STUDER REVOX

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STUDER REVOX

B710 MK I/II

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5.2.2 Kontrolle des Signalweges "vor Band"

- Beide Regler OUTPUT LEVEL (Geräte-Rückseite) im Uhrzeigersinn in den Anschlag drehen.
- Regler INPUT LEVEL (Gerätefront) im Uhrzeigersinn in den Anschlag drehen, Regler MIC INPUT LEVEL im Gegenuhrzeigersinn in den Anschlag drehen.
- Schalter DOLBY NR und Schalter MPX-FILTER auf OFF stellen.
- Schalter MONITOR auf SOURCE stellen.
- An beiden Eingängen LINE INPUT ca. 70 mV (ca 35 mV bei MKI-Geräten), 315 Hz einspeisen.
- Mit dem Trimmpotentiometer CHANNEL BALANCE (Fig. 5.3) den rechten Kanal auf den gleichen Pegel einstellen.

Achtung:
Diese Einstellung muss für die nachfolgenden Messungen gleich bleiben. Nach dieser Einstellung muss der Frequenzgang kontrolliert werden. Er darf von 30 Hz bis 20 kHz die Toleranz von ± 1 dB nicht überschreiten.

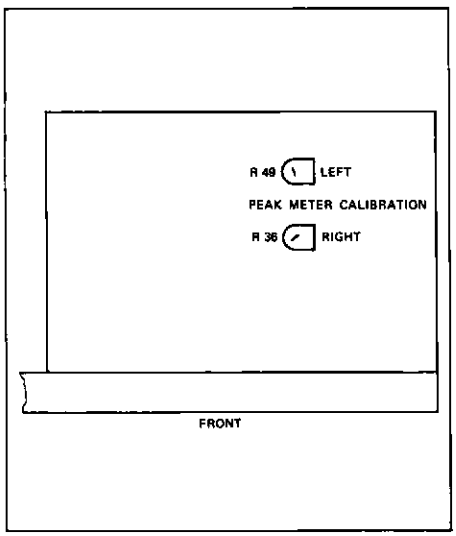


Fig. 5.2

5.2.2 Checking the signal path "without tape"

- Turn both OUTPUT LEVEL controls (rear panel) to clockwise limit position.
- Turn INPUT LEVEL control (front panel) to clockwise limit position and MIC INPUT LEVEL control to counterclockwise limit position.
- Set DOLBY NR switch and MPX-FILTER switch to OFF position.
- Set MONITOR switch to SOURCE position.
- Feed approx. 70 mV (approx. 35 mV on MKI units) and 315 Hz into both LINE INPUTs.
- Adjust right-hand channel to identical level with the aid of CHANNEL BALANCE trimmer potentiometer (Fig. 5.3).

Caution:
This setting must be retained for the subsequent measurements. After the above adjustment has been made, check the frequency response. Within the range of 30 Hz to 20 kHz it should not vary by more than ± 1 dB.

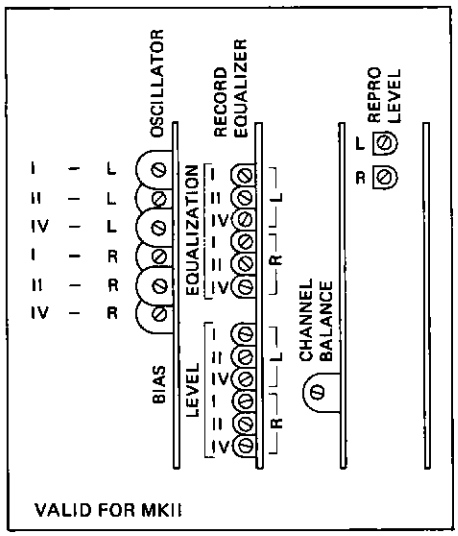


Fig. 5.3

5.2.2 Contrôle du cheminement "avant-bande" du signal

- Placez les deux potentiomètres OUTPUT LEVEL en butée en les tournant dans le sens des aiguilles d'une montre.
- Placez INPUT LEVEL (face avant) en butée dans le sens des aiguilles d'une montre et MIC INPUT LEVEL en butée également, mais dans le sens contraire.
- Commutez DOLBY NR et MPX-FILTER sur OFF.
- Placez le commutateur MONITOR sur SOURCE.
- Injectez une tension env. 70 mV (env. 35 mV pour les appareils MKI), 315 Hz aux deux entrées LINE INPUT.
- Réglez le canal droit au même niveau grâce au trimmer CHANNEL BALANCE (fig. 5.3).

Attention:
Ce réglage ne doit pas être modifié lors des ajustements suivants. Après ce réglage, contrôlez la réponse amplitude-fréquence. Elle ne doit pas dépasser la tolérance de ± 1 dB entre 30 Hz et 20 kHz.

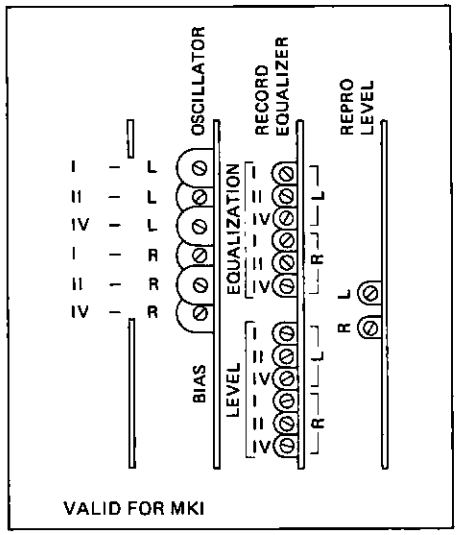


Fig. 5.3a

5.2.3 Kontrolle und Kalibrierung des PEAK READING METER's

Kontrolle:
- An LINE INPUT ca. 70 mV (ca.35 mV bei MKI-Geräten), 315 Hz einspeisen.
- Den Generatorpegel verändern, bis am linken Ausgang 0,775 V anstehen.
- Den Generatorpegel im Bereich 0 bis −0,5 dB variieren.
- Beide Segmente links der Dolby-Marke (0 dB) müssen gleichzeitig aufleuchten bzw. verlöschen. Ist dies nicht der Fall, muss die Anzeige neu kalibriert werden.

5.2.3 Checking and calibrating the PEAK READING METER

Checks:
- Feed approx. 70 mV (approx. 35 mV on MKI units) and 315 Hz in LINE INPUT.
- Vary generator level until 0,775 V is available at the left-hand output.
- Vary the generator level within the range 0 to −0.5 dB.
- Both segments to the left of the Dolby marker (0 dB) must turn on or off simultaneously. Should this not be the case, the display requires recalibration.

5.2.3 Contrôle et étalonnage du PEAK METER DISPLAY

Contrôle:
- Injectez 315 Hz sous env. 70 mV dans LINE INPUT (env. 35 mV pour les appareils MKI).
- Ajustez le niveau du générateur jusqu'à ce que la sortie gauche délivre 0,775 V.
- Faites varier le niveau du générateur dans une plage de 0 à −0,5 dB.
- Les deux segments situés à gauche du symbole DOLBY (0 dB) doivent s'allumer ou s'éteindre simultanément, sinon il y a lieu de reétalonner l'affichage.

5. AUDIOEINSTELLUNGEN

(Voraussetzung für diese Einstellungen ist ein optimal eingestelles Laufwerk)

5.1 Messgeräte und Hilfsmittel

Für Messgeräte und Hilfsmittel siehe Kapitel 1.7.2

5.2 Kontrollen

(Bei relativen Pegelangaben gilt: 0 dBu am Peak Meter entsprechen 200 nWb/m = Dolby-Pegel / 580 mV an TP1 auf Dolby Encoder = 0,775 V an Line Output.)

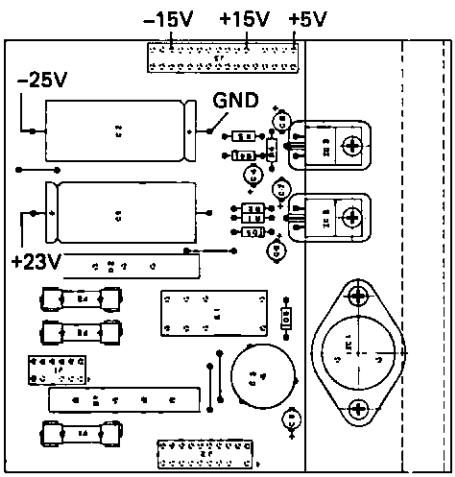


Fig. 5.1

5.2.1 Kontrolle der Speisespannungen (DC)

Die Messpunkte sind aus Fig. 5.1 ersichtlich.
Stabilisierte Spannungen:

+15 V +/– 0,75 V
–15 V +/– 0,75 V
+ 5 V +/– 0,25V

unstabilisierte Spannungen (in Stopp-Position des Gerätes:
+23 V
–23 V

5. AUDIO ADJUSTMENTS

(A suitably adjusted tape transport is a prerequisite for all audio adjustments.)

5.1 Measuring instruments and aids

Tools and measuring aids see Section 1.7.2

5.2 Checks

(The following applies to specifications with relatively high levels: 0 dBu on peak meter corresponds to 200 nWb/m = Dolby level / 580 mV at TP1 on Dolby encoder = 0.775 V at line output.)

5.2.1 Checking the supply voltage (DC)

The test points are shown in Fig. 5.1.
Stabilized voltages:

+ 15 V ± 0,75 V
– 15 V ± 0,75 V
+ 5 V ± 0,25 V

unstabilized voltages (with recorder in stop mode):
+ 23 V
– 23 V

5. REGLAGES AUDIO

(Ces réglages n'ont de sens que si un réglage préalable du mécanisme a été éffectué.

5.1 Appareils de mesure et accessoires

Pour outils et moyens nécessaires voir chapitre 1.7.2

5.2 Contrôles

Pour les données en niveaux relatifs, on a: 0 dBu au Peak-mètre correspondent à 200 nWb/m= niveau Dolby / 580 mV au Dolby Encoder = 0,775V aux sorties ligne

5.2.1 Contrôle des tensions d'alimentation (DC)

La figure 5.1 donne les différents points de mesure.
Tensions stabilisées:
+ 15 V ± 0,75 V
– 15 V ± 0,75 V
+ 5 V ± 0,25 V

tensions non stabilisées (mesurées en position STOP de l'appareil)
+ 23 V
– 23 V

3.5.3 Einstellen der Quarzfrequenz

- Frequenzzähler an Testpunkt [N] anschliessen (Fig. 3.14).
- Quarzfrequenz mit C22 auf 4 MHz ± 5 Hz einstellen.
  Dieser Abgleich sollte bei einer Raumtemperatur von 22 Grad Celsius durchgeführt werden (bei max. Einstelltoleranz beträgt die Abweichung der Uhr ca. 0,1 s/Tag bei konstanter Temperatur).
- Ist der Einstellbereich von C22 zu klein, so ist der Kondensator C9 von 56 pF auf 10 pF zu verkleinern

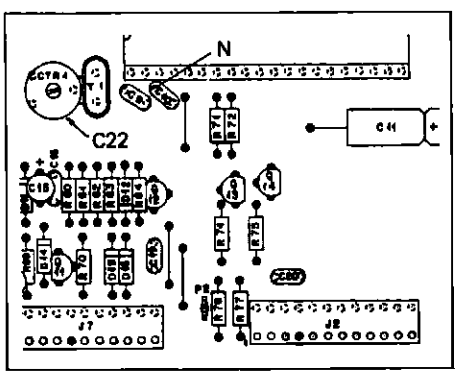


Fig. 3.14

3.5.3 Tuning the quartz frequency

- Connect frequency counter to test point [N] (Fig. 3.14).
- Tune quartz frequency with C22 to 4 MHz ± 5 Hz.
  This adjustment should be made with an ambient temperature of 22° C (with maximum tolerance, the error rate of the clock is approximately 0.1 s/day with constant ambient temperatures.
- If the adjustment range of C22 is too small reduce capacitor C9 from 56 pF to 10 pF.

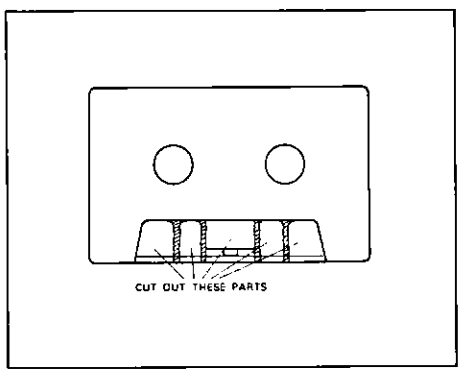


Fig. 3.15

3.5.3 Ajustage de la fréquence du quartz

- Raccordez le fréquencemètre digital au point de test [N] (fig. 3.14).
- Ajustez la fréquence du quartz à 4 MHz ± 5 Hz grâce à C 22.
  Cet étalonnage doit se faire à la température ambiante de 22 degrés (à la tolérance maximale de réglage, la précision de l'horloge est de 0,1 s/jour env. à température constante).
- Si la plage de réglage de C22 est trop petite, il faudra diminuer le condensateur C9 de 56 à 10 pF.

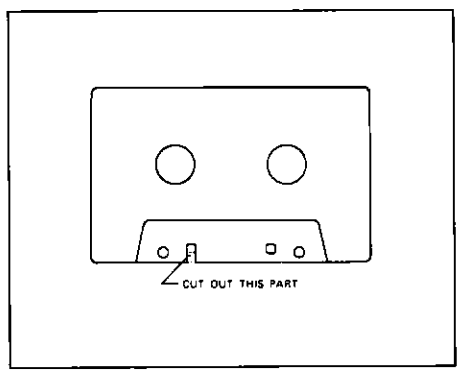
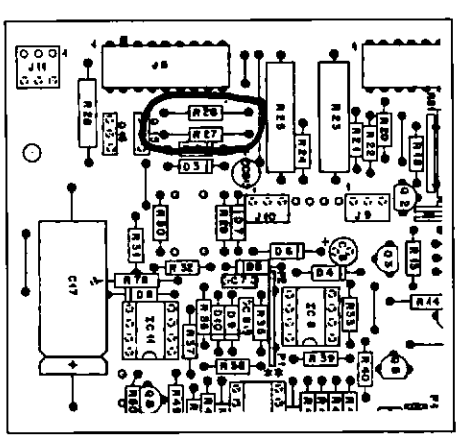


Fig. 3.16

3.5.4 Bandlaufkontrolle

Hilfsmittel: Kassette A (Cr 0_2 / IECII, C90) nach Fig. 3.15 bearbeiten.
Kassette B (Cr 0_2 / IECII, C60) nach Fig. 3.16 bearbeiten.

- Laufwerk reinigen und Kassette A einlegen.
- Gerät auf Wiedergabe starten und den Spannungsabfall über R26 (MICROPROCESSOR PCB 1.710.465/Fig. 3.17) messen.
  Messpunkte: Plus-Pol von C17 (Masse) und IC11 Pin 2.
  Sollwert: 0,9 bis 1,2 V.
- Nach ca. 10 Minuten Wiedergabebetrieb den Spannungsabfall über R27 messen.
  Messpunkte: Plus-Pol von C17 (Masse) und IC11 Pin 6.



3.5.4 Checking the tape motion

Aids: Cassette A (Cr 0_2 / IECII, C90) processed according to Fig. 3.15)
Cassette B (Cr 0_2 / IECII, C60, processed according to Fig. 3.16)

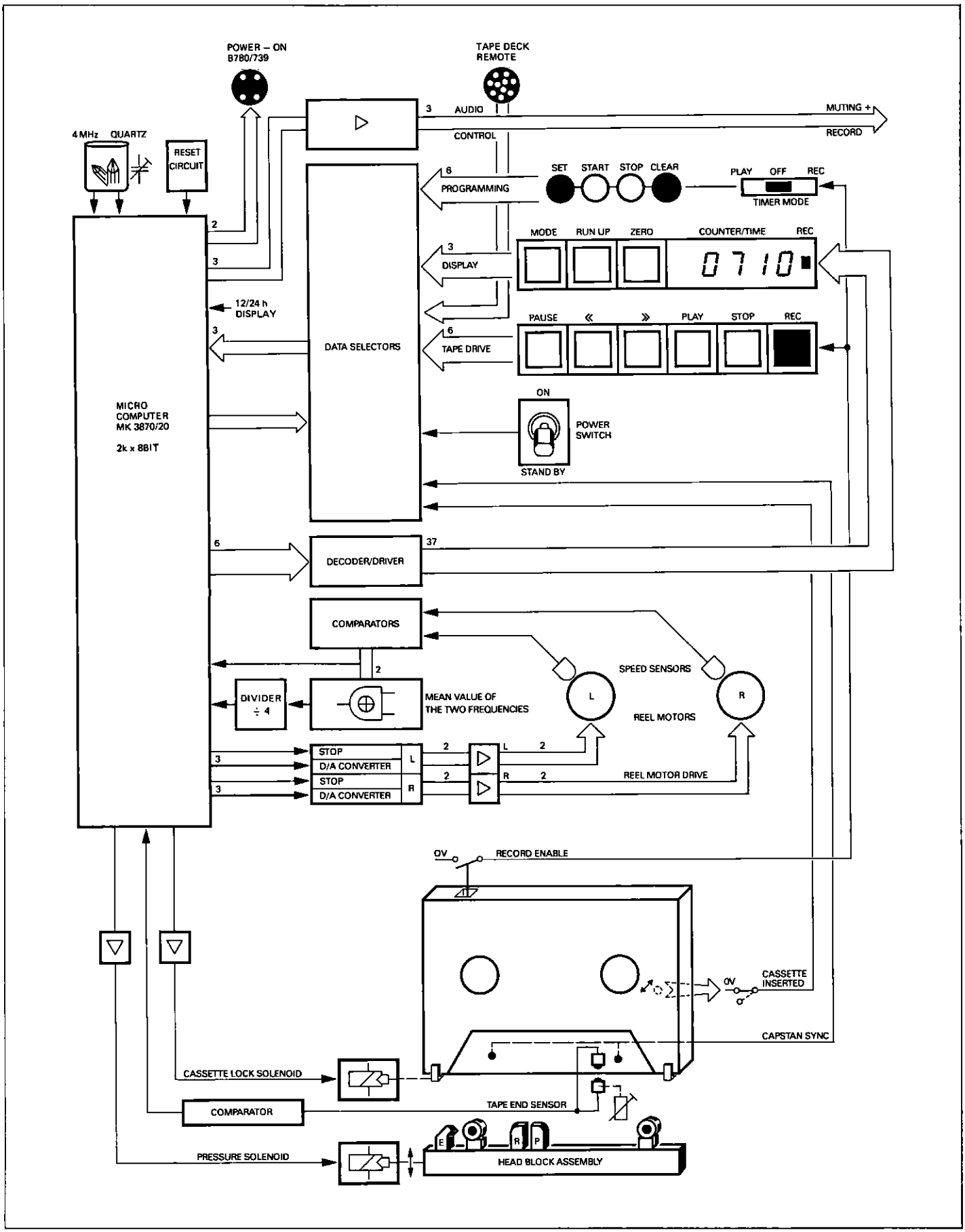
- Clean tape transport and load cassette A.
- Start recorder in play mode and measure potential drop across R26 (MICROPROCESSOR PCB 1.710.465 / Fig. 3.17).
  Desired value: 0.9 to 1.2 V.
- After approx. 10 minutes of playing time, measure the potential drop across R27.

3.5.4 Contrôle du défilement de la bande

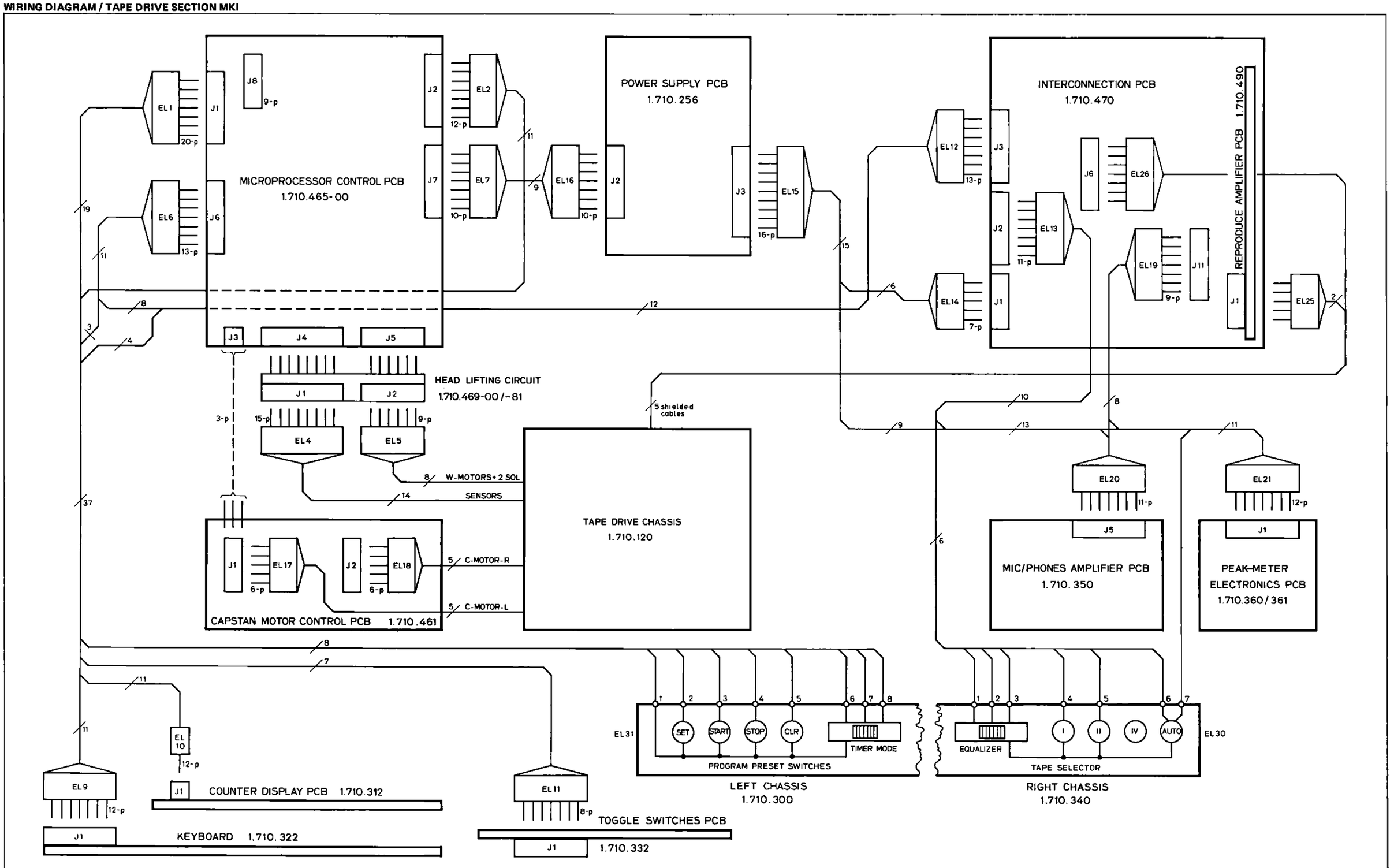
Accessoires: Cassette A (Cr 0_2 / IECII, C90) modifiée selon fig. 3.15.
Cassette B (Cr 0_2 / IECII, C60) modifiée selon fig. 3.16.

- Nettoyez le mécanisme et introduisez la cassette A.
- Mettez l'appareil en lecture et mesurez la chûte de tension aux bornes de R26 (MICROPROCESSOR PCB 1.710.465 / fig. 3.17).
  Valeur nominale: 0,9 à 1,2 V, ce qui correspond à un moment d'enroulement d'environ 0,004 Nm / 40 cm/p.
- Après environ 10 minutes de fonctionnement en mode lecture, mesurez la chûte de tension aux bornes de R27.

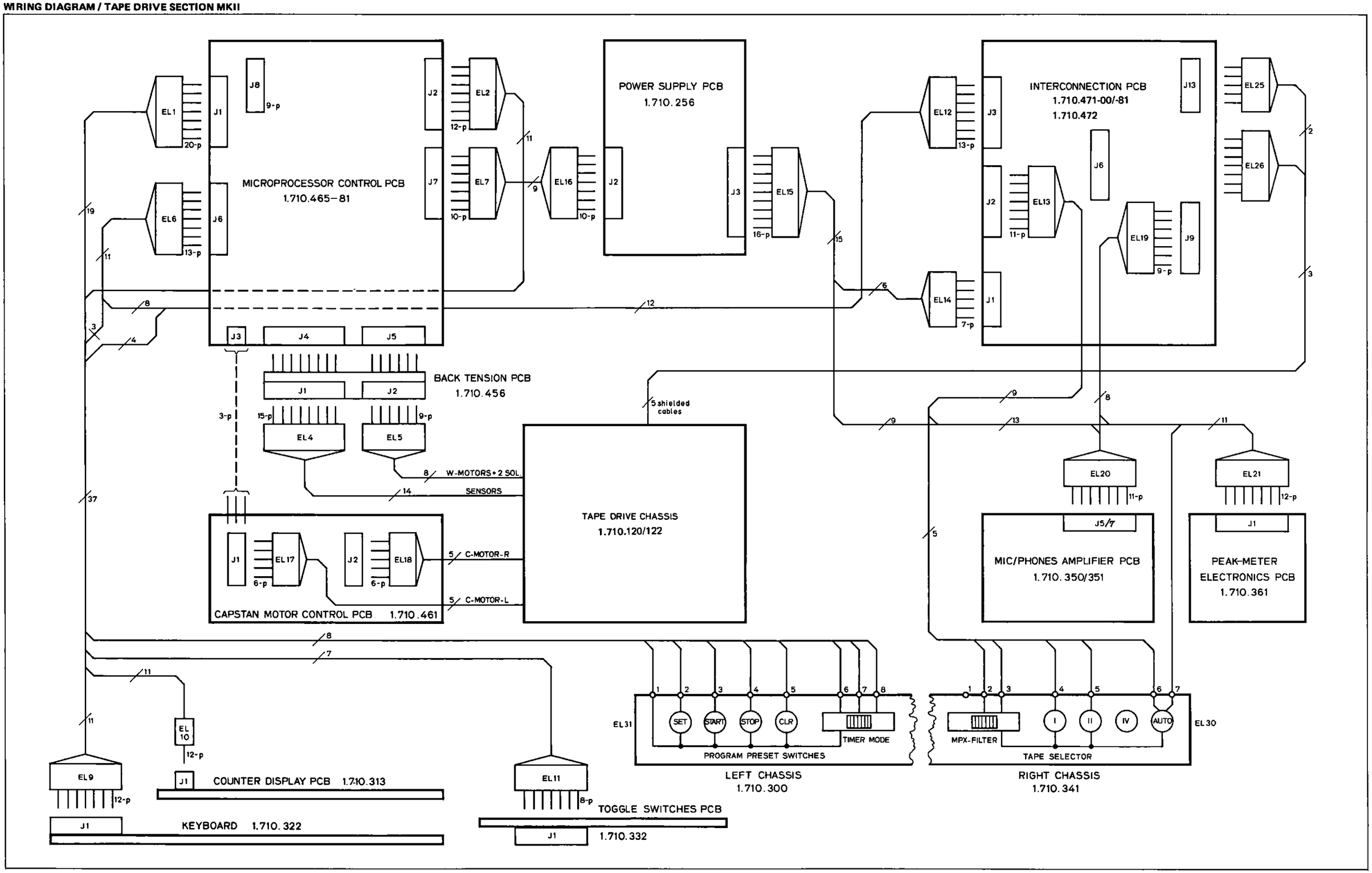
TAPE DRIVE / BLOCKDIAGRAM MKII



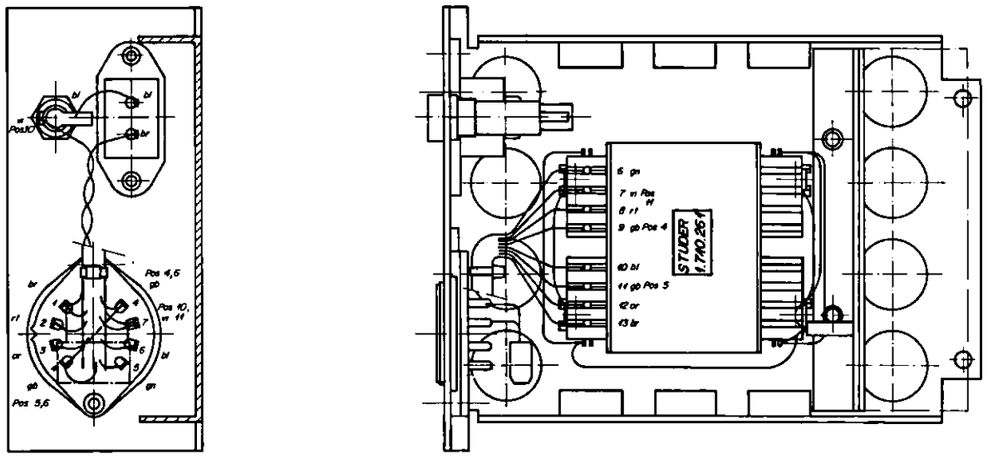
WIRING DIAGRAM / TAPE DRIVE SECTION MKI



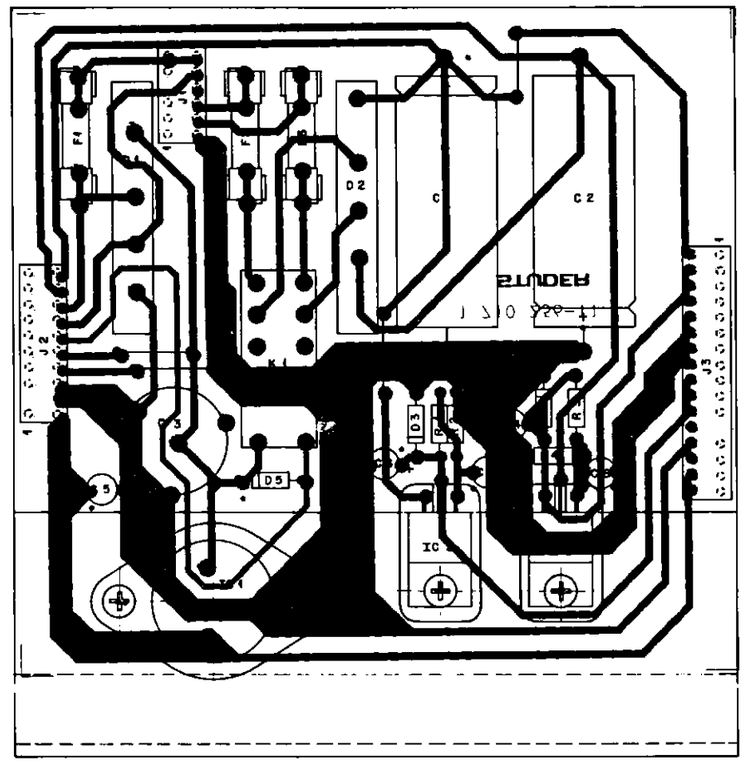
WIRING DIAGRAM / TAPE DRIVE SECTION MKII



POWER SUPPLY / TRANSFORMER UNIT 1.710.256/260



TRANSFORMER UNIT 1.710.260



POWER SUPPLY PCB 1.710.256

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.25.4222	2200 uF	-10%, 25V El	
	C.....2	59.25.4222	2200 uF	-10%, 25V El	
	C.....3	59.22.4222	2200 uF	-10%, 16V El	
	C.....4	59.22.6100	10 uF	-10%, 25V El	
	C.....5	59.22.6100	10 uF	-10%, 25V El	
	C.....6	59.22.6100	10 uF	-10%, 25V El	
	C.....7	59.22.6100	10 uF	-10%, 25V El	
	C.....8	59.22.6100	10 uF	-10%, 25V El	
	D.....1	70.01.0235		B 40 C 2200	
	D.....2	70.01.0235		B 40 C 2200	
	D.....3	50.04.0122	1N 4001	Si	
	D.....4	50.04.0122	1N 4001	Si	
	D.....5	50.04.0125	1N 4448	Si	
	F.....1	51.01.0119	1.6 A	slow blow 5x20mm	
	F.....2	51.01.0118	1.25A	slow blow 5x20mm	
	F.....3	51.01.0118	1.25A	slow blow 5x20mm	
	IC....1	50.05.0133	LM 309K	+5V Volt. Regulator	N. M
	IC....2	50.10.0104	LM 317	+1.2V- +37V Volt. Regulator	N. Ti
	IC....3	50.10.0105	LM 337	-1.2V- -37V Volt. Regulator	N. Ti
	J.....1	54.01.0238	6-Pole		
	J.....2	54.01.0242	10-Pole		
	J.....3	54.01.0301	16-Pole		
	K.....1	56.01.0117	2x A	8...13V/ 180 Ohm	
	R.....1	57.11.4431	430 Ohm	2%, 0.25W, CF	
	R.....2	57.11.4472	4.7 kOhm	2%, 0.25W, CF	
	R.....3	57.11.4121	120 Ohm	2%, 0.25W, CF	
	R.....4	57.11.4132	1.3 kOhm	2%, 0.25W, CF	

IND. POS.NO. PART NO. VALUE SPECIFICATIONS / EQUIVALENT MANUF.

El=Electrolytic,
CF=Carbon Film, Si=Silicon,
MANUFACTURER: N=NATIONAL, Ti=TEXAS INSTRUMENTS, M=MOTOROLA,

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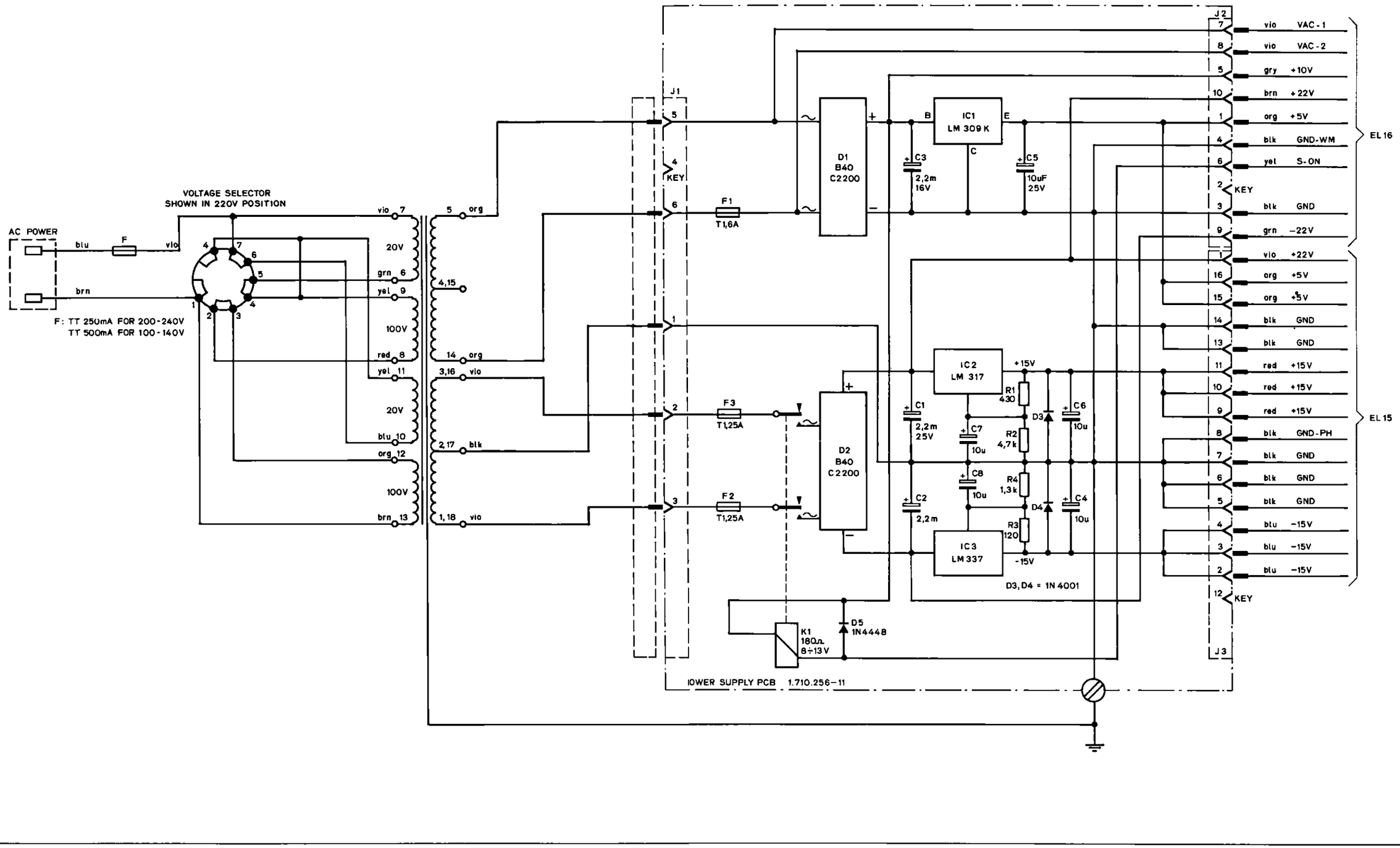
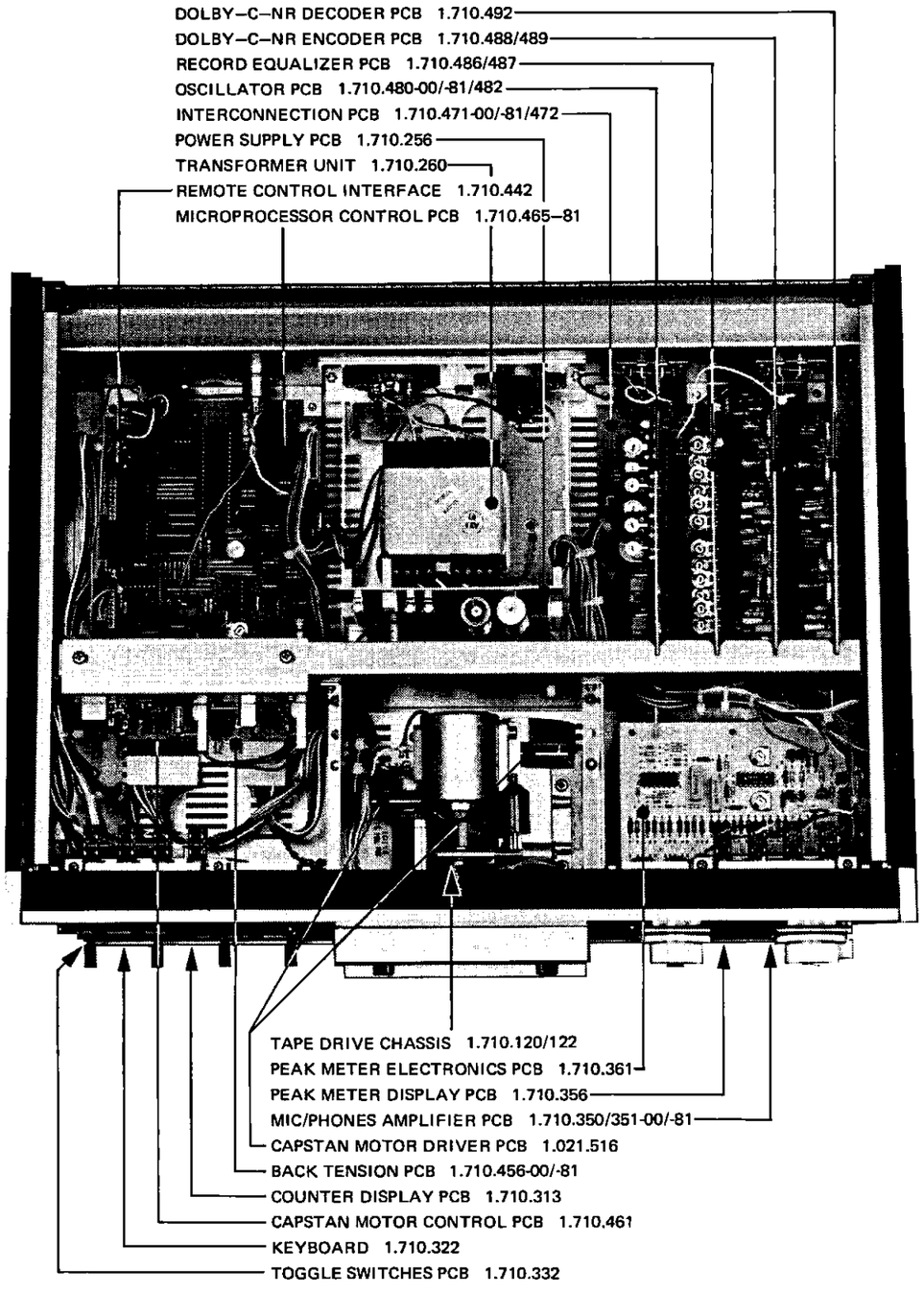
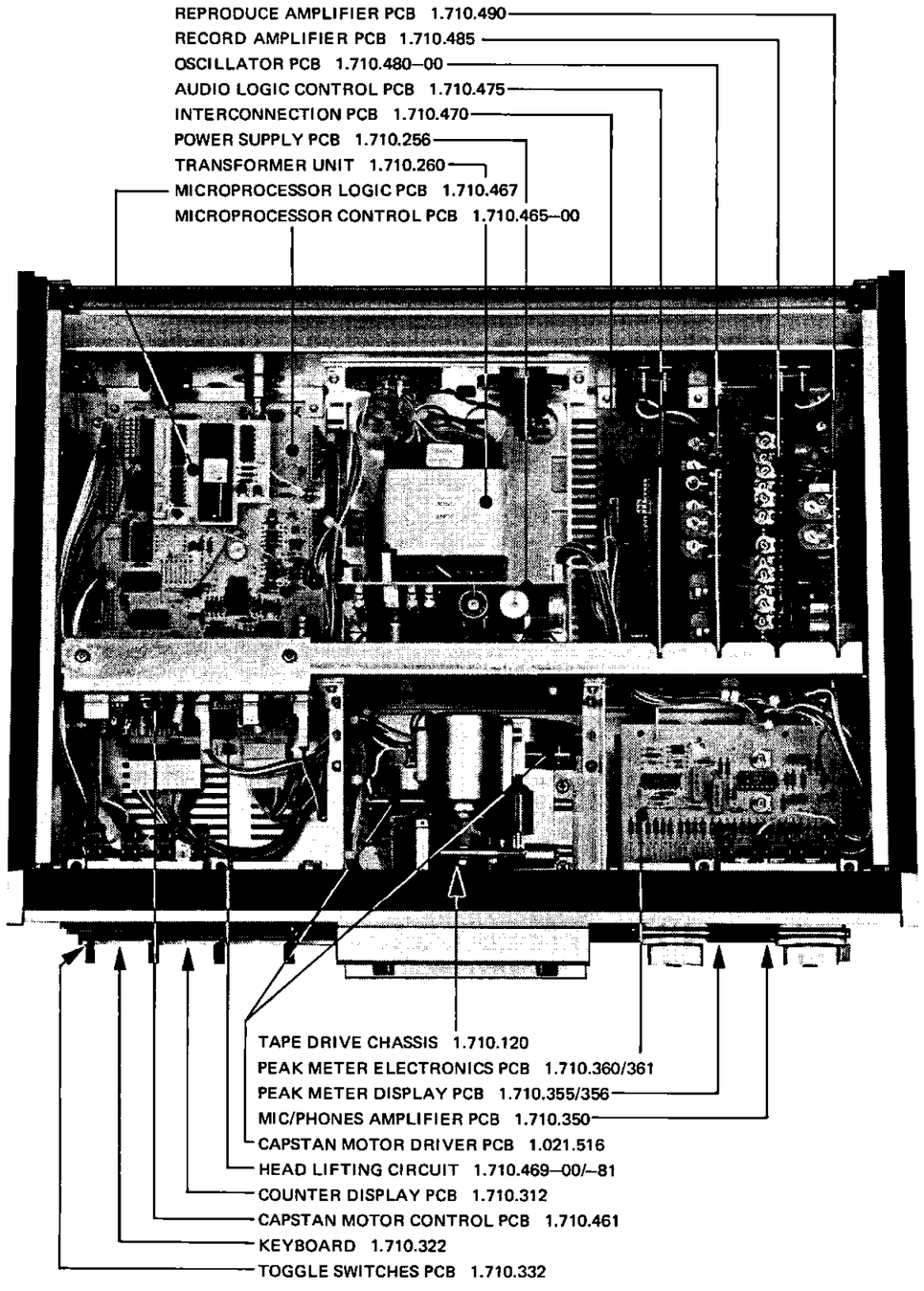
POWER SUPPLY / TRANSFORMER UNIT 1.710.256/260



BOARDS LOCATION MKII



BOARDS LOCATION MKI



CONTENTS

ALL PCBs MARKED WITH THIS SIGN ▲
CONTAIN COMPONENTS SENSITIVE TO
STATIC CHARGES.
PLEASE, REFER TO PREFACE BEFORE
YOU REMOVE THESE BOARDS.

5.5.4 Fremd- und Geräuschspannungsabstand der Mikrofoneingänge

- Regler LINE LEVEL im Gegenuhrzeigersinn in den Anschlag drehen. (Geräte-Rückseite)
- Regler INPUT LEVEL LINE im Gegenuhrzeigersinn in den Anschlag drehen.
- Regler INPUT LEVEL MIC im Uhrzeigersinn in den Anschlag drehen.
- Beide Mikrofoneingänge mit 200 Ohm abschliessen.
- Schalter MONITOR auf SOURCE stellen.

Die Daten werden bezogen auf 0 dB (200 nWb/m):

Fremdspannungsabstand	>52 dB (62)
Geräuschspannungsabstand (IEC-A)	>54 dB (65)

Die Werte in Klammern beziehen sich auf die Bestückung mit 1.710.351 und 1.710.489.

5.5.4 Signal-to-noise ratio of microphone inputs

- Turn LINE LEVEL control to counterclockwise limit position (on rear panel).
- Turn INPUT LEVEL LINE control to counterclockwise limit position.
- Turn INPUT LEVEL MIC control to clockwise limit position.
- Terminate both microphone inputs with 200 ohm.
- Set MONITOR switch to SOURCE position.

The specifications are relative to 0 dB (200 nWb/m):

SN ratio, unweighted	>52 dB (62)
SN ratio, weighted (IEC-A)	>54 dB (65)

The values in brackets refer to recorders equipped with the assemblies 1.710.351 and 1.710.489.

5.5.4 Recul du bruit de fond des entrées micro

- Placez le potentiomètre LINE LEVEL en butée en le tournant dans le sens contraire des aiguilles d'une montre.
- Amenez de même façon le potentiomètre INPUT LEVEL LINE en butée.
- Tournez INPUT LEVEL MIC en sens inverse jusqu'à la butée.
- Chargez les deux entrées micro avec 200 Ohm chacune.
- Placez le commutateur MONITOR sur SOURCE.

Les donnés sont référées à 0 dB (200 nWb/m):

recul du souffle	>52 dB (62)
rapport signal/bruit (IEC-A)	>54 dB (65)

Les valeurs entre parenthèses se rapportent aux circuits 1.710.351 et 1.710.489.

5.5.5 Tonhöhenschwankungen

Die in den Technischen Daten spezifizierten Gleichlaufwerte sind mit einem Tonhöhenschwankungs-Messgerät nach IEC 386 (DIN 45507) in Stellung "bewertet" gemessen (geprüft mit Wobbel-Kassette 3150 Hz).

Werden diese Wobbel-Werte nicht erreicht, so empfiehlt es sich, den Andruckmagneten nach 3.4.5 nachzustellen.

5.5.5 Wow and flutter

The wow-and-flutter values listed in the technical specifications are measured with a wow-and-flutter meter according to IEC 386 (DIN 45507) in the "weighted" position (measured with a "wow-and-flutter"-cassette 3150 Hz).

If these wow and flutter figures cannot be achieved it is recommended to readjust the plunger solenoid as per 3.4.5.

5.5.5 Pleurage

Le taux de pleurage spécifié dans les caractéristiques techniques est mesuré à l'aide d'un vobulomètre selon IEC 386 (DIN 45507), en position "pondéré" avec une cassette de pleurage 3150Hz.

Si ces valeurs de pleurages ne sont pas atteintes, nous vous recommandons d'effectuer le réglage de l'électro-aimant d'appui comme décrit sous 3.4.5.

5.5.2 Geräusch-/Fremdspannungsabstand "über Band"

Bezogen auf Vollaussteuerung k3 = 3%, Regler INPUT LEVEL in Linksanschlag, Gerät vollständig im Gehäuse montiert.

Band	bewertet (IEC-A) Geräusch		unbewertet (Fremd)	
	Dolby B	Dolby C	Dolby B	Dolby C
IEC1	>66dB	>72dB	>56dB	>58dB
IEC2	>64dB	>73dB	>56dB	>58dB
IEC4	>66dB	>73dB	>56dB	>58dB

Die angegebenen Werte beziehen sich auf Vollaussteuerung k3 = 3% in Wiedergabe gemessen. Falls sie nicht erreicht werden, sind als erste Massnahmen die bandberührenden Metallteile (Köpfe, Achsen, etc.) sorgfältig zu entmagnetisieren.

5.5.3 Löschdämpfung und Kanalübersprechen

Diese beiden Messungen müssen mit einem selektiven Voltmeter ausgeführt werden (Bandbreite < 100 Hz).

Löschdämpfung von 1000 Hz bezüglich Vollpegel:

- Neue oder gelöschte Kassette, Bandtyp IEC4 einlegen und Zähler auf Null setzen.
- Schalter DOLBY NR auf ON, B-TYPE stellen.
- 1000 Hz-Ton aufzeichnen, Pegel ca. +6 dB.
- Kassette auf Null zurückspulen und das Eingangsignal abschalten.
- Gerät auf Aufnahme starten, der Messwert muss besser als –70 dB sein.

Durch die Messung mit dem Bandtyp IEC4 ist gewährleistet, dass bei Erreichen des angegebenen Wertes die geforderte Löschdämpfung mit Sicherheit auch bei allen anderen Bandsorten erreicht wird.

Kanalübersprechen:

Gemessen wird am Ausgang des nicht ausgesteuerten Kanals, darum muss dessen Regler INPUT LEVEL in Linksanschlag gebracht werden.

- Messfrequenz 1000 Hz +6 dB aufzeichnen.
- Der Messwert des nicht ausgesteuerten Kanals muss besser als –40 dB sein.
- Um ein Übersprechen und eine Frequenzganganhebung im Bereich von 19 kHz bis 20 kHz zu verhindern, wird empfohlen, die Anschlussdrähte der Input-Buchsen so nahe wie möglich an der Rückwand entlang zu verlegen.

5.5.2 Signal-to-noise ratio "with tape"

Relative to peak reproduce level k3 = 3% Turn INPUT LEVEL control to counterclockwise limit position, recorder in housing.

Tape	weighted (IEC-A)		unweighted	
	Dolby B	Dolby C	Dolby B	Dolby C
IEC1	>66dB	>72dB	>56dB	>58dB
IEC2	>64dB	>73dB	>56dB	>58dB
IEC4	>66dB	>73dB	>56dB	>58dB

The specified values refer to peak reproduce level k3 = 3%. If they cannot be reached, the first remedial step is to carefully demagnetize all metal parts that come in contact with the tape (heads, shafts, etc.).

5.5.3 Erase depth and interchannel cross talk

The two measurements are to be made with a selective voltmeter (band width < 100 Hz).

Erase depth of 1000 Hz relative to full level:

- Load virgin or erased cassette, tape type IEC4, and reset counter to zero.
- Set DOLBY-NR to ON (B-Type).
- Record 1000 Hz signal, line level approximately + 6 dB.
- Rewind cassette to zero and switch off input signal.
- Start tape transport in record mode; the measured value must be better than –70 dB.

If the specified value is achieved with tape type IEC4, you can be sure that the required erase depth will also be achieved for all other tape types.

Interchannel cross talk:

The measurement is taken at the non-driven channel which means that its input must be short-circuited.

- Record test frequency 1000 Hz line level + 6 dB.
- The measured value at the non-driven channel must be better than –40 dB.
- To prevent crosstalk and an increase of frequency response in the range of 19 kHz to 20 kHz we recommend to place the input wirings as close as possible to the back cover.

5.5.2 Recul du bruit de fond "après bande"

rapporté à la modulation maximale h3 = 3% potentiomètre INPUT LEVEL en butée gauche, appareil complètement remonté.

Bande	valeur pondérée (IEC-A)		valeur non pondérée	
	Dolby B	Dolby C	Dolby B	Dolby C
IEC1	>66dB	>72dB	>56dB	>58dB
IEC2	>64dB	>73dB	>56dB	>58dB
IEC4	>66dB	>73dB	>56dB	>58dB

Ces mesures se rapportent à une modulation maximale h3 = 3%. Si on ne peut les atteindre, il convient d'abord de démagnétiser toutes les pièces métalliques en contact avec la bande.

5.5.3 Efficacité de l'effacement et diaphonie

Ces deux mesures sont réalisées avec un voltmètre sélectif (largeur de bande 100 Hz).

Efficacité de l'effacement à 1 kHz par rapport au niveau maximal:

- Introduisez une cassette neuve ou effacée, type IEC4 et mettez le compteur à zéro.
- Placez le commutateur DOLBY-NR sur OFF.
- Enregistrez un son de 1 kHz, à +6 dB env.
- Rebobinez la cassette jusqu'au début et débranchez le signal d'entrée.
- Démarrez l'appareil en enregistrement, la valeur mesurée doit être meilleure que –70 dB.

La mesure avec le type de bande IEC4 garantit les valeurs d'effacement exigées pour les autres sortes si on a atteint la valeur requise avec IEC4.

Diaphonie:

La mesure s'effectue à la sortie du canal qui n'est pas modulé, aussi doit-on court-circuiter son entrée.

- La fréquence de mesure est 1 kHz, à +4 dB.
- La valeur de mesure de la diaphonie doit être meilleure que –40 dB.
- Afin d'éviter de la diaphonie et une élévation de la courbe de réponse entre 19 kHz et 20 kHz, veillez à ce que le chemin des câbles de raccordement de la prise Input se trouve au plus près de la paroi arrière.

Achtung:
Die Kanäle beeinflussen sich gegenseitig. Beim Einstellen des maximalen Pegels muss daher der bestmögliche Kompromiss gesucht werden.

Caution:
The channels influence each other. When adjusting for maximum level, the optimum compromise must be found.

Attention:
Les canaux s'influencent mutuellement. Lors du réglage au niveau maximal, on doit rechercher le meilleur compromis.

5.4.4 Aufnahmepegel und -Entzerrung einstellen

- Vorbereitungen wie unter Kapitel 5.4.2.
- An LINE INPUT ca. 7 mV (ca.3,5 mV bei MKI-Geräten), 315 Hz einspeisen.
- Schalter DOLBY NR auf OFF stellen.
- Gerät auf Aufnahme starten.
- Die Trimmpotentiometer LEVEL (Record Equalizer 1.710.486) so einstellen, dass beim Umschalten des Schalters MONITOR von Position SOURCE auf TAPE kein Pegelsprung auftritt.
- Trimmpotentiometer EQUALIZATION (Record Equalizer 1.710.486) bei folgenden Frequenzen gegenüber 315 Hz voreinstellen:

IEC 1	10 kHz	0 bis + 1 dB
IEC 2+4	14 kHz	0 bis + 1 dB

- Die Frequenzgänge für alle drei Bandsorten kontrollieren und mit Trimmpotentiometer EQUALIZATION auf möglichst geradlinigen Frequenzgang einstellen.
- Pegelsprung mit IEC2 Kassette bei Dolby-Pegel 0 dB, 250 Hz durch Umschalten des Schalters MONITOR kontrollieren. Die Anzeige am PEAK METER Display darf nicht ändern. Bei Abweichung mit den Trimmpotentiometern LEVEL (1.710.471) nachjustieren.

5.4.4 Adjusting the record level and equalization

- Same preparations as described in 5.4.2.
- Feed approx 7 mV (approx 3.5 mV on MKI units) and 315 Hz in LINE INPUT.
- Set DOLBY NR switch to OFF position.
- Start tape transport in record mode.
- Adjust trimmer potentiometer LEVEL (record equalization 1.710.486) in such a manner that no level jump occurs when changing the MONITOR switch setting from SOURCE to TAPE.
- Preadjust the trimmer potentiometer EQUALIZATION (record equalizer 1.710.486) with the following frequencies relative to 315 Hz:

IEC 1	10 kHz	0 to + 1 dB
IEC 2+4	14 kHz	0 to + 1 dB

- Check the frequency responses for all three tape types and adjust for best possible linearity with the aid of trimmer potentiometer EQUALIZATION.
- Load IEC2 cassette and start tape transport in record mode.
- Feed in Dolby level 0dB, 250Hz. When changing the MONITOR switch setting from SOURCE to TAPE, the indication at the PEAK METER should not vary. In case of a difference adjust trimmer LEVEL (1.710.471).

5.4.4 Réglage du niveau et de la correction à l'enregistrement

- Mêmes travaux préliminaires qu'en chapitre 5.4.2.
- Injectez 315 Hz sous env. 7 mV dans LINE INPUT (env. 3,5 mV pour les appareils MKI).
- Le commutateur DOLBY-NR doit être sur OFF.
- Démarrez en enregistrement.
- Réglez les trimmers LEVEL (Record Equalizer 1.710.486) de manière à n'avoir aucun saut de niveau en passant de SOURCE à TAPE avec le commutateur MONITOR.
- Effectuez les corrections, rapportées à 315 Hz, pour les fréquences suivantes à l'aide des trimmers EQUALIZATION (Record Equalizer 1.710.486):

IEC 1	10 kHz	0 à + 1 dB
IEC 2+4	14 kHz	0 à + 1 dB

- Contrôlez la réponse en fréquence pour les trois sortes de bandes en essayant de l'obtenir la plus linéaire possible à l'aide des trimmers EQUALIZER.
- Introduisez une cassette IEC2 et mettez l'appareil en position d'enregistrement.
- Injectez le niveau Dolby 0dB, 250Hz et placez le commutateur MONITOR sur TAPE. L'indication au PEAK METER ne doit pas varier. Sinon, ajustez les trimmers LEVEL (1.710.471). Si on ne peut par procéder à l'ajustage, il faut modifier R58 (1.710.471).

5.5 Messen verschiedener Kenndaten

5.5.1 Klirrfaktor k3 von 315 Hz

LINE INPUT ca. 70 mV (ca.35 mV bei MKI-Geräten), DOLBY-NR auf ON (B oder C)

IEC1	0,8%
IEC2	1,5%
IEC4	1,5%

5.5 Measuring various characteristics

5.5.1 Distortion k3 of 315 Hz

LINE INPUT approx. 70 mV (approx. 35 mV on MKI units), DOLBY NR ON (B or C)

IEC1	0.8%
IEC2	1.5%
IEC4	1.5%

5.5 Mesure de différentes caractéristiques

5.5.1 Taux de distorsion h3 à 315 Hz

LINE INPUT env. 70 mV (env. 35 mV pour les appareils MKI), DOLBY NR sur ON (B ou C)

IEC1	0,8%
IEC2	1,5%
IEC4	1,5%

Optimale Vormagnetisierung für diverse Kassettenbänder

Die hier angegebene Tabelle enthält für verschiedene Kassetten weitere Richtwerte der Vormagnetisierungseinstellung.

Optimal biasing for different cassette tapes

Below table contains more recommended values of the bias adjustment for various cassettes.

Prémagnétisation optimale pour diverses cassettes

Le tableau ci-dessous indique des valeurs de référence complémentaires pour le réglage de la prémagnétisation de diverses cassettes.

IEC	Manufacturer	Cassette-Typ	Record head 1.116.710.01 ΔU (dB)	Record head 1.116.710.02 ΔU (dB)
II	REVOX	Chromium	2.5	5
IV	REVOX	Metal	2	4.5
I	Agfa	Superferro HDX Fe I	5.5	7
II	Agfa	Superchrom HDX	2.5	5
I	BASF	LH Super I	6	7
II	BASF	Chromdioxid Super II	2.5	5
IV	BASF	Metal IV	2	4.5
I	Denon	DX - 3	4	5
II	Denon	DX - 7	2	4.5
IV	Denon	DX - M	2.5	5
I	Fuji	FR I	5	6
II	Fuji	FX II	2.5	5
I	Maxell	XL I S	5	6
II	Maxell	XL II S	1.5	3.5
IV	Maxell	MX 60	4	6
I	Sony	AHF	6	7
II	Sony	UCX - S	2.5	5.5
IV	Sony	Metallic	2.5	5
I	TDK	AD - X	5	7
II	TDK	SA - X	2	5
IV	TDK	MA	4	6

5.4.2 Azimut des Aufnahmekopfes einstellen
(nur für RECORDHEAD 1.116.710.01)

Achtung:
Für diese Einstellung nur hochwertige Kassetten verwenden. Das Band darf an den Kanten keine mechanischen Verletzungen oder Verformungen aufweisen.

- Bandberührende Teile mit einem feuchten Filzstab (im REVOX-Reinigungs-Set enthalten) reinigen und entmagnetisieren.
- Kassette einlegen und die der Kassettensorte entsprechende Drucktaste TAPE SELECTOR drücken. Bei nach IEC kodierten Kassetten kann in Position AUTO gearbeitet werden.
- An LINE INPUT ca. 7 mV (ca.3,5 mV bei MKI-Geräten), 10 kHz einspeisen; am LINE OUTPUT muss −20 dBu anstehen (Schalter MONITOR auf SOURCE).
- Gerät auf Aufnahme starten (Tasten REC und PLAY).
- Schalter MONITOR auf TAPE stellen.
- Mit Kreuzschlitzschraubendreher Grösse 00 Schraube Y (Fig. 5.4) so einstellen, dass für beide Kanäle ein Pegelmaximum erreicht wird (minimale Phasendifferenz).

Die nachfolgenden Einstellungen gelten für eine Bandsorte. Für die anderen Sorten ist in der gleichen Weise vorzugehen. Über die Lage der entsprechenden Trimmpotentiometer gibt Fig. 5.3 Auskunft.

5.4.2 Adjusting the azimuth of the record head
(only with RECORDHEAD 1.116.710.01)

Caution:
When making this adjustment, use only high-quality cassettes that have been spooled forward and backward once. The tape must not show any mechanical damage or deformations along the edges.

- Clean all parts that come in contact with the tape with a moist felt stick (included in the REVOX cleaning kit) and subsequently demagnetize these parts.
- Load cassette and press the TAPE SELECTOR button that corresponds to the type of cassette. For cassettes coded according to the IEC scheme, the AUTO position can be used.
- Feed approx. 7 mV (approx. 3.5 mV on MKI units) and 10 kHz in LINE INPUT. Line level −20 dBu should be available at the LINE OUTPUT (MONITOR switch in SOURCE position).
- Start record in play mode (press REC and PLAY).
- Set MONITOR switch to TAPE position.
- With screwdriver size 00 for cross recessed head screws adjust screw Y (Fig. 5.4) in such a manner that maximum level is obtained for both channels (minimum phase difference).

The following adjustments apply for one type of tape only. For other tape types, proceed in the same manner. The position of the corresponding trimmer potentiometers can be determined from Fig. 5.3.

5.4.2 Azimut de la tête d'enregistrement
(seulement pour RECORDHEAD 1.116.710.01)

Attention:
N'employez pour ces réglages que des cassettes de haute qualité qui auront été préalablement déroulées et rebobinées par l'appareil. La bande ne doit en aucun cas présenter de détériorations ou de déformations mécaniques sur les bords.

- Nettoyez les pièces en contact avec la bande avec un coton-tige humide (contenu dans le set de nettoyage REVOX) et démagnétisez les.
- Introduisez une cassette et appuyez sur la touche correspondante de TAPE SELECTOR. Dans le cas de cassettes codées IEC, on peut utiliser la position AUTO.
- Injectez 10 kHz sous env. 7 mV dans LINE INPUT (env. 3,5 mV pour les appareils MKI). On doit mesurer −20 dB à LINE OUTPUT (commutateur MONITOR sur SOURCE).
- Appuyez sur les touches REC et PLAY.
- Placez le commutateur MONITOR sur TAPE.
- Tournez la vis Y (fig. 5.4) avec le tournevis cruciforme taille 00 pour obtenir un niveau maximal pour les deux canaux (différence minimale de phase).

Les réglages qui suivent sont valables pour un type de bande. Pour les autres sortes, on procèdera de même. La figure 5.3 indique l'emplacement des trimmers correspondants.

5.4.3 Einstellen der Vormagnetisierung

- Gleiche Vorbereitungen wie unter Kapitel 5.4.2.
- Die entsprechenden Trimmpotentiometer auf der Oszillatorsteckkarte (siehe Fig. 5.3) so einstellen, dass für beide Kanäle ein maximaler Ausgangspegel erreicht wird.
- Die erreichten Werte (in dB) notieren, von diesem Wert den jeweiligen Betrag nach Fig. 5.7 abziehen.
- Den errechneten Wert mit den entsprechenden Trimmpotentiometern einstellen.

5.4.3 Adjusting the tape bias

- Same preparations as described in 5.4.2.
- Adjust the corresponding trimmer potentiometers on the oscillator PCB (refer to Fig. 5.3) in such a manner, that maximum output level is obtained for both channels.
- Write down the actual values (in dB) and deduct from this value the amount shown in Fig. 5.7.
- Set this calculated value with the corresponding trimmer potentiometers.

5.4.3 Réglage de la prémagnétisation

- Mêmes travaux préliminaires qu'au chapitre 5.4.2.
- Réglez les trimmers de la carte oscillateur (voir fig. 5.3) de façon à obtenir un niveau maximal des deux canaux.
- Notez les valeurs absolues en dB puis soustrayez leur la valeur correspondante indiquée fig. 5.7.
- Ajustez à la valeur calculée à l'aide des trimmers.

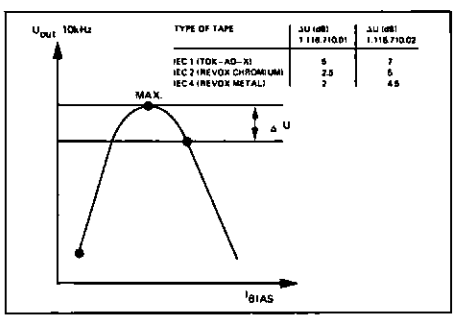


Fig. 5.7

5.3.3 Kontrolle der Schalter TAPE SELECTOR

– Umschalten der Drucktasten TAPE SELECTOR von IEC1 auf AUTO darf keinen Pegelsprung verursachen (bei 10 kHz prüfen).

Abschliessend sollte der Wiedergabepegel überprüft und ggf nachgestellt werden.

5.3.4 Kontrolle des Wiedergabefrequenzganges

– Bezugskassette im Abschnitt "Frequenzgang" auf Wiedergabe starten.
– Der Sollfrequenzgang bei einwandfreier Bezugskassette muss innerhalb der in Fig. 5.5 eingezeichneten Toleranz-Zone liegen.

Die gleiche Kontrolle muss auch mit den Bezugskassetten IEC2 (Cr O_2) 70 μs durchgeführt werden.

5.4 Aufnahmeeinstellungen mit Kassetten gemäss IEC1, IEC2 und IEC4

5.4.1 Kontrolle der Oszillatorfrequenz

MK1 Geräte: Gerät ausschalten, Oszillatorsteckkarte 1.710.480 ausziehen und über den Verlängerungsprint wieder einsetzen.

– Gerät einschalten, Kassette einlegen und einmal umspulen.
– Tasten REC und PAUSE drücken.
– Digitalzähler an Punkt A (Fig. 5.6) anschliessen.
– Die Frequenz muss 105 kHz ± 1 kHz betragen. Falls die Abweichung grösser ist, kann dies mit dem Spulenkern von T1 (Fig.5.6, Punkt B) korrigiert werden.

5.3.3 Checking the TAPE SELECTOR switch

– When the TAPE SELECTOR buttons are changed over from IEC1 to AUTO, no level jump should occur (check with 10 kHz).

After these adjustments check the reproduce level and readjust if necessary.

5.3.4 Checking the reproduce frequency response

– Start frequency response section of reference cassette in PLAY mode.
– With an immaculate reference cassette, the nominal frequency must be within the tolerance zone illustrated in Fig. 5.5.

The same check must also be performed with the 70 μs IECII reference cassettes.

5.4 Record adjustments with cassettes conforming to IEC1, IEC2 and IEC4

5.4.1 Checking the oscillator frequency

MKI recorders: switch recorder off and reconnect oscillator PCB 1.710.480 via the extension board.

– Load cassette and spool forward and backward once.
– Press REC and PAUSE keys.
– Connect digital counter to point A (Fig. 5.6).
– The frequency must measure 105 kHz ± 1 kHz. If the deviation is larger, this can be corrected with the trimmer slug of T1 (Fig. 5.6, point B).

5.3.3 Contrôle du commutateur TAPE SELECTOR

– Une commutation du TAPE SELECTOR de IEC1 à AUTO ne doit pas provoquer de saut de niveau (essai à 10 kHz).

A l'issue de réglage, on mesurera le niveau du signal de lecture pour le réajuster le cas échéant.

5.3.4 Contrôle de la courbe de réponse lecture

– Lisez la plage "réponse en fréquence" de la cassette étalon.
– La courbe de réponse en fréquence, pour une cassette étalon en bon état doit tenir dans le gabarit de la figure 5.5.

Le même contrôle doit être effectué avec la cassette étalon DIN 70 μs.

5.4 Réglages de l'enregistrement avec les cassettes IEC1, IEC2 et IEC4

5.4.1 Contrôle de la fréquence de l'oscillateur

Versions MKI: Débranchez l'appareil, inserrez le circuit imprimé prolongateur entre l'oscillateur 1.710.480 et son logement.

– Introduisez une cassette, faites la défiler entièrement et rebobinez-la.
– Appuyez sur les touches REC et PAUSE.
– Raccordez le fréquencemètre digital au point A (fig. 5.6).
– La fréquence doit être de 105 kHz ± 1 kHz. Si l'écart est plus grand, il peut être corrigé en agissant sur le noyau de T1 (fig.5.6 point B).

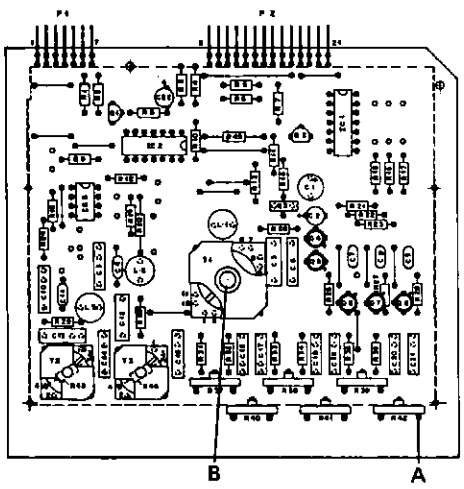


Fig. 5.6

5.3 Messungen und Einstellungen "über Band"

In diesem Abschnitt wird eine Bezugskassette 4,75 benötigt. Es ist von Vorteil, diese auf dem Gerät einmal vollständig umzuspulen.
Für die folgenden Einstellarbeiten ist die Laufwerkabdeckung auszubauen.

5.3.1 Einstellen des Wiedergabepegels

- Bandberührende Metallteile bei ausgeschaltetem Gerät sorgfältig entmagnetisieren und reinigen.
- Hi-Fi Bezugskassette 4,75 (Fe) einlegen.
- Schalter MONITOR auf TAPE stellen und die Drucktaste TAPE SELECTOR IEC1 drücken.
- Schalter DOLBY NR auf OFF stellen.
- Kassette im Pegeltonteil 250 nWb/m, 315 Hz auf Wiedergabe (PLAY) starten.
- Wiedergabepegel mit den Trimmpotentiometern REPRO LEVEL L und R so einstellen, dass am LINE OUTPUT + 2 dBu (0,97 V) ansteht (Fig. 5.3).

5.3.2 Azimut des Wiedergabekopfes einstellen

- Laufwerkabdeckung abnehmen.
- Bezugskassette im Abschnitt "Spalteinstellung 10 kHz" auf Wiedergabe starten.
- Die Ausgangsspannung am LINE OUTPUT muss ca. –9 dBu betragen.
- Mit Schraube X (Fig. 5.4) den Ausgangspegel beider Kanäle auf maximale Ausgangsspannung einstellen.
  (Für diese Einstellung kann auch ein Phasenmeter verwendet werden, dabei wird auf minimalen Phasenfehler abgeglichen.)

5.3 Measurements and adjustments with tape

A 4.75 reference cassette is required for these adjustments. Spool the cassette forward and backward twice on the recorder to be adjusted. The tape transport cover must be removed for these adjustments.

5.3.1 Adjusting the reproduce level

- Carefully demagnetize and clean all metal parts that come in contact with the tape.
- Mount Hi-Fi reference cassette 4.75 (Fe).
- Set MONITOR switch to TAPE position and press TAPE SELECTOR IEC1.
- Set DOLBY NR switch to OFF position.
- Start reference cassette, level tone section 250 nWb/m, 315 Hz, in PLAY mode.
- Adjust reproduce level with trimmer potentiometers REPRODUCE LEVEL L and R in such a manner that +2 dBu (0.97) V is available at the LINE OUTPUT (Fig. 5.3).

5.3.2 Adjusting the azimuth of the reproduce head

- Remove tape transport cover.
- Start reference cassette, azimuth alignment 10 kHz section in PLAY mode.
- The output voltage at the LINE OUTPUT must be approximately –9 dBu.
- With screw X (Fig. 5.4), adjust the output level of the two channels for maximum output voltage.
  (A phase meter can also be used for these adjustments. In this case adjust for minimum phase error.)

5.3 Mesures et réglages "après bande"

Pour ces réglages, on utilisera la cassette étalon 4,75 (Fe). Cette cassette doit auparavant défiler entièrement et être rebobiner par l'appareil. De plus, on retirera le capot du mécanisme.

5.3.1 Réglage du niveau de lecture

- Démagnétisez et nettoyez soigneusement les parties métalliques en contact avec la bande.
- Introduisez la cassette étalon 4,75 (Fe).
- Placez le commutateur MONITOR sur TAPE et appuyez sur la touche TAPE SELECTOR IEC I.
- Placez le commutateur DOLBY NR sur OFF.
- Lisez la plage de référence 250 nWb/m, 315 Hz de la cassette.
- Réglez le niveau de lecture avec les trimmer REPRO LEVEL L et R pour que la sortie LINE OUTPUT délivre +2 dBu (0,97V) (fig. 5.3).

5.3.2 Réglage de l'azimut de la tête de lecture

- Déposez le couvercle du mécanisme.
- Lisez la plage "Réglage par crevasse 10 kHz" de la cassette étalon.
- La tension de sortie LINE OUTPUT doit être 10 dB sous le niveau ligne.
- Réglez à sa valeur maximale le niveau de sortie des deux canaux grâce à la vis X (fig.5.4). (Pour effectuer ce réglage, on peut se servir d'un phase-mètre et régler à l'erreur de phase minimale.)

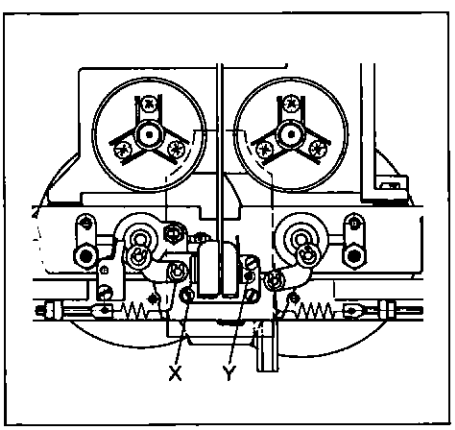


Fig. 5.4

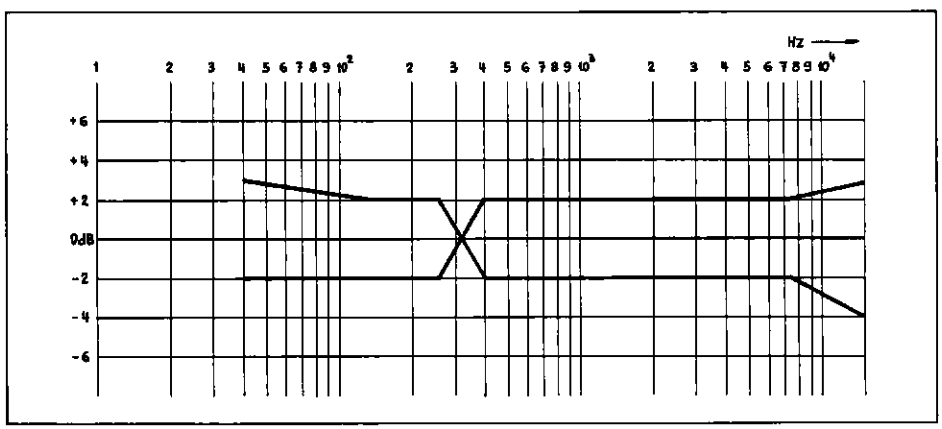


Fig. 5.5

Kalibrieren:
- An LINE INPUT ca. 70 mV (ca.35 mV bei MKI-Geräten), 315 Hz einspeisen (an LINE OUTPUT müssen 0,775 V/0 dBu anstehen).
- Trimmpotentiometer PEAK METER CALIBRATION (Fig. 5.2) für beide Kanäle so einstellen, dass die beiden Segmente links der Dolby-Marke (0 dB) gerade noch aufleuchten.
- Kontrolle wie vorgängig beschrieben wiederholen.

Calibration:
- Feed approx. 70 mV (approx. 35 mV on MKI units) and 315 Hz in LINE INPUT. (Corresponds to 0.775 V/0 dB at LINE OUTPUT).
- Adjust trimmer potentiometer PEAK METER CALIBRATION (Fig. 5.2) of both channels in such a manner that the two segments to the left of the Dolby marker (0 dB) just light up.
- Recheck as described above.

Etalonnage:
- Injectez 315 Hz sous env. 70 mV (env. 35 mV pour les appareils MKI) dans LINE INPUT. (Correspond à 0,775 V/ 0 dB au LINE OUTPUT).
- Ajustez le trimmer PEAK METER CALIBRATION (fig. 5.3) pour les deux canaux de façon à ce que les deux segments situés à gauche du symbole DOLBY (0 dB) s'allument à peine.
- Répétez le contrôle comme décrit ci-dessus.

5.2.4 Kontrolle und Abgleich der MPX-Filter

- An LINE INPUT 19 kHz ± 20 Hz, ca. 70 mV (ca.35 mV bei MKI-Geräten einspeisen.
- An LINE OUTPUT müssen 0,775 V (0 dBu) anstehen.
- Schalter DOLBY NR und MPX-FILTER auf ON stellen.
- Die Ausgangsspannung muss um −30 dB auf < 24 mV absinken.
  Ist dies nicht der Fall, müssen die Filter neu abgeglichen werden.

Abgleich:
- Gerät ausschalten und den Dolby C Encoder-Print 1.710.488/489 über den Verlängerungsprint 1.710.495 führen, danach das Gerät wieder einschalten.
- Die Abgleichkerne der Spulen L2 (L3) und L4 auf maximale Dämpfung einstellen (min. 30 dB).
- Kontrolle wiederholen.

5.2.4 Checking and adjusting the MPX filters

- Feed in 19 kHz ± 20 Hz approx. 70 mV (approx. 35 mV on MKI units) at LINE INPUT.
- Corresponds to 0,775 V (0 dBu) at LINE OUTPUT.
- Set DOLBY-NR and MPX-FILTER switches to ON position.
- The output voltage should drop by at least −30 dB.
  Should this not be the case, the filters require readjustment.

Adjustment:
- Switch recorder off and reconnect the Dolby-C encoder 1.710.488/489 via the extension board 1.710.495. Switch recorder on again.
- Adjust trimmer slugs of coils L2 (L3) and L4 to maximum attenuation (min. 30 dB).
- Repeat checking steps.

5.2.4 Contrôle et alignement des filtres MPX

- Injectez 19 kHz ± 20 Hz sous env. 70 mV dans LINE INPUT (env. 35 mV pour les appareils MKI).
- Correspond à 0,775 V (0 dBu) au LINE OUTPUT.
- Placez les commutateurs DOLBY NR et MPX-FILTER sur ON.
- La tension de sortie doit être inférieure d'au moins 30 dB. Si ce n'est pas le cas, il faut réaligner les filtres.

Alignement:
- Débranchez l'appareil, insérez le circuit imprimé prolongateur 1.710.495 entre l'encodeur Dolby-C 1.710.489 et son logement puis rebranchez l'appareil.
- Réglez les noyaux d'alignement des bobines L2 (L3) et L4 pour un amortissement maximal.
- Répétez le contrôle.

5.2.5 Fremd- und Geräuschspannungsabstand "vor Band" kontrollieren
bezogen auf 200 nWb/m

- Schalter DOLBY NR auf OFF stellen.
- Regler INPUT LEVEL LINE im Uhrzeigersinn in den Anschlag drehen.
- Regler INPUT LEVEL MIC im Gegenuhrzeigersinn in den Anschlag drehen.
- Die Leitungseingänge kurzschliessen.

Der Fremdspannungsabstand muss mindestens 73 dB (79 dB), der Geräuschspannungsabstand (A-Kurve) mindestens 76 dB (82 dB) betragen. Diese Werte beziehen sich auf die Bestückung 1.710.350/488, Werte in Klammern auf die Bestückung mit 1.710.351/489.

5.2.5 Checking the signal-to-noise ratio "without tape"
relative to 200 nWb/m

- Set DOLBY NR switch to OFF position.
- Turn INPUT LEVEL LINE control to clockwise limit position.
- Set INPUT LEVEL MIC control to counterclockwise limit position.
- Short-circuit line inputs.

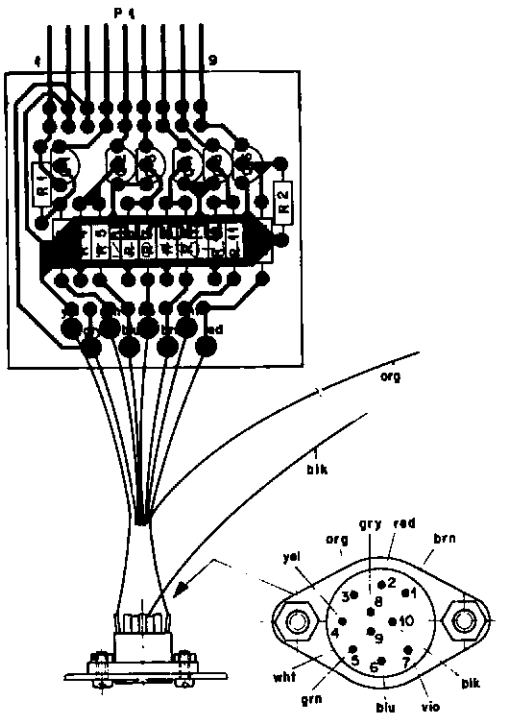
The unweighted SN ratio should measure at least 73 dB (79 dB), the weighted SN ratio (curve A) at least 76 dB (82 dB). These values apply to recorders equipped with the assemblies 1.710.350/488, those in brackets to recorders equipped with the assemblies 1.710.351/489.

5.2.5 Contrôle du rapport signal/bruit "avant bande"
référé à 200 nWb/m

- DOLBY NR placé sur OFF.
- Amenez INPUT LEVEL LINE en butée dans le sens des aiguilles d'une montre.
- Amenez INPUT LEVEL MIC en butée en le tournant en sens inverse.
- Court-circuitez les entrées ligne.

Le recul du bruit doit être d'au moins 73 dB (79 dB), le rapport signal/bruit (courbe A) d'au moins 76 dB (82 dB). Ces valeurs se rapportent au circuit 1.710.350/488, celles entre parenthèses au circuit 1.710.351/489.

REMOTE CONTROL INTERFACE 1.710.441/442



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	J.....1	54.02.0315	10-Pole	DIN Socket	
	MP....1	1.710.440.11		RC INTERFACE PCB	St
	MP....2	1.710.440.93		CABLE HARNESS	St
	P.....1	54.01.0429	9-POLE	PIN-STRIP	AMP
	Q.....1	50.03.0436	BC 237	NPN	
	Q.....2	50.03.0436	BC 237	NPN	
	Q.....3	50.03.0436	BC 237	NPN	
	Q.....4	50.03.0436	BC 237	NPN	
	Q.....5	50.03.0436	BC 237	NPN	
	Q.....6	50.03.0436	BC 237	NPN	
	R.....1	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....6	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....7	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....10	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....11	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....12	57.11.4682	6.8 kOhm	5%, 0.25W, CF	

CF=Carbon Film
MANUFACTURER: St=STUDER,

ORIG 81/10/27

S T U D E R 82/09/21 RW RC INTERFACE KIT 1.710.441.00 PAGE 1

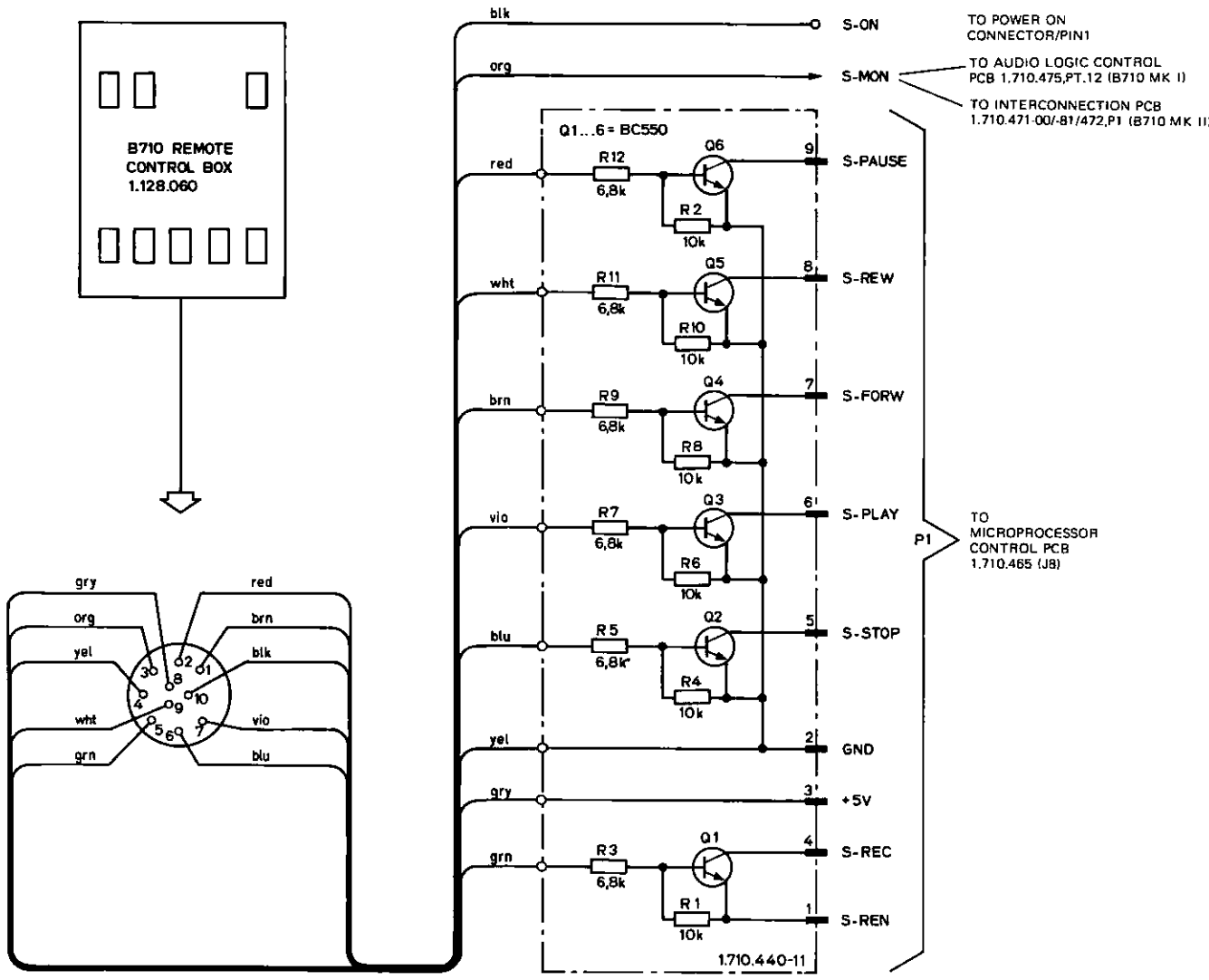
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	J.....1	54.02.0315	10-Pole	DIN Socket	
	MP....1	1.710.440.11		RC INTERFACE PCB	St
	MP....2	1.710.440.93		CABLE HARNESS	St
	P.....1	54.01.0429	9-POLE	PIN-STRIP	AMP
	Q.....1	50.03.0436	BC 237	NPN	
	Q.....2	50.03.0436	BC 237	NPN	
	Q.....3	50.03.0436	BC 237	NPN	
	Q.....4	50.03.0436	BC 237	NPN	
	Q.....5	50.03.0436	BC 237	NPN	
	Q.....6	50.03.0436	BC 237	NPN	
	R.....1	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....6	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....7	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....10	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....11	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R.....12	57.11.4682	6.8 kOhm	5%, 0.25W, CF	

CF=Carbon Film
MANUFACTURER: St=STUDER,

ORIG 82/01/06

S T U D E R 82/09/21 RW RC INTERFACE 1.710.442.00 PAGE 1

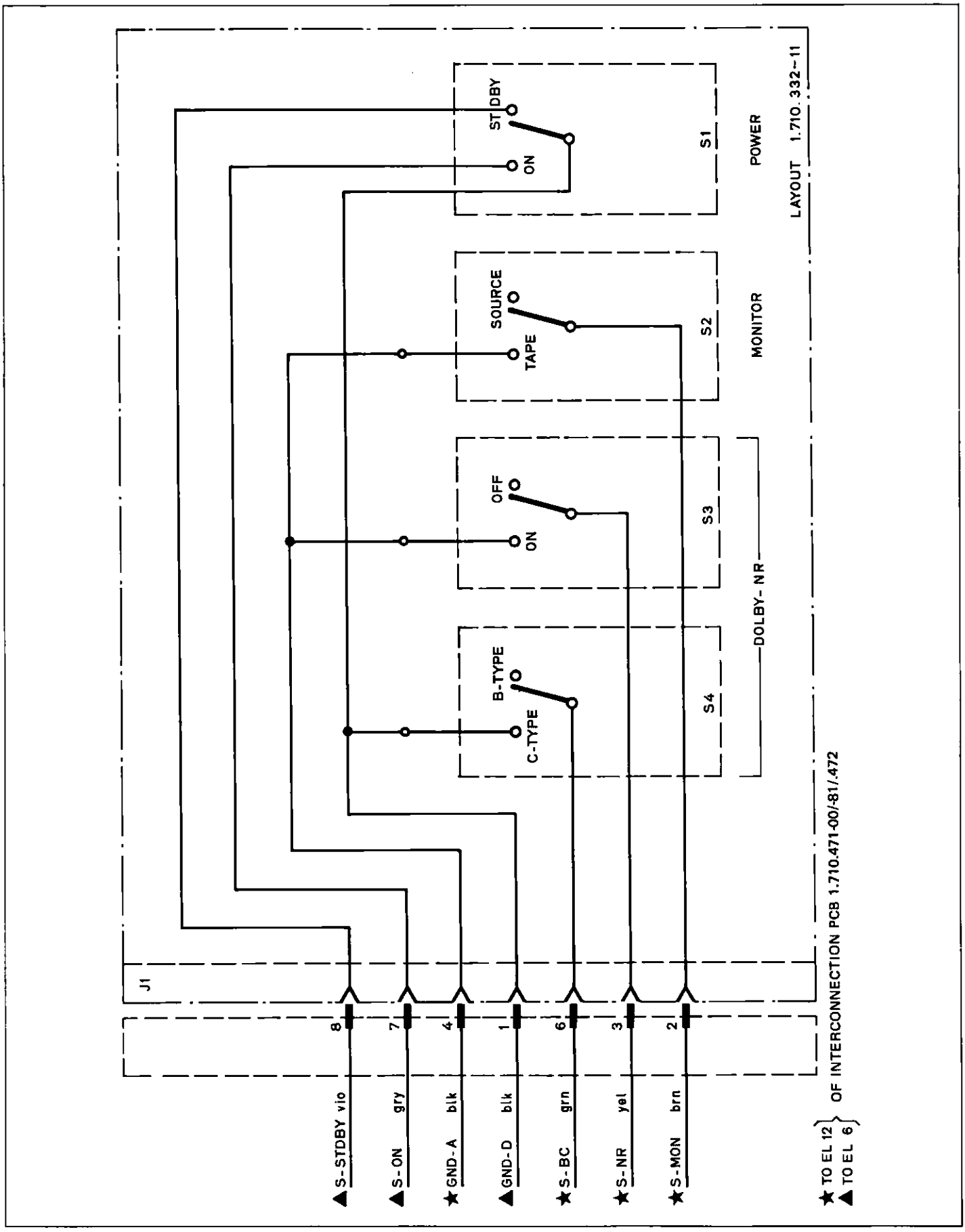
REMOTE CONTROL INTERFACE 1.710.441/442



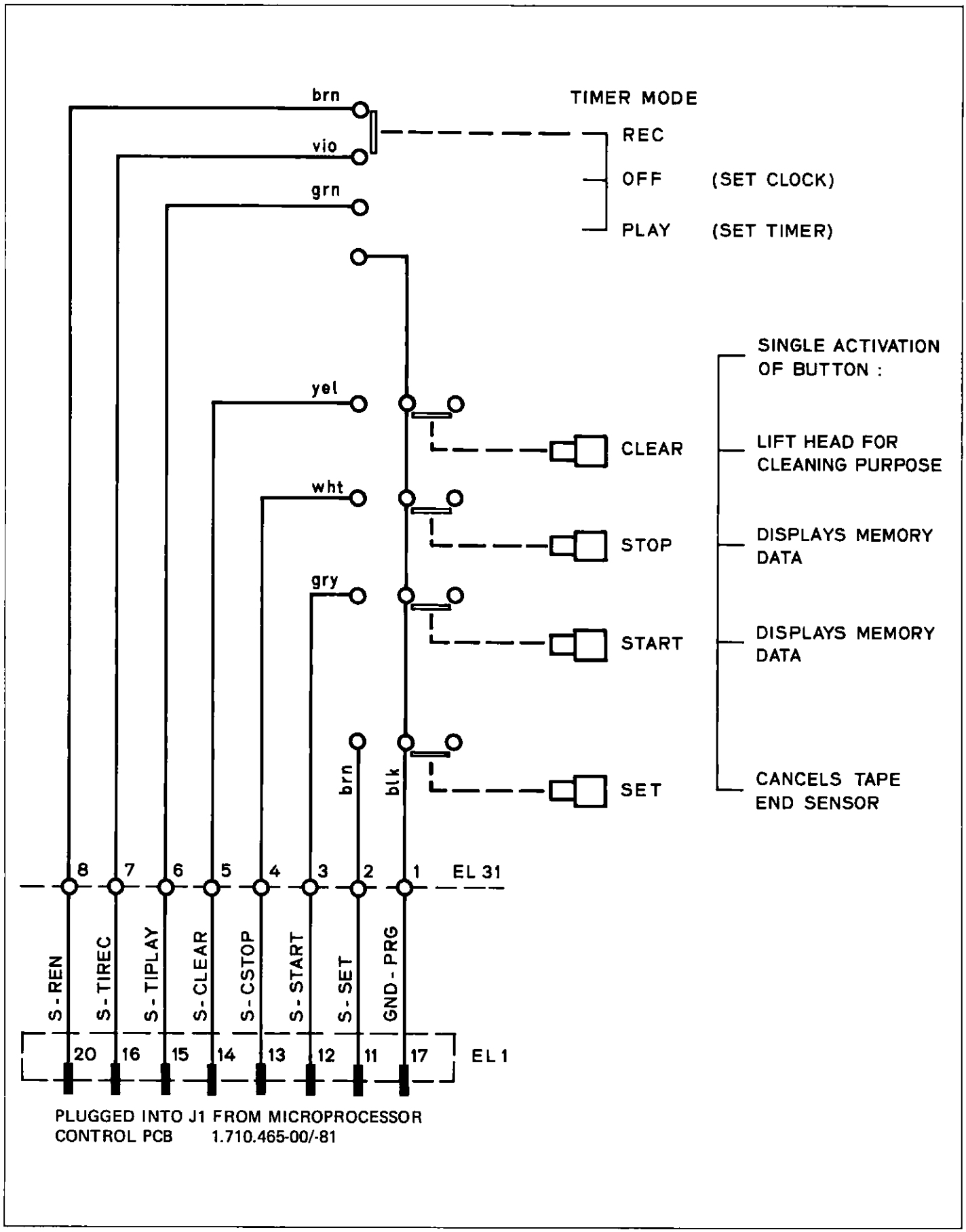
FEATURING:
- STANDARD TAPE TRANSPORT + REPEAT FUNCTION
- MONITORING (SOURCE / TAPE)

REMOTE CONTROL INTERFACE INSTALLATION KIT TO B710 MKI 1.710.441–00
REMOTE CONTROL INTERFACE/FACTORY MOUNTED IN B710 MKII 1.710.442–00

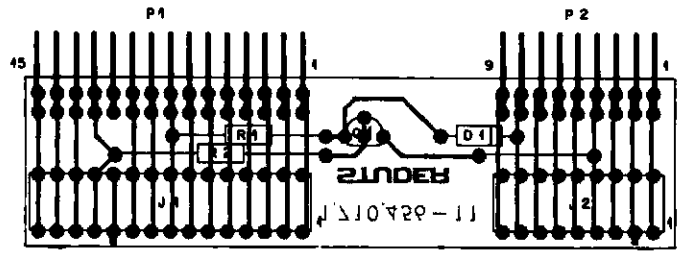
TOGGLE SWITCHES PCB 1.710.332



PROGRAM PRESET SWITCHES



BACK TENSION PCB 1.710.456-00/-81

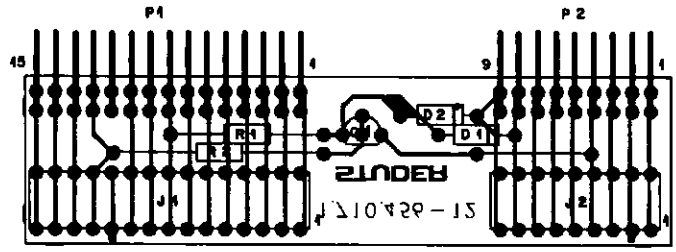


IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	D.....1	50.04.0125	1N4448	Any	
	J.....1	54.01.0243	15-Pole	CIS-Socket-Strip	
	J.....2	54.01.0212	9-Pole	CIS-Socket-Strip	
	P.....1	54.01.0275	15-Pole	CIS-Pin-Strip	AMP
	P.....2	54.01.0220	9-Pole	Cis-Pin-Strip	AMP
	Q.....1	50.03.0436	BC 237 B	NPN	
	R.....1	57.11.4331	330 Ohm	5%,0.25W,MF	
	R.....2	57.11.4333	33 kOhm	5%,0.25W,MF	

MF=Metal Film.

ORIG 82/06/10

STUDER 82/06/10 RH BACK TENSION PCB 1.710.456.00 PAGE 1



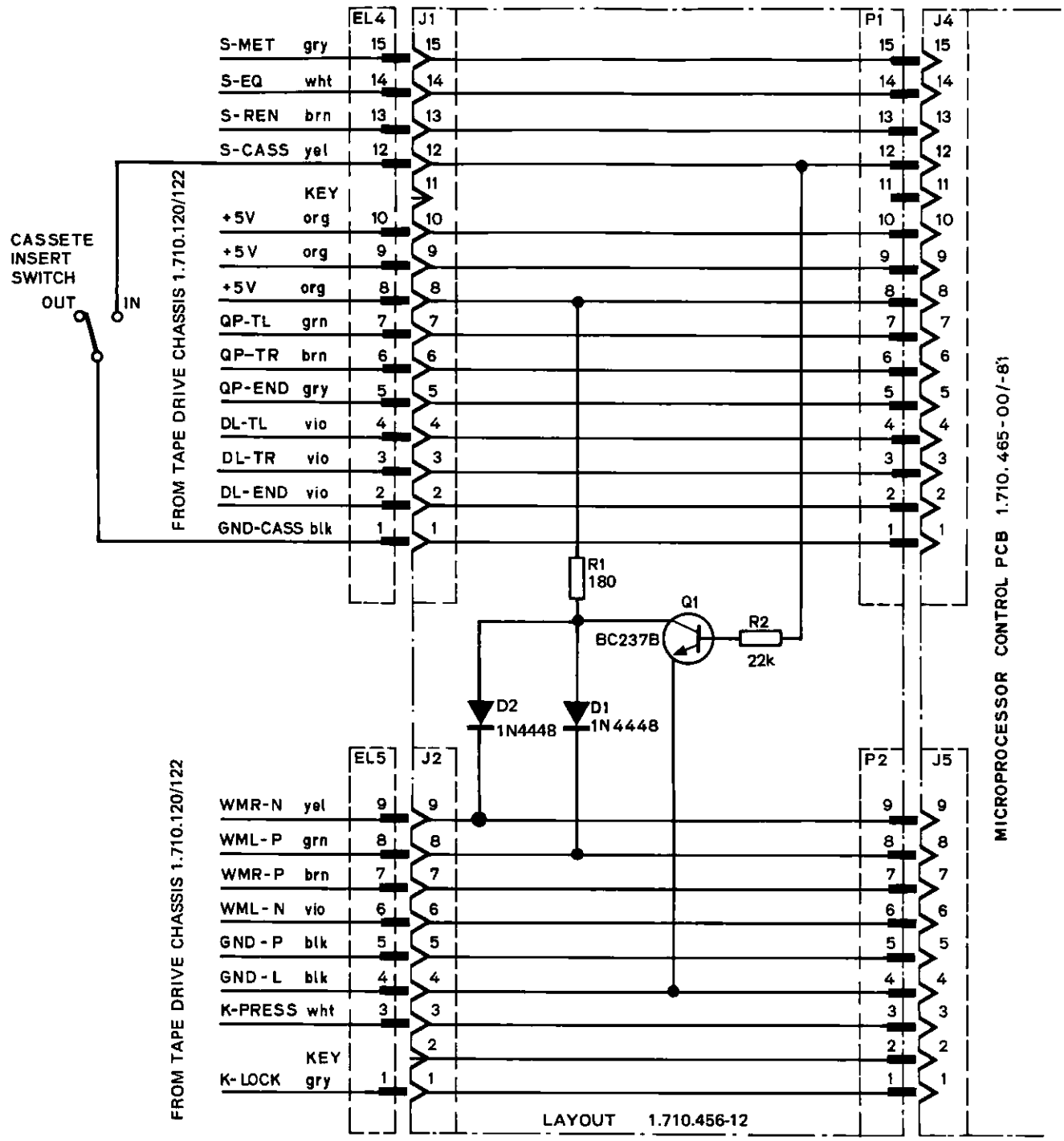
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	D.....1	50.04.0125	1N4448	Any	
	D.....2	50.04.0125	1N4448	Any	
	J.....1	54.01.0243	15-Pole	CIS-Socket-Strip	
	J.....2	54.01.0212	9-Pole	CIS-Socket-Strip	
	P.....1	54.01.0275	15-Pole	CIS-Pin-Strip	AMP
	P.....2	54.01.0220	9-Pole	Cis-Pin-Strip	AMP
	Q.....1	50.03.0436	BC 237 B	NPN	
	R.....1	57.11.4181	180 Ohm	5%,0.25W,MF	
	R.....2	57.11.4223	22 kOhm	5%,0.25W,MF	

MF=Metal Film.

ORIG 83/04/11

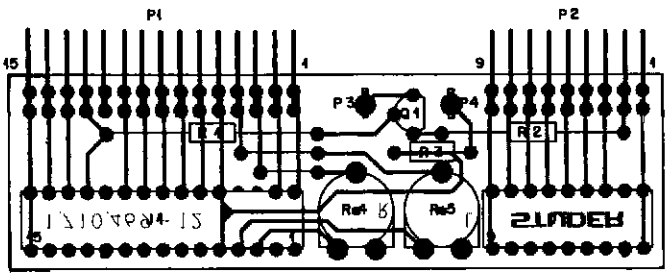
STUDER (00) 83/04/11 RH BACK TENSION PCB 1.710.456.81 PAGE 1

BACK TENSION PCB 1.710.456-00/-81



VERSION 1.710.456-00
WITHOUT D2
R1 = 330Ω/R2 = 33k
LAYOUT = 1.710.456-11

HEAD LIFTING CIRCUIT 1.710.469–00/–81



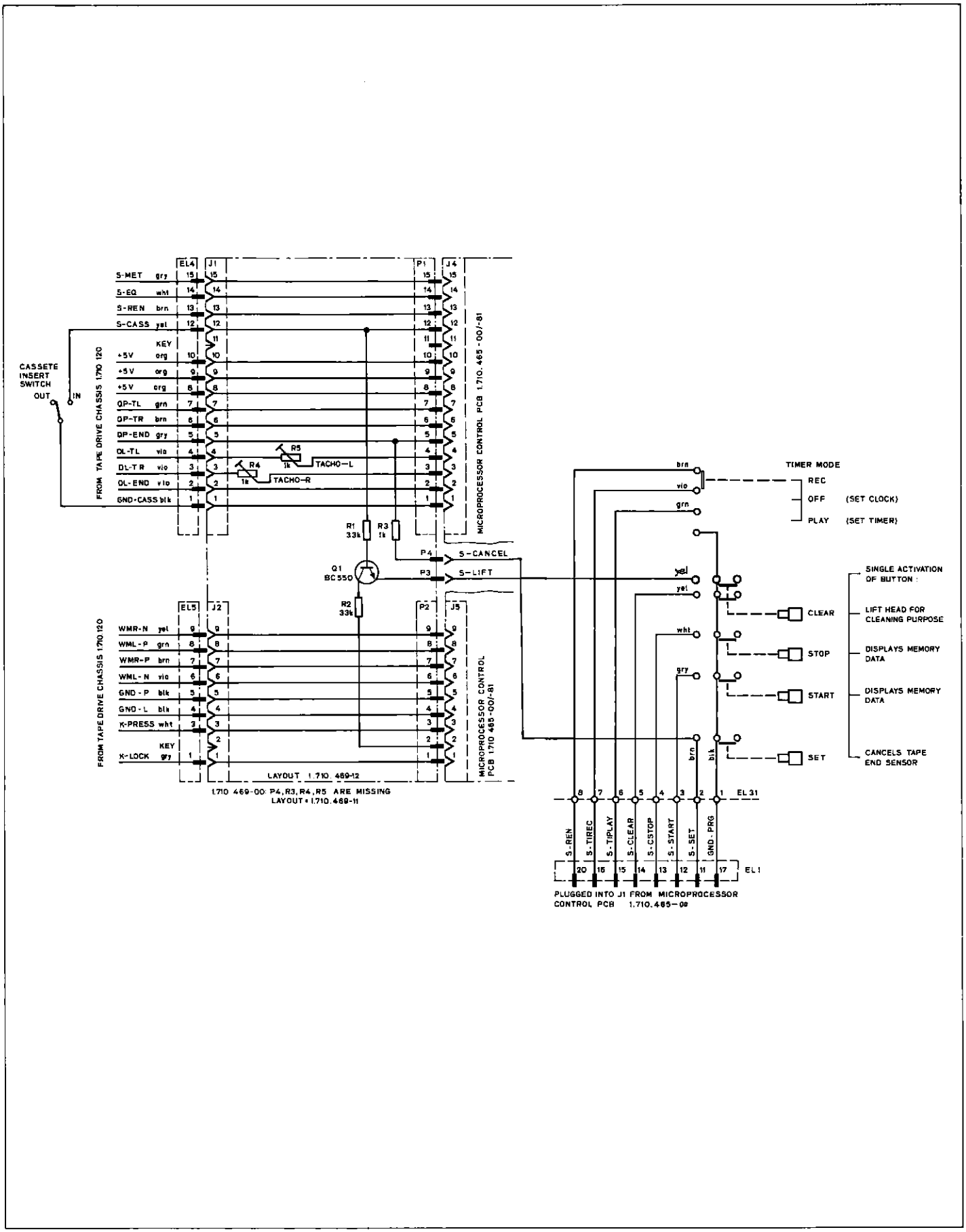
INC.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	J.....1	54.01.0243	15-Pole	CIS	
	J.....2	54.01.0212	9-Pole	CIS	
	P.....1	54.01.0275	15-Pole	Pin-Strip	AMP
	P.....2	54.01.0270	9-Pole	Pin-Strip	AMP
	P.....3	54.02.0320		Flat-Pin	
	P.....4	54.02.0320		Flat-Pin	
	Q.....1	50.03.0436	BC 550	NPN	
	R.....1	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....4	58.02.5102	1 kOhm	20%, 0.15W, Pot, lin.	
	R.....5	58.02.5102	1 kOhm	20%, 0.15W, Pot, lin.	

CF=Carbon Film

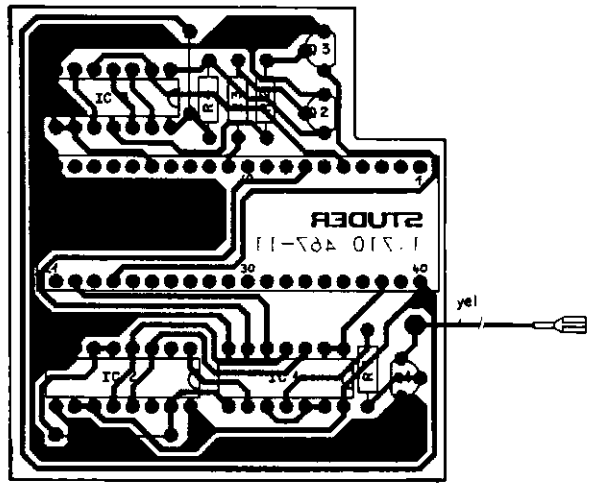
ORIG 81/08/20

STUDER 81/08/20 RW HEAD LIFTING CIRCUIT 1.710.469.81 PAGE 1

HEAD LIFTING CIRCUIT 1.710.469–00/–81



MICROPROCESSOR LOGIC PCB 1.710.467 "ESE"

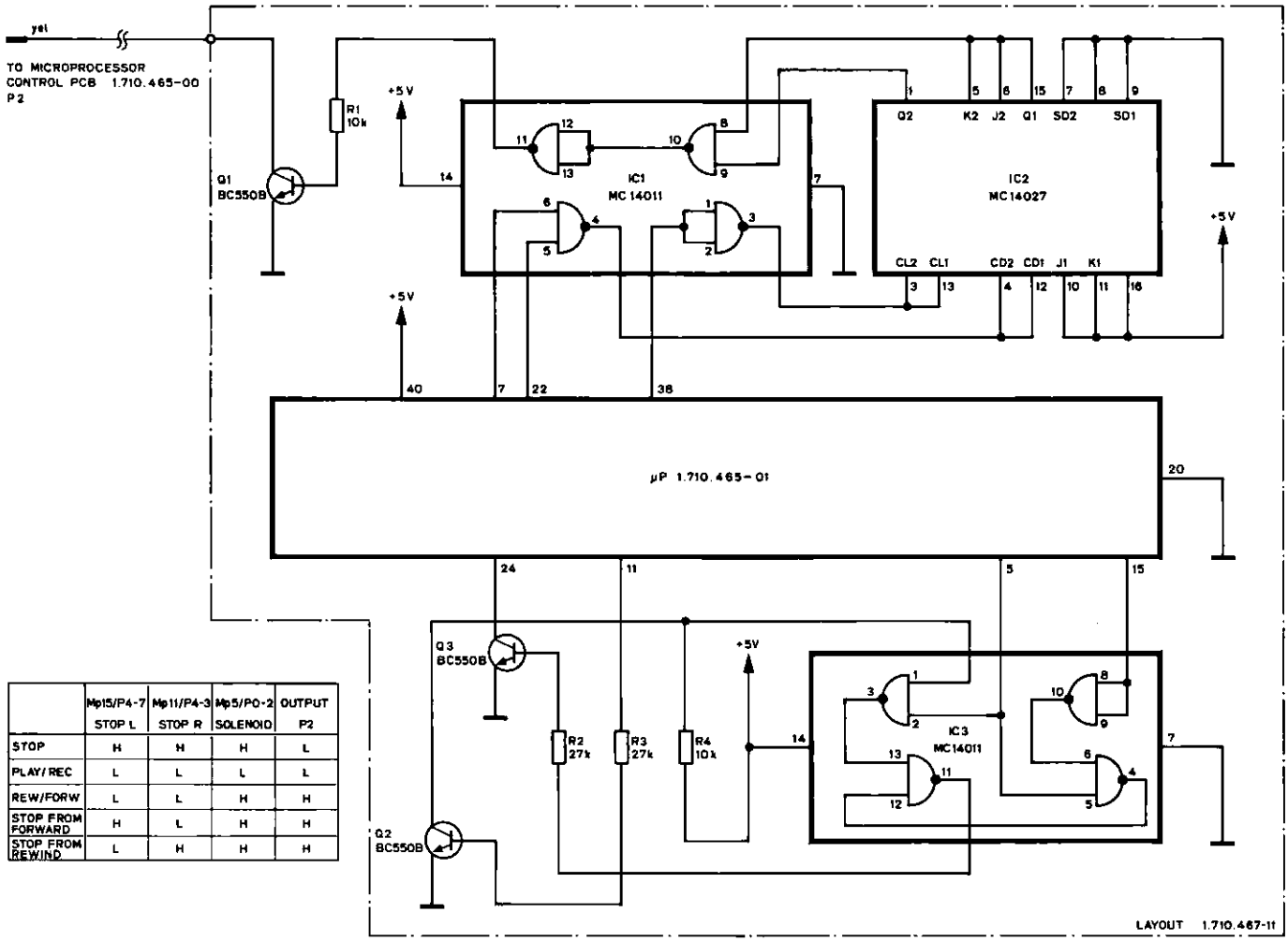


IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R 1	57.11.4103	10 kΩ	5%	
	R 2	57.11.4273	27 kΩ	5%	
	R 3	57.11.4273	27 kΩ	5%	
	R 4	57.11.4103	10 kΩ	5%	
	Q 1	50.03.0436	BC 550 B	NPN / BC 547 B, BC 237 B	
	Q 2	50.03.0436	BC 550 B	NPN / BC 547 B, BC 237 B	
	Q 3	50.03.0436	BC 550 B	NPN / BC 447 B, BC 237 B	
	IC 1	50.07.0311	MC 14011	Quad 2-Input NAND Gate	
	IC 2	50.07.0027	MC 14027	Dual JK-Flip-Flop	
	IC 3	50.07.0011	MC 14011	Quad 2-Input NAND Gate	
	XIC	53.03.0155		40-Pole 2 Wire Wrap IC Socket	

IND	DATE	NAME
④		
③		
②		
①		
○	[illegible]	[illegible]

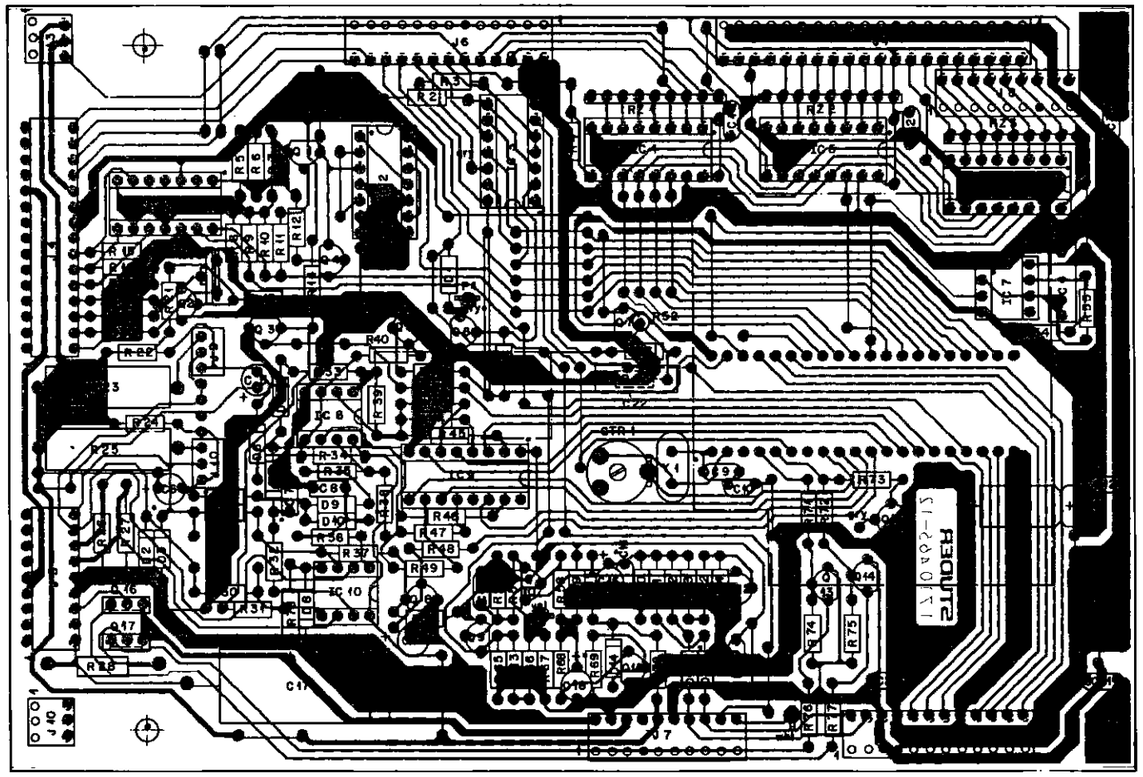
STUDER [illegible] 1.710.467 PAGE [illegible] OF [illegible]

MICROPROCESSOR LOCIC PCB 1.710.467 "ESE"

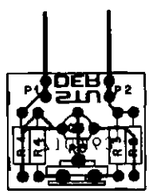


	Mp15/P4-7 STOP L	Mp11/P4-3 STOP R	Mp5/P0-2 SOLENOID	OUTPUT P2
STOP	H	H	H	L
PLAY/REC	L	L	L	L
REW/FORW	L	L	H	H
STOP FROM FORWARD	H	L	H	H
STOP FROM REWIND	L	H	H	H

MICROPROCESSOR CONTROL PCB 1.710.465–00 "ESE"



MICROPROCESSOR CONTROL PCB 1.710.465–00



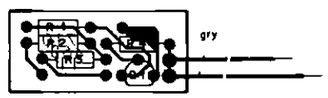
WM–CONTROL PCB 1.710.462

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	P.....1	54.01.0577	3-Pole	Pin-Strip (1 Pin of Strip used)	AMP
	P.....2	54.01.0577	3-Pole	Pin-Strip (1 Pin of Strip used)	AMP
	Q.....1	50.03.0436	BC 237 B	NPN	
	R.....1	57.11.4512	5.1 K	2%,0.25W,MF	
	R.....2	57.11.4201	200 R	2%,0.25W,MF	
	R.....3	57.11.4152	1.5 K	2%,0.25W,MF	
	R.....4	57.11.4822	8.2 K	2%,0.25W,MF	
	R.....5	58.02.4102	1 K	20%,0.10W,PCF	

MF=Metal Film, PCF=Pot. Meter Carbon Film

ORIG 82/05/19

STUDER 82/05/19 RW WM CONTROL PCB PK1 1.710.462.00 PAGE 1



WML–LOGIC CONTROL PCB 1.710.468

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	G1	50.03.0436	BC 550 B	NPN $I_C \leq 100\,mA$ $U_{CEO}=45V$	
2	R1	57.11.3113	11 kΩ	±1%	
1	R2	57.11.3101	100 Ω	±1%	
1	R3	57.11.3622	6.2 kΩ	±1%	
	R4	57.11.4473	47 kΩ	±5%	

IND	DATE	NAME
4		
3		
2	21.4.92	FM
1	24.9.91	FM
0	6.2.90	DS

STUDER WML - LOGIC UNIT PL .710.4-2-03 PAGE 1 OF 1

1.710.468 :
R1 = 9,1 k (57.11.3912) IF WM–CONTROL PCB 1.710.462 IS EQUIPPED INSTEAD OF R34

WM–CONTROL PCB 1.710.462 WML–LOGIC CONTROL PCB 1.710.468

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.32.3103	10 nF	20%, 25V Cer	
	C.....2	59.32.5123	10 nF	20%, 25V Cer	
	C.....3	59.32.3103	10 nF	20%, 25V Cer	
	C.....4	59.02.5333	33 nF	5%, 25V PC	
	C.....5	59.22.5220	22 uF	-20%, 25V El	
	C.....6	59.22.5220	22 uF	-20%, 25V El	
	C.....7	59.06.0104	100 nF	10%, 25V PE	
	C.....8	59.06.0104	100 nF	10%, 25V Px	
	C.....9	59.34.4560	56 pF	5%, 25V Cer	
	C.....10	59.32.4471	470 pF	5%, 25V Cer	
	C.....11	59.25.1101	100 uF	-20%, 6V El	
	C.....12	59.32.3103	10 nF	20%, 25V Cer	
	C.....13	59.30.4109	10 uF	-20%, 16V Ta	
	C.....14	59.32.3103	10 nF	20%, 25V Cer	
	C.....15	59.30.4220	22 uF	-20%, 16V Ta	
	C.....16	59.32.3103	10 nF	20%, 25V Cer	
	C.....17	59.25.4471	470 uF	-20%, 25V El	
	C.....18	59.30.6109	1 uF	-20%, 25V Ta	
	C.....19	59.32.3103	10 nF	20%, 25V Cer	
	C.....20	59.32.3103	10 nF	20%, 25V Cer	
	C.....21	59.32.3103	10 nF	20%, 25V Cer	
(01)	C.....22	59.31.5476	470 nF	20%, 25V PC	
(01)	LT+....1	59.18.0138	5-40 pF	Var. Cap. TK: -150 +/-350 ppM	
	D.....1	50.04.0125	1N4448	Si	
	D.....2	50.04.0122	1N4001	Si	
	D.....3	50.04.0122	1N4001	Si	
	D.....4	50.04.0125	1N4448	Si	
	D.....5	50.04.0125	1N4448	Si	
	D.....6	50.04.1136	Z 2.7V	5%, 0.4W, Si	
	D.....7	50.04.1106	Z 2.7V	5%, 0.4W, Si	
	D.....8	50.04.1101	Z 2.4V	5%, 0.4W, Si	
	D.....9	50.04.0125	1N4448	Si	
	D.....10	50.04.0125	1N4448	Si	
	D.....11	50.04.0125	1N4448	Si	
	D.....12	50.04.1123	Z 4.7V	5%, 0.4W, Si	
	D.....13	50.04.0125	1N4448	Si	
	D.....14	50.04.1137	Z 3.3V	5%, 0.4W, Si	
	D.....15	50.04.0125	1N4448	Si	
	D.....16	50.04.0125	1N4448	Si	
(01)	D.....17	50.04.0125	1N4448	Si	
	IC.....1	50.11.0134	LM 339N	Quad Comparator	N, M
	IC.....2	50.07.0013	F 4013	Dual D-Flipflop CMOS	Fx M
	IC.....3	50.05.0127	SN 7406	Hex Driver TTL	Fx Sig
	IC.....4	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fx
	IC.....5	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fx
	IC.....6	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fx
	IC.....7	50.05.0139	NE 555	Timer	Fx M
	IC.....8	50.05.0286	LM 358	Dual Op. Amp.	Fx
	IC.....9	50.07.0050	F 4050	Hex Buffer CMOS	Fx M
	IC.....10	50.05.0245	RC4558	Dual Op. Amp.	Fx Ra
	IC.....11	1.710.467.00		uP Logic Unit	Sy
	J.....1	54.01.0226	20-Pole	CIS-Socket-Strip	
	J.....2	54.01.0215	12-Pole	CIS-Socket-Strip	
	J.....3	54.01.0287	3-Pole	CIS-Socket-Strip	
	J.....4	54.01.0263	15-Pole	CIS-Socket-Strip	
	J.....5	54.01.0212	9-Pole	CIS-Socket-Strip	
	J.....6	54.01.0292	13-Pole	CIS-Socket-Strip	
	J.....7	54.31.0290	10-Pole	CIS-Socket-Strip	
	J.....8	54.01.0217	9-Pole	CIS-Socket-Strip	
	J.....9	50.20.1017	3-Pole	Transistor-Socket TO-220	
	J.....10	50.20.1017	3-Pole	Transistor-Socket TO-220	
	J.....11	54.31.0287	3-Pole	CIS-Socket-Strip	
	L.....1	62.01.0115		Wide-Band Inductance	
	P.....1	54.02.0320		2.8x0.8mm Plug	
	P.....2	54.02.0320		2.8x0.8mm Plug	
	P.....3	54.02.0320		2.8x0.8mm Plug	
	Q.....1	50.03.0436	BC 550B	NPN	

STUDER (02) 83/03/07 Rw MICROPROCESSOR CONTROL 1.710.465.00 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....21	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....22	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R.....23	57.56.5100	10 Ohm	5%, 4W, CF	
	R.....24	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R.....25	57.56.5100	10 Ohm	5%, 4W, CF	
	R.....26	57.11.3479	4.7 Ohm	1%, 0.25W, MF	
	R.....27	57.11.3479	4.7 Ohm	1%, 0.25W, MF	
	R.....28	57.12.4270	27 Ohm	5%, 0.5 W, CF	
	R.....29	57.11.3133	10 kOhm	1%, 0.25W, MF	
	R.....30	57.11.3133	10 kOhm	1%, 0.25W, MF	
	R.....31	57.11.3132	1 kOhm	1%, 0.25W, MF	
	R.....32	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R.....33	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
(05)	R.....34	57.11.3752	7.5 kOhm	1%, 0.25W, MF	
(02)	R.....35	1.710.462.00		WM-CONTROL PCB	
	R.....36	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....37	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R.....38	57.11.3132	1 kOhm	1%, 0.25W, MF	
	R.....39	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R.....40	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R.....41	57.11.3152	1.5 kOhm	1%, 0.25W, MF	
	R.....42	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....43	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....44	57.39.1242	12.4 kOhm	1%, 0.25W, MF	
	R.....45	1.710.468.00		WML-Logic Unit	
	R.....46	57.39.3091	3.09 kOhm	1%, 0.25W, MF	
	R.....47	57.39.3091	3.09 kOhm	1%, 0.25W, MF	
	R.....48	57.39.6191	6.19 kOhm	1%, 0.25W, MF	
	R.....49	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....50	57.39.1242	12.4 kOhm	1%, 0.25W, MF	
	R.....51	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....52	57.11.4102	1 kOhm	5%, 0.25W, CF	
(03)	R.....53	57.11.4273	27 kOhm	5%, 0.25W, CF	
(01)	R.....54	57.11.4134	100 kOhm	5%, 0.25W, CF	
(09)	R.....55	57.11.4473	47 kOhm	5%, 0.25W, CF	
(01)	R.....56	57.11.4154	150 kOhm	5%, 0.25W, CF	

STUDER (02) 83/03/07 Rw MICROPROCESSOR CONTROL 1.710.465.00 PAGE 4

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	D.....13	50.04.0125	1N4448	Si	
	D.....14	50.04.1137	Z 3.3V	5%, 0.4W, Si	
	D.....15	50.04.0125	1N4448	Si	
	D.....16	50.04.0125	1N4448	Si	
(01)	D.....17	50.04.0125	1N4448	Si	
	IC.....1	50.11.0134	LM 339N	Quad Comparator	N, M
	IC.....2	50.07.0013	F 4013	Dual D-Flipflop CMOS	Fx M
	IC.....3	50.05.0127	SN 7406	Hex Driver TTL	Fx Sig
	IC.....4	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fx
	IC.....5	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fx
	IC.....6	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fx
	IC.....7	50.05.0139	NE 555	Timer	Fx M
	IC.....8	50.05.0286	LM 358	Dual Op. Amp.	Fx
	IC.....9	50.07.0050	F 4050	Hex Buffer CMOS	Fx M
	IC.....10	50.05.0245	RC4558	Dual Op. Amp.	Fx Ra
	IC.....11	1.710.467.00		uP Logic Unit	Sy
	J.....1	54.01.0226	20-Pole	CIS-Socket-Strip	
	J.....2	54.01.0215	12-Pole	CIS-Socket-Strip	
	J.....3	54.01.0287	3-Pole	CIS-Socket-Strip	
	J.....4	54.01.0263	15-Pole	CIS-Socket-Strip	
	J.....5	54.01.0212	9-Pole	CIS-Socket-Strip	
	J.....6	54.01.0292	13-Pole	CIS-Socket-Strip	
	J.....7	54.31.0290	10-Pole	CIS-Socket-Strip	
	J.....8	54.01.0217	9-Pole	CIS-Socket-Strip	
	J.....9	50.20.1017	3-Pole	Transistor-Socket TO-220	
	J.....10	50.20.1017	3-Pole	Transistor-Socket TO-220	
	J.....11	54.31.0287	3-Pole	CIS-Socket-Strip	
	L.....1	62.01.0115		Wide-Band Inductance	
	P.....1	54.02.0320		2.8x0.8mm Plug	
	P.....2	54.02.0320		2.8x0.8mm Plug	
	P.....3	54.02.0320		2.8x0.8mm Plug	
	Q.....1	50.03.0436	BC 550B	NPN	

STUDER (02) 83/03/07 Rw MICROPROCESSOR CONTROL 1.710.465.00 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....55	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....56	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....57	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....58	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R.....59	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R.....60	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R.....61	57.11.4820	82 Ohm	5%, 0.25W, CF	
	R.....62	57.11.4820	82 Ohm	5%, 0.25W, CF	
	R.....63	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R.....64	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....65	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R.....66	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....67	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R.....68	57.11.4131	100 Ohm	5%, 0.25W, CF	
	R.....69	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....70	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....71	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....72	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....73	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....74	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....75	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....76	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....77	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....78	57.12.4132	1 kOhm	5%, 0.5 W, CF	
	R.....79	59.02.4222	22 kOhm	20%, Dal 4x PCF,LIN	
	RZ.....1	1.010.314.57	8x10 kOhm	Pull-Up Network	
	RZ.....2	1.010.014.57	8x10 kOhm	Pull-Up Network	
	RZ.....3	1.010.014.57	8x10 kOhm	Pull-Up Network	
	Y.....1	89.01.0550	4 Mhz	Quartz +/- 50ppM, Cl=30pF	

STUDER (02) 83/03/07 Rw MICROPROCESSOR CONTROL 1.710.465.00 PAGE 5

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	Q.....2	50.03.0436	BC 550B	NPN	
	Q.....3	50.03.0436	BC 550B	NPN	
	Q.....4	50.03.0436	BC 550B	NPN	
	Q.....5	50.03.0436	BC 550B	NPN	
	Q.....6	50.03.0360	BC 337-25	NPN, Ic=800mA	
	Q.....7	50.03.0436	BC 550B	NPN	
	Q.....8	50.03.0436	BC 550B	NPN	
	Q.....9	50.03.0351	BC 327-25	PNP, Ic=800mA	
	Q.....10	50.03.0436	BC 550B	NPN	
	Q.....11	50.03.0436	BC 550B	NPN	
	Q.....12	50.03.0436	BC 550B	NPN	
	Q.....13	50.03.0515	BC 560B	PNP	
	Q.....14	50.03.0515	BC 560B	PNP	
	Q.....15	50.03.0436	BC 550B	NPN	
	Q.....16	50.03.0534	BD 679	NPN Power Darlington	
	Q.....17	50.03.0534	BD 679	NPN Power Darlington	
	R.....1	57.11.4153	15 kuhm	5%, 0.25W, CF	
	R.....2	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....6	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R.....7	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....10	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....11	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....12	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....13	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....14	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....15	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....16	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....17	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R.....18	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....19	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....20	57.11.4181	180 Ohm	5%, 0.25W, CF	

STUDER (02) 83/03/07 Rw MICROPROCESSOR CONTROL 1.710.465.00 PAGE 3

Ta=Tantalum, El=Electrolytic, Cer=Ceramic, PC=Polycarbon,
PE=Polyester, Si=Silicon,
CF=Carbon Film, PCF=Pot. Meter, MF=Metall Film,

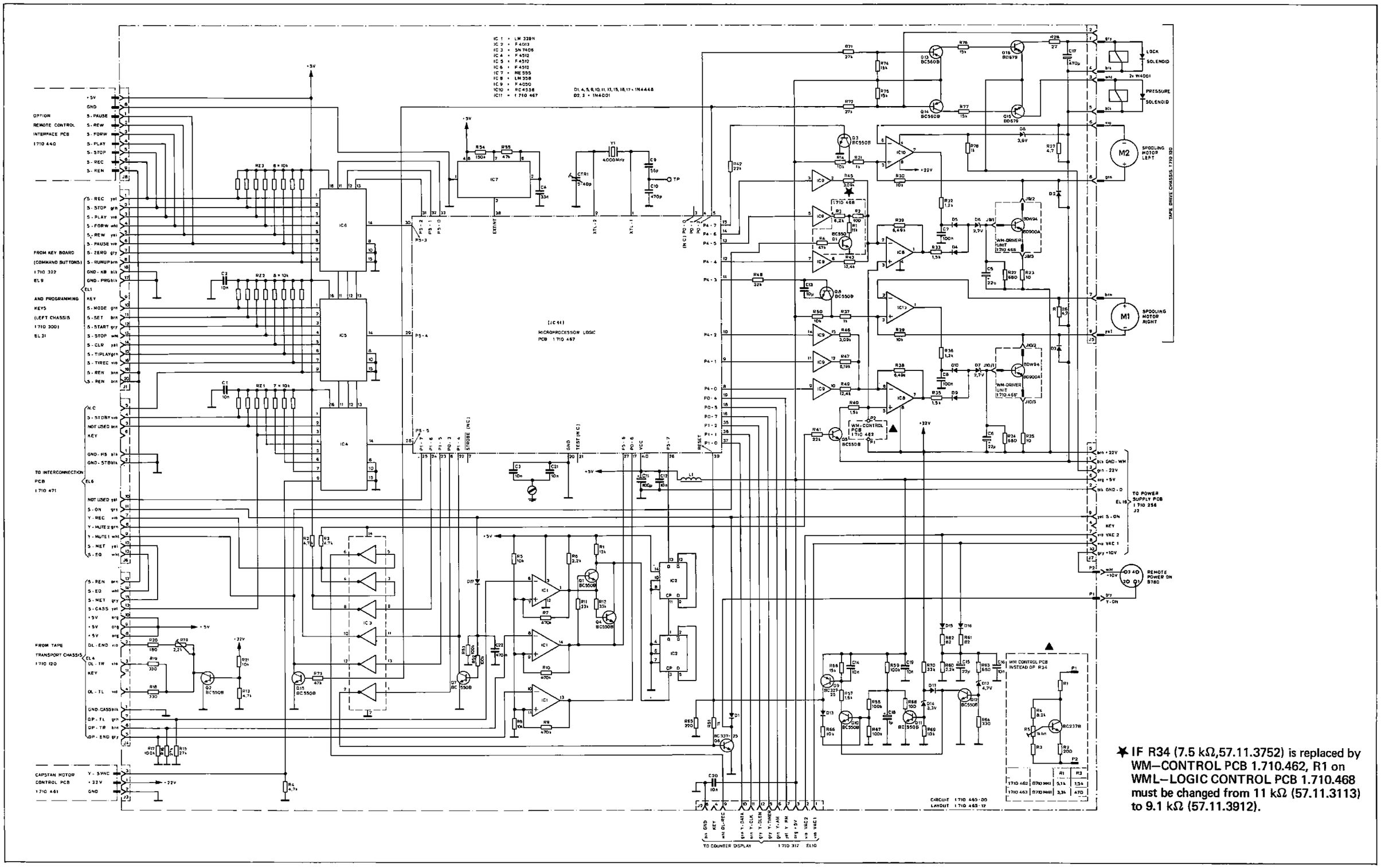
MANUFACURER: F=FAIRCHILD, TI=TEXAS INSTRUMENTS, M=MOTOROLA,
S=STUDER, Sig=SIGNETICS, Ra=RAYTHEON,

ORIG 81/02/25 (01) 81/04/02 (02) 83/03/07

STUDER (02) 83/03/07 Rw MICROPROCESSOR CONTROL 1.710.465.00 PAGE 6

MICROPROCESSOR CONTROL PCB 1.710.465–00 "ESE"

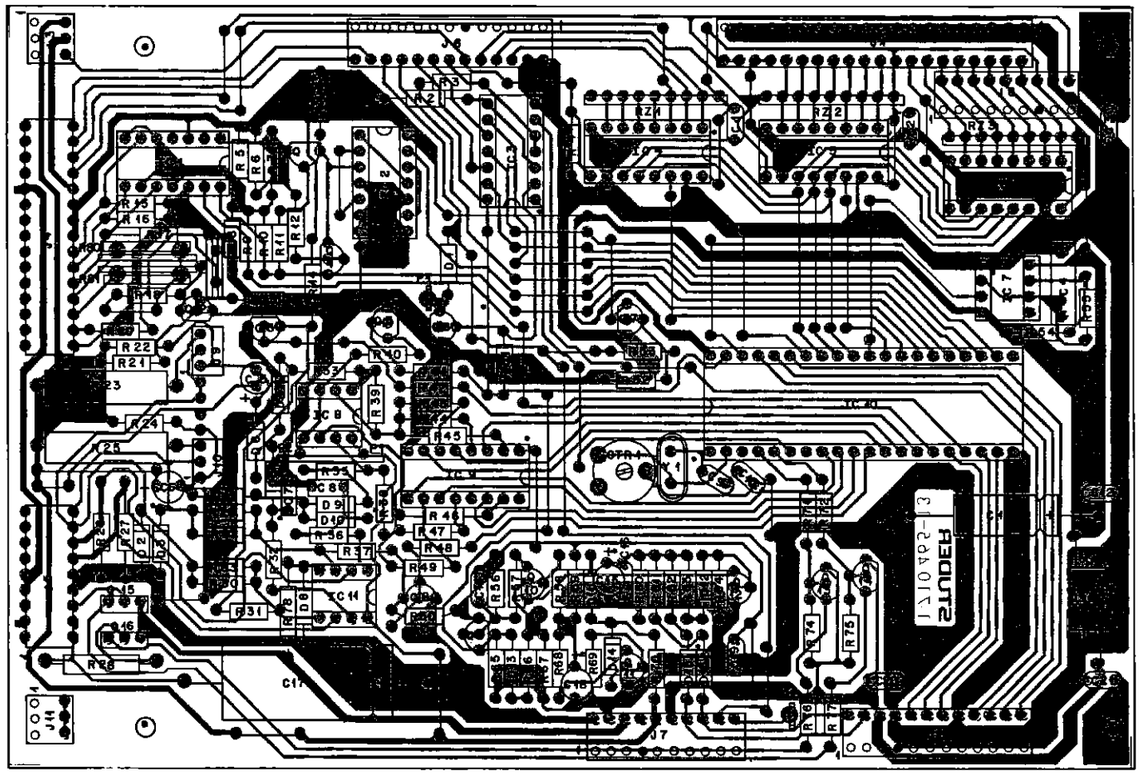
WM–CONTROL PCB 1.710.462 WML–LOGIC CONTROL PCB 1.710.468



	R1	R3
1710 462 B710 MKI	5,1 k	1,5 k
1710 463 B710 MKII	3,3 k	470

✱ IF R34 (7.5 kΩ,57.11.3752) is replaced by WM–CONTROL PCB 1.710.462, R1 on WML–LOGIC CONTROL PCB 1.710.468 must be changed from 11 kΩ (57.11.3113) to 9.1 kΩ (57.11.3912).

MICROPROCESSOR CONTROL PCB 1.710.465–81 "ESE"



WM–CONTROL PCB 1.710.463

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	P.....1	54.01.0577	3-Pole	Pin-Strip (1 Pin of Strip used)	AMP
	P.....2	54.01.0577	3-Pole	Pin-Strip (1 Pin of Strip used)	AMP
	Q.....1	50.03.0436	BC 237 B	NPN	
	R.....1	57.11.4332	3.3 K	2%,0.25W,MF	
	R.....2	57.11.4201	200 R	2%,0.25W,MF	
	R.....3	57.11.4472	470 R	2%,0.25W,MF	
	R.....4	57.11.4822	8.2 K	2%,0.25W,MF	
	R.....5	58.02.4102	1 K	20%,0.10W,PCF	

PF=Metal Film, PCF= Pot. Meter Carbon Film

ORIG 82/05/19

WM–CONTROL PCB 1.710.463

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	D.....15	50.04.0125	1N4448	Si	
	D.....16	50.04.0125	1N4448	Si	
	IC....1	50.11.0134	LM 3394	Quad Comparator	Ny M
	IC....2	50.07.0013	F 4013	Dual D-Flipflop CMOS	Fy M
	IC....3	50.05.0127	SN 7406	Hex Driver TTL	Ti, Sig
	IC....4	50.07.3512	F 4512	8-Bit Data-Selector CMOS	Fy
	IC....5	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fy
	IC....6	50.07.0512	F 4512	8-Bit Data-Selector CMOS	Fy
	IC....7	50.05.0158	NE 555	Timer	Ti, M
	IC....8	50.35.0286	LM 358	Dual Op. Amp.	Tis
	IC....9	50.07.0050	F 4050	Hex Buffer CMOS	Fy M
	IC....10	1.710.465.02	MK3870/20	SINGLE-CHIP MICROCOMPUTER	S
	IC....11	50.05.0245	RC4558	Dual Op. Amp.	Ti, Ra
	J.....1	54.31.0226	20-Pole	CIS-Socket-Strip	
	J.....2	54.01.0215	12-Pole	CIS-Socket-Strip	
	J.....3	54.31.3287	3-Pole	CIS-Socket-Strip	
	J.....4	54.01.0243	15-Pole	CIS-Socket-Strip	
	J.....5	54.01.0212	9-Pole	CIS-Socket-Strip	
	J.....6	54.01.0292	13-Pole	CIS-Socket-Strip	
	J.....7	54.01.0290	10-Pole	CIS-Socket-Strip	
	J.....8	54.01.0217	9-Pole	CIS-Socket-Strip	
	J.....9	50.20.1017	3-Pole	Transistor-Sockmt TO-220	
	J.....10	50.20.1017	3-Pole	Transistor-Sockmt TO-220	
	J.....11	54.01.0287	3-Pole	CIS-Socket-Strip	
	L.....1	62.01.0115		Wide-Band Inductance	
	P.....1	54.02.0320		2.8x0.8mm Flat Pin	AMP
	P.....2	54.02.0320		2.8x0.8mm Flat Pin	AMP
	Q.....1	50.03.0436	BC 550B	NPN	
	Q.....2	50.03.0436	BC 550B	NPN	
	Q.....3	50.03.0436	BC 550B	NPN	
	Q.....4	50.03.0436	BC 550B	NPN	
	Q.....5	50.03.0436	BC 550B	NPN	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	Q.....6	50.03.0340	BC 337-25	NPN, Ic=800mA	
	Q.....7	50.03.0436	BC 550B	NPN	
	Q.....8	50.03.0436	BC 550B	NPN	
	Q.....9	50.03.0351	BC 327-25	PNP, Ic=800mA	
	Q.....10	50.03.0436	BC 550B	NPN	
	Q.....11	50.03.0436	BC 550B	NPN	
	Q.....12	50.03.0436	BC 550B	NPN	
	Q.....13	50.03.0515	BC 560B	PNP	
	Q.....14	50.03.0515	BC 560B	PNP	
	Q.....15	50.03.0504	BD 679	NPN Power Darlington	
	Q.....16	50.03.0504	BD 679	NPN Power Darlington	
	R.....1	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....6	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R.....7	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....10	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....11	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....12	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....13	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....14	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....15	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....16	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....17	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....18	57.11.4181	180 Ohm	5%, 0.25W, CF	
	R.....20	57.11.4181	180 Ohm	5%, 0.25W, CF	
	R.....21	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....22	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R.....23	57.56.5100	10 Ohm	5%, 4W, CF	
	R.....24	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R.....25	57.56.5100	10 Ohm	5%, 4W, CF	
	R.....26	57.11.3479	4.7 Ohm	1%, 0.25W, MF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....27	57.11.3479	4.7 Ohm	1%, 0.25W, MF	
	R.....28	57.12.4277	27 Ohm	5%, 0.5 W, CF	
	R.....29	57.11.3103	10 kOhm	1%, 0.25W, MF	
	R.....30	57.11.3103	10 kOhm	1%, 0.25W, MF	
	R.....31	57.11.3132	1 kOhm	1%, 0.25W, MF	
	R.....32	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R.....33	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
(00)	R.....34	57.11.3797	7.5 kOhm	1%, 0.25W, MF	
(01)	R.....34	1.710.463.00		WM-Control PCB	
	R.....35	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....36	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R.....37	57.11.3122	1 kOhm	1%, 0.25W, MF	
	R.....38	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R.....39	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R.....40	57.11.3152	1.5 kOhm	1%, 0.25W, MF	
	R.....41	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....42	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....43	57.39.1262	12.4 kOhm	1%, 0.25W, MF	
	R.....44	57.39.6191	6.19 kOhm	1%, 0.25W, MF	
	R.....45	57.39.3091	3.09 kOhm	1%, 0.25W, MF	
	R.....46	57.39.3091	3.09 kOhm	1%, 0.25W, MF	
	R.....47	57.39.6191	6.19 kOhm	1%, 0.25W, MF	
	R.....48	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....49	57.39.1262	12.4 kOhm	1%, 0.25W, MF	
	R.....50	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....51	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....52	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....53	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....54	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R.....55	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....56	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....57	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....58	57.11.4124	120 kOhm	5%, 0.25W, CF	
	R.....59	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....60	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R.....61	57.11.4820	82 Ohm	5%, 0.25W, CF	
	R.....62	57.11.4820	82 Ohm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....63	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R.....64	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....65	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R.....66	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....67	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....68	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R.....69	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....70	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....71	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....72	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....74	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....75	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....76	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....77	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R.....78	57.12.4102	1 kOhm	5%, 0.5 W, CF	
	R.....79	58.02.4222	2.2 kOhm	20%, 0.1 W, PCF+LIN	
	R.....80	58.99.0138	1 kOhm	20%, 0.1 W, PCF+LIN	
	R.....81	58.99.0138	1 kOhm	20%, 0.1 W, PCF+LIN	
(02)	R.....82	57.11.4224	220 kOhm	5%, 0.25W, MF	
(02)	R.....83	57.11.4224	220 kOhm	5%, 0.25W, MF	
(03)	RZ.....1	1.810.814.57	8x10 kOhm	Pull-Up Network	
(03)	RZ.....1	57.88.4103	8x10 kOhm	Pull-Up Network	
(03)	RZ.....2	1.810.814.57	8x10 kOhm	Pull-Up Network	
(03)	RZ.....2	57.88.4103	8x10 kOhm	Pull-Up Network	
(03)	RZ.....3	1.810.814.57	8x10 kOhm	Pull-Up Network	
(03)	RZ.....3	57.88.4103	8x10 kOhm	Pull-Up Network	
	Y.....1	89.01.0550	4 MHz	Quartz, +/- 50ppm, C1=30pF	

(03) 23.04.85 Replacement of network series

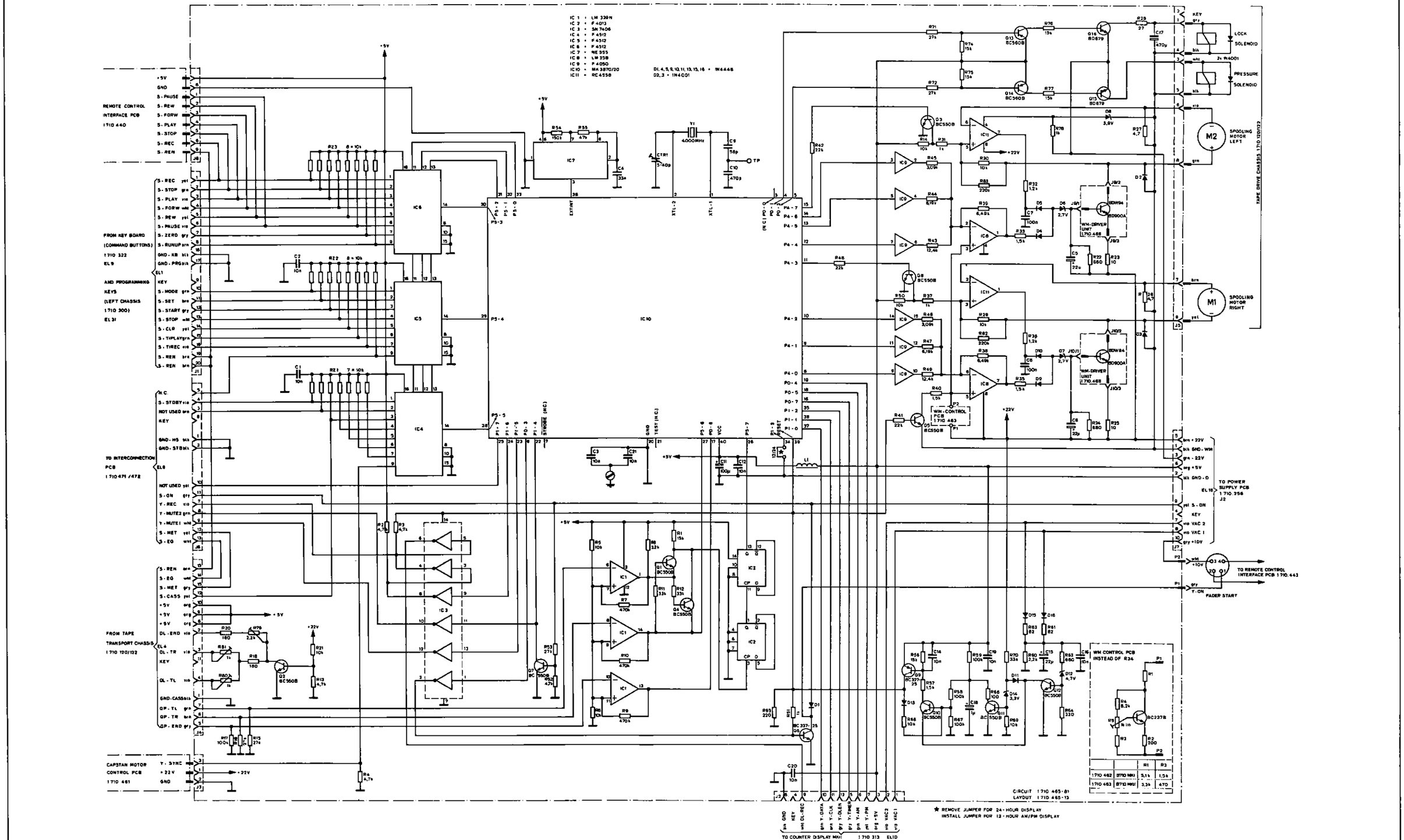
E1=Electrolytic, Cer=Ceramic, PC=Polycarbon.,
PE=Polyester, Si=Silicon,
CF=Carbon Film, PCF=Pot. Meter, MF=Metal Film,

MANUFACTURER: F=FAIRCHILD, TI=TEXAS INSTRUMENTS, M=MOTOROLA,
S=STUDER, Siq=SIGNETICS, Ra=RAYTHEON,

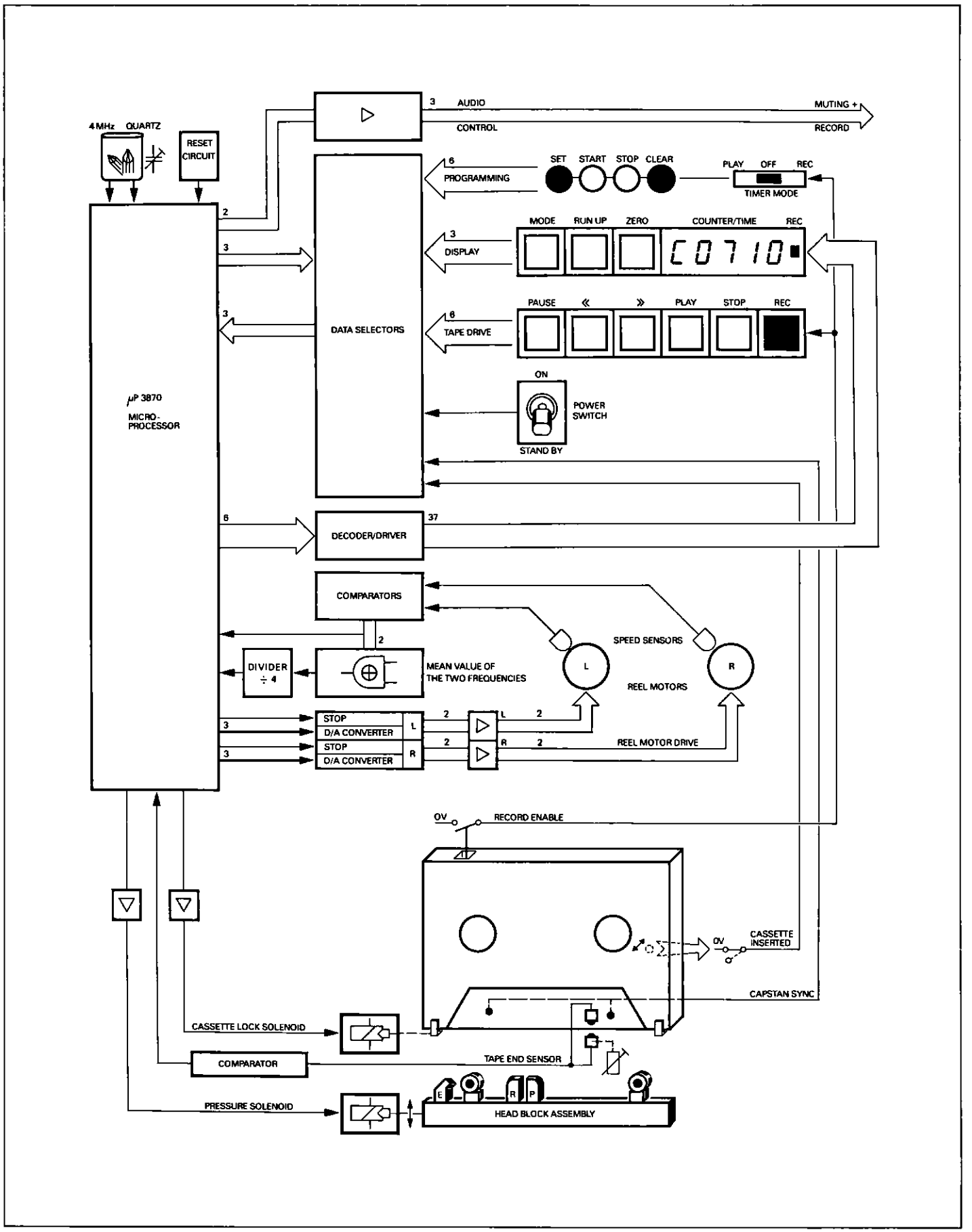
ORIG 81/12/11 (01) 82/05/02 (02) 82/08/19 (03) 85/04/23

MICROPROCESSOR CONTROL PCB 1.710.465–81 "ESE"

WM–CONTROL PCB 1.710.463



TAPE DRIVE / BLOCKDIAGRAM MKI

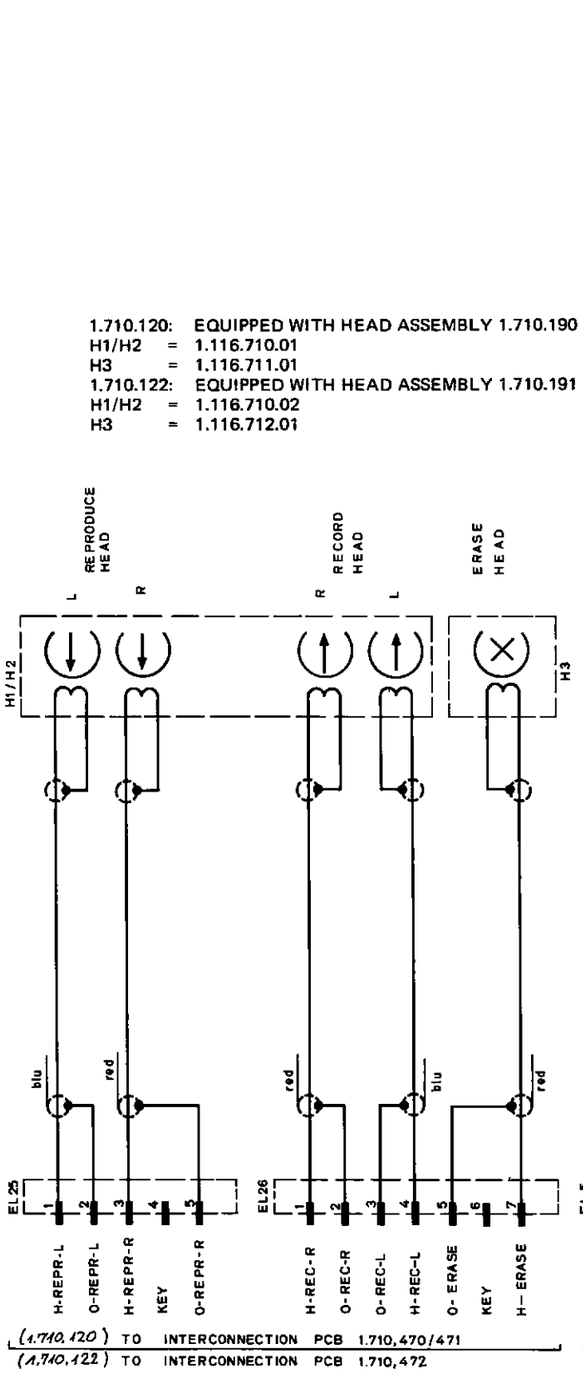


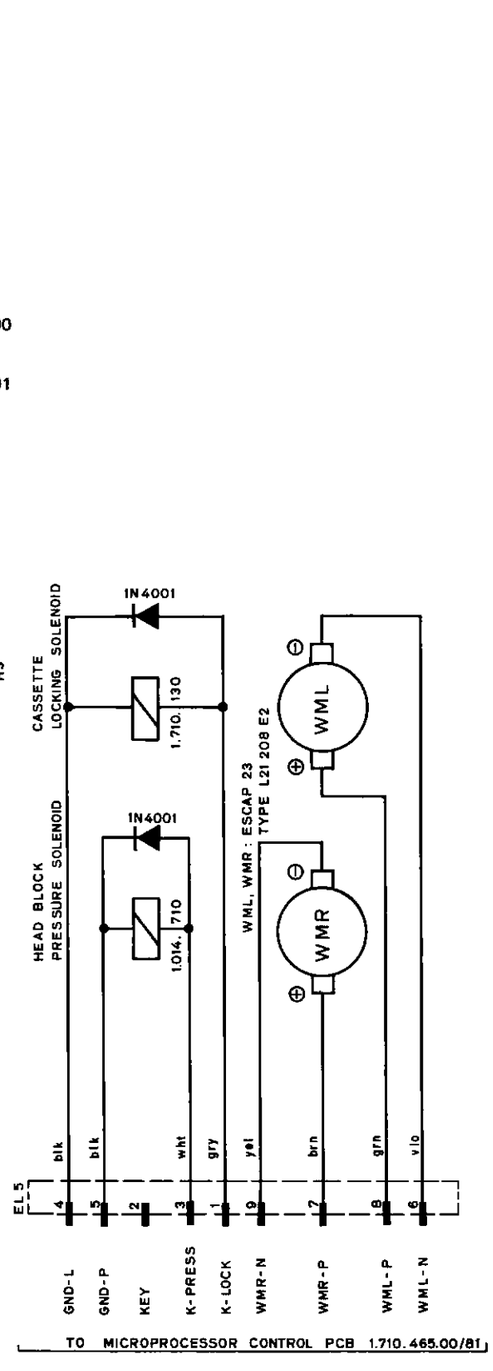
CONTENTS

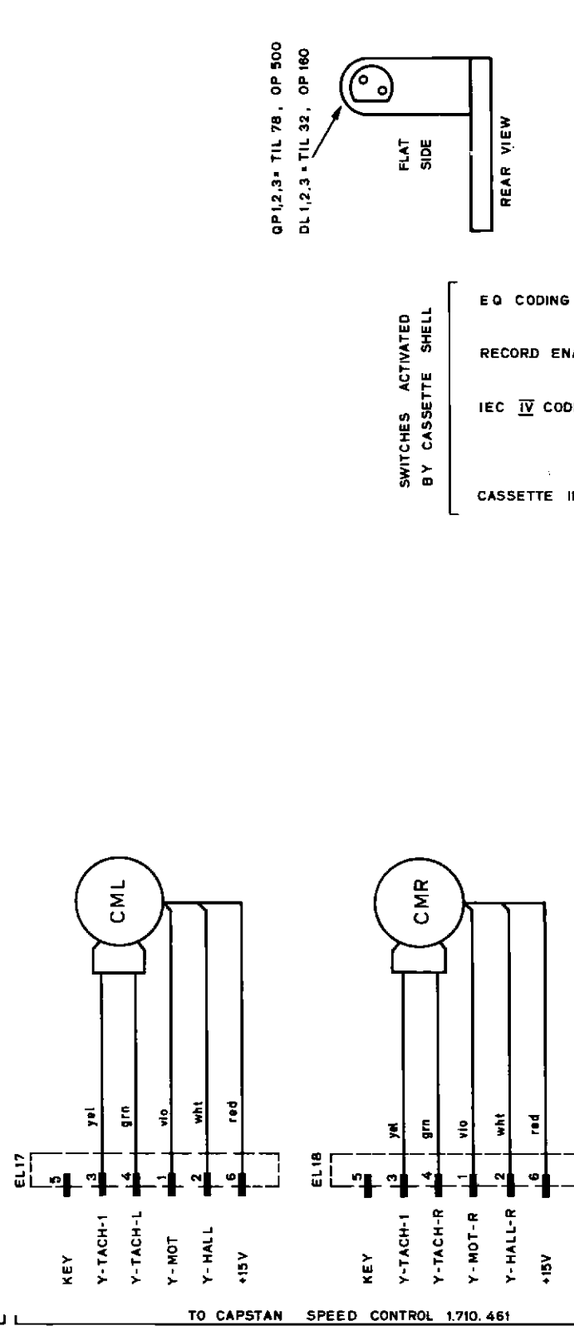
ALL PCBs MARKED WITH THIS SIGN ▲
CONTAIN COMPONENTS SENSITIVE TO
STATIC CHARGES.
PLEASE, REFER TO PREFACE BEFORE
YOU REMOVE THESE BOARDS.

TAPE DRIVE CHASSIS (WITH HEAD BLOCK ASSEMBLY) 1.710.120–00
TAPE DRIVE CHASSIS (WITH HEAD BLOCK ASSEMBLY) A/C 1.710.122–00

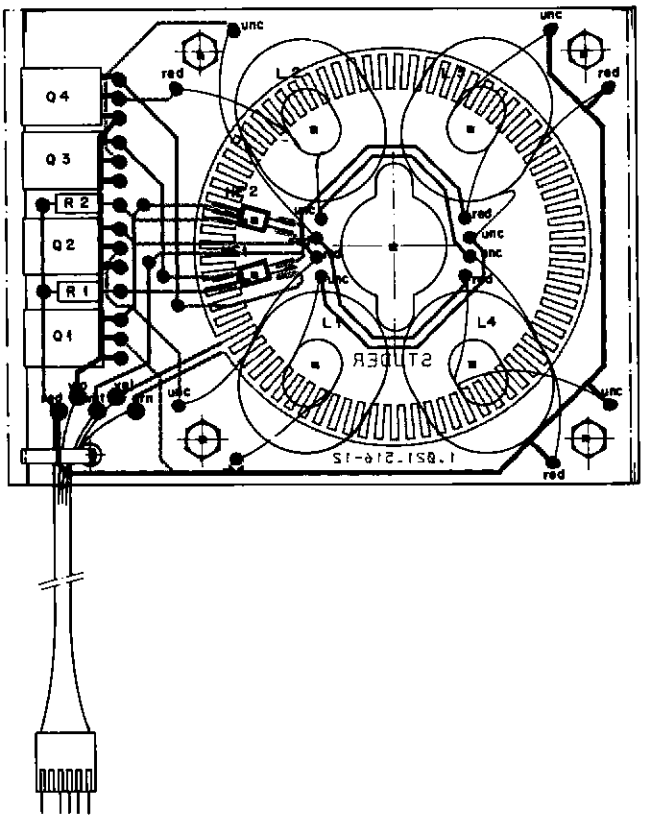
1.710.120: EQUIPPED WITH HEAD ASSEMBLY 1.710.190
H1/H2 = 1.116.710.01
H3 = 1.116.711.01
1.710.122: EQUIPPED WITH HEAD ASSEMBLY 1.710.191
H1/H2 = 1.116.710.02
H3 = 1.116.712.01







CAPSTAN MOTOR DRIVER PCB 1.021.516

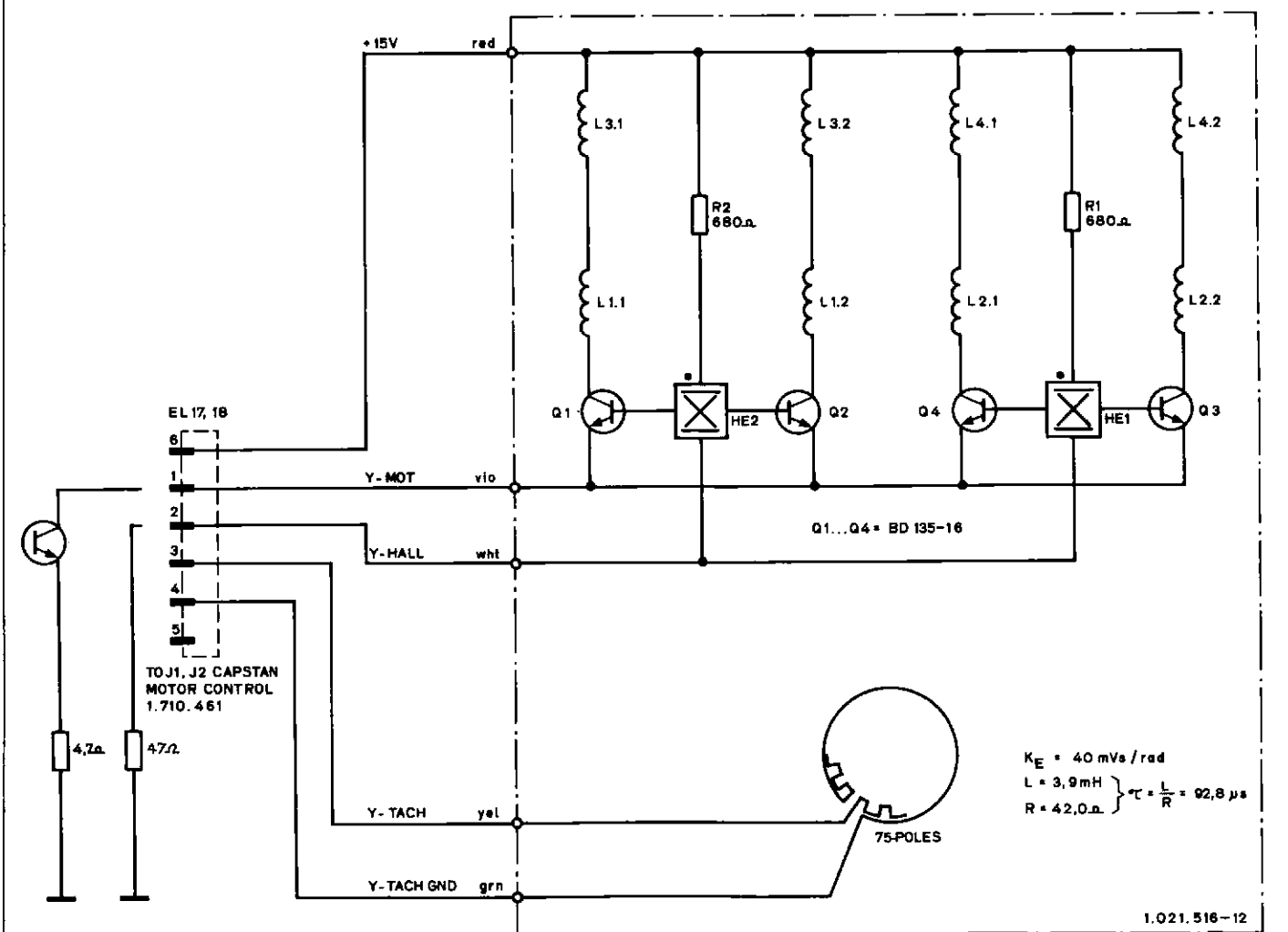


INC.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	HE....1	50.99.0136		Hall-Element	S
	HE....2	50.59.0136		Hall-Element	S
	L.....1	1.021.516.02		Stator-Coil	S
	L.....2	1.021.516.02		Stator-Coil	S
	L.....3	1.021.516.02		Stator-Coil	S
	L.....4	1.021.516.02		Stator-Coil	S
	Q.....1	50.03.0495	BD 135-16	NPN	
	Q.....2	50.03.0495	BD 135-16	NPN	
	Q.....3	50.03.0495	BD 135-16	NPN	
	Q.....4	50.03.0495	BD 135-16	NPN	
	R.....1	57.11.3681	680 Ohm	1%, 0.25W, MF	
	R.....2	57.11.3681	680 Ohm	1%, 0.25W, MF	

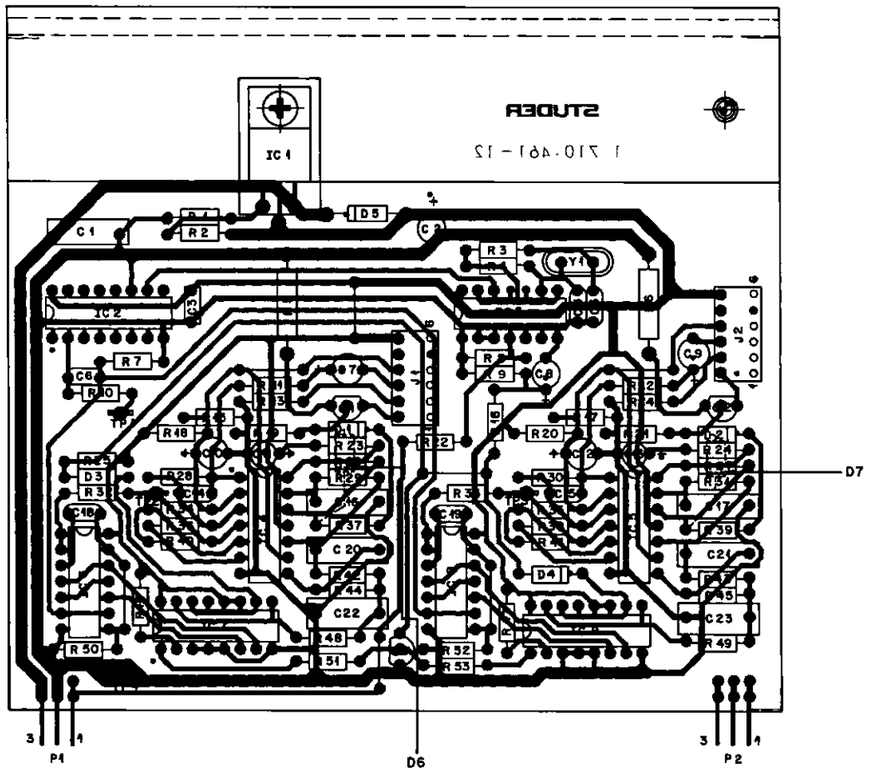
MF=Metal Film
MANUFACTURER: S=STUDER

CPIC R1/03/11

CAPSTAN MOTOR DRIVER PCB 1.021.516



CAPSTAN MOTOR CONTROL PCB 1.710.461 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.31.1104	0.1 uF	20%, PE	
	C.....2	59.22.6130	10 uF	-20%, El	
	C.....3	59.99.0205	68 nF	20%, CER	
	C.....4	59.34.4560	56 pF	5%, Cer	
	C.....5	59.34.4560	56 pF	5%, Cer	
	C.....6	59.34.4331	330 pF	5%, Cer	
	C.....7	59.22.8109	1 uF	-20%, 25V, El	
	C.....8	59.36.4229	2.2 uF	20%, 25V, Ta	
	C.....9	59.22.8109	1 uF	-20%, 25V, EL	
	C.....10	59.22.6100	10 uF	-20%, 25V, El	
	C.....11	59.36.4229	2.2 uF	20%, 25V, Ta	
	C.....12	59.22.6100	10 uF	-20%, 25V, El	
	C.....13	59.36.4479	4.7 uF	-20%, 25V, Ta	
	C.....14	59.34.4560	56 pF	5%, Cer	
	C.....15	59.34.4560	56 pF	5%, Cer	
	C.....16	59.02.5473	47 nF	5%, 63V, PC	
	C.....17	59.02.5473	47 nF	5%, 63V, PC	
	C.....18	59.34.4331	330 pF	5%, Cer	
	C.....19	59.34.4331	330 pF	5%, Cer	
	C.....20	59.02.5153	15 nF	5%, 63V, PC	
	C.....21	59.02.5153	15 nF	5%, 63V, PC	
	C.....22	59.02.0224	220 nF	5%, 63V, PC	
	C.....23	59.02.0224	220 nF	5%, 63V, PC	
	D.....1	50.04.1120	Z 4.3V	SI	
	D.....2	50.04.1120	Z 4.3V	SI	
	D.....3	50.04.0125	1N4448	SI	
	D.....4	50.04.0125	1N4448	SI	
(01)	D.....5	50.04.0122	1N4001	SI	
(02)	D.....6	50.04.1114	Z 10 V	SI	
(02)	D.....7	50.04.1114	Z 10 V	SI	
	IC.....1	50.10.0134	LM 317	Pos. Volt. Regulator	M, TI
	IC.....2	50.37.0020	4020B	14-Stage Binary Counter	M, Fr, N
	IC.....3	50.37.1069	4069UB	Hex Inverter	M, Fr, N
	IC.....4	50.05.0232	RC 4136	Quad Op Amp	TI, R
	IC.....5	50.05.0232	RC 4136	Quad Op Amp	TI, R

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	IC.....6	50.07.0036	4001B	Quad 2-Input NOR	M, Fr, N
	IC.....7	50.07.0007	4035B	4-Bit Shift Register	M, Fr, N
	IC.....8	50.07.0036	4001B	Quad 2-Input NOR	M, Fr, N
	IC.....9	50.07.0007	4035B	4-Bit Shift Register	M, Fr, N
	J.....1	54.01.0216	6-Pole	CIS	
	J.....2	54.01.0216	6-Pole	CIS	
	Q.....1	50.03.0340	BC 337-25	2N4401	
	Q.....2	50.03.0340	BC 337-25	2N4401	
	Q.....3	50.03.0636	BC 237		
	R.....1	57.11.4472	4.7 kOhm	2%, 0.25W, MF	
	R.....2	57.11.3431	430 Ohm	2%, 0.25W, MF	
	R.....3	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4565	5.6 MOhm	5%, 0.25W, CF	
	R.....5	57.12.4479	4.7 Ohm	5%, 0.33W, CF	
	R.....6	57.12.4479	4.7 Ohm	5%, 0.33W, CF	
	R.....7	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4474	470 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R.....10	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....11	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....12	57.11.4102	1 kOhm	5%, 0.25W, CF	
(09)	R.....13	57.11.4220	22 Ohm	5%, 0.25W, CF	
(02)	R.....13	57.11.4470	47 Ohm	5%, 0.25W, CF	
(09)	R.....14	57.11.4220	22 Ohm	5%, 0.25W, CF	
(02)	R.....14	57.11.4470	47 Ohm	5%, 0.25W, CF	
	R.....15	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....16	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....17	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....18	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....19	57.11.4132	1 kOhm	5%, 0.25W, CF	
	R.....20	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....21	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....22	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....23	57.11.4152	1.5 kOhm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....24	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....25	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R.....26	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....27	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....28	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....29	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....30	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....31	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....32	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....33	57.11.4132	1 kOhm	5%, 0.25W, CF	
	R.....34	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....35	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....36	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....37	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....38	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....39	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R.....40	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....41	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....42	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....43	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....44	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....45	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....46	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....47	57.11.4132	1 kOhm	5%, 0.25W, CF	
	R.....48	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....49	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R.....50	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....51	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....52	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....53	57.11.4133	10 kOhm	5%, 0.25W, CF	
	Y.....1	89.01.3552		Quartz 3.072MHz	S

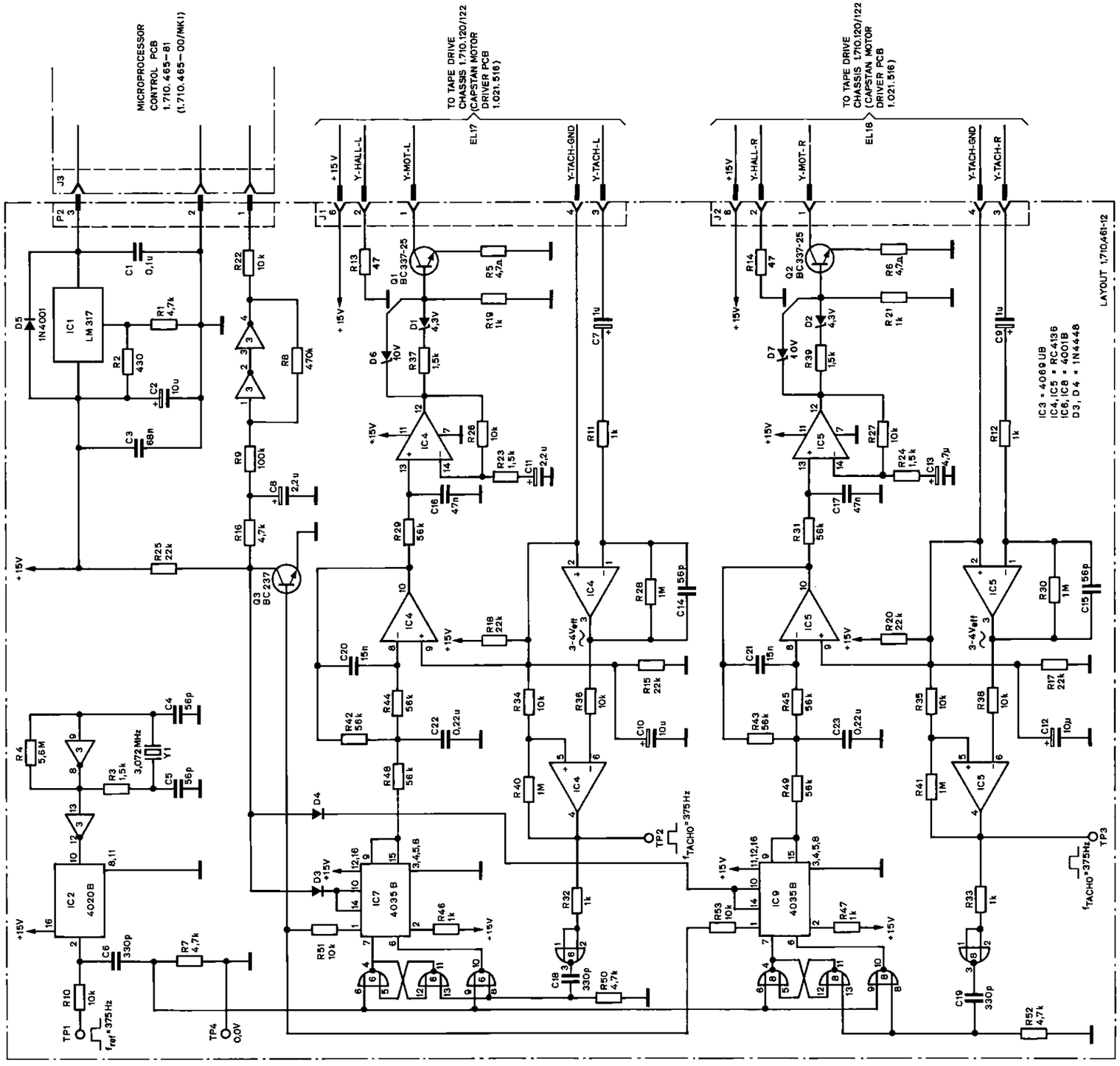
EL=Electrolytic, Cer=Ceramic, TA=Tantalum, PC=Polycarb.,
PE=Polyester, SI=Silicon,
CF=Carbon Film, MF=Metal Film,

MANUFACTURER:F=FAIRCHILD, M=MOTOROLA, N=NATIONAL, R=RAYTHEON,
TI=TEXAS INSTRUMENTS, S=STUDER,

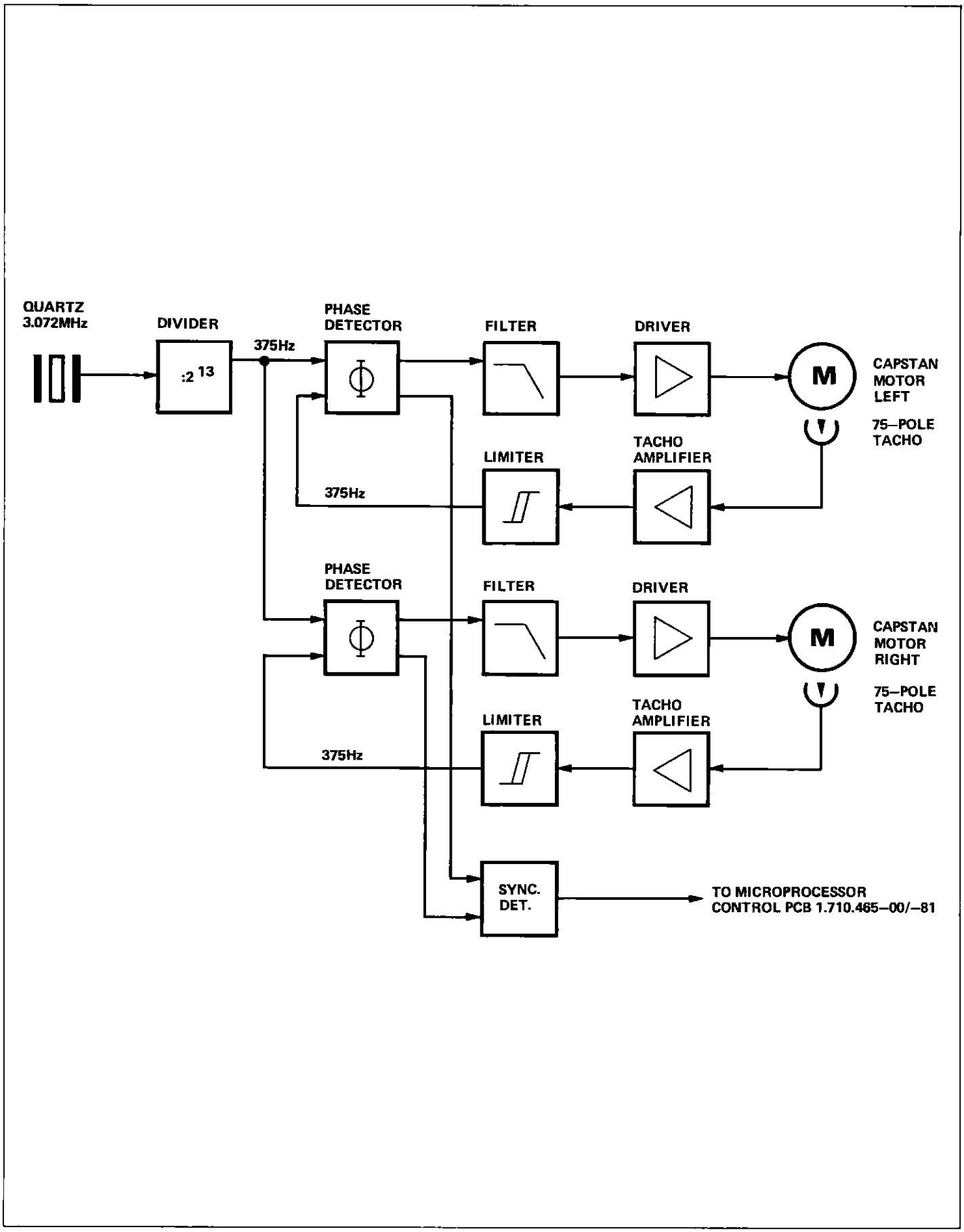
MODIFICATIONS:
(01) 29.09.81: D5 (1N4001) WAS ADDED FOR PROTECTION OF THE VOTAGE REGULATOR (IC 1)
(02) 29.06.84: R13, R14 WERE CHANGED FROM 22 TO 47 Ohm AND D6, D7 WERE ADDED FOR INCREASE OF STARTING TORQUE OF THE MOTORS

DRIG 81/09/11 (01) 81/09/09 (02) 84/06/29

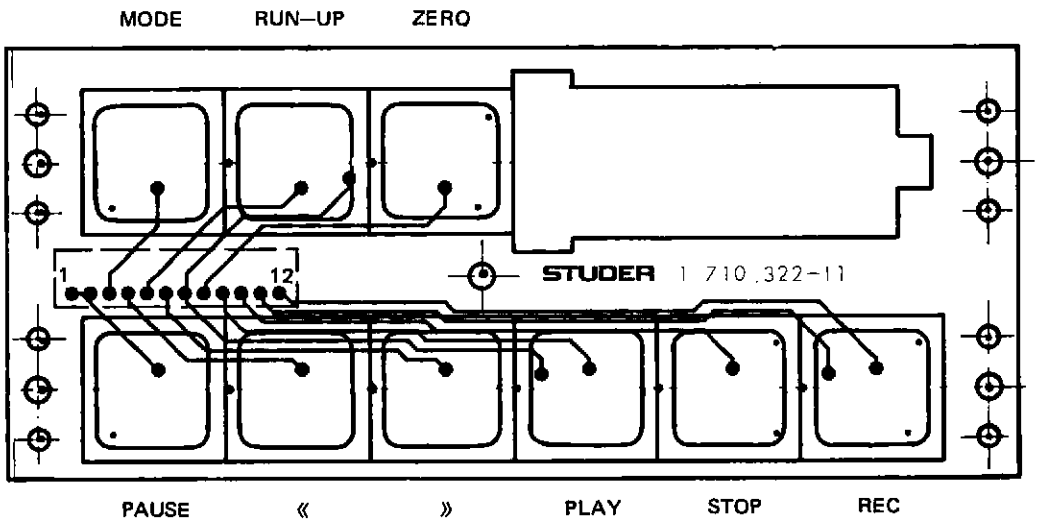
CAPSTAN MOTOR CONTROL PCB 1.710.461 "ESE"



CAPSTAN MOTOR CONTROL BLOCKDIAGRAM



KEYBOARD 1.710.322



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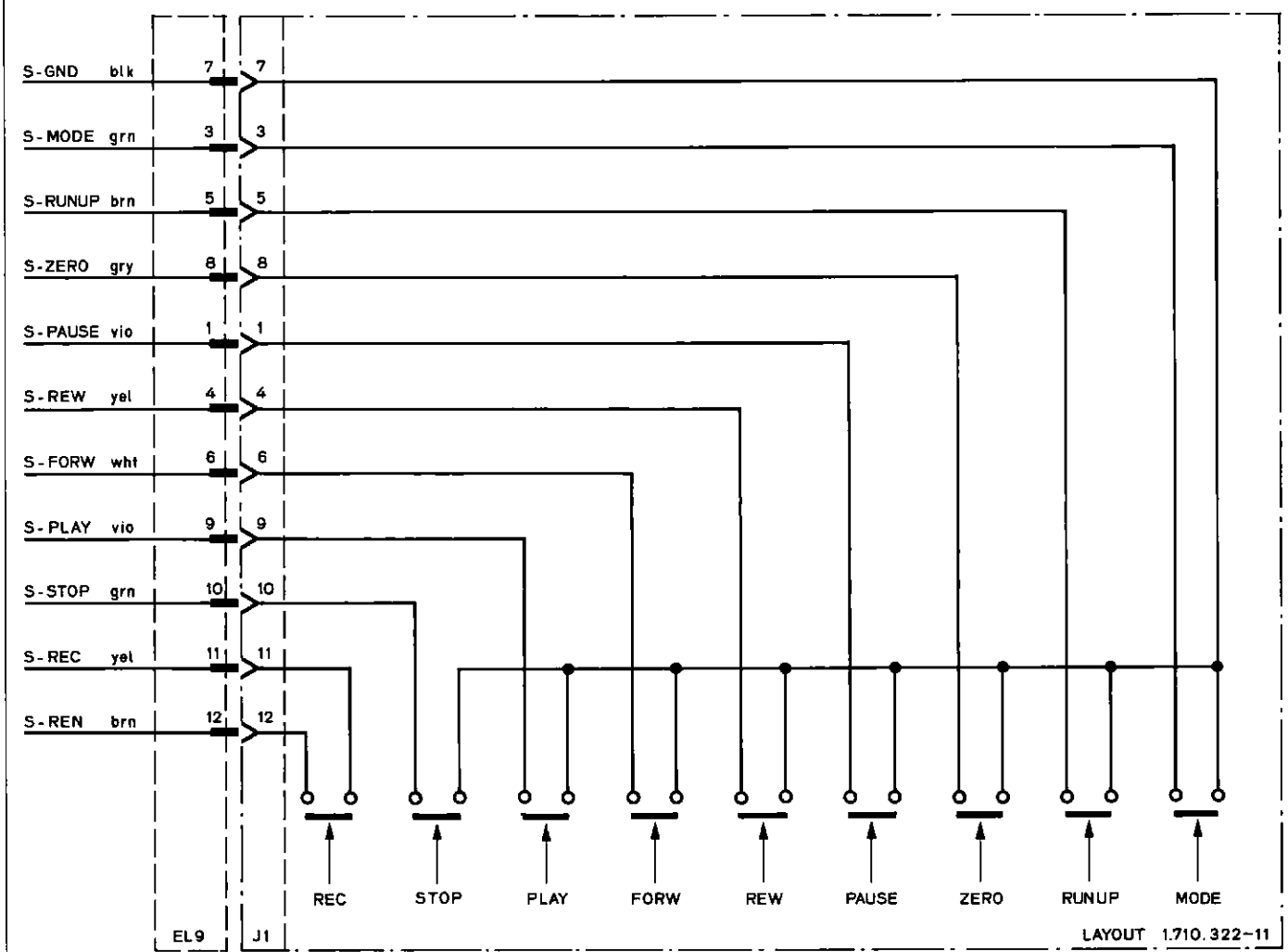
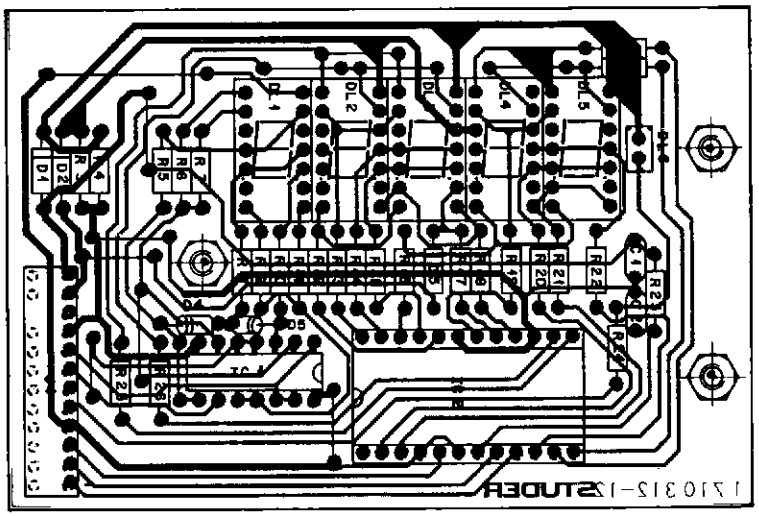


COUNTER DISPLAY PCB 1.710.312



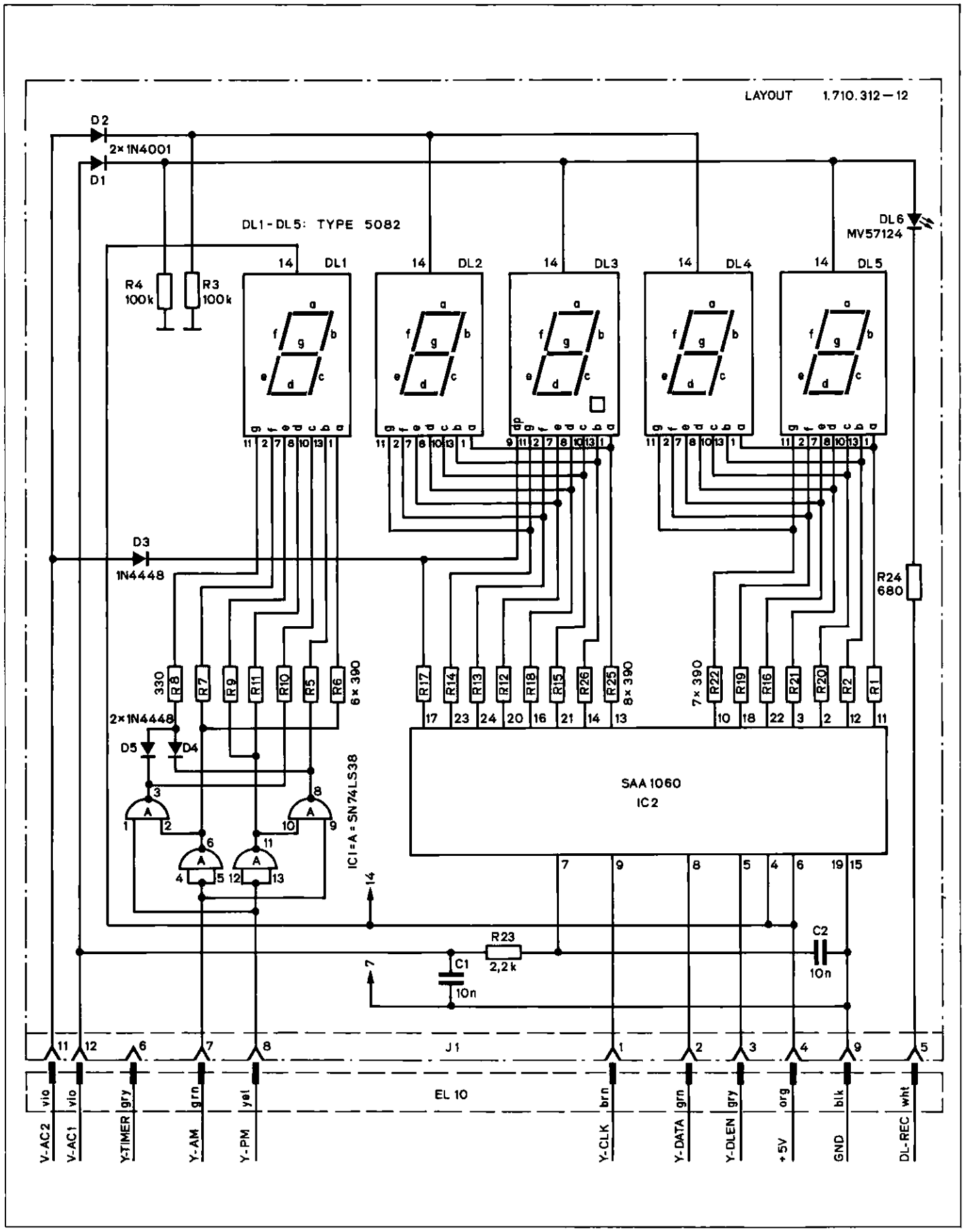
INC.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.32.3103	10 nF	20%, Cer	
	C.....2	59.32.3103	10 nF	20%, Cer	
	D.....1	50.04.0122	1N4001	Si	
	D.....2	50.04.0122	1N4001	Si	
	D.....3	50.04.0125	1N4448	Si	
	D.....4	50.04.0125	1N4448	Si	
	D.....5	50.04.0125	1N4448	Si	
	DL....1	73.01.0122	5082	7 Segment LED Display	HP
	DL....2	73.01.0122	5082	7 Segment LED Display	HP
	DL....3	73.01.0122	5082	7 Segment LED Display	HP
	DL....4	73.01.0122	5082	7 Segment LED Display	HP
	DL....5	73.01.0122	5082	7 Segment LED Display	HP
	DL....6	50.04.2119	MV 57124	2-4 mCd @ 20mA	GI
	IC....1	50.06.0038	74 LS 38	LS-TTL	
	IC....2	50.13.0103	SAA 1060		PH
	J.....1	54.01.0236	12-Pole	CIS-Socket-Strip	
	R.....1	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....2	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....3	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....8	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....9	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....10	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....11	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....12	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....13	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....14	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....15	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....16	57.11.4391	390 Ohm	5%, 0.25W, CF	

INC.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....17	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....18	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....19	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....20	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....21	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....22	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....23	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....24	57.11.4681	680 Ohm	5%, 0.25W, CF	
	R....25	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....26	57.11.4391	390 Ohm	5%, 0.25W, CF	

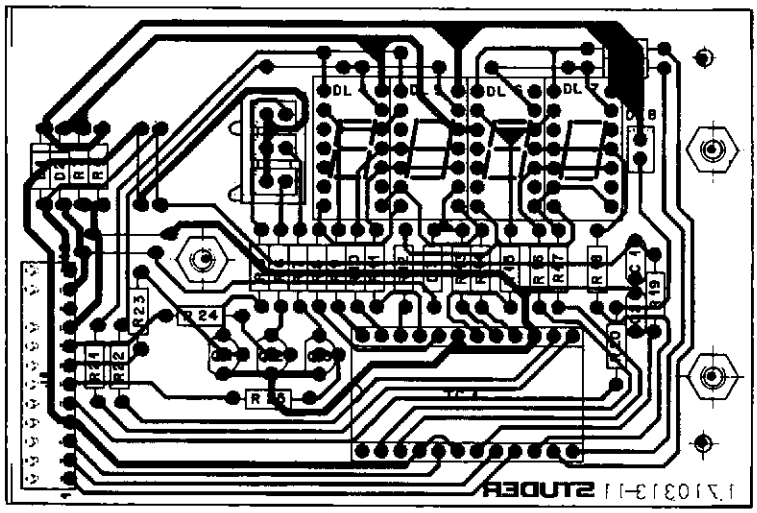
Cer=Ceramic; Si=Silicon;
CF=CARBON FILM
MANUFACTURER: GI=General Instruments, PH=Philips;
HP=Hewlett-Packard;

CRIG A1/C2/17

COUNTER DISPLAY PCB 1.710.312



COUNTER DISPLAY PCB 1.710.313



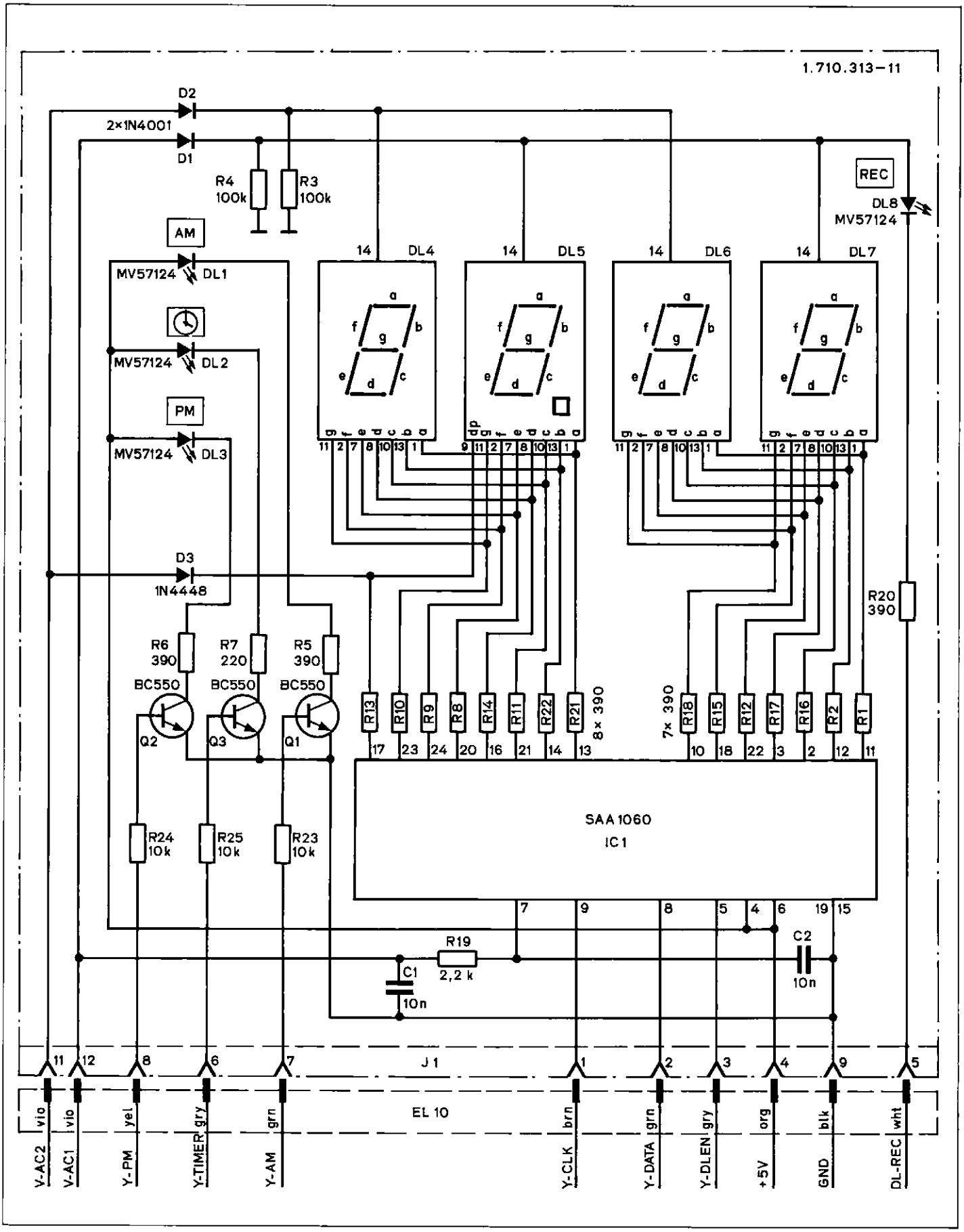
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.32.3103	10 nF	20%, Cer	
	C.....2	59.32.3103	10 nF	20%, Cer	
	D.....1	50.04.0122	1N4001	Si	
	D.....2	50.04.0122	1N4001	Si	
	D.....3	50.04.0125	1N4448	Si	
	DL....1	50.04.2119	MV 57124	2-4 mCd @ 20mA	GI
	DL....2	50.04.2119	MV 57124	2-4 mCd @ 20mA	GI
	DL....3	50.04.2119	MV 57124	2-4 mCd @ 20mA	GI
	DL....4	73.01.0122	5082	7 Segment LED Display	HP
	DL....5	73.01.0122	5082	7 Segment LED Display	HP
	DL....6	73.01.0122	5082	7 Segment LED Display	HP
	DL....7	73.01.0122	5082	7 Segment LED Display	HP
	DL....8	50.04.2119	MV 57124	2-4 mCd @ 20mA	GI
	IC....1	50.13.0103	SAA 1060		PH
	J.....1	54.01.0236	12-Pole	CIS-Socket-Strip	
	Q.....1	50.03.0497	BC 550C	NPN	
	Q.....2	50.03.0497	BC 550C	NPN	
	Q.....3	50.03.0497	BC 550C	NPN	
	R.....1	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....2	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....3	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R.....8	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....9	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....10	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....11	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....12	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....13	57.11.4391	390 Ohm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....14	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....15	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....16	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....17	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....18	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....19	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....20	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....21	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....22	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....23	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....24	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....25	57.11.4103	10 kOhm	5%, 0.25W, CF	

Cer=Ceramic, Si=Silicon,
CF=CARBON FILM
MANUFACTURER: GI=General Instruments, PH=Philips,
HP=Hewlett-Packard,

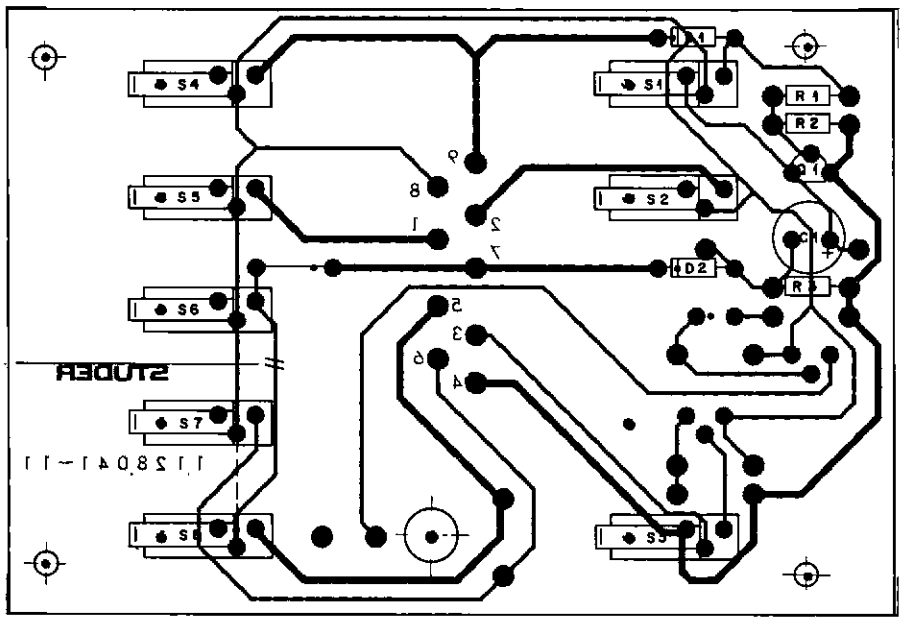
DRIG 81/12/09

COUNTER DISPLAY PCB 1.710.313



REMOTE CONTROL PCB 1.128.065

PRINTED CONDUCTOR INTERRUPTED



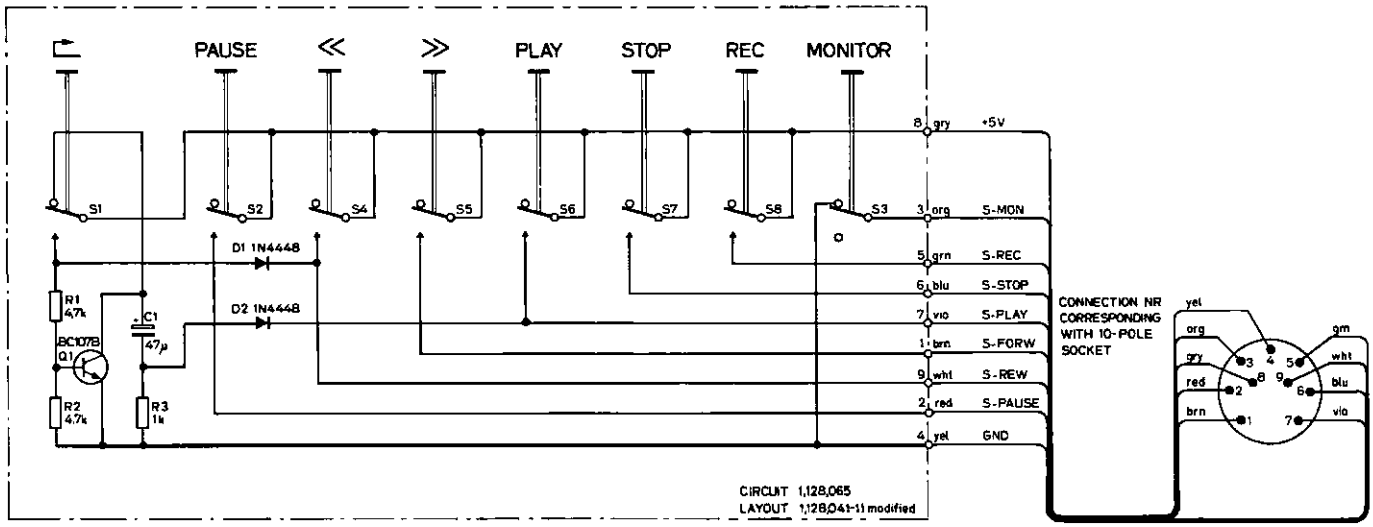
INC.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.22.6470	47 uF	-10%, 25V, El	
	D.....1	50.04.0125	1N4448		any
	D.....2	50.04.0125	1N4448		any
	Q.....1	50.03.0436	BC 107B	NPN	
	R.....1	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4102	1 kOhm	5%, 0.25W, CF	
	S.....1	55.99.0139	1xU	MICROSWITCH	AG
	S.....2	55.99.0139	1xU	MICROSWITCH	AG
	S.....3	55.99.0139	1xU	MICROSWITCH	AG
	S.....4	55.99.0139	1xU	MICROSWITCH	AG
	S.....5	55.99.0139	1xU	MICROSWITCH	AG
	S.....6	55.99.0139	1xU	MICROSWITCH	AG
	S.....7	55.99.0139	1xU	MICROSWITCH	AG
	S.....8	55.99.0139	1xU	MICROSWITCH	AG

El=Electelytic,
CF=Carbon Film

CRIG 82/01/14

S T U D E R 82/01/14 RW REMOTE CONTROL 1.128.065.00 PAGE 1

REMOTE CONTROL PCB 1.128.065



FRANCAIS

Entraînement	entraînement des cassettes compactes par 4moteurs et double cabestan 2 moteurs DC de bobinage contrôlés par µP 2 cabestans à entraînement direct pilotés par quartz
Affichage à 7 segments	compteur à 4 chiffres commutable en fonction horloge
Vitesse de défilement	4,76 cm/s
Pleurage (selon DIN 45507) IEC 386	0,1% pour C60 et C 90
Cassettes utilisables	C 46 jusqu'à C 120 les caractéristiques techniques sont garanties jusqu'à C 90
Temps de rebobinage	45 s environ pour une C 60 65 s environ pour une C 90
Systèmes de réduction des bruits	DOLBY® B et DOLBY C (enregistrement et lecture séparés), filtre MPX commutable
Choix du type de bande	IEC I ≙ Fe_2O_3 IEC II ≙ CrO_2 IEC IV ≙ Metal AUTO ≙ automatique par le code de la cassette
Correction de lecture	3180 + 120µs pour IEC I 3180 + 70µs pour IEC II + IV
Niveau de modulation	200 nWb/m pour 0 dB au PEAK READING METER (crête-mètre)
Taux de distortion 315 Hz; 0 dB (K3)	IEC I : meilleur que 0,8% IEC II : meilleur que 1,5% IEC IV: meilleur que 1,5%
Réponse en fréquence (enregistrement-lecture, mesurée à –20 dB)	IEC I : 30 Hz ... 18 kHz +2/–3 dB IEC II : 30 Hz ... 20 kHz +2/–3 dB IEC IV: 30 Hz ... 20 kHz +2/–3 dB
Rapport signal/bruit (se rapportant à 0 dB) pondéré d'après IEC/A (DOLBY C enclenché)	meilleur que 72 dB
Amortissement de la diaphonie (à 1 kHz)	meilleur que 40 dB
Fréquence de prémagnétisation et d'effacement	105 kHz
Entrées par canal sensibilité pour 0 dB	**MIC** 0,70 mV/ 10 kohms (asymétrique) **LINE** 70 mV/220 kohms
Taux de surcharge de toutes les entrées	40 dB (1 : 100)
Sorties par canal niveau pour 0 dB	LINE OUTPUT max. 0,775 V, Ri 390 ohms, max. 1,5 kohms avec atténuateur réglable jusqu'à –26 dB PHONES max. 2,45 V, sans risque en cas de court-circuit, pour casques de 200 ... 600 ohms, niveau réglable par potentiomètre de volume séparé
Composants	1 microprocesseur 2 k x 8 bit, 55 IC's, 86 transistors, 57 diodes, 10 LED's, 3 redresseurs, 2 relais et 4 indicateurs à sept segments 2 bar graphs à 24-segments, 2 quartz
Alimentation	100 ... 140/200 ... 240 V AC (commutable) ±10%, 50 ... 60 Hz, max. 50 W
Fusible secteur	100 ... 140 V : T 500 mA 200 ... 240 V : T 250 mA
Dimensions de l'appareil	452 x 151 x 352 mm (L x H x P)
Poids	10,4 kg

Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D Symbol are trade marks of Dolby Laboratories Licensing Corporation.

Valeurs de mesure ‹après bande› avec des cassettes REVOX.
Sous reserve de modifications

9. TECHNISCHE DATEN
9. TECHNICAL SPECIFICATIONS
9. CHARACTERISTIQUES TECHNIQUES

DEUTSCH

Laufwerk	4-Motoren Laufwerk mit Doppel-Kapstan; 2 DC-Wickelmotoren über µP geregelt 2 einzeln gesteuerte, direkt angetriebene Kapstanmotoren
7-Segment-Anzeige	Bandzähler, 4-stellig auf Uhr-Funktion umschaltbar
Bandgeschwindigkeit	4,76 cm/s
Tonhöhenschwankungen (nach DIN 45507) IEC 386	0,1% für C60 und C90
Verwendbare Kassetten	C46 bis C120 (die techn. Daten sind bis C90 garantiert)
Umspulzeiten	ca. 45s für C60 ca. 65s für C90
Geräuschunterdrückungs-systeme	Dolby® B/Dolby C umschaltbar (beide für Aufnahme und Wiedergabe getrennt).
Bandsortenwahl	IEC I ≙ Fe_2O_3 IEC II ≙ CrO_2 IEC IV ≙ Metallpigment AUTO ≙ automatisch über Kassettencodierung
Wiedergabe-Entzerrung	3180 + 120µs für IEC I 3180 + 70µs für IEC II + IV
Band-Aussteuerung	200 nWb/m für 0 dB-Anzeige am PEAK READING METER
Klirrfaktor bei 315 Hz; 0 dB/K3	IEC I : besser als 0,8% IEC II : besser als 1,5% IEC IV: besser als 1,5%
Frequenzgang (über Band bei −20 dB gemessen)	IEC I : 30 Hz ... 18 kHz +2/−3 dB IEC II : 30 Hz ... 20 kHz +2/−3 dB IEC IV: 30 Hz ... 20 kHz +2/−3 dB
Geräuschspannungsabstand bezogen auf 3% Klirrfaktor bewertet nach IEC/A (DOLBY C ein)	besser als 72 dB
Übersprechdämpfung (bei 1 kHz)	besser als 40 dB
Vormagnetisierungs- und Löschfrequenz	105 kHz
Eingänge pro Kanal Empfindlichkeit für 0 dB Aussteuerung	**MIC** 0,70 mV/ 10 kOhm (asymmetrisch) **LINE** 70 mV/220 kOhm
Übersteuerungsfestigkeit aller Eingänge	40 dB (1:100)
Ausgänge pro Kanal Pegel für 0 dB Aussteuerung	LINE OUTPUT max. 0,775 V Ri = 390 Ohm, max. 1,5 kOhm mit Pegelsteller regelbar −26 dB PHONES max. 2,45 V, optimal für Kopfhörer von 200 ... 600 Ohm. Kurzschlussfest, separat regelbar über Volume-Regler.
Bestückung	1 Mikroprozessor 2 k x 8 bit, 55 IC's, 86 Transistoren, 57 Dioden, 10 LED's 3 Gleichrichter, 2 Relais, 4 Sieben-Segment-Anzeigen, 2 24-Segment Bar-Graph, 2 Quarze
Stromversorgung	100/120/140/200/220/240 V AC umschaltbar ±10%, 50 ... 60 Hz, max. 50 W
Netzsicherung	100 ... 140 V : T 500 mA 200 ... 240 V : T 250 mA
Gewicht (Masse):	10,4 kg
Gehäuseabmessungen (B x H x T):	452 x 151 x 352 (mm)

Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D Symbol are trade marks of Dolby Laboratories Licensing Corporation.

Messwerte über Band, gemessen mit REVOX-Kassetten.
Änderungen vorbehalten

ENGLISH

Transport mechanism	4-motor dual capstan drive for compact cassettes 2 DC-spooling motors controlled by microprocessor 2 capstan shafts individually driven by quartz controlled MDD motors
7-segment display	4 digit tape counter switchable to time clock
Tape speed	4,76 cm/s (1 7/8 ips)
Wow and flutter (as per DIN 45507) IEC 386	0.1 % with C 60 and C 90 cassettes
Useable cassettes	C 46 to C 120 specified data guaranteed up to C 90 only
Winding times	approx. 45 sec. for C 60 approx. 65 sec. for C 90
Noise reduction systems and	Dolby®-B/Dolby C processors in the recording and reproducing channels, switchable MPX-filter
Tape selection	IEC I ≙ Fe_2O_3 IEC II ≙ CrO_2 IEC IV ≙ Metal AUTO ≙ automatic sensing of coded cassettes
Playback equalization	3180 + 120 µs, IEC I 3180 + 70 µs, IEC II + IV
Recording level	200 nWb/m equals 0 dB on peak level meters
Distortion at 315 Hz, 0 dB (K3)	IEC I : better than 0.8% IEC II : better than 1.5% IEC IV: better than 1.5%
Frequency response (measured via tape at - 20 dB)	IEC I : 30 Hz ... 18 kHz +2/−3 dB IEC II : 30 Hz ... 20 kHz +2/−3 dB IEC IV: 30 Hz ... 20 kHz +2/−3 dB
Signal to noise ratio referred to 3% distortion weighted as per IEC/A (Dolby C on):	better than 72 dB
Separation (at 1 kHz	better than 40 dB
Bias and erase frequency:	105 kHz
Inputs per channel Sensitivity for 0 dB	**MIC** 0,70 mV/ 10 kohms (unbalanced) **LINE** 70 mV/220 kohms
Overload margin on all inputs	40 dB (1 : 100)
Outputs per channel Level at 0 dB reading	LINE OUTPUT: max. 0.775 V Ri 390 ohms, max. 1.5 kohms adjustable to −26 dB PHONES: max. 2,45 V optimal headphone impedance 200 ... 600 ohms, short-circuit-proof, volume separatly adjustable
Component parts	1 microprocessor 2 k x 8 bit 55 IC, 86 transistors, 57 diodes, 10 LED, 3 fullwave rectifiers, 2 relays, 4 seven-segment display 2 24-segment bar graphs, 2 quartz
Voltage selector	100/120/140/200/220/240 V AC (voltage selector) ±10%, 50 ... 60 Hz, max. 50 W
Fuse	100 ... 140 V: 500 mA 200 ... 240 V: 250 mA
Weight	22 lbs 15 ozs (10,4 kg)
Dimensions (W x H x D)	452 x 151 x 352 mm (17.8 x 6 x 13.85 inches)

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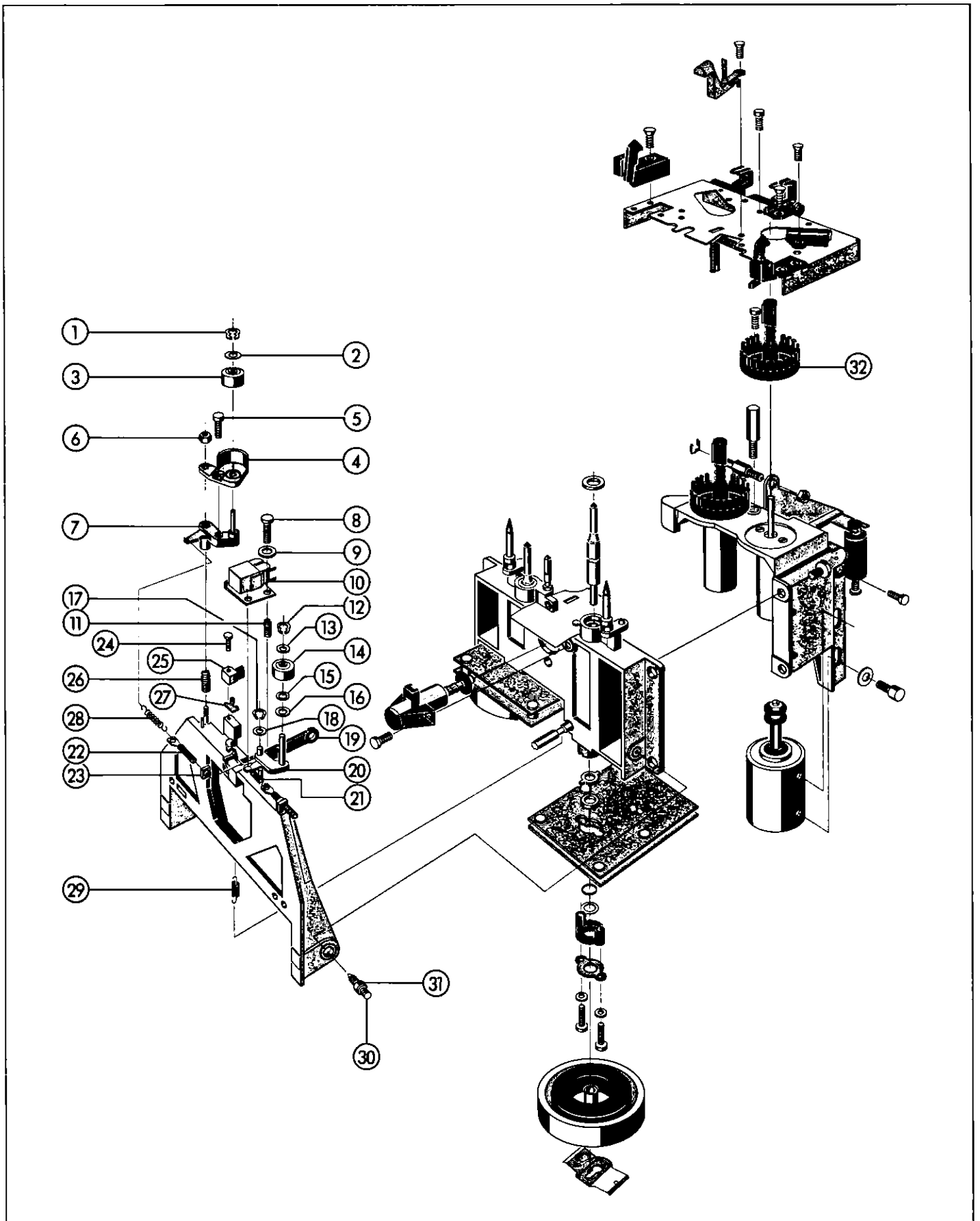
‹Overall› performance data as measured with REVOX-cassettes
Subject to change.

CASSETTE TAPE TRANSPORT FROM NO. 20401

	QTY	ORDER NUMBER	PART NAME
	QTY	ORDER NUMBER	PART NAME
01	1	24.99.0113	Shaft lock
02	1	1.388.252.05	Flat washer
03	1	1.710.203.00	Pinch roller
04	1	1.710.122.01	Tape guide
05	1	21.01.0203	Screw
06	1	22.99.0136	Nut
07	1	1.710.199.00	Pinch roller arm complete left
08	3	21.01.0206	Screw
09	3	23.01.2022	Flat washer
10	1	1.116.710.02	Record/Reproduce head (from No 20401)
11	3	1.010.067.37	Pressure spring
12	1	24.99.0113	Shaft lock
13	1	1.388.252.05	Flat washer
14	1	1.710.203.00	Pinch roller right
15	1	1.388.252.05	Flat washer
16	1	1.010.048.23	Flat washer
17	1	24.99.0122	Shaft lock
18	1	1.388.252.04	Flat washer
19	1	1.710.120.09	Link
20	1	1.710.200.00	Pinch roller arm right
21	1	1.010.103.37	Tension spring
22	2	1.067.670.02	Screw (special)
23	2	22.99.0106	Nut M 3
24	1	21.01.0207	Screw
25	1	1.116.712.01	Erase head (from No. 20401)
26	1	1.010.093.37	Pressure spring
27	1	1.710.122.02	Erase head spacer
28	1	1.010.024.37	Tension spring
29	1	1.010.103.37	Tension spring
30	3	1.020.001.05	Set screw
31	3	1.736.226.04	Slotted nut
32	2	1.710.161.00	Coupling arm complete (from No 21101)

CASSETTE TAPE TRANSPORT FROM NO. 20401



CASSETTE TAPE TRANSPORT

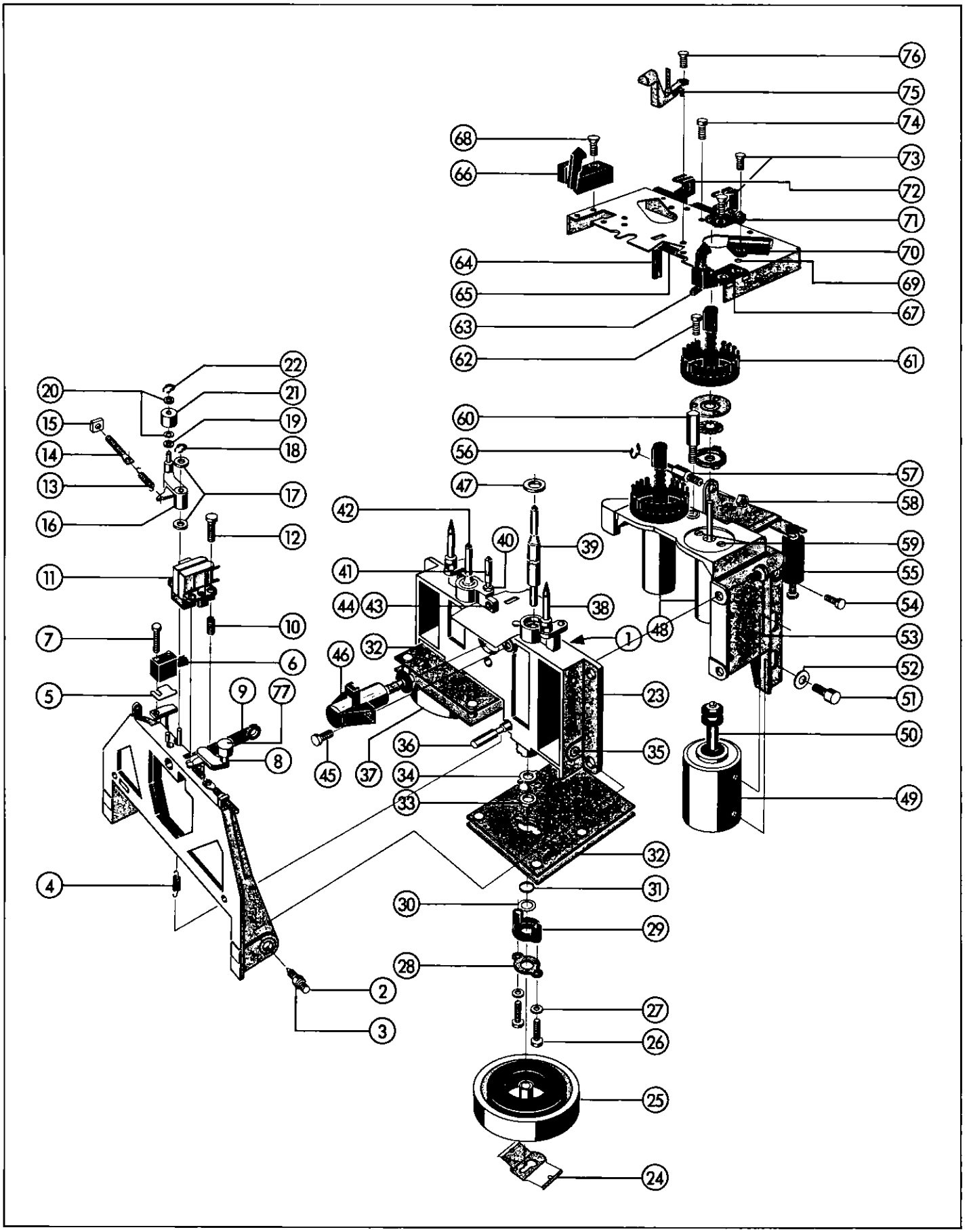
	QTY	ORDER NUMBER	PART NAME	
64	1	1.710.220.04	Coupling lever	
65	1	1.710.220.05	Axle	
66	1	1.710.225.00	Locking device	left
67	1	1.710.228.00	Locking device	right
68	2	21.26.2353	Screw	M 3 x 5
69	1	1.710.236.00	Cassette sensor	
70	2	1.710.175.00	Tape move sensor board	
71	1	1.710.233.00	Sensing finger	
72	1	1.710.240.81	Cassette coding sensor	
73	2	21.26.2353	Screw	M 3 x 5
74	4	21.26.0353	Screw	
75	1	1.710.212.00	Tape end sensor	
76	1	21.26.2353	Screw	M 3 x 5
77	1	1.710.202.00	Pinch roller	right

CASSETTE TAPE TRANSPORT

	QTY	ORDER NUMBER	PART NAME
	QTY	ORDER NUMBER	PART NAME
	4	1.710.119.00 1.710.120.11	Cassette tape transport, complete Screw
01	1 1	1.710.120.12 21.26.0354	Latch stop Screw
02	2	1.020.001.05	Set screw
03	2	1.736.226.04	Slotted nut
04	1	1.010.103.37	Tension spring
05		1.710.120.14 1.710.120.17	Erase head spacer
06	1 1	1.116.711.01 1.116.711.02	Erase head (from No. 16650) Erase head (to No. 16649)
07	1	21.01.0283	Screw M 2.5 x 14
08	1	1.710.198.00	Pinch roller arm right, complete (to No. 20400)
09	1	1.710.120.09	Link
10	3	1.010.067.37	Pressure spring
11	1	1.116.710.01	Record/Reproduce head (to No 20400)
12	3	21.01.0206	Screw M 2 x 10
13	2	1.010.024.37	Tension spring
14	2	1.067.670.02	Screw (special)
15	2	22.99.0106	Nut M 3
16	1	1.710.195.00	Pinch roller arm left, complete (to No. 20400)
17	2	1.388.252.04	Flat washer
18	1	24.99.0122	Shaft lock
19	1	1.010.048.23	Flat washer
20	2	1.388.252.05	Flat washer
21	1	1.710.201.00	Pinch roller left
22	1	24.99.0113	Shaft lock
23	1	.021.510.00	Dual capstan support
24	1	1.021.510.07	Shaft lock
25	1	1.021.521.00	Rotor complete right
26	2	21.14.0284	Screw M 2.5 x 16
27	2	24.16.1025	Lock washer
28	1	1.021.510.06	Cover plate
29	1	1.021.510.09	Flange for low friction washer
30	5 5	1.062.210.08 1.062.210.09	Head spacer

	QTY	ORDER NUMBER	PART NAME
31	1	31.99.0117	O - ring
32	2	1.021.516.00	Capstan motor driver
33	1	1.021.510.05	Low friction washer
34	1	1.021.510.14	Thrust bearing
35	2	1.710.120.06	Bearing bush
36	1	1.710.120.15	Spring bolt
37	1	1.021.520.00	Rotor complete left
38	2	1.710.120.07	Guide pin
39	1	1.021.510.17	Capstan shaft long
40	1	22.01.5030	Nut M3
41	1	1.710.120.08	Centering pin
42	1	1.021.510.15	Capstan shaft short
43	1	1.710.120.10	Centering screw
44	1	22.01.8030	Nut M 3
45	2	21.26.0353	Screw
46	1 1 1 1	1.710.130.00 1.014.820.08 31.99.0122 1.010.064.37	Locking solenoid, complete Guiding cap Sealing ring Spring
47	1	1.021.510.08	Sealing washer
48	2	72.02.0106	Spooling motor
49	1 1	1.014.710.00 1.014.760.00	Pinch roller solenoid Pinch roller solenoid (from No. 21605)
50	1 1	1.710.170.00 1.014.761.00	Plunger, complete Plunger, complete (from No. 21605)
51	2	21.53.0455	Screw M 4 x 8
52	2	23.01.1043	Flat washer
53	3	21.26.0455	Screw M 4 x 8
54	2	21.26.0454	Screw M 3 x 6
55	1	1.721.120.03	Dashpot, complete
56	1	24.16.3032	Retaining clip
57	1	1.710.155.00	Threaded lever complete
58	1	22.01.8030	Nut M 3
59	2	21.01.2202	Screw M 2 x 4
60	1	1.010.122.27	Threaded pin
61	2	1.710.161.00	Coupling arm, complete
62	2	21.01.0203	Screw M 2 x 5
63	2	1.710.220.03	Locking lever

CASSETTE TAPE TRANSPORT

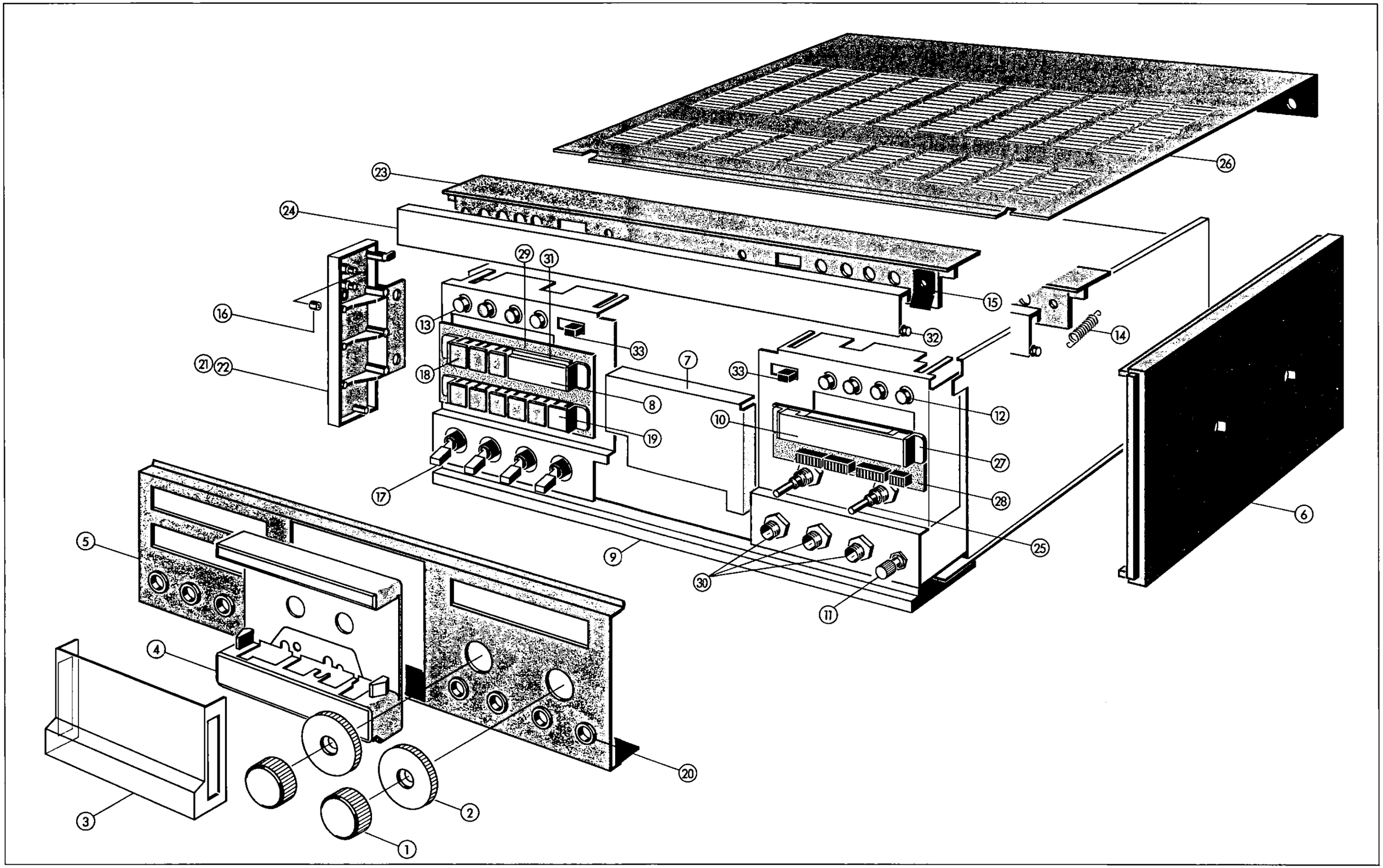


OPERATING SECTION

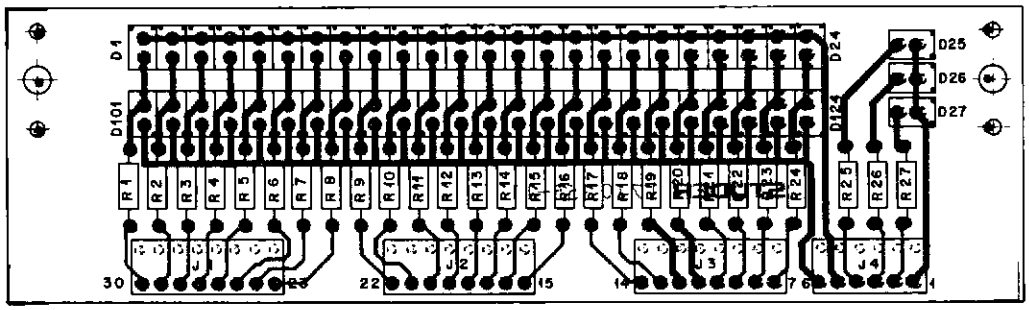
	QTY	ORDER NUMBER	PART NAME
01	2	1.177.100.11	Knob
02	2	1.177.100.12	Washer
03	1	1.710.010.11	Cassette dust cover
04	1	1.710.010.12	Tape transport cover
05	1	1.710.390.00	Operating panel MK I
	1	1.710.391.00	Operating panel MKII
06	1	1.166.010.09	Side part, left/right
07	1	1.710.119.00	Cassette tape transport, complete (to No. 20400)
	1	1.710.121.00	Cassette tape transport, complete (from No. 20401)
08	1	1.710.300.01	Window left
	1	1.710.300.02	Filter, red, MK I
	1	1.710.300.03	Filter, red, MKII
09	1	1.068.711.00	Toe rail, complete
10	1	1.710.340.01	Window, up to No. 7700 right
	1	1.710.340.04	Window, from No. 7701 right
11	1	1.710.350.01	Volume potentiometer
12	6	1.710.010.13	Push button, grey
13	2	1.710.010.14	Push button, red
14	2	1.010.102.37	Tension spring, MK I
15	2	1.710.010.17	Flat spring, MKII
16	2	1.710.010.18	Rubber ring, MKII
17	4	1.011.120.00	Toggle switch
18	8	1.011.201.05	Push button. grey
19	1	1.011.201.06	Push button, red
20	8	1.068.700.14	Decor rim
21	1	1.710.010.08	Side part left
22	1	1.710.010.09	Side part right
23	1	1.710.010.06	Cover strip, MK I
	1	1.710.010.07	Designate sticker, MK I
	1	1.710.010.15	Cover strip, MKII
	1	1.710.010.16	Designate sticker, MKII
24	1	1.710.420.01	Front cover flap, MK I
	1	1.710.421.01	Front cover flap, MKII
25	2	1.710.345.01	Double potentiometer
26	1	1.710.010.01	Cover plate
27	6	1.179.143.11	Bracket
28	1	1.710.355.00	Peak meter display (up to No. 7700)
	1	1.710.356.00	Peak meter display (from No.7701)
29	1	1.710.320.00	Keyboard PCB

	QTY	ORDER NUMBER	PART NAME
30	1	1.710.350.00	Mic/Phones Amp. PCB MK I
	1	1.710.351.81	Mic/Phones Amp. PCB MKII
31	1	1.710.312.00	Counter display MK I
	1	1.710.313.00	Counter display MKII
32	2	1.710.420.02	Flap holder
33	2	1.710.303.03	Slide switch

OPERATING SECTION



PEAK METER DISPLAY PCB 1.710.355



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	DL....1	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....2	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....3	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....4	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....5	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....6	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....7	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....8	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL....9	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...10	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...11	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...12	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...13	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...14	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...15	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...16	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...17	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...18	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...19	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...20	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...21	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...22	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...23	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...24	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...25	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...26	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL...27	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..101	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..102	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..103	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..104	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..105	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..106	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..107	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..108	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..109	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..110	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI

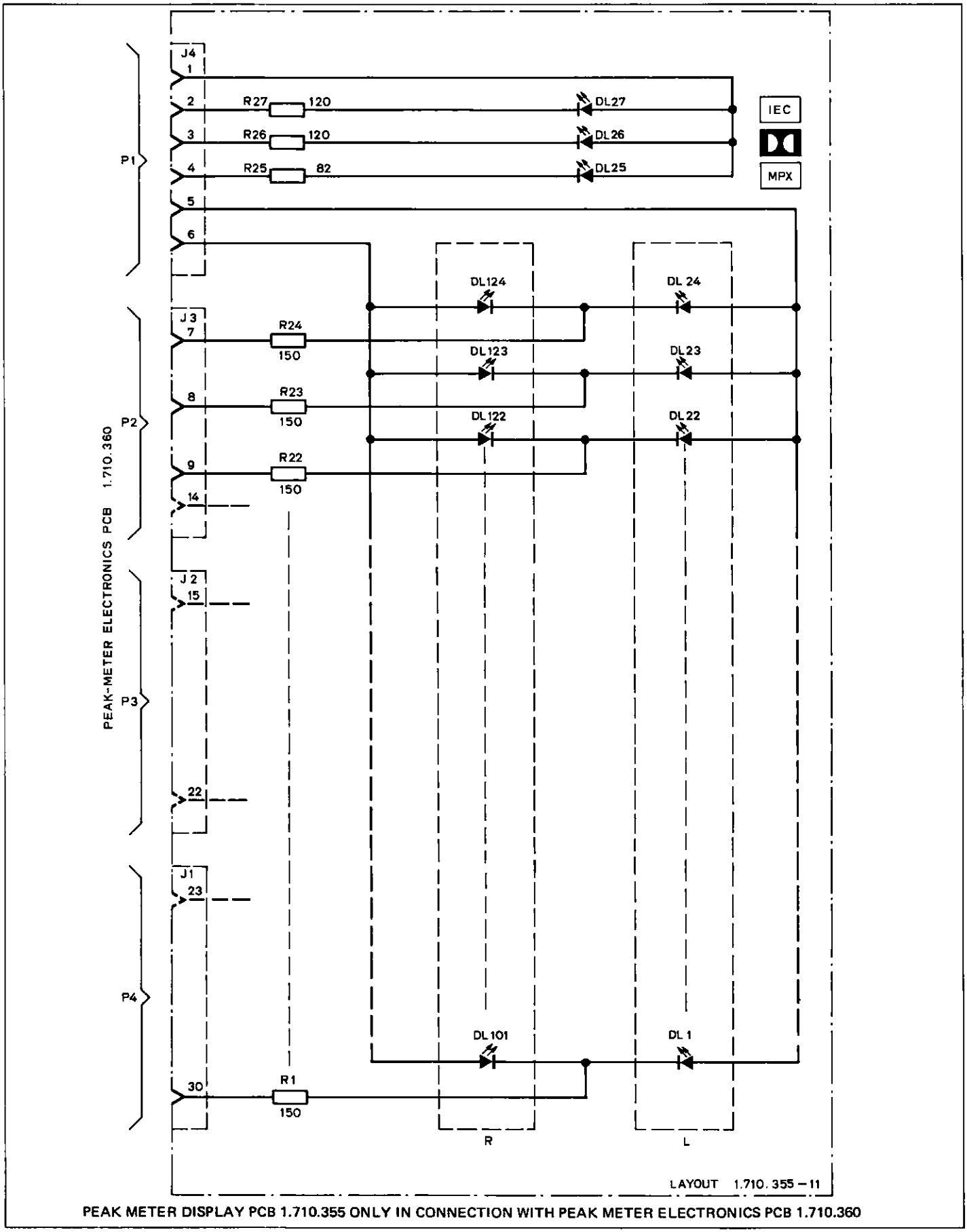
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	DL..111	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..112	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..113	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..114	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..115	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..116	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..117	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..118	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..119	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..120	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..121	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..122	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..123	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	DL..124	50.04.2119	MV 57124	2-4 mCd @20mA	MON+GI
	J.....1	54.01.0262	8-Pole	CIS-Socket-Strip	AMP
	J.....2	54.01.0262	8-Pole	CIS-Socket-Strip	AMP
	J.....3	54.01.0262	8-Pole	CIS-Socket-Strip	AMP
	J.....4	54.01.0238	6-Pole	CIS-Socket-Strip	AMP
	R.....1	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....2	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....3	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....4	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....5	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....8	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....9	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....10	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....11	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....12	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....13	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....14	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....15	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....16	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....17	57.11.4151	150 Ohm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....18	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....19	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....20	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....21	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....22	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....23	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....24	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R....25	57.11.4820	82 Ohm	5%, 0.25W, CF	
	R....26	57.11.4121	120 Ohm	5%, 0.25W, CF	
	R....27	57.11.4121	120 Ohm	5%, 0.25W, CF	

CF= Carbon Film
MANUFACTURER: MON=MONSANTO GI=GENERAL INSTRUMENTS

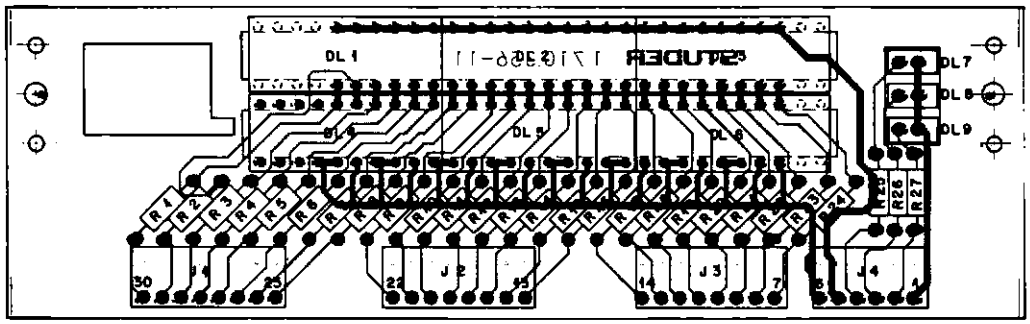
ORIG 81/01/29

PEAK METER DISPLAY PCB 1.710.355



PEAK METER DISPLAY PCB 1.710.355 ONLY IN CONNECTION WITH PEAK METER ELECTRONICS PCB 1.710.360

PEAK METER DISPLAY PCB 1.710.356



INC.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	DL....1	5C.C4.2134	MV 57164	2-4 mCD 320mA	GI
	DL....2	5C.C4.2134	MV 57164	2-4 mCD 320mA	GI
	DL....3	5C.C4.2134	MV 57164	2-4 mCD 320mA	GI
	DL....4	5C.C4.2134	MV 57164	2-4 mCD 320mA	GI
	DL....5	5C.C4.2134	MV 57164	2-4 mCD 320mA	GI
	DL....6	5C.C4.2134	MV 57164	2-4 mCD 320mA	GI
	DL....7	5C.C4.2119	MV 57124	2-4 mCD 320mA	MON.GI
	DL....8	5C.C4.2119	MV 57124	2-4 mCD 320mA	MON.GI
	DL....9	5C.C4.2119	MV 57124	2-4 mCD 320mA	MON.GI
	J.....1	54.C1.0262	CIS 4-POL		
	J.....2	54.C1.0262	CIS 4-POL		
	J.....3	54.C1.0262	CIS 4-POL		
	J.....4	54.C1.0238	CIS 6-POL		
	R.....1	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....2	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....3	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....4	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....5	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....8	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....9	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....10	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....11	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....12	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....13	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....14	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....15	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....16	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....17	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....18	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....19	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....20	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....21	57.11.41*1	150 Ohm	5%, 0.25W, CF	
	R.....22	57.11.41*1	150 Ohm	5%, 0.25W, CF	

INC.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....23	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....24	57.11.4151	150 Ohm	5%, 0.25W, CF	
	R.....25	57.11.4820	82 Ohm	5%, 0.25W, CF	
	R.....26	57.11.4121	120 Ohm	5%, 0.25W, CF	
	R.....27	57.11.4121	120 Ohm	5%, 0.25W, CF	

CF= Carbon Film
MANUFACTURER: GI=GENERAL INSTRUMENTS

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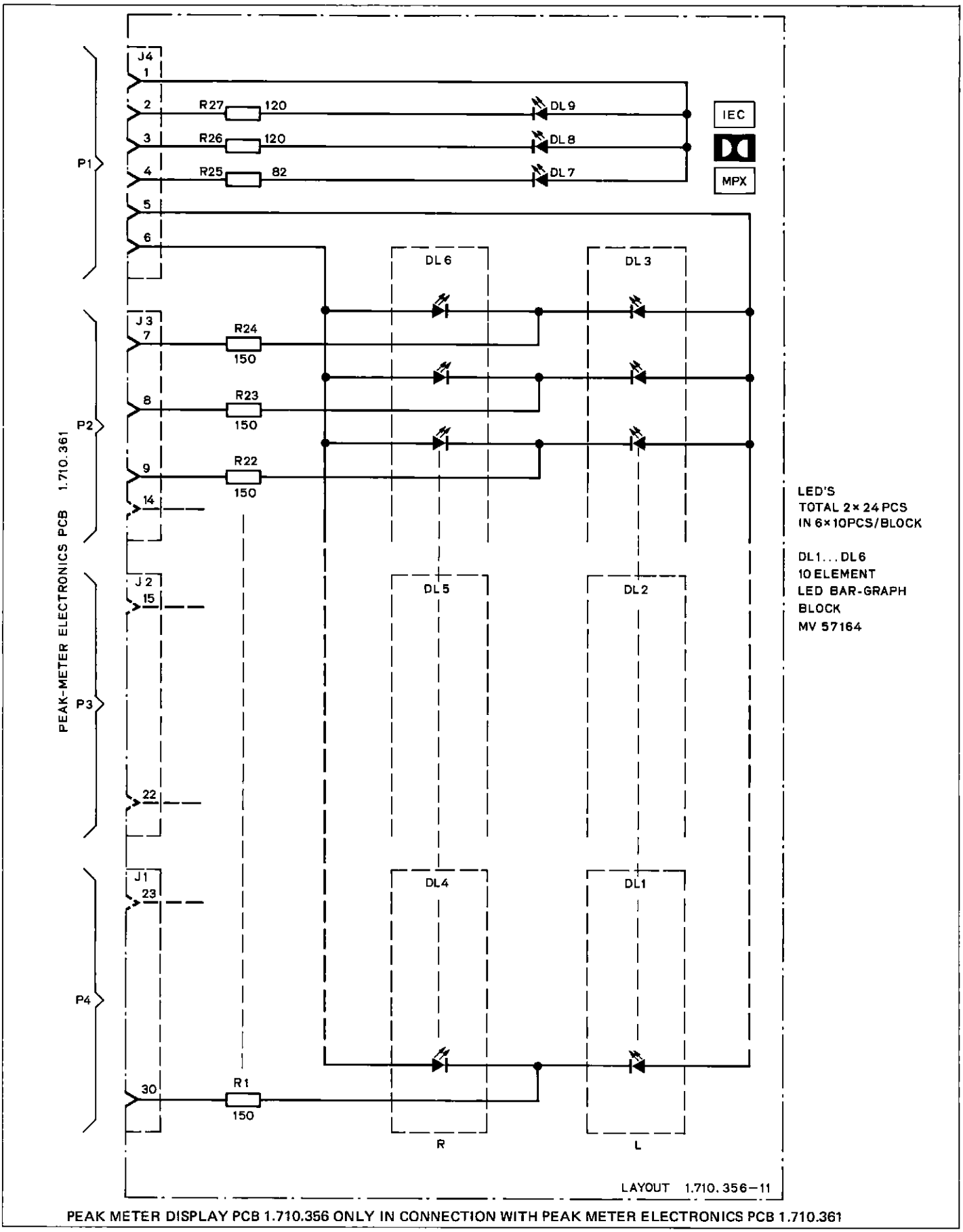
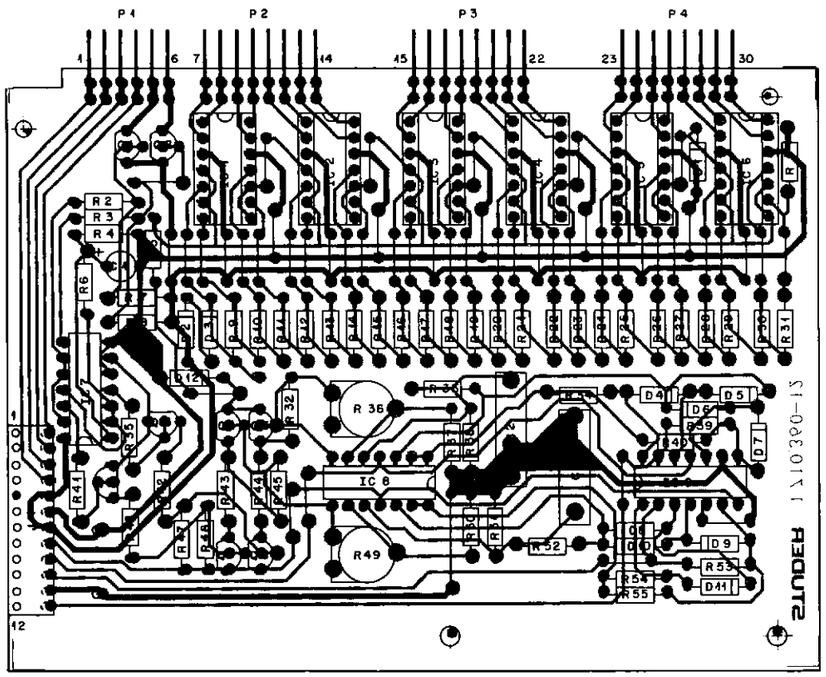
PEAK METER DISPLAY PCB 1.710.356



PEAK METER DISPLAY PCB 1.710.356 ONLY IN CONNECTION WITH PEAK METER ELECTRONICS PCB 1.710.361

PEAK METER ELECTRONICS PCB 1.710.361(360) "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.22.5220	22 uF - 20%	10V EL	
	C.....2	59.12.2474	.47 uF 5%	PE	
	C.....3	59.12.2474	.47 uF 5%	PE	
	D.....1	50.04.0125	1N4448	Si	
	D.....2	50.04.0125	1N4448	Si	
	D.....3	50.04.0125	1N4448	Si	
	D.....4	50.04.0125	1N4448	Si	
	D.....5	50.04.0125	1N4448	Si	
	D.....6	50.04.0125	1N4448	Si	
	D.....7	50.04.0125	1N4448	Si	
	D.....8	50.04.0125	1N4448	Si	
	D.....9	50.04.0125	1N4448	Si	
	D.....10	50.04.0125	1N4448	Si	
	D.....11	50.04.0125	1N4448	Si	
	D.....12	50.04.0125	1N4448	Si	
	IC....1	50.11.0104	LM 339 LIN	UA 339	
	IC....2	50.11.0104	LM 339 LIN	UA 339	
	IC....3	50.11.0104	LM 339 LIN	UA 339	
	IC....4	50.11.0104	LM 339 LIN	UA 339	
	IC....5	50.11.0104	LM 339 LIN	UA 339	
	IC....6	50.11.0104	LM 339 LIN	UA 339	
	IC....7	50.06.0014	T4LS 14 TTL		
	IC....8	50.09.0104	LF 347	TL 084	N. TI,
	IC....9	50.05.0232	RC 4136	RC4136N	RAY. TI,
	J.....1	54.01.0215	12-Pole		
	P.....1	54.01.0426	6-Pole	Pin-Strip	
	P.....2	54.01.0428	8-Pole	Pin-Strip	
	P.....3	54.01.0428	8-Pole	Pin-Strip	
	P.....4	54.01.0428	8-Pole	Pin-Strip	
	Q.....1	50.03.0351	BC 327-25	PNP	P.
	Q.....2	50.03.0351	BC 327-25	PNP	P.
	Q.....3	50.03.0515	BC 307 B	PNP	M+P.

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	Q.....4	50.03.0331	2N 5639	FET	M+SX.
	Q.....5	50.03.0331	2N 5639	FET	M+SX.
	Q.....6	50.03.0519	BC 307 B	PNP	M+P.
	Q.....7	50.03.0436	BC 237 B	NPN	
	Q.....8	50.03.0436	BC 237 B	NPN	
	R.....1	57.11.3102	1.0 kOhm	1%, 0.25W, MF	
	R.....2	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....3	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....4	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R.....5	57.11.3102	1.0 kOhm	1%, 0.25W, MF	
	R.....6	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....9	57.39.8461	8.46 kOhm	1%, 0.25W, MF	
	R.....10	57.39.7681	7.68 kOhm	1%, 0.25W, MF	
	R.....11	57.11.3682	6.8 kOhm	1%, 0.25W, MF	
	R.....12	57.11.3622	6.2 kOhm	1%, 0.25W, MF	
	R.....13	57.39.5491	5.49 kOhm	1%, 0.25W, MF	
	R.....14	57.39.4871	4.87 kOhm	1%, 0.25W, MF	
	R.....15	57.11.3432	4.3 kOhm	1%, 0.25W, MF	
	R.....16	57.11.3392	3.9 kOhm	1%, 0.25W, MF	
	R.....17	57.39.3481	3.48 kOhm	1%, 0.25W, MF	
	R.....18	57.39.3091	3.09 kOhm	1%, 0.25W, MF	
	R.....19	57.11.3272	2.7 kOhm	1%, 0.25W, MF	
	R.....20	57.11.3242	2.4 kOhm	1%, 0.25W, MF	
	R.....21	57.11.3222	2.2 kOhm	1%, 0.25W, MF	
	R.....22	57.11.3202	2.0 kOhm	1%, 0.25W, MF	
	R.....23	57.11.3332	3.3 kOhm	1%, 0.25W, MF	
	R.....24	57.39.2551	2.55 kOhm	1%, 0.25W, MF	
	R.....25	57.11.3202	2.0 kOhm	1%, 0.25W, MF	
	R.....26	57.11.3162	1.6 kOhm	1%, 0.25W, MF	
	R.....27	57.11.3132	1.3 kOhm	1%, 0.25W, MF	
	R.....28	57.11.3102	1.0 kOhm	1%, 0.25W, MF	
	R.....29	57.11.3821	820 Ohm	1%, 0.25W, MF	
	R.....30	57.39.1371	1.37 kOhm	1%, 0.25W, MF	
	R.....31	57.39.7870	787 Ohm	1%, 0.25W, MF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....32	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....33	57.11.3272	2.7 kOhm	1%, 0.25W, MF	
	R.....34	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....35	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....36	58.02.5103	10 kOhm	20%, 0.15W, POT.LIN	
	R.....37	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....38	57.11.4155	1.5 MOhm	5%, 0.25W, CF	
	R.....39	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....40	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....41	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....42	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R.....43	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....44	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....45	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....46	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R.....47	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....48	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....49	58.02.5103	10 kOhm	20%, 0.25W, POT.LIN	
	R.....50	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....51	57.11.4155	1.5 MOhm	5%, 0.25W, CF	
	R.....52	57.11.3272	2.7 kOhm	1%, 0.25W, MF	
	R.....53	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....54	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....55	57.11.4103	10 kOhm	5%, 0.25W, CF	

MF=Metal Film, CF=Carbon Film, POT=Pot.Meter Carbon Film,
TA=Tantalum, PE=Polyester,
MANUFACTURER:N=NATIONAL, TI=TEXAS INSTRUMENTS, P=PHILIPS,
M=MOTOROLA, Sig=SIGNETICS, S=SILICONIX,

DRIG 81/10/20

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.30.2470	47 uF - 20%	6.3V TA	
	C.....2	59.12.2474	.47 uF 5%	PE	
	C.....3	59.12.2474	.47 uF 5%	PE	
	D.....1	50.04.0125	1N4448	Si	
	D.....2	50.04.0125	1N4448	Si	
	D.....3	50.04.0125	1N4448	Si	
	D.....4	50.04.0125	1N4448	Si	
	D.....5	50.04.0125	1N4448	Si	
	D.....6	50.04.0125	1N4448	Si	
	D.....7	50.04.0125	1N4448	Si	
	D.....8	50.04.0125	1N4448	Si	
	D.....9	50.04.0125	1N4448	Si	
	D.....10	50.04.0125	1N4448	Si	
	D.....11	50.04.0125	1N4448	Si	
(DL)	D.....12	50.04.0125	1N4448	Si	
	IC....1	50.11.0104	LM 339 LIN	UA 339	
	IC....2	50.11.0104	LM 339 LIN	UA 339	
	IC....3	50.11.0104	LM 339 LIN	UA 339	
	IC....4	50.11.0104	LM 339 LIN	UA 339	
	IC....5	50.11.0104	LM 339 LIN	UA 339	
	IC....6	50.11.0104	LM 339 LIN	UA 339	
	IC....7	50.06.0014	T4LS 14 TTL		
	IC....8	50.09.0104	LF 347	TL 084	N. TI,
	IC....9	50.05.0232	RC 4136	RC4136N	RAY. TI,
	J.....1	54.01.0215	12-Pole		
	P.....1	54.01.0426	6-Pole	Pin-Strip	
	P.....2	54.01.0428	8-Pole	Pin-Strip	
	P.....3	54.01.0428	8-Pole	Pin-Strip	
	P.....4	54.01.0428	8-Pole	Pin-Strip	
	Q.....1	50.03.0490	BC 328-25	PNP	P.
	Q.....2	50.03.0490	BC 328-25	PNP	P.
	Q.....3	50.03.0317	BC 251 A	PNP	M+P.

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	Q.....4	50.03.0331	2N 5639	FET	M+SX.
	Q.....5	50.03.0331	2N 5639	FET	M+SX.
	Q.....6	50.03.0317	BC 251 A	PNP	M+P.
	Q.....7	50.03.0436	BC 237 B	NPN	
	Q.....8	50.03.0436	BC 237 B	NPN	
	R.....1	57.11.3102	1.0 kOhm	1%, 0.25W, MF	
	R.....2	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....3	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....4	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R.....5	57.11.3102	1.0 kOhm	1%, 0.25W, MF	
	R.....6	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....9	57.11.3682	6.8 kOhm	1%, 0.25W, MF	
	R.....10	57.11.3622	6.2 kOhm	1%, 0.25W, MF	
	R.....11	57.39.5491	5.49 kOhm	1%, 0.25W, MF	
	R.....12	57.39.4871	4.87 kOhm	1%, 0.25W, MF	
	R.....13	57.11.3432	4.3 kOhm	1%, 0.25W, MF	
	R.....14	57.11.3392	3.9 kOhm	1%, 0.25W, MF	
	R.....15	57.39.3481	3.48 kOhm	1%, 0.25W, MF	
	R.....16	57.11.3302	3.0 kOhm	1%, 0.25W, MF	
	R.....17	57.11.3272	2.7 kOhm	1%, 0.25W, MF	
	R.....18	57.11.3242	2.4 kOhm	1%, 0.25W, MF	
	R.....19	57.11.3222	2.2 kOhm	1%, 0.25W, MF	
	R.....20	57.11.3202	2.0 kOhm	1%, 0.25W, MF	
	R.....21	57.11.3182	1.8 kOhm	1%, 0.25W, MF	
	R.....22	57.11.3152	1.5 kOhm	1%, 0.25W, MF	
	R.....23	57.39.1371	1.37 kOhm	1%, 0.25W, MF	
	R.....24	57.11.3122	1.2 kOhm	1%, 0.25W, MF	
	R.....25	57.11.3202	2.0 kOhm	1%, 0.25W, MF	
	R.....26	57.11.3162	1.6 kOhm	1%, 0.25W, MF	
	R.....27	57.11.3132	1.3 kOhm	1%, 0.25W, MF	
	R.....28	57.11.3132	1.3 kOhm	1%, 0.25W, MF	
	R.....29	57.11.3821	820 Ohm	1%, 0.25W, MF	
	R.....30	57.39.1371	1.37 kOhm	1%, 0.25W, MF	
	R.....31	57.11.3751	750 Ohm	1%, 0.25W, MF	

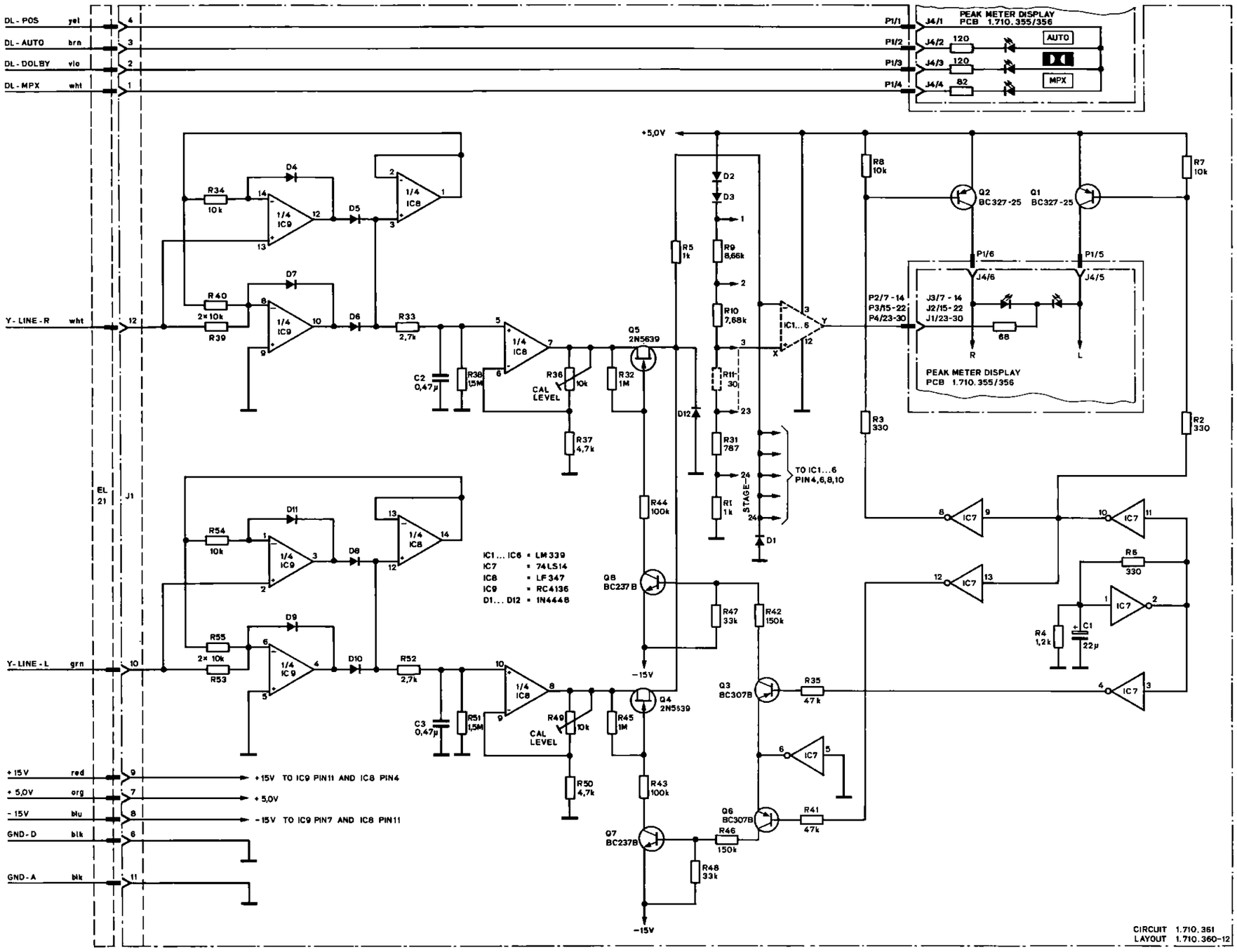
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....32	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....33	57.11.3272	2.7 kOhm	1%, 0.25W, MF	
	R.....34	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....35	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....36	58.02.5103	10 kOhm	20%, 0.15W, POT.LIN	
	R.....37	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....38	57.11.4155	1.5 MOhm	5%, 0.25W, CF	
	R.....39	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....40	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....41	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....42	57.11.4153	150 kOhm	5%, 0.25W, CF	
	R.....43	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....44	57.11.3134	100 kOhm	5%, 0.25W, CF	
	R.....45	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R.....46	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R.....47	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....48	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R.....49	58.02.5103	10 kOhm	20%, 0.25W, POT.LIN	
	R.....50	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....51	57.11.4155	1.5 MOhm	5%, 0.25W, CF	
	R.....52	57.11.3272	2.7 kOhm	1%, 0.25W, MF	
	R.....53	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....54	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....55	57.11.4103	10 kOhm	5%, 0.25W, CF	

MF=Metal Film, CF=Carbon Film, POT=Pot.Meter Carbon Film,
TA=Tantalum, PE=Polyester,

MANUFACTURER:N=NATIONAL, TI=TEXAS INSTRUMENTS, P=PHILIPS,
M=MOTOROLA, Sig=SIGNETICS, S=SILICONIX,

DRIG 81/02/09 (01) 81/06/24

PEAK METER ELECTRONICS PCB 1.710.361(360) "ESE"



R11 = 6.8k
R12 = 6.2k
R13 = 5.49k
R14 = 4.87k
R15 = 4.3k
R16 = 3.9k
R17 = 3.84k
R18 = 3.09k
R19 = 2.7k
R20 = 2.4k
R21 = 2.2k
R22 = 2.0k
R23 = 3.3k
R24 = 2.55k
R25 = 2.0k
R26 = 1.6k
R27 = 1.3k
R28 = 1.0k
R29 = 820
R30 = 1.37k

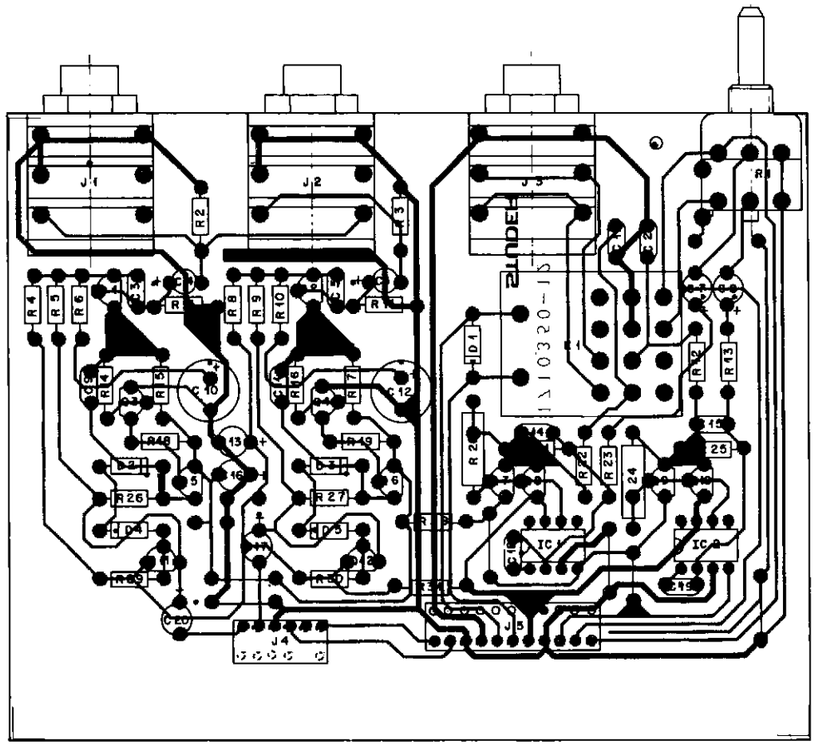
STAGE CONFIGURATION OF COMPARATOR CONNECTORS

STAGE	R	IC NR/PIN-X/PIN-Y
1	D3	1/5/2
2	R9	1/7/1
3	R10	1/11/13
4	R11	1/9/14
5	R12	2/5/2
6	R13	2/7/1
7	R14	2/11/13
8	R15	2/9/14
9	R16	3/5/2
10	R17	3/7/1
11	R18	3/11/13
12	R19	3/9/14
13	R20	4/5/2
14	R21	4/7/1
15	R22	4/11/13
16	R23	4/9/14
17	R24	5/5/2
18	R25	5/7/1
19	R26	5/11/13
20	R27	5/9/14
21	R28	6/5/2
22	R29	6/7/1
23	R30	6/11/13
24	R31	6/9/14
	R1	

PEAK METER ELECTRONICS PCB 1.710.361 ONLY IN CONNECTION WITH PEAK METER DISPLAY PCB 1.710.356 (B70 MKI SINCE SERIAL NR.7701 AND B710MK II).
PEAK METER ELECTRONICS PCB 1.710.360 ONLY IN CONNECTION WITH PEAK METER DISPLAY PCB 1.710.355 (B70MK II TILL SERIAL NR.7700).

PCB 1.710.360:
COMPONENTS WICH DIFFER TO 1.710.361 SEE POSITION LIST 1.710.360.

MIC/PHONES AMPLIFIER PCB 1.710.350



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT		MANUF.
C	1	59.32.3103	10 nF	20%	Cer	
C	2	59.32.3103	10 nF	20%	Cer	
C	3	59.32.4132	1 nF	20%	Cer	
C	4	59.30.6130	1 uF	-20%	Ta	
C	5	59.32.4102	1 nF	20%	Cer	
C	6	59.30.6100	1 uF	20%	Ta	
C	7	59.22.8479	4.7 uF	-20%	EL	
C	8	59.22.8479	4.7 uF	-20%	EL	
C	9	59.32.0100	10 pF	20%	Cer	
C	10	59.22.4101	100 uF	-10%	El	
C	11	59.32.0100	10 pF	20%	Cer	
C	12	59.22.4101	100 uF	-10%	El	
C	13	59.22.5220	22 uF	-10%	El	
C	14	59.32.1330	33 pF	20%	Cer	
C	15	59.32.1330	33 pF	20%	Cer	
C	16	59.22.5220	22 uF	-10%	El	
C	17	59.22.6100	10 uF	-10%	El	
C	18	59.32.0101	100 pF	-10%	Cer	
C	19	59.32.0101	100 pF	-10%	Cer	
C	20	59.22.6100	10 uF	-10%	El	
D	1	50.04.0125	1N4448		Si	
D	2	50.04.0125	1N4448		Si	
D	3	50.04.0125	1N4448		Si	
D	4	50.04.0125	1N4448		Si	
D	5	50.04.0125	1N4448		Si	
IC	1	50.05.0257	LM 301	LIN		TI
IC	2	50.05.0257	LM 301	LIN		TI
J	1	1.710.350.08		Jack-Socket		S
J	2	1.710.350.08		Jack-Socket		S
J	3	1.710.350.00		Jack-Socket		S
J	4	54.01.0238	6-Pole	EIS-Socket-Strip		AMP
J	5	54.01.0291	11-Pole	EIS-Socket-Strip		AMP
K	1	56.04.0141	PZ 6	24V, 4PU		

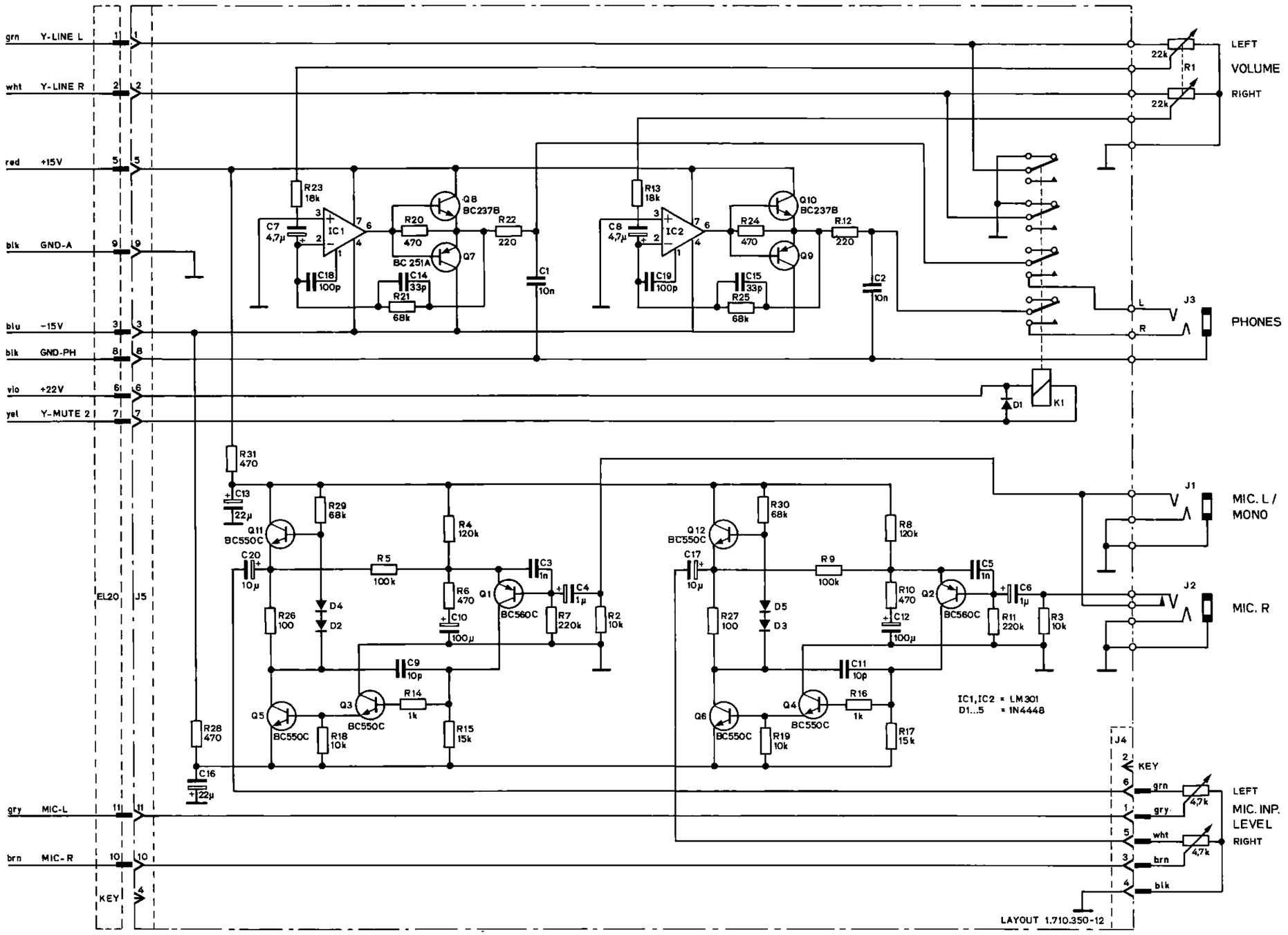
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT		MANUF.
U	1	50.03.0496	BC 560 C	PNP		
U	2	50.03.0496	BC 560 C	PNP		
U	3	50.03.0497	BC 550 C	NPN		
U	4	50.03.0497	BC 550 C	NPN		
U	5	50.03.0497	BC 550 C	NPN		
U	6	50.03.0497	BC 550 C	NPN		
U	7	50.03.0317	BC 251 A	PNP, BC 307 A		
U	8	50.03.0436	BC 237 B	NPN, BC 547 B		
U	9	50.03.0317	BC 251 A	PNP, BC 307 A		
U	10	50.03.0436	BC 237 B	NPN, BC 547 B		
U	11	50.03.0497	BC 550 C	NPN		
U	12	50.03.0497	BC 550 C	NPN		
R	1	1.710.350.01	22 kOhm	+log		S
R	2	57.11.4103	10 kOhm	5% 0.25W CF		
R	3	57.11.4103	10 kOhm	5% 0.25W CF		
(00)	R	4	57.11.4224	220 kOhm	5% 0.25W CF	
(02)	R	4	57.11.4124	120 kOhm	5% 0.25W CF	
R	5	57.11.4134	100 kOhm	5% 0.25W CF		
(00)	R	6	57.11.4102	1 kOhm	5% 0.25W CF	
(02)	R	6	57.11.4471	470 Ohm	5% 0.25W CF	
R	7	57.11.4224	220 kOhm	5% 0.25W CF		
(00)	R	8	57.11.4224	220 kOhm	5% 0.25W CF	
(02)	R	8	57.11.4124	120 kOhm	5% 0.25W CF	
R	9	57.11.4134	100 kOhm	5% 0.25W CF		
(00)	R	10	57.11.4102	1 kOhm	5% 0.25W CF	
(02)	R	10	57.11.4471	470 Ohm	5% 0.25W CF	
R	11	57.11.4224	220 kOhm	5% 0.25W CF		
R	12	57.11.4221	220 Ohm	5% 0.25W CF		
R	13	57.11.4183	18 kOhm	5% 0.25W CF		
R	14	57.11.4102	1 kOhm	5% 0.25W CF		
R	15	57.11.4153	15 kOhm	5% 0.25W CF		
R	16	57.11.4132	1 kOhm	5% 0.25W CF		
R	17	57.11.4153	15 kOhm	5% 0.25W CF		
R	18	57.11.4133	10 kOhm	5% 0.25W CF		
R	19	57.11.4133	10 kOhm	5% 0.25W CF		
R	20	57.12.4471	470 Ohm	5% 0.33W CF		

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT		MANUF.
R	21	57.11.4683	68 kOhm	5% 0.25W CF		
R	22	57.11.4221	220 Ohm	5% 0.25W CF		
R	23	57.11.4183	18 kOhm	5% 0.25W CF		
R	24	57.12.4471	470 Ohm	5% 0.33W CF		
R	25	57.11.4683	68 kOhm	5% 0.25W CF		
R	26	57.11.4101	100 Ohm	5% 0.25W CF		
R	27	57.11.4101	100 Ohm	5% 0.25W CF		
(00)	R	28	57.11.4222	2.2 kOhm	5% 0.25W CF	
(01)	R	28	57.11.4471	470 Ohm	5% 0.25W CF	
R	29	57.11.4683	68 kOhm	5% 0.25W CF		
R	30	57.11.4683	68 kOhm	5% 0.25W CF		
(00)	R	31	57.11.4222	2.2 kOhm	5% 0.25W CF	
(01)	R	31	57.11.4471	470 Ohm	5% 0.25W CF	

Cer=CERAMIC, El=ELECTROLYT, Ta=TANTALUM
CF=CARBON FILM
MANUFACTURER: TI= TEXAS INSTRUMENT S=STUDER

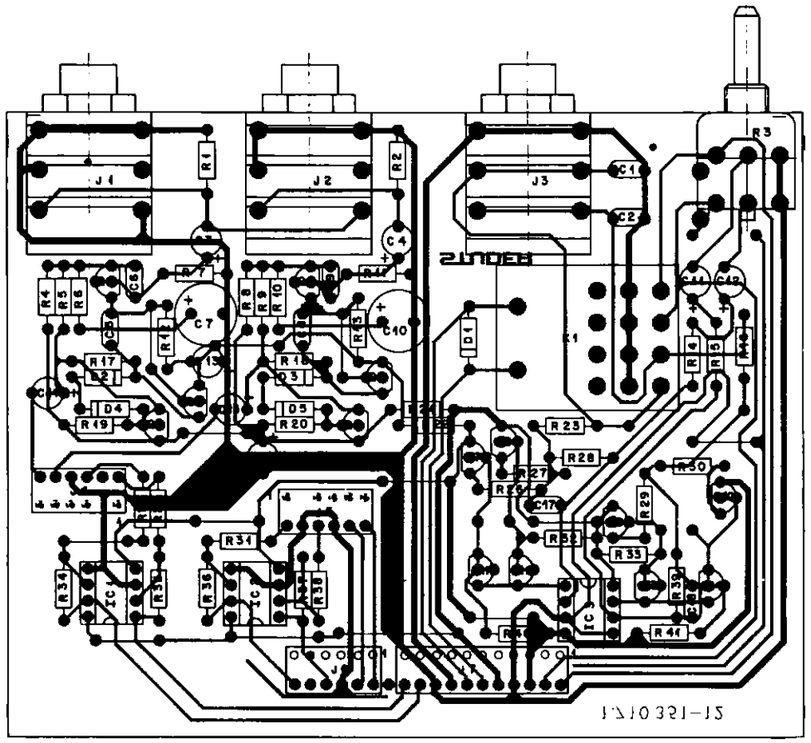
ORIG 81/02/17 (01) 81/03/26 (02) 82/03/31

MIC/PHONES AMPLIFIER PCB 1.710.350



MIC/PHONES AMPLIFIER PCB 1.710.350 FOR B710 MKI OR IN CONNECTION WITH DOLBY - C - ENCODER PCB 1.710.488 (B710 MKII) VALID TILL SERIAL NO. 17050 (B710 MKII)

MIC/PHONES AMPLIFIER PCB 1.710.351–00/–81



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C	1	59.32.3103	10 nF	20%, Cer	
C	2	59.32.3103	10 nF	20%, Cer	
C	3	59.22.6100	10 uF	-10%, El	
C	4	59.22.6100	10 uF	-10%, El	
C	5	59.32.0100	10 pF	20%, Cer	
C	6	59.32.4102	1 nF	20%, Cer	
C	7	59.22.2221	220 uF	-10%, El	
C	8	59.32.0100	10 pF	20%, Cer	
C	9	59.32.4102	1 nF	20%, Cer	
C	10	59.22.2221	220 uF	-10%, El	
C	11	59.22.8479	4.7 uF	-20%, El	
C	12	59.22.8479	4.7 uF	-20%, El	
C	13	59.22.5220	22 uF	-10%, El	
C	14	59.22.6100	10 uF	-10%, El	
C	15	59.22.6100	10 uF	-10%, El	
C	16	59.22.5220	22 uF	-10%, El	
C	17	59.32.1330	33 pF	20%, Cer	
C	18	59.32.1330	33 pF	20%, Cer	
D	1	50.04.0125	1N4448	Si	
D	2	50.04.0125	1N4448	Si	
D	3	50.04.0125	1N4448	Si	
D	4	50.04.0125	1N4448	Si	
D	5	50.04.0125	1N4448	Si	
IC	1	50.09.0107	RC 4559	Dual Op. Amp.	TI+RA
IC	2	50.09.0107	RC 4559	Dual Op. Amp.	TI+RA
IC	3	50.09.0107	RC 4559	Dual Op. Amp.	TI+RA
J	1	1.710.350.02		Jack-Socket	St
J	2	1.710.350.02		Jack-Socket	St
J	3	1.710.350.02		Jack-Socket	St
J	4	54.01.0238	6-Pole	CIS-Socket-Strip	AMP
J	5	54.01.0238	6-Pole	CIS-Socket-Strip	AMP
J	6	54.01.0216	6-Pole	CIS-Socket-Strip	AMP
J	7	54.01.0291	11-Pole	CIS-Socket-Strip	AMP

STUCER 82/07/05 RW MIC. PHONES AMPL. 1.710.351.00 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C	1	59.32.3133	10 nF	20%, Cer	
C	2	59.32.3133	10 nF	20%, Cer	
C	3	59.22.6130	10 uF	-10%, El	
C	4	59.22.6130	10 uF	-10%, El	
C	5	59.32.0100	10 pF	20%, Cer	
C	6	59.32.4122	1 nF	20%, Cer	
C	7	59.22.2221	220 uF	-10%, El	
C	8	59.32.0100	10 pF	20%, Cer	
C	9	59.32.4102	1 nF	20%, Cer	
C	10	59.22.2221	220 uF	-10%, El	
C	11	59.22.8479	4.7 uF	-20%, El	
C	12	59.22.8479	4.7 uF	-20%, El	
C	13	59.22.5220	22 uF	-10%, El	
C	14	59.22.6100	10 uF	-10%, El	
C	15	59.22.6100	10 uF	-10%, El	
C	16	59.22.5220	22 uF	-10%, El	
C	17	59.32.1330	33 pF	20%, Cer	
C	18	59.32.1330	33 pF	20%, Cer	
D	1	50.04.0125	1N4448	Si	
D	2	50.04.0125	1N4448	Si	
D	3	50.04.0125	1N4448	Si	
D	4	50.04.0125	1N4448	Si	
D	5	50.04.0125	1N4448	Si	
IC	1	50.09.0107	RC 4559	Dual Op. Amp.	TI+RA
IC	2	50.09.0107	RC 4559	Dual Op. Amp.	TI+RA
IC	3	50.09.0107	RC 4559	Dual Op. Amp.	TI+RA
J	1	1.710.350.02		Jack-Socket	St
J	2	1.710.350.02		Jack-Socket	St
J	3	1.710.350.02		Jack-Socket	St
J	4	54.01.0238	6-Pole	CIS-Socket-Strip	AMP
J	5	54.01.0238	6-Pole	CIS-Socket-Strip	AMP
J	6	54.01.0216	6-Pole	CIS-Socket-Strip	AMP
J	7	54.01.0291	11-Pole	CIS-Socket-Strip	AMP

STUDER (00) 83/06/15 RW MIC. PHONES AMPL. 1.710.351.81 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
K	1	56.04.0121	PZ 4	24V, 4PU	
Q	1	50.03.0625	BC 327	PNP	
Q	2	50.03.0625	BC 327	PNP	
Q	3	50.03.0497	BC 550 C	NPN	
Q	4	50.03.0497	BC 550 C	NPN	
Q	5	50.03.0497	BC 550 C	NPN	
Q	6	50.03.0497	BC 550 C	NPN	
Q	7	50.03.0625	BC 327	PNP matched with Q11	Sie
Q	8	50.03.0516	BC 337	NPN matched with Q12	Sie
Q	9	50.03.0516	BC 337	NPN matched with Q13	Sie
Q	10	50.03.0625	BC 327	PNP matched with Q14	Sie
Q	11	50.03.0625	BC 327	PNP matched with Q 7	Sie
Q	12	50.03.0516	BC 337	NPN matched with Q 8	Sie
Q	13	50.03.0516	BC 337	NPN matched with Q 9	Sie
Q	14	50.03.0625	BC 327	PNP matched with Q10	Sie
R	1	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	2	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	3	1.710.350.01	22 kOhm	20%, 0.15W, PCF, +log	St
R	4	57.11.4113	11 kOhm	2%, 0.25W, CF	
R	5	57.11.4153	15 kOhm	5%, 0.25W, CF	
R	6	57.11.4151	150 Ohm	5%, 0.25W, CF	
R	7	57.11.4224	220 kOhm	5%, 0.25W, CF	
R	8	57.11.4113	11 kOhm	2%, 0.25W, CF	
R	9	57.11.4153	15 kOhm	5%, 0.25W, CF	
R	10	57.11.4151	150 Ohm	5%, 0.25W, CF	
R	11	57.11.4224	220 kOhm	5%, 0.25W, CF	
R	12	57.11.4681	680 Ohm	5%, 0.25W, CF	
R	13	57.11.4681	680 Ohm	5%, 0.25W, CF	
R	14	57.11.4183	18 kOhm	5%, 0.25W, CF	
R	15	57.11.4183	18 kOhm	5%, 0.25W, CF	
R	16	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	17	57.11.4101	100 Ohm	5%, 0.25W, CF	
R	18	57.11.4101	100 Ohm	5%, 0.25W, CF	
R	19	57.11.4683	68 kOhm	5%, 0.25W, CF	
R	20	57.11.4683	68 kOhm	5%, 0.25W, CF	

STUDER 82/07/05 RW MIC. PHONES AMPL. 1.710.351.00 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
K	1	56.04.0121	PZ 4	24V, 4PU	
Q	1	50.03.0625	BC 327	PNP	
Q	2	50.03.0625	BC 327	PNP	
Q	3	50.03.0497	BC 550 C	NPN	
Q	4	50.03.0497	BC 550 C	NPN	
Q	5	50.03.0497	BC 550 C	NPN	
Q	6	50.03.0497	BC 550 C	NPN	
Q	7	50.03.0625	BC 327	PNP matched with Q11	Sie
Q	8	50.03.0516	BC 337	NPN matched with Q12	Sie
Q	9	50.03.0516	BC 337	NPN matched with Q13	Sie
Q	10	50.03.0625	BC 327	PNP matched with Q14	Sie
Q	11	50.03.0625	BC 327	PNP matched with Q 7	Sie
Q	12	50.03.0516	BC 337	NPN matched with Q 8	Sie
Q	13	50.03.0516	BC 337	NPN matched with Q 9	Sie
Q	14	50.03.0625	BC 327	PNP matched with Q10	Sie
R	1	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	2	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	3	1.710.380.01	22 kOhm	20%, 0.15W, PCF, +log	St
R	4	57.11.4113	11 kOhm	2%, 0.25W, CF	
R	5	57.11.4153	15 kOhm	5%, 0.25W, CF	
R	6	57.11.4680	68 Ohm	5%, 0.25W, CF	
R	7	57.11.4224	220 kOhm	5%, 0.25W, CF	
R	8	57.11.4113	11 kOhm	2%, 0.25W, CF	
R	9	57.11.4153	15 kOhm	5%, 0.25W, CF	
R	10	57.11.4680	68 Ohm	5%, 0.25W, CF	
R	11	57.11.4224	220 kOhm	5%, 0.25W, CF	
R	12	57.11.4681	680 Ohm	5%, 0.25W, CF	
R	13	57.11.4681	680 Ohm	5%, 0.25W, CF	
R	14	57.11.4183	18 kOhm	5%, 0.25W, CF	
R	15	57.11.4183	18 kOhm	5%, 0.25W, CF	
R	16	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	17	57.11.4131	100 Ohm	5%, 0.25W, CF	
R	18	57.11.4131	100 Ohm	5%, 0.25W, CF	
R	19	57.11.4683	68 kOhm	5%, 0.25W, CF	
R	20	57.11.4683	68 kOhm	5%, 0.25W, CF	

STUDER (00) 83/06/15 RW MIC. PHONES AMPL. 1.710.351.81 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R	21	57.12.4471	470 Ohm	5%, 0.33W, CF	
R	22	57.12.4471	470 Ohm	5%, 0.33W, CF	
R	23	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	24	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	25	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	26	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	27	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	28	57.11.4683	68 kOhm	5%, 0.25W, CF	
R	29	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	30	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	31	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	32	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	33	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	34	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	35	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	36	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	37	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	38	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	39	57.11.4683	68 kOhm	5%, 0.25W, CF	
R	40	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	41	57.11.4103	10 kOhm	5%, 0.25W, CF	

C=CERAMIC, El=ELECRTOLYTIC,
CF=CARBON FILM
MANUFACTURER: TI= TEXAS INSTRUMENT St=STUDER, Sie=Siemens,

ORIG 82/06/21

STUDER 82/07/05 RW MIC. PHONES AMPL. 1.710.351.00 PAGE 3

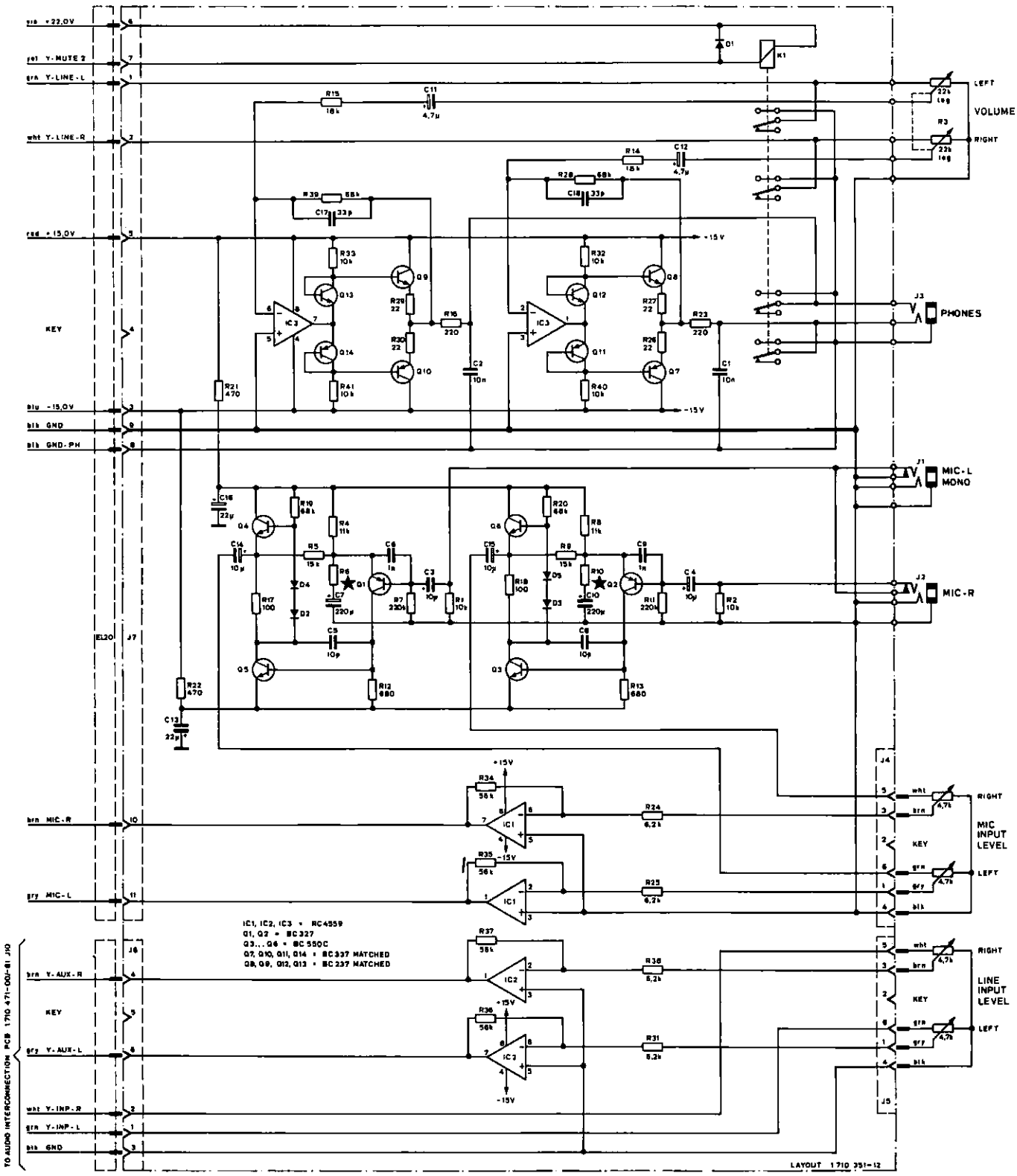
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R	21	57.12.4471	470 Ohm	5%, 0.33W, CF	
R	22	57.12.4471	470 Ohm	5%, 0.33W, CF	
R	23	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	24	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	25	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	26	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	27	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	28	57.11.4683	68 kOhm	5%, 0.25W, CF	
R	29	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	30	57.11.4220	22 Ohm	5%, 0.25W, CF	
R	31	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	32	57.11.4133	10 kOhm	5%, 0.25W, CF	
R	33	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	34	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	35	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	36	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	37	57.11.4563	56 kOhm	5%, 0.25W, CF	
R	38	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
R	39	57.11.4683	68 kOhm	5%, 0.25W, CF	
R	40	57.11.4133	10 kOhm	5%, 0.25W, CF	
R	41	57.11.4133	10 kOhm	5%, 0.25W, CF	

C=CERAMIC, El=ELECRTOLYTIC,
CF=CARBON FILM,
MANUFACTURER: TI= TEXAS INSTRUMENT St=STUDER, Sie=Siemens,

ORIG 83/06/15

STUDER (00) 83/06/15 RW MIC. PHONES AMPL. 1.710.351.81 PAGE 3

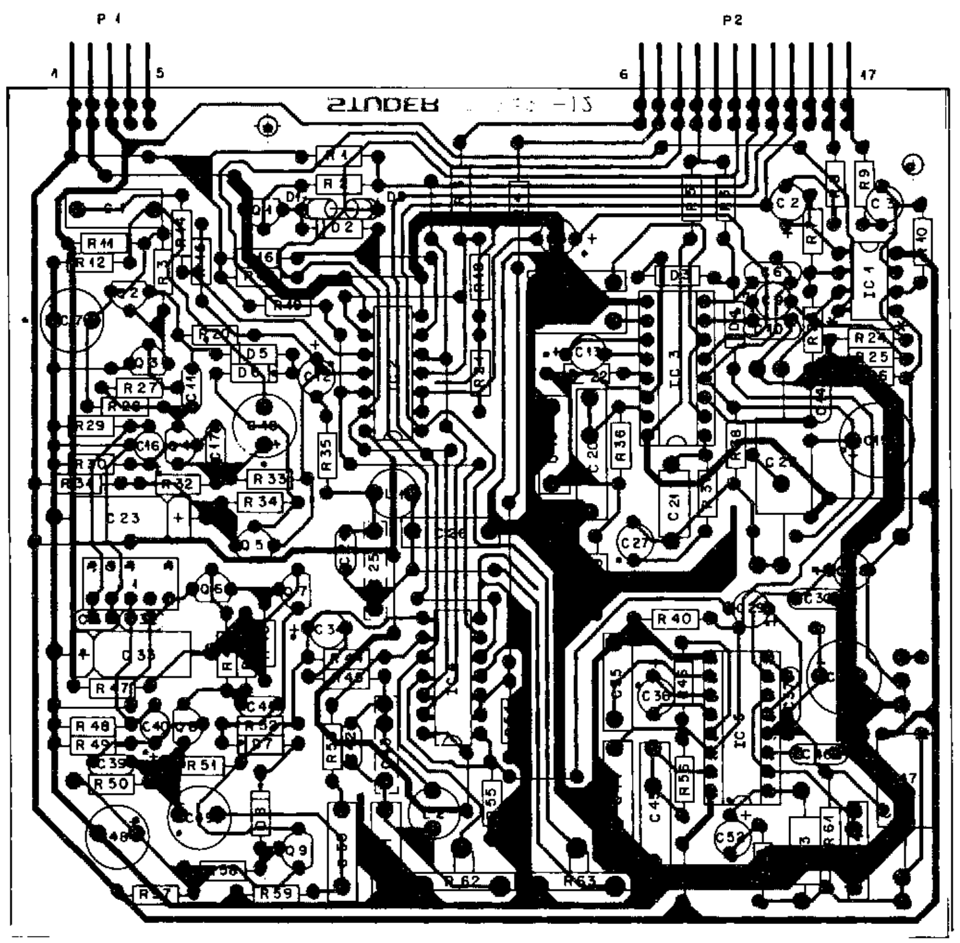
MIC/PHONES AMPLIFIER PCB 1.710.351–00/–81

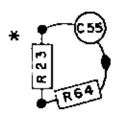


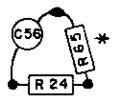
MIC/PHONES AMPLIFIER PCB 1.710.351 ONLY IN CONNECTION WITH DOLBY–C ENCODER PCB 1.710.489
VALID SINCE SERIAL NO. 17051

✱ FOR 1.710.351–00: R6, R10=150Ω ; FOR 1.710.351–81: R6, R10=68Ω

REPRODUCE AMPLIFIER PCB 1.710.490 "ESE"







IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.11.4103	10 nF	2.5%, 25V PC	
	C.....2	59.22.5220	22 uF	-10%, 25V El	
	C.....3	59.22.5220	22 uF	-10%, 25V El	
	C.....4	59.22.8109	1 uF	-10%, 25V El	
	C.....5	59.11.6471	470 pF	5%, 25V PC	
	C.....6	59.32.1102	1 nF	20%, 25V Cer	
	C.....7	59.22.5470	47 uF	-10%, 25V El	
	C.....8	59.12.4473	47 nF	5%, 25V PE	
	C.....9	59.22.6100	10 uF	-10%, 25V El	
	C.....10	59.32.1102	1 nF	10%, 25V Cer	
	C.....11	59.32.0100	10 pF	20%, 25V Cer	
	C.....12	59.22.6100	10 uF	-10%, 25V El	
	C.....13	59.22.6100	10 uF	-10%, 25V El	
	C.....14	59.32.1102	1 nF	10%, 25V Cer	
	C.....15	59.22.3221	220 uF	-10%, 10V El	
	C.....16	59.30.1470	47 uF	-20%, 3V Ta	
	C.....17	59.32.1151	150 pF	20%, 25V Cer	
	C.....18	59.22.5470	47 uF	-10%, 25V El	
	C.....19	59.31.6104	100 nF	10%, 25V PE	
	C.....20	59.31.6334	330 nF	10%, 25V PE	
	C.....21	59.12.7472	4.7 nF	1%, 25V PS	
	C.....22	59.12.7333	33 nF	1%, 25V PS	
	C.....23	59.25.3470	47 uF	-10%, 16V El	
	C.....24				
	C.....25	59.34.4271	270 pF	5%, 25V Cer	
	C.....26	59.11.4472	4.7 nF	2.5%, 25V PC	
	C.....27	59.22.6100	10 uF	-10%, 25V El	
	C.....28	59.22.6100	10 uF	-10%, 25V El	
	C.....29	59.22.8109	1 uF	-10%, 25V El	
	C.....30	59.32.1102	1 nF	20%, 25V Cer	
	C.....31	59.34.2151	150 pF	2%, 25V Cer	
	C.....32	59.34.2151	150 pF	2%, 25V Cer	
	C.....33	59.25.3470	47 uF	-10%, 16V El	
	C.....34	59.22.6100	10 uF	-10%, 25V El	
	C.....35	59.12.4473	47 nF	5%, 25V PE	
	C.....36	59.22.6100	10 uF	-10%, 25V El	
	C.....37	59.32.1102	1 nF	20%, 25V Cer	

S T U D E R (02) 81/06/26 Rd REPRODUCE AMPLIFIER 1.710.490.00 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....38	59.22.3221	220 uF	-10%, 10V El	
	C.....39	59.32.1151	150 pF	20%, 25V Cer	
	C.....40	59.30.1470	47 uF	-20%, 3V Ta	
	C.....41	59.32.0100	10 pF	20%, 25V Cer	
	C.....42				
	C.....43	59.34.4271	270 pF	5%, 25V Cer	
	C.....44	59.31.6104	100 nF	10%, 25V PE	
	C.....45	59.31.6334	330 nF	10%, 25V PE	
	C.....46	59.32.1102	1 nF	20%, 25V Cer	
	C.....47	59.12.7333	33 nF	1%, 25V PS	
	C.....48	59.22.5470	47 uF	-10%, 25V El	
	C.....49	59.22.5470	47 uF	-10%, 25V El	
	C.....50	59.11.4103	10 nF	2.5%, 25V PC	
	C.....51	59.11.4472	4.7 nF	2.5%, 25V PC	
	C.....52	59.22.6100	10 uF	-10%, 25V El	
	C.....53	59.12.7472	4.7 nF	1%, 25V PS	
	C.....54	59.11.6471	470 pF	5%, 25V PC	
(02)	C.....55	59.34.4331	330 pF	10%, 25V Cer	
(02)	C.....56	59.34.4331	330 pF	10%, 25V Cer	
	D.....1	50.04.0125	1N4448	SI	any
	D.....2	50.04.0125	1N4448	SI	any
	D.....3	50.04.0125	1N4448	SI	any
	D.....4	50.04.0125	1N4448	SI	any
	D.....5	50.04.0125	1N4448	SI	any
	D.....6	50.04.0125	1N4448	SI	any
	D.....7	50.04.0125	1N4448	SI	any
	D.....8	50.04.0125	1N4448	SI	any
	D.....9	50.04.1107	Z 3.3V	5%, 400mW.	
	IC.....1	50.35.0245	RC 4558	Dual Op. Amp.	RA. TI
	IC.....2	50.07.0066	MC 14066	CMOS	M, TI
	IC.....3	50.11.0105	LM 1111 A	DOLBY B PROC.	N.
	IC.....4	50.07.0066	MC 14066	CMOS	M. TI
	IC.....5	50.11.0105	LM 1111 A	DOLBY B PROC.	N.
	J.....1	54.31.0246	5-Pole	CIS-Socket-Strip	AMP

S T U D E R (02) 81/06/26 Rd REPRODUCE AMPLIFIER 1.710.490.00 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	L.....1	62.02.1822	L 8.2mH	5%,	
	L.....2	62.02.1822	L 8.2mH	5%,	
	P.....1	54.01.0269	5-Pole	Pin-Strip	AMP
	P.....2	54.01.0221	12-Pole	Pin-Strip	AMP
	Q.....1	50.03.0497	BC 550 C	NPN	
	Q.....2	50.03.0497	BC 550 C	NPN	
	Q.....3	50.03.0497	BC 550 C	NPN	
	Q.....4	50.03.0496	BC 560 C	PNP	
	Q.....5	50.03.0497	BC 550 C	NPN	
	Q.....6	50.03.0497	BC 550 C	NPN	
	Q.....7	50.03.0497	BC 550 C	NPN	
	Q.....8	50.03.0496	BC 560 C	PNP	
	Q.....9	50.03.0497	BC 550 C	NPN	
	R.....1	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4183	18 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4183	18 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4683	68 kOhm	5%, 0.25W, CF	
	R.....6	57.11.4100	10 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....9	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R.....10	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
	R.....11	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....12	57.11.4181	180 Ohm	5%, 0.25W, CF	
	R.....13	57.11.4103	10 kOhm	5%, 0.25W, CF	
(00)	R.....14	57.39.6981	6.98 kOhm	1%, 0.25W, MF	
(01)	R.....14	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
(00)	R.....15	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
(01)	R.....15	57.11.4432	4.3 kOhm	2%, 0.25W, CF	
	R.....16	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....17	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....18	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....19	57.11.4103	10 kOhm	5%, 0.25W, CF	

S T U D E R (02) 81/06/26 Rd REPRODUCE AMPLIFIER 1.710.490.00 PAGE 3

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....20	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R.....21	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....22	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R.....23	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....24	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R.....25	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....26	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....27	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....28	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....29	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R.....30	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....31	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....32	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R.....33	57.11.4274	270 kOhm	5%, 0.25W, CF	
	R.....34	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....35	57.11.4471	470 Ohm	5%, 0.25W, CF	
	R.....36	57.11.4274	270 kOhm	5%, 0.25W, CF	
	R.....37	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....38	57.11.3332	3.3 kOhm	1%, 0.25W, MF	
	R.....39	57.11.4334	330 kOhm	5%, 0.25W, CF	
	R.....40	57.11.4334	330 kOhm	5%, 0.25W, CF	
	R.....41	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....42	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....43	57.11.4133	10 kOhm	5%, 0.25W, CF	
(00)	R.....44	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
(01)	R.....44	57.11.4432	4.3 kOhm	2%, 0.25W, CF	
	R.....45	57.11.4471	470 Ohm	5%, 0.25W, CF	
	R.....46	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R.....47	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....48	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R.....49	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R.....50	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R.....51	57.11.4274	270 kOhm	5%, 0.25W, CF	
	R.....52	57.11.4331	330 Ohm	5%, 0.25W, CF	
(00)	R.....53	57.39.6981	6.98 kOhm	1%, 0.25W, CF	
(01)	R.....53	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R.....54	57.11.4102	1 kOhm	5%, 0.25W, CF	

S T U D E R (02) 81/06/26 Rd REPRODUCE AMPLIFIER 1.710.490.00 PAGE 4

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....55	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R.....56	57.11.4274	270 kOhm	5%, 0.25W, CF	
	R.....57	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....58	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....59	57.11.4181	180 Ohm	5%, 0.25W, CF	
	R.....60	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....61	57.11.3332	3.3 kOhm	1%, 0.25W, MF	
	R.....62	58.19.0203	20 kOhm	20%, 0.15W, POT, LIN	
	R.....63	58.19.0203	20 kOhm	20%, 0.15W, POT, LIN	
(02)	R.....64	57.11.4123	12 kOhm	5%, 0.15W, CF	
(02)	R.....65	57.11.4123	12 kOhm	5%, 0.15W, CF	

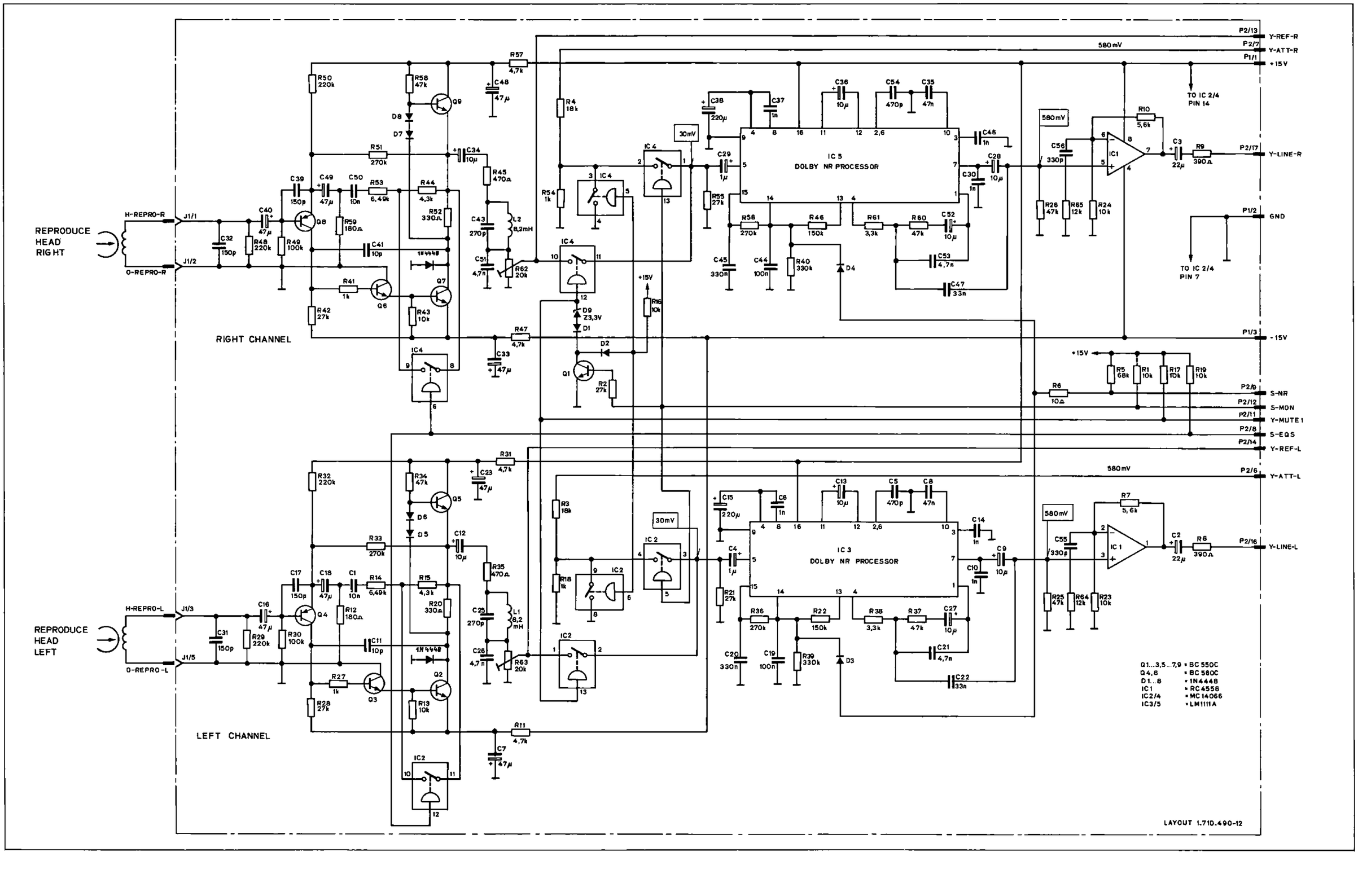
El=Electrolytic, Cer=Ceramic, PC=Polycarb., TA=Tantalum, PE=Polyester,
PS=Polystyrene, SI = Silicon
CF=Carbon Film, MF=Metal Film

MANUFACTURER: TI=TEXAS INSTRUMENTS M=MOTOROLA N=NATIONAL RA=RAYTHEON

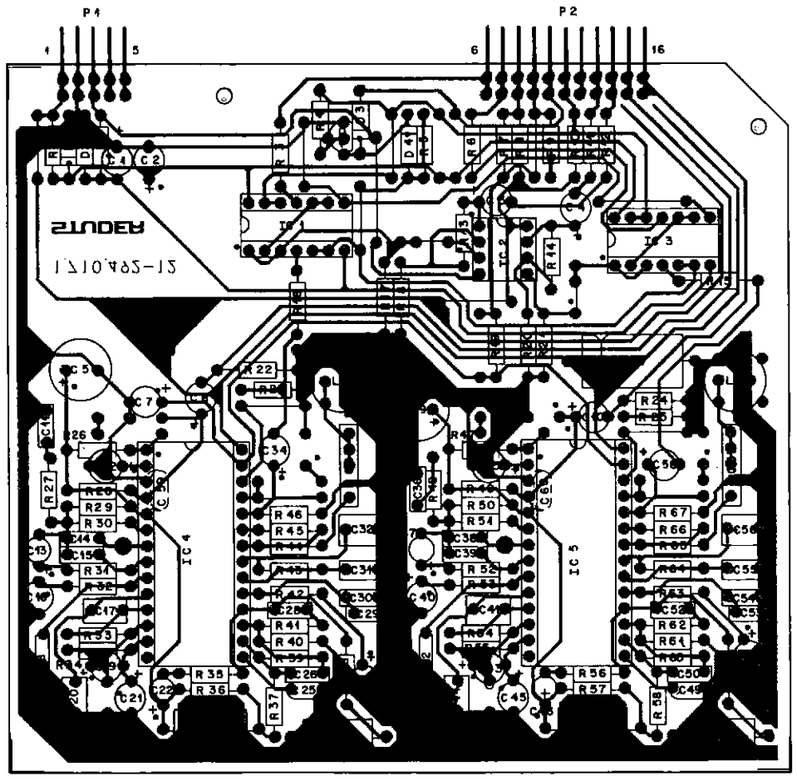
ORIG 81/01/05 (01) 81/03/26 (02) 81/06/26

S T U D E R (02) 81/06/26 Rd REPRODUCE AMPLIFIER 1.710.490.00 PAGE 5

REPRODUCE AMPLIFIER PCB 1.710.490 "ESE"



DOLBY–C DECODER PCB 1.710.492 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C-----1	59.22.6100	10 uF	-10%, 25V,	El
	C-----2	59.22.6100	10 uF	-10%, 25V,	El
	C-----3	59.22.5220	22 uF	-10%, 25V,	El
	C-----4	59.22.5220	22 uF	-10%, 25V,	El
	C-----5	59.22.3221	220 uF	-10%, 10V,	El
	C-----6	59.25.3101	100 uF	20%, 16V,	El
	C-----7	59.22.5220	22 uF	-10%, 25V,	El
	C-----8	59.22.8109	1 uF	-10%, 25V,	El
	C-----9	59.22.3221	220 uF	-10%, 10V,	El
	C-----10	59.22.8109	1 uF	-10%, 25V,	El
	C-----11	59.06.0153	15 nF	10%, 25V,	PE
	C-----12	59.22.3101	100 uF	-10%, 10V,	El
	C-----13	59.30.4100	10 uF	20%, 16V,	Ta
	C-----14	59.06.0153	15 nF	10%, 25V,	PE
	C-----15	59.06.0103	10 nF	10%, 25V,	PE
	C-----16	59.22.8479	4.7 uF	-10%, 25V,	El
	C-----17	59.06.0334	330 nF	10%, 25V,	PE
	C-----18	59.12.4183	18 nF	5%, 25V,	PC
	C-----19	59.22.8109	1 uF	-10%, 25V,	El
	C-----20	59.06.0334	330 nF	10%, 25V,	PE
	C-----21	59.22.8109	1 uF	-10%, 25V,	El
(00)	C-----22	59.30.4100	10 uF	-20%, 25V,	Ta
(01)	C-----22	59.30.4100	10 uF	-20%, 16V,	Ta
	C-----23	59.12.7562	5.6 nF	5%, 25V,	PS
	C-----24	59.12.7392	3.9 nF	2%, 25V,	PS
	C-----25	59.36.2390	39 pF	10%, 25V,	Cer
	C-----26	59.06.0102	1 nF	10%, 25V,	PE
	C-----27	59.22.8479	4.7 uF	10%, 25V,	El
	C-----28	59.05.1332	3.3 nF	2%, 25V,	PE
	C-----29	59.06.0333	33 nF	10%, 25V,	PE
	C-----30	59.06.0473	47 nF	10%, 25V,	PE
	C-----31	59.06.0154	150 nF	10%, 25V,	PE
	C-----32	59.06.0474	470 nF	10%, 25V,	PE
	C-----33	59.11.6182	1.8 nF	2.5%, 25V,	PC
	C-----34	59.22.6100	10 uF	-10%, 25V,	El
	C-----35	59.22.3101	100 uF	-10%, 10V,	El
	C-----36	59.06.0153	15 nF	10%, 25V,	PE

STUDER (01) 82/05/03 Rd DOLBY-C DECODER 1.710.492.00 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C-----37	59.30.4100	10 uF	20%, 16V,	Ta
	C-----38	59.06.0153	15 nF	10%, 25V,	PE
	C-----39	59.06.0103	10 nF	10%, 25V,	PE
	C-----40	59.22.8479	4.7 uF	-10%, 25V,	El
	C-----41	59.06.0334	330 nF	10%, 25V,	PE
	C-----42	59.12.4183	18 nF	5%, 25V,	PC
	C-----43	59.22.8109	1 uF	-10%, 25V,	El
	C-----44	59.06.0334	330 nF	10%, 25V,	PE
	C-----45	59.22.8109	1 uF	-10%, 25V,	El
(00)	C-----46	59.30.4100	10 uF	-20%, 25V,	Ta
(01)	C-----46	59.30.4100	10 uF	-20%, 25V,	Ta
	C-----47	59.12.7562	5.6 nF	5%, 25V,	PS
	C-----48	59.12.7392	3.9 nF	2%, 25V,	PS
	C-----49	59.36.2390	39 pF	10%, 25V,	Cer
	C-----50	59.06.0102	1 nF	10%, 25V,	PE
	C-----51	59.22.8479	4.7 uF	10%, 25V,	El
	C-----52	59.05.1332	3.3 nF	2%, 25V,	PE
	C-----53	59.06.0333	33 nF	10%, 25V,	PE
	C-----54	59.06.0473	47 nF	10%, 25V,	PE
	C-----55	59.06.0154	150 nF	10%, 25V,	PE
	C-----56	59.06.0474	470 nF	10%, 25V,	PE
	C-----57	59.11.6182	1.8 nF	2.5%, 25V,	PC
	C-----58	59.22.6100	10 uF	-10%, 25V,	El
(00)	C-----59	77.77.7777			
(01)	C-----59	59.32.4471	470 pF	20%, 25V,	Cer
(00)	C-----60	77.77.7777			
(01)	C-----60	59.32.4471	470 pF	20%, 25V,	Cer
	D-----1	50.04.1103	Z 7.5V	5%,400mW	
	D-----2	50.04.1123	Z 4.7V	5%,400mW	
	D-----3	50.04.0125	1N4448		SI
	D-----4	50.04.0125	1N4448		SI
	IC----1	50.07.0066	MC 14066	CMOS	MoNo
(00)	IC----2	50.05.0245	RC 4558	Dual Op. Amp.	TI=RAY.
(01)	IC----2	50.05.0107	RC 4559	Dual Op. Amp.	TI=RAY.
	IC----3	50.07.0066	MC 14066	CMOS	MoNo

STUDER (01) 82/05/03 Rd DOLBY-C DECODER 1.710.492.00 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	IC----4	50.11.0109	HA 12038	DOLBY-B/C NR-PROC.	Hi.
	IC----5	50.11.0109	HA 12038	DOLBY-B/C NR-PROC.	Hi.
	L-----1	62.99.0108	L 3mH	5%.	
	L-----2	62.99.0108	L 3mH	5%.	
	P-----1	54.31.0269	5-Pole	Pin-Strip	
	P-----2	54.01.0272	11-Pole	Pin-Strip	
	Q-----1	50.03.0497	BC 550 C		Si.
	R-----1	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R-----2	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R-----3	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----4	57.11.4133	13 kOhm	5%, 0.25W, CF	
	R-----5	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----6	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
(00)	R-----7	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
(01)	R-----7	57.11.4272	2.7 kOhm	5%, 0.25W, CF	
(00)	R-----8	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
(01)	R-----8	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----9	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----10	57.11.4123	12 kOhm	5%, 0.25W, CF	
	R-----11	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R-----12	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R-----13	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
	R-----14	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
	R-----15	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----16	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----17	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R-----18	57.11.4123	12 kOhm	5%, 0.25W, CF	
	R-----19	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----20	57.11.4133	13 kOhm	5%, 0.25W, CF	
	R-----21	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R-----22	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R-----23	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----24	57.11.4273	27 kOhm	5%, 0.25W, CF	

STUDER (01) 82/05/03 Rd DOLBY-C DECODER 1.710.492.00 PAGE 3

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----25	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----26	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
	R-----27	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R-----28	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R-----29	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----30	57.11.4512	5.1 kOhm	5%, 0.25W, CF	
	R-----31	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----32	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
	R-----33	57.11.4823	82 kOhm	5%, 0.25W, CF	
	R-----34	57.11.4135	1 MOhm	5%, 0.25W, CF	
	R-----35	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R-----36	57.11.4683	68 kOhm	5%, 0.25W, CF	
	R-----37	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----38	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R-----39	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----40	57.11.4822	8.2 kOhm	5%, 0.25W, CF	
	R-----41	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R-----42	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
	R-----43	57.11.4823	82 kOhm	5%, 0.25W, CF	
	R-----44	57.11.3102	1 kOhm	1%, 0.25W, CF	
	R-----45	57.11.3332	3.3 kOhm	1%, 0.25W, CF	
	R-----46	57.11.4822	8.2 kOhm	5%, 0.25W, CF	
	R-----47	57.11.4562	5.6 kOhm	5%, 0.25W, CF	
	R-----48	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R-----49	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R-----50	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----51	57.11.4512	5.1 kOhm	5%, 0.25W, CF	
	R-----52	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----53	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
	R-----54	57.11.4823	82 kOhm	5%, 0.25W, CF	
	R-----55	57.11.4135	1 MOhm	5%, 0.25W, CF	
	R-----56	57.11.4563	56 kOhm	5%, 0.25W, CF	
	R-----57	57.11.4683	68 kOhm	5%, 0.25W, CF	
	R-----58	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----59	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R-----60	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----61	57.11.4822	8.2 kOhm	5%, 0.25W, CF	

STUDER (01) 82/05/03 Rd DOLBY-C DECODER 1.710.492.00 PAGE 4

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----62	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R-----63	57.11.4622	6.2 kOhm	5%, 0.25W, CF	
	R-----64	57.11.4823	82 kOhm	5%, 0.25W, CF	
	R-----65	57.11.3102	1 kOhm	1%, 0.25W, CF	
	R-----66	57.11.3332	3.3 kOhm	1%, 0.25W, CF	
	R-----67	57.11.4822	8.2 kOhm	5%, 0.25W, CF	

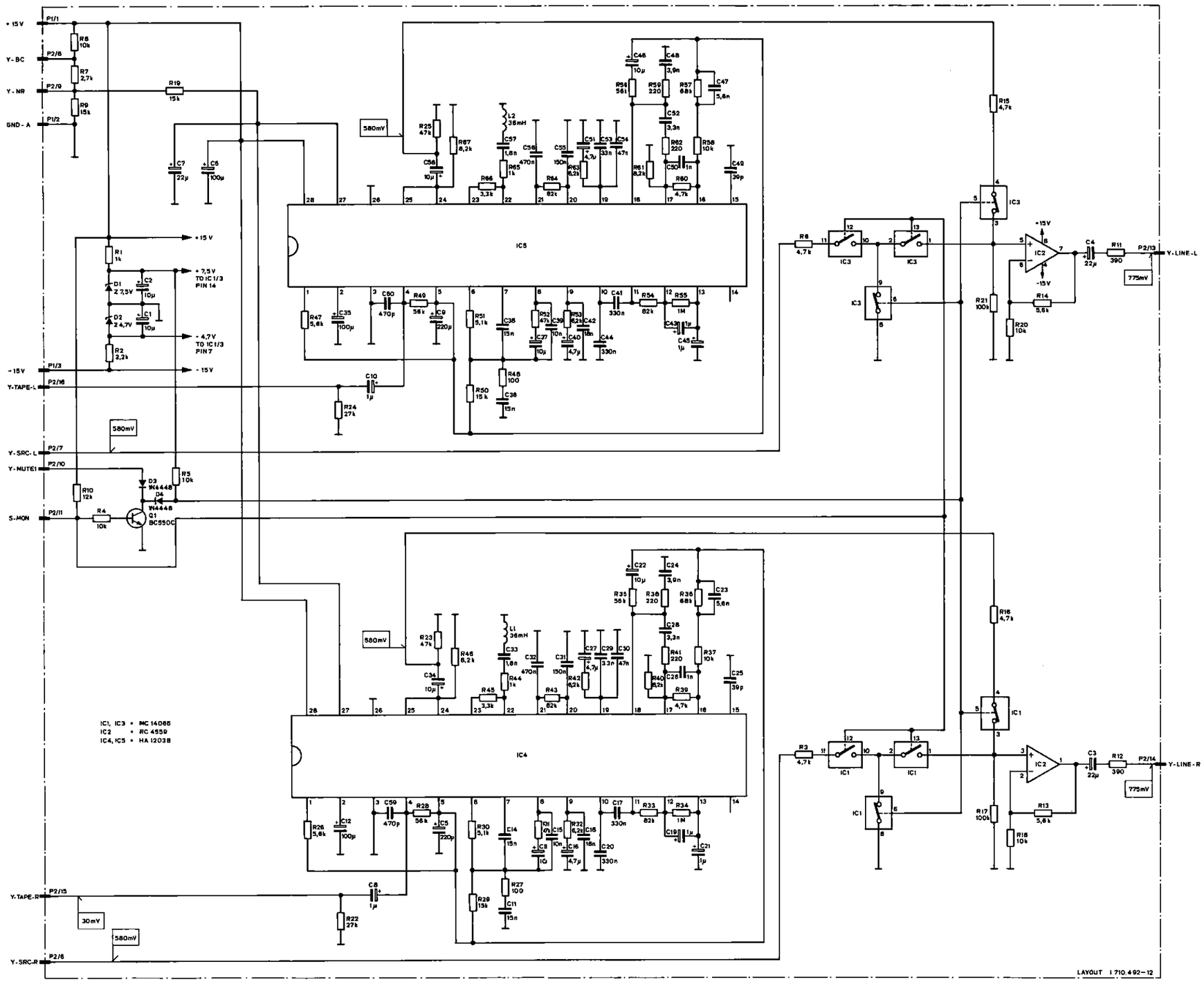
El=Electrolytic, Ta=Tantalum, Cer=Ceramic, PE=Polyester,
PP=Polypropylene, PC=Polycarbonate, PS=Polystyrene,
CF=Carbon Film, MF=Metal Film,

MANUFACTURER: Ray= Raytheon, S=STUDER, Si=Siemens, TI=TERAS INSTRUMENTS,

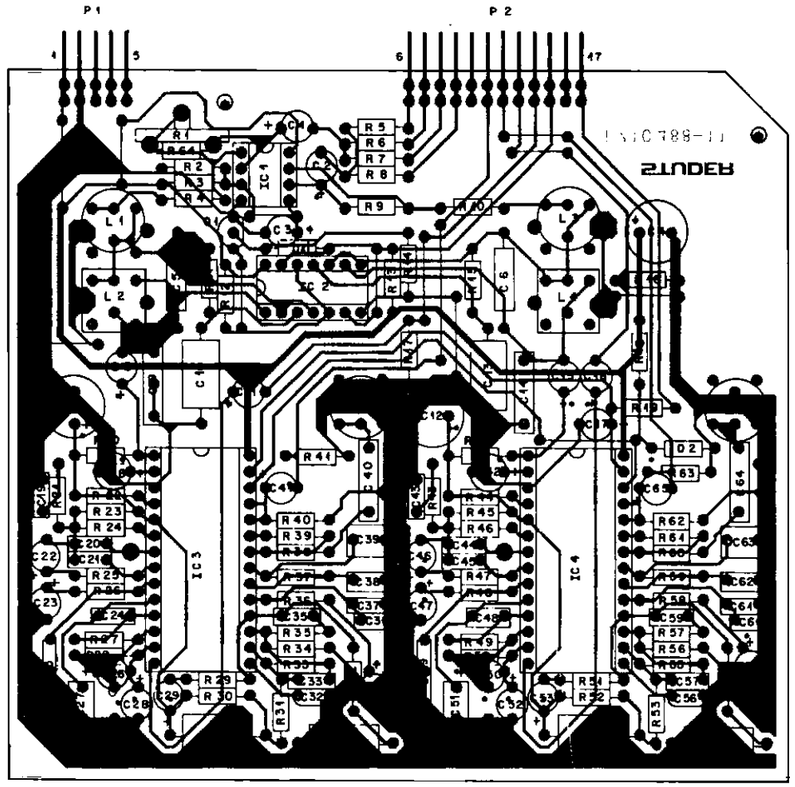
ORIG 82/01/08 (01) 82/05/03

STUDER (01) 82/05/03 Rd DOLBY-C DECODER 1.710.492.00 PAGE 5

DOLBY – C DECODER PCB 1.710.492 "ESE"



DOLBY–C ENCODER PCB 1.710.488 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.22.6100	10 uF	-10%, 25V,	EI
	C.....2	59.22.6100	10 uF	-10%, 25V,	EI
(00)	C.....3	59.22.6100	10 uF	-10%, 25V,	EI
(01)	C.....3	59.22.3101	100 uF	-10%, 10V,	EI
	C.....4	59.25.3101	100 uF	20%, 16V,	EI
	C.....5	59.12.7302	3 nF	1%, 25V,	PS
	C.....6	59.12.7302	3 nF	1%, 25V,	PS
	C.....7	59.22.3221	220 uF	-10%, 10V,	EI
	C.....8	59.22.6100	10 uF	-10%, 25V,	EI
	C.....9	59.11.6222	2.2 nF	5%, 25V,	PS
	C....10	59.12.7392	3.9 nF	2%, 25V,	PS
	C....11	59.22.6120	10 uF	-10%, 25V,	EI
	C....12	59.22.3221	220 uF	-10%, 10V,	EI
	C....13	59.12.7392	3.9 nF	2%, 25V,	PS
	C....14	59.11.6222	2.2 nF	5%, 25V,	PS
	C....15	59.22.6120	10 uF	-10%, 25V,	EI
	C....16	59.22.6100	10 uF	-10%, 25V,	EI
	C....17	59.22.5220	22 uF	-10%, 25V,	EI
	C....18	59.22.3101	100 uF	-10%, 10V,	EI
	C....19	59.06.0153	15 nF	10%, 25V,	PE
	C....20	59.06.0153	15 nF	10%, 25V,	PE
	C....21	59.06.0103	10 nF	10%, 25V,	PE
	C....22	59.30.4100	10 uF	20%, 16V,	Ta
	C....23	59.22.6479	4.7 uF	-10%, 25V,	EI
	C....24	59.06.0334	330 nF	10%, 25V,	PE
	C....25	59.12.6183	18 nF	5%, 25V,	PC
	C....26	59.22.6109	1 uF	-10%, 25V,	EI
	C....27	59.26.0334	330 nF	10%, 25V,	PE
	C....28	59.22.6109	1 uF	-10%, 25V,	EI
	C....29	59.30.4100	10 uF	-20%, 16V,	Ta
	C....30	59.12.7562	5.6 nF	2%, 25V,	PS
	C....31	59.12.7392	3.9 nF	2%, 25V,	PS
	C....32	59.34.2390	39 pF	10%, 25V,	Cer
	C....33	59.06.0102	1 nF	10%, 25V,	PE
	C....34	59.22.6479	4.7 uF	10%, 25V,	EI
	C....35	59.05.1332	3.3 nF	2%, 25V,	PE
	C....36	59.06.0333	33 nF	10%, 25V,	PE

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C....37	59.26.0473	47 nF	10%, 25V,	PE
	C....38	59.06.0154	150 nF	10%, 25V,	PE
	C....39	59.06.0474	470 nF	10%, 25V,	PE
	C....40	59.11.6182	1.8 nF	2.5%, 25V,	PC
	C....41	59.22.6103	10 nF	-10%, 25V,	EI
	C....42	59.22.3101	100 uF	-10%, 10V,	EI
	C....43	59.06.0153	15 nF	10%, 25V,	PE
	C....44	59.06.0153	15 nF	10%, 25V,	PE
	C....45	59.06.0103	10 nF	10%, 25V,	PE
	C....46	59.30.4100	10 uF	20%, 16V,	Ta
	C....47	59.22.6479	4.7 uF	-10%, 25V,	EI
	C....48	59.06.0334	330 nF	10%, 25V,	PE
	C....49	59.12.6183	18 nF	5%, 25V,	PC
	C....50	59.22.6109	1 uF	-10%, 25V,	EI
	C....51	59.06.0334	330 nF	10%, 25V,	PE
	C....52	59.22.6109	1 uF	-10%, 25V,	EI
	C....53	59.30.4100	10 uF	-20%, 25V,	Ta
	C....54	59.12.7562	5.6 nF	2%, 25V,	PS
	C....55	59.12.7392	3.9 nF	2%, 25V,	PS
	C....56	59.34.2390	39 pF	10%, 25V,	Cer
	C....57	59.06.0102	1 nF	10%, 25V,	PE
	C....58	59.22.6479	4.7 uF	10%, 25V,	EI
	C....59	59.05.1332	3.3 nF	2%, 25V,	PE
	C....60	59.06.0333	33 nF	10%, 25V,	PE
	C....61	59.06.0473	47 nF	10%, 25V,	PE
	C....62	59.06.0154	150 nF	10%, 25V,	PE
	C....63	59.06.0474	470 nF	10%, 25V,	PE
	C....64	59.11.6182	1.8 nF	2.5%, 25V,	PC
	C....65	59.22.6100	10 uF	-10%, 25V,	EI
	D.....1	50.34.1114	Z 10V	5%,400mW	
	D.....2	50.04.1123	Z 4.7V	5%,400mW	
	IC....1	50.09.0107	4C 4559	Dual Op. Amp.	TI+Ra+
	IC....2	50.07.0065	MC 14066	CMOS	M+TI+
	IC....3	50.11.0189	MA 12038	DOLBY-B/C NR-PROC.	Mi+
	IC....4	50.11.0189	MA 12038	DOLBY-B/C NR-PROC.	Mi+

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	L.....1	62.99.0108	L 36mH	5%,	
	L.....2	62.99.0109	L 23mH	Variable	
	L.....3	62.99.0108	L 36mH	5%,	
	L.....4	62.99.0109	L 23mH	Variable	
	L.....5	62.99.0108	L 36mH	5%,	
	L.....6	62.99.0108	L 36mH	5%,	
	P.....1	54.01.0269	5-Pole	Pin-Strip	AMP
	P.....2	54.01.0221	12-Pole	Pin-Strip	AMP
	Q.....1	50.03.0497	BC 550 C	NPN	Si+
	R.....1	58.99.0136	22 kOhm	20%, 0.10W, PCF+LIN	
	R.....2	57.11.6133	10 kOhm	5%, 0.25W, CF	
	R.....3	57.11.6103	10 kOhm	5%, 0.25W, CF	
	R.....4	57.11.6222	2.2 kOhm	5%, 0.25W, CF	
(00)	R.....5	57.11.6123	12 kOhm	5%, 0.25W, CF	
(01)	R.....5	57.11.6472	4.7 kOhm	5%, 0.25W, CF	
(00)	R.....6	57.11.6103	10 kOhm	5%, 0.25W, CF	
(01)	R.....6	57.11.6472	4.7 kOhm	5%, 0.25W, CF	
(00)	R.....7	57.11.6103	10 kOhm	5%, 0.25W, CF	
(01)	R.....7	57.11.6472	4.7 kOhm	5%, 0.25W, CF	
(00)	R.....8	57.11.6103	10 kOhm	5%, 0.25W, CF	
(01)	R.....8	57.11.6472	4.7 kOhm	5%, 0.25W, CF	
(00)	R.....9	57.11.6153	15 kOhm	5%, 0.25W, CF	
(01)	R.....9	57.11.6392	3.9 kOhm	5%, 0.25W, CF	
	R....10	57.11.6222	2.2 kOhm	5%, 0.25W, CF	
	R....11	57.11.6334	330 kOhm	5%, 0.25W, CF	
	R....12	57.11.6333	33 kOhm	5%, 0.25W, CF	
	R....13	57.11.6123	12 kOhm	5%, 0.25W, CF	
	R....14	57.11.6123	12 kOhm	5%, 0.25W, CF	
	R....15	57.11.6334	330 kOhm	5%, 0.25W, CF	
	R....16	57.11.6473	47 kOhm	5%, 0.25W, CF	
	R....17	57.11.6473	47 kOhm	5%, 0.25W, CF	
	R....18	57.11.6103	10 kOhm	5%, 0.25W, CF	
	R....19	57.11.6153	15 kOhm	5%, 0.25W, CF	
	R....20	57.11.6512	5.1 kOhm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....21	57.11.6101	100 Ohm	5%, 0.25W, CF	
	R....22	57.11.6563	56 kOhm	5%, 0.25W, CF	
	R....23	57.11.6153	15 kOhm	5%, 0.25W, CF	
	R....24	57.11.6512	5.1 kOhm	5%, 0.25W, CF	
	R....25	57.11.6473	47 kOhm	5%, 0.25W, CF	
	R....26	57.11.6622	6.2 kOhm	5%, 0.25W, CF	
	R....27	57.11.6823	82 kOhm	5%, 0.25W, CF	
	R....28	57.11.6105	1 MOhm	5%, 0.25W, CF	
	R....29	57.11.6563	56 kOhm	5%, 0.25W, CF	
	R....30	57.11.6683	68 kOhm	5%, 0.25W, CF	
	R....31	57.11.6133	10 kOhm	5%, 0.25W, CF	
	R....32	57.11.6221	220 Ohm	5%, 0.25W, CF	
	R....33	57.11.6472	4.7 kOhm	5%, 0.25W, CF	
	R....34	57.11.6822	8.2 kOhm	5%, 0.25W, CF	
	R....35	57.11.6221	220 Ohm	5%, 0.25W, CF	
	R....36	57.11.6622	6.2 kOhm	5%, 0.25W, CF	
	R....37	57.11.6823	82 kOhm	5%, 0.25W, CF	
	R....38	57.11.3102	1 kOhm	1%, 0.25W, CF	
	R....39	57.11.3332	3.3 kOhm	1%, 0.25W, CF	
	R....40	57.11.6822	8.2 kOhm	5%, 0.25W, CF	
	R....41	57.11.6473	47 kOhm	5%, 0.25W, CF	
	R....42	57.11.6512	5.1 kOhm	5%, 0.25W, CF	
	R....43	57.11.6101	100 Ohm	5%, 0.25W, CF	
	R....44	57.11.6563	56 kOhm	5%, 0.25W, CF	
	R....45	57.11.6153	15 kOhm	5%, 0.25W, CF	
	R....46	57.11.6512	5.1 kOhm	5%, 0.25W, CF	
	R....47	57.11.6473	47 kOhm	5%, 0.25W, CF	
	R....48	57.11.6622	6.2 kOhm	5%, 0.25W, CF	
	R....49	57.11.6823	82 kOhm	5%, 0.25W, CF	
	R....50	57.11.6125	1 MOhm	5%, 0.25W, CF	
	R....51	57.11.6563	56 kOhm	5%, 0.25W, CF	
	R....52	57.11.6683	68 kOhm	5%, 0.25W, CF	
	R....53	57.11.6133	10 kOhm	5%, 0.25W, CF	
	R....54	57.11.6221	220 Ohm	5%, 0.25W, CF	
	R....55	57.11.6472	4.7 kOhm	5%, 0.25W, CF	
	R....56	57.11.6822	8.2 kOhm	5%, 0.25W, CF	
	R....57	57.11.6221	220 Ohm	5%, 0.25W, CF	

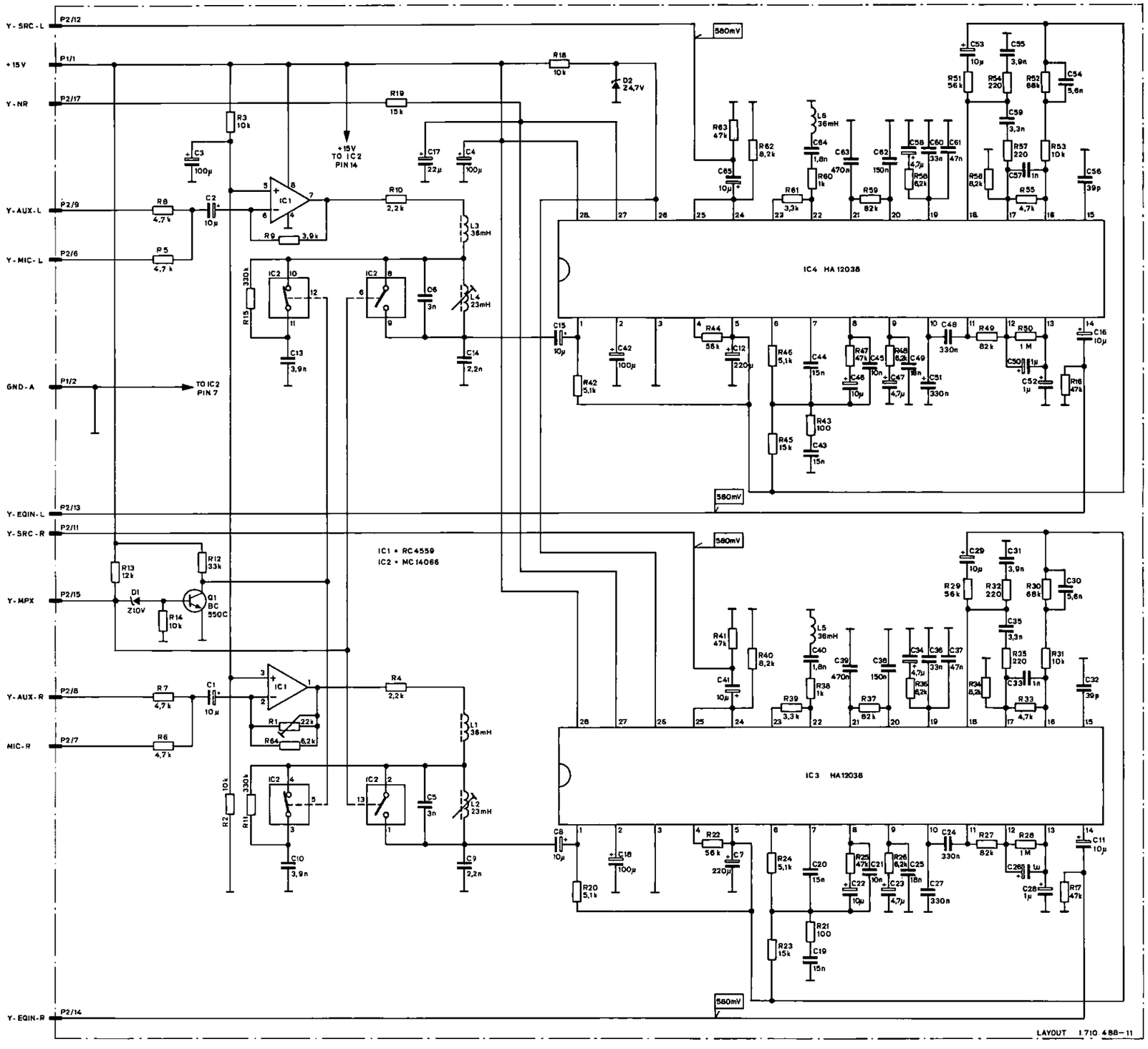
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....58	57.11.6622	6.2 kOhm	5%, 0.25W, CF	
	R....59	57.11.6823	82 kOhm	5%, 0.25W, CF	
	R....60	57.11.3102	1 kOhm	1%, 0.25W, CF	
	R....61	57.11.3332	3.3 kOhm	1%, 0.25W, CF	
	R....62	57.11.6822	8.2 kOhm	5%, 0.25W, CF	
	R....63	57.11.6473	47 kOhm	5%, 0.25W, CF	
(00)	R....64	77.77.7777			
(01)	R....64	57.11.6622	6.2 kOhm	5%, 0.25W, CF	

E1=Electrolytic, Ta=Tantalum, Cer=Ceramic, PE=Polyester,
PP=Polypropylene, PC=Polycarbonate,
CF=Carbon Film, MF=Metal Film,

MANUFACTURER: Ray= Raytheon, S=STUDER, Si=Siemens, TI=TEXAS INSTRUMENTS,
MI=Mitachi,

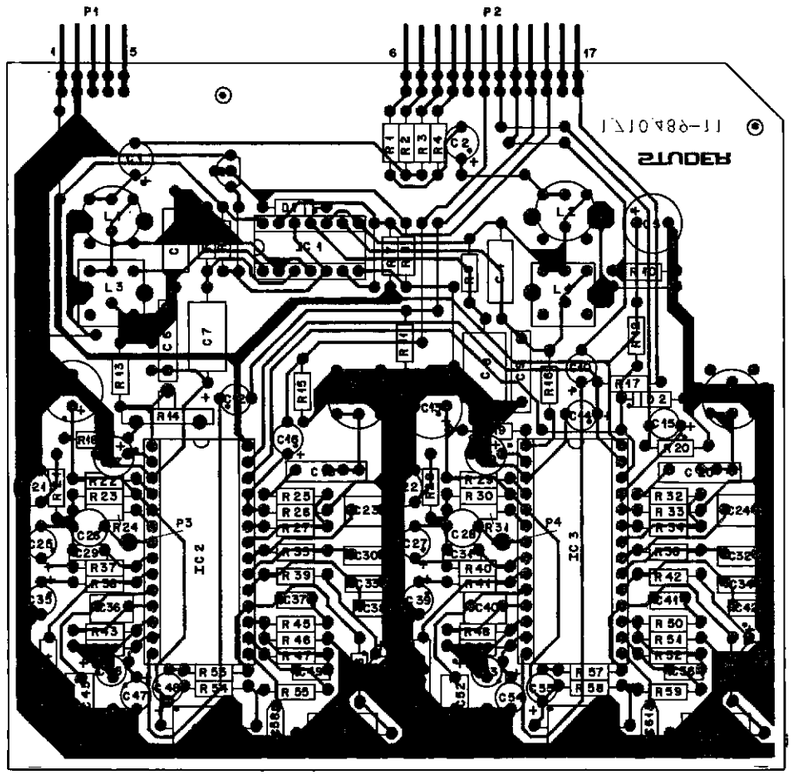
ORIG 82/01/11 (01) 82/03/05

DOLBY–C ENCODER PCB 1.710.488 "ESE"



DOLBY–C ENCODER PCB 1.710.488 ONLY IN CONNECTION WITH MIC/PHONES AMPLIFIER PCB 1.710.350 VALID TILL SERIAL NO. 17050

DOLBY–C ENCODER PCB 1.710.489 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C-----1	59-22-6100	10 uF	-10%, 25V,	EI
	C-----2	59-22-6100	10 uF	-10%, 25V,	EI
	C-----3	59-12-7302	3 nF	1%, 25V,	PS
	C-----4	59-12-7302	3 nF	1%, 25V,	PS
	C-----5	59-22-4121	100 uF	-20%, 16V,	EI
	C-----6	59-11-6222	2.2 nF	5%, 25V,	PS
	C-----7	59-12-7392	3.9 nF	2%, 25V,	PS
	C-----8	59-12-7392	3.9 nF	2%, 25V,	PS
	C-----9	59-11-6222	2.2 nF	5%, 25V,	PS
	C-----10	59-22-6100	10 uF	-10%, 25V,	EI
	C-----11	59-22-3221	220 uF	-10%, 10V,	EI
	C-----12	59-22-6100	10 uF	-10%, 25V,	EI
	C-----13	59-22-3221	220 uF	-10%, 10V,	EI
	C-----14	59-22-9220	22 uF	-10%, 25V,	EI
	C-----15	59-22-6100	10 uF	-10%, 25V,	EI
	C-----16	59-22-6100	10 uF	-10%, 25V,	EI
	C-----17	59-22-3101	100 uF	-10%, 10V,	EI
	C-----18	59-11-7182	1.8 nF	2.5%, 25V,	PC
	C-----19	59-22-3101	100 uF	-10%, 10V,	EI
	C-----20	59-11-7182	1.8 nF	2.5%, 25V,	PC
	C-----21	59-06-0153	15 nF	10%, 25V,	PE
	C-----22	59-06-0153	15 nF	10%, 25V,	PE
	C-----23	59-06-0474	470 nF	10%, 25V,	PE
	C-----24	59-06-0474	470 nF	10%, 25V,	PE
	C-----25	59-22-6100	10 uF	-10%, 25V,	EI
	C-----26	59-06-0153	15 nF	10%, 25V,	PE
	C-----27	59-22-6100	10 uF	-10%, 25V,	EI
	C-----28	59-06-0153	15 nF	10%, 25V,	PE
	C-----29	59-06-0103	10 nF	10%, 25V,	PE
	C-----30	59-06-0154	150 nF	10%, 25V,	PE
	C-----31	59-06-0103	10 nF	10%, 25V,	PE
	C-----32	59-06-0154	150 nF	10%, 25V,	PE
	C-----33	59-06-5473	47 nF	5%, 25V,	PE
	C-----34	59-06-5473	47 nF	5%, 25V,	PE
	C-----35	59-22-8479	4.7 uF	-10%, 25V,	EI
	C-----36	59-06-0334	330 nF	10%, 25V,	PE
	C-----37	59-05-1332	3.3 nF	2%, 25V,	PE

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C-----38	59-06-5333	33 nF	5%, 25V,	PE
	C-----39	59-22-8479	4.7 uF	-10%, 25V,	EI
	C-----40	59-06-0334	330 nF	10%, 25V,	PE
	C-----41	59-05-1332	3.3 nF	2%, 25V,	PE
	C-----42	59-06-5333	33 nF	5%, 25V,	PE
	C-----43	59-22-8479	4.7 uF	-10%, 25V,	EI
	C-----44	59-12-6183	18 nF	5%, 25V,	PC
	C-----45	59-06-0334	330 nF	10%, 25V,	PE
	C-----46	59-22-8109	1 uF	-10%, 25V,	EI
	C-----47	59-22-8109	1 uF	-10%, 25V,	EI
	C-----48	59-22-6100	10 uF	10%, 25V,	EI
	C-----49	59-06-0102	1 nF	10%, 25V,	PE
	C-----50	59-22-8479	4.7 uF	-10%, 25V,	EI
	C-----51	59-12-6183	18 nF	5%, 25V,	PC
	C-----52	59-06-0334	330 nF	10%, 25V,	PE
	C-----53	59-22-8109	1 uF	-10%, 25V,	EI
	C-----54	59-22-8109	1 uF	-10%, 25V,	EI
	C-----55	59-22-6100	10 uF	-10%, 25V,	EI
	C-----56	59-06-0102	1 nF	10%, 25V,	PE
	C-----57	59-12-7562	5.6 nF	2%, 25V,	PS
	C-----58	59-36-2390	39 pF	10%, 25V,	CER
	C-----59	59-12-7392	3.9 nF	2%, 25V,	PS
	C-----60	59-12-7562	5.6 nF	2%, 25V,	PS
	C-----61	59-36-2390	39 pF	10%, 25V,	CER
	C-----62	59-12-7392	3.9 nF	2%, 25V,	PS
	D-----1	50-04-1114	Z 10V	5%,400mW	
	D-----2	50-04-1123	Z 4.7V	5%,400mW	
	IC----1	50-07-0066	MC 14066	CMOS	MoTo
	IC----2	50-11-0109	HA 12038	DOLBY-B/C NR-PROC.	Hit
	IC----3	50-11-0109	HA 12038	DOLBY-B/C NR-PROC.	Hit
	L-----1	62-99-0108	L 36mH	5%,	
	L-----2	62-99-0108	L 36mH	5%,	
	L-----3	62-99-0109	L 23mH	Variable	
	L-----4	62-99-0109	L 23mH	Variable	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	L-----5	62-99-0108	L 36mH	5%,	
	L-----6	62-99-0108	L 36mH	5%,	
	P-----1	54-34-0269	5-Pole	Pin-Strip	AMP
	P-----2	54-01-0221	12-Pole	Pin-Strip	AMP
(01)	P-----3	54-02-0320		2.8x0.8mm Flat Pin	AMP
(01)	P-----4	54-02-0320		2.8x0.8mm Flat Pin	AMP
	Q-----1	50-03-0497	BC 550 C	NPN	Si,
	R-----1	57-11-4432	4.3 kOhm	5%, 0.25W, CF	
	R-----2	57-11-4432	4.3 kOhm	5%, 0.25W, CF	
	R-----3	57-11-4432	4.3 kOhm	5%, 0.25W, CF	
	R-----4	57-11-4432	4.3 kOhm	5%, 0.25W, CF	
	R-----5	57-11-4334	330 kOhm	5%, 0.25W, CF	
	R-----6	57-11-4333	33 kOhm	5%, 0.25W, CF	
	R-----7	57-11-4123	12 kOhm	5%, 0.25W, CF	
	R-----8	57-11-4103	10 kOhm	5%, 0.25W, CF	
	R-----9	57-11-4334	330 kOhm	5%, 0.25W, CF	
	R-----10	57-11-4473	47 kOhm	5%, 0.25W, CF	
	R-----11	57-11-4473	47 kOhm	5%, 0.25W, CF	
	R-----12	57-11-4103	10 kOhm	5%, 0.25W, CF	
	R-----13	57-11-4432	4.3 kOhm	5%, 0.25W, CF	
	R-----14	58-19-0501	500 Ohm	20%, 0.10W, PCF,LIN	
	R-----15	57-11-4473	47 kOhm	5%, 0.25W, CF	
	R-----16	57-11-4432	4.3 kOhm	5%, 0.25W, CF	
	R-----17	57-11-4153	15 kOhm	5%, 0.25W, CF	
	R-----18	57-11-4561	560 Ohm	5%, 0.25W, CF	
	R-----19	57-11-4821	820 Ohm	5%, 0.25W, CF	
	R-----20	57-11-4473	47 kOhm	5%, 0.25W, CF	
	R-----21	57-11-4101	100 Ohm	5%, 0.25W, CF	
	R-----22	57-11-4563	56 kOhm	5%, 0.25W, CF	
	R-----23	57-11-4153	15 kOhm	5%, 0.25W, CF	
	R-----24	57-11-4512	5.1 kOhm	5%, 0.25W, CF	
	R-----25	57-11-3102	1 kOhm	1%, 0.25W, CF	
	R-----26	57-11-4822	8.2 kOhm	5%, 0.25W, CF	
	R-----27	57-11-3332	3.3 kOhm	1%, 0.25W, CF	

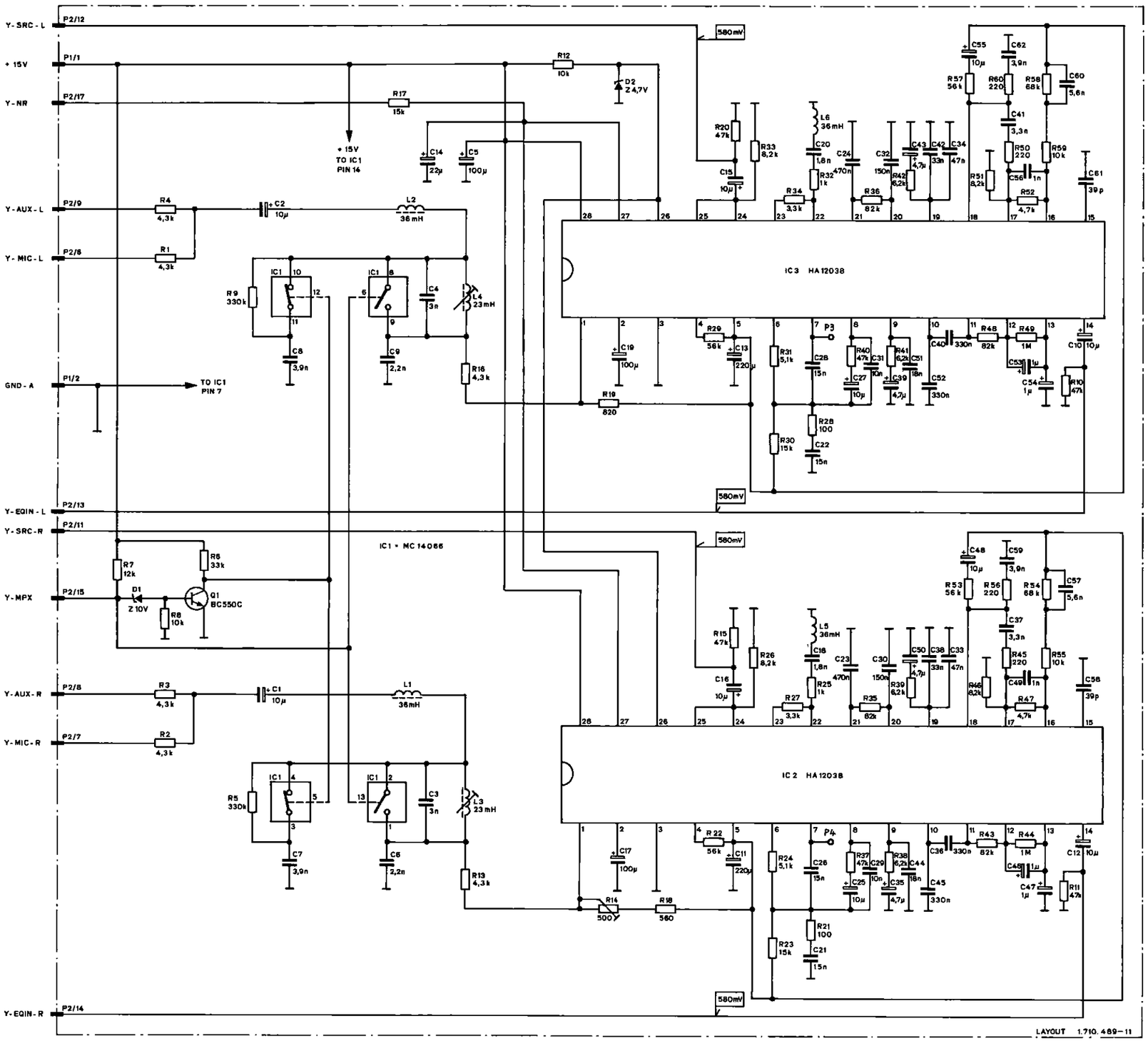
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----28	57-11-4101	100 Ohm	5%, 0.25W, CF	
	R-----29	57-11-4563	56 kOhm	5%, 0.25W, CF	
	R-----30	57-11-4153	15 kOhm	5%, 0.25W, CF	
	R-----31	57-11-4512	5.1 kOhm	5%, 0.25W, CF	
	R-----32	57-11-3102	1 kOhm	1%, 0.25W, CF	
	R-----33	57-11-4822	8.2 kOhm	5%, 0.25W, CF	
	R-----34	57-11-3332	3.3 kOhm	1%, 0.25W, CF	
	R-----35	57-11-4823	82 kOhm	5%, 0.25W, CF	
	R-----36	57-11-4823	82 kOhm	5%, 0.25W, CF	
	R-----37	57-11-4473	47 kOhm	5%, 0.25W, CF	
	R-----38	57-11-4622	6.2 kOhm	5%, 0.25W, CF	
	R-----39	57-11-4622	6.2 kOhm	5%, 0.25W, CF	
	R-----40	57-11-4473	47 kOhm	5%, 0.25W, CF	
	R-----41	57-11-4622	6.2 kOhm	5%, 0.25W, CF	
	R-----42	57-11-4622	6.2 kOhm	5%, 0.25W, CF	
	R-----43	57-11-4823	82 kOhm	5%, 0.25W, CF	
	R-----44	57-11-4105	1 MOhm	5%, 0.25W, CF	
	R-----45	57-11-4221	220 Ohm	5%, 0.25W, CF	
	R-----46	57-11-4822	8.2 kOhm	5%, 0.25W, CF	
	R-----47	57-11-4472	4.7 kOhm	5%, 0.25W, CF	
	R-----48	57-11-4823	82 kOhm	5%, 0.25W, CF	
	R-----49	57-11-4105	1 MOhm	5%, 0.25W, CF	
	R-----50	57-11-4221	220 Ohm	5%, 0.25W, CF	
	R-----51	57-11-4822	8.2 kOhm	5%, 0.25W, CF	
	R-----52	57-11-4472	4.7 kOhm	5%, 0.25W, CF	
	R-----53	57-11-4563	56 kOhm	5%, 0.25W, CF	
	R-----54	57-11-4683	68 kOhm	5%, 0.25W, CF	
	R-----55	57-11-4103	10 kOhm	5%, 0.25W, CF	
	R-----56	57-11-4221	220 Ohm	5%, 0.25W, CF	
	R-----57	57-11-4563	56 kOhm	5%, 0.25W, CF	
	R-----58	57-11-4683	68 kOhm	5%, 0.25W, CF	
	R-----59	57-11-4103	10 kOhm	5%, 0.25W, CF	
	R-----60	57-11-4221	220 Ohm	5%, 0.25W, CF	

El=Electrolytic, Ta=Tantalum, Cer=Ceramic, PE=Polyester,
PP=Polypropylene, PC=Polycarbonate,
CF=Carbon Film, MF=Metal Film,

MANUFACTURER: Ray= Raytheon, S=STUDER, Si=Siemens, TI=TEXAS INSTRUMENTS,
HI=Hitachi

ORIG 82/06/16 (01) 83/02/17

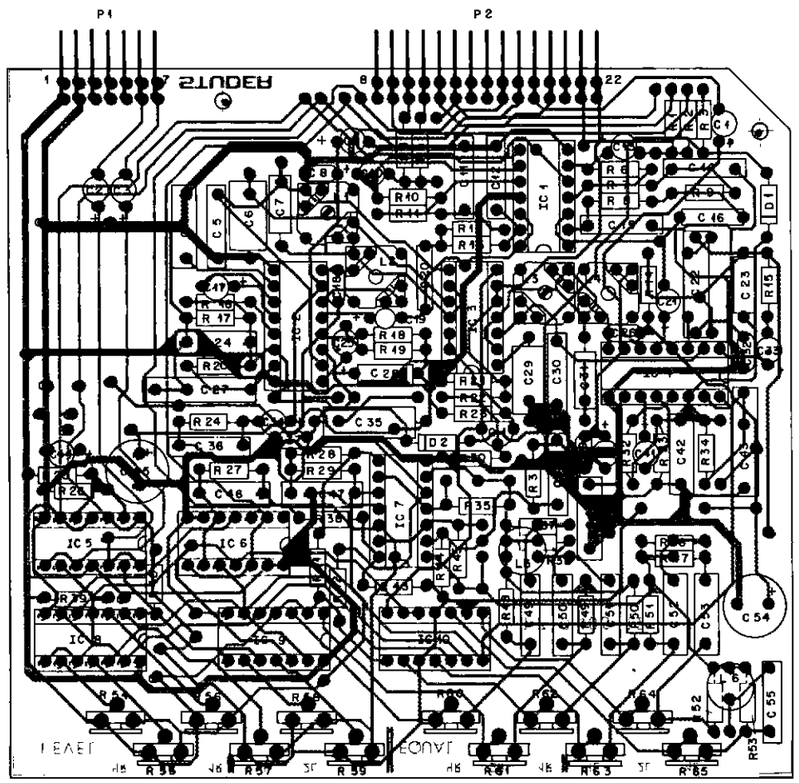
DOLBY–C ENCODER PCB 1.710.489 "ESE"



DOLBY–C ENCODER PCB 1.710.489 ONLY IN CONNECTION WITH MIC/PHONES AMPLIFIER PCB 1.710.351

VALID SINCE SERIAL NO. 17051

RECORD AMPLIFIER 1.710.485 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT			MANUF.
	C-----1	59.22.6100	10 uF	-10%,	25V	El	
	C-----2	59.22.6100	10 uF	-10%,	25V	El	
	C-----3	59.22.6103	13 uF	-10%,	25V	El	
	C-----4	59.12.4473	47 nF	5%,	25V	PE	
	C-----5	59.11.6222	2.2 nF	5%,	25V	PE	
	C-----6	59.12.7392	3.9 nF	5%,	25V	PS	
	C-----7	59.12.7302	3 nF	1%,	25V	PS	
	C-----8	59.32.1102	1 nF	20%,	25V	Cer	
	C-----9	59.22.6100	10 uF	-10%,	25V	El	
	C-----10	59.22.6100	10 uF	-10%,	25V	El	
(00)	C-----11	59.11.3682	6.8 nF	5%,	25V	PC	
(02)	C-----11	59.12.4153	15 nF	5%,	25V	PC	
	C-----12	59.11.6102	1 nF	5%,	25V	PC	
	C-----13	59.22.6100	10 uF	-10%,	25V	El	
(00)	C-----14	59.11.3682	6.8 nF	5%,	25V	PC	
(02)	C-----14	59.12.4153	15 nF	5%,	25V	PC	
	C-----15	59.11.6102	1 nF	5%,	25V	PC	
	C-----16	59.12.4183	18 nF	5%,	25V	PC	
	C-----17	59.22.6100	10 uF	-10%,	25V	El	
	C-----18	59.32.1102	1 nF	20%,	25V	Cer	
	C-----19	59.22.8109	1 uF	-20%,	25V	El	
	C-----20	59.12.4183	18 nF	5%,	25V	PC	
	C-----21	59.22.8109	1 uF	-20%,	25V	Ta	
	C-----22	59.12.7333	33 nF	1%,	25V	PS	
	C-----23	59.12.7472	4.7 nF	1%,	25V	PS	
	C-----24	59.31.6104	100 nF	10%,	25V	PE	
	C-----25	59.22.6100	10 uF	-10%,	25V	El	
	C-----26	59.32.1102	1 nF	20%,	25V	Cer	
	C-----27	59.31.6334	330 nF	10%,	25V	PE	
	C-----28	59.12.7472	4.7 nF	1%,	25V	PS	
	C-----29	59.12.7392	3.9 nF	5%,	25V	PS	
	C-----30	59.11.6222	2.2 nF	5%,	25V	PC	
	C-----31	59.12.7302	3 nF	1%,	25V	PS	
	C-----32	59.32.1102	1 nF	20%,	25V	Cer	
	C-----33	59.22.6100	10 uF	-10%,	25V	El	
	C-----34	59.22.6100	10 uF	-10%,	25V	El	
	C-----35	59.12.7333	33 nF	1%,	25V	PS	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT			MANUF.
	C-----36	59.11.6332	3.3 nF	5%,	25V	PE	
	C-----37	59.32.1102	1 nF	20%,	25V	Cer	
	C-----38	59.11.6332	3.3 nF	5%,	25V	PE	
	C-----39	59.32.1102	1 nF	20%,	25V	Cer	
	C-----40	59.22.6100	10 uF	-10%,	25V	El	
	C-----41	59.22.6100	10 uF	-10%,	25V	El	
	C-----42	59.31.6104	100 nF	10%,	25V	PE	
	C-----43	59.31.6334	330 nF	10%,	25V	PE	
	C-----44	59.22.3470	47 uF	-10%,	10V	El	
	C-----45	59.22.3221	220 uF	-10%,	10V	EL	
	C-----46	59.31.6224	220 nF	10%,	25V	PE	
	C-----47	59.31.6224	220 nF	10%,	25V	PE	
	C-----48	59.12.4473	47 nF	5%,	25V	PE	
	C-----49	59.11.4103	10 nF	2.5%,	25V	PC	
(00)	C-----50	59.11.4103	10 nF	2.5%,	25V	PC	
(01)	C-----50	59.11.3682	6.8 nF	2.5%,	25V	PC	
	C-----51	59.11.4472	4.7 nF	2.5%,	25V	PC	
	C-----52	59.11.4103	10 nF	2.5%,	25V	PC	
(00)	C-----53	59.11.4103	10 nF	2.5%,	25V	PC	
(01)	C-----53	59.11.3682	6.8 nF	2.5%,	25V	PC	
	C-----54	59.22.3221	220 uF	-10%,	10V	El	
	C-----55	59.11.4472	4.7 nF	2.5%,	25V	PC	
	D-----1	50.04.0125	1N4448			Si	any
	D-----2	50.04.0125	1N4448			Si	any
	IC----1	50.05.0232	RC 4136	Quad. Op. Amp.			TI, RA
	IC----2	50.11.0105	LM 1111A	Dolby B Proc.			Ns
	IC----3	50.07.0066	MC14066	CMOS			M, TI
	IC----4	50.11.0105	LM 1111A	Dolby B Proc.			N
	IC----5	50.05.0232	RC 4136	Quad. Op. Amp.			TI, RA
	IC----6	50.07.0070	MC 14070	CMOS			M, TI
	IC----7	50.05.0232	RC 4136	Quad. Op. Amp.			TI, RA
	IC----8	50.07.0066	MC14066	CMOS			M, TI
	IC----9	50.07.0066	MC14066	CMOS			M, TI
	IC----10	50.07.0066	MC14066	CMOS			M, TI

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	L-----1	1.022.206.00	23 mH		S
	L-----2	1.022.209.00	36 mH		S
	L-----3	1.022.208.00	23 mH		S
	L-----4	1.022.209.00	36 mH		S
	L-----5	62.02.1822	L 8.2 mH		
	L-----6	62.02.1822	L 8.2 mH		
	P-----1	54.01.0223	7-Pole	Pin-Strip	AMP
	P-----2	54.01.0275	15-Pole	Pin-Strip	AMP
	Q-----1	50.33.0497	BC 550 C	NPN	
	R-----1	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R-----2	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R-----3	57.11.4100	10 Ohm	5%, 0.25W, CF	
	R-----4	57.11.4133	10 kOhm	5%, 0.25W, CF	
	R-----5	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----6	57.11.4133	10 kOhm	5%, 0.25W, CF	
(00)	R-----7	57.39.1101	1.1 kOhm	1%, 0.25W, CF	
(02)	R-----7	57.11.4511	510 Ohm	2%, 0.25W, MF	
	R-----8	57.39.1301	1.3 kOhm	1%, 0.25W, CF	
	R-----9	57.39.1001	1 kOhm	1%, 0.25W, CF	
(00)	R-----10	57.11.4103	10 kOhm	5%, 0.25W, CF	
(02)	R-----10	58.99.0136	22 kOhm	20%, 0.10W, PCF,LIN	
(00)	R-----11	57.39.1131	1.1 kOhm	1%, 0.25W, CF	
(02)	R-----11	57.11.4511	510 Ohm	2%, 0.25W, MF	
	R-----12	57.39.1031	1 kOhm	1%, 0.25W, CF	
	R-----13	57.39.1331	1.3 kOhm	1%, 0.25W, CF	
	R-----14	57.39.3321	3.32 kOhm	1%, 0.25W, CF	
	R-----15	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----16	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R-----17	57.11.4334	330 kOhm	5%, 0.25W, CF	
	R-----18	57.39.3321	3.32 kOhm	1%, 0.25W, CF	
	R-----19	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----20	57.11.4274	270 kOhm	5%, 0.25W, CF	
	R-----21	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----22	57.11.4333	33 kOhm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----23	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R-----24	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----25	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R-----26	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R-----27	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R-----28	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----29	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R-----30	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----31	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R-----32	57.11.4154	150 kOhm	5%, 0.25W, CF	
	R-----33	57.11.4334	330 kOhm	5%, 0.25W, CF	
	R-----34	57.11.4274	270 kOhm	5%, 0.25W, CF	
	R-----35	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R-----36	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R-----37	57.11.4100	10 Ohm	5%, 0.25W, CF	
(00)	R-----38	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
(01)	R-----38	57.11.4182	1.8 kOhm	5%, 0.25W, CF	
	R-----39	57.11.4134	130 kOhm	5%, 0.25W, CF	
	R-----40	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R-----41	57.11.4123	12 kOhm	5%, 0.25W, CF	
	R-----42	57.11.4471	470 Ohm	5%, 0.25W, CF	
	R-----43	57.11.4123	12 kOhm	5%, 0.25W, CF	
	R-----44	57.11.4471	470 Ohm	5%, 0.25W, CF	
	R-----45	57.11.4682	6.8 kOhm	5%, 0.25W, CF	
	R-----46	57.11.4100	10 Ohm	5%, 0.25W, CF	
	R-----47	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
(00)	R-----47	57.11.4182	1.8 kOhm	5%, 0.25W, CF	
(01)	R-----48	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----49	57.11.4273	27 kOhm	5%, 0.25W, CF	
(00)	R-----49	57.11.4473	47 kOhm	5%, 0.25W, CF	
(01)	R-----50	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----51	57.11.4153	15 kOhm	5%, 0.25W, CF	
(00)	R-----52	57.11.4223	22 kOhm	5%, 0.25W, CF	
(01)	R-----52	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R-----53	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R-----54	58.02.4223	22 kOhm	20%, 0.10W, PCF,LIN	
	R-----55	58.02.4223	22 kOhm	20%, 0.10W, PCF,LIN	

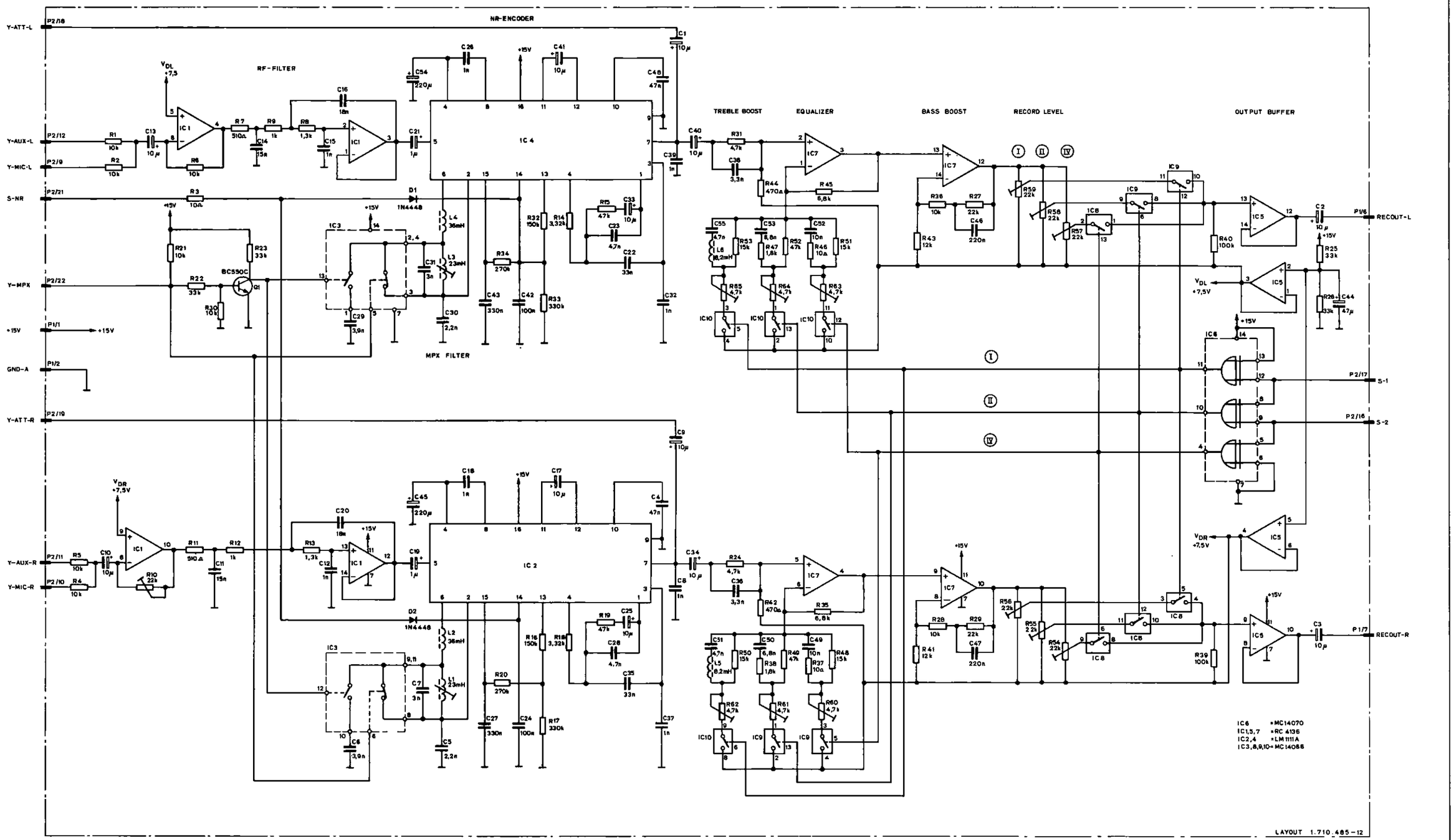
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----56	58.02.4223	22 kOhm	20%, 0.10W, PCF,LIN	
	R-----57	58.02.4223	22 kOhm	20%, 0.10W, PCF,LIN	
	R-----58	58.02.4223	22 kOhm	20%, 0.10W, PCF,LIN	
	R-----59	58.02.4223	22 kOhm	20%, 0.10W, PCF,LIN	
	R-----60	58.02.4472	4.7 kOhm	20%, 0.10W, PCF,LIN	
	R-----61	58.02.4472	4.7 kOhm	20%, 0.10W, PCF,LIN	
	R-----62	58.02.4472	4.7 kOhm	20%, 0.10W, PCF,LIN	
	R-----63	58.02.4472	4.7 kOhm	20%, 0.10W, PCF,LIN	
	R-----64	58.02.4472	4.7 kOhm	20%, 0.10W, PCF,LIN	
	R-----65	58.02.4472	4.7 kOhm	20%, 0.10W, PCF,LIN	

El=Electrolytic, Cer=Ceramic, PC=Polycarb., TA=Tantalum, PE=Polyester,
PS=Polystyrene, SI = Silicon
CF=Carbon Film, MF=Metal Film, PCF=Pot-Meter Carbon Film

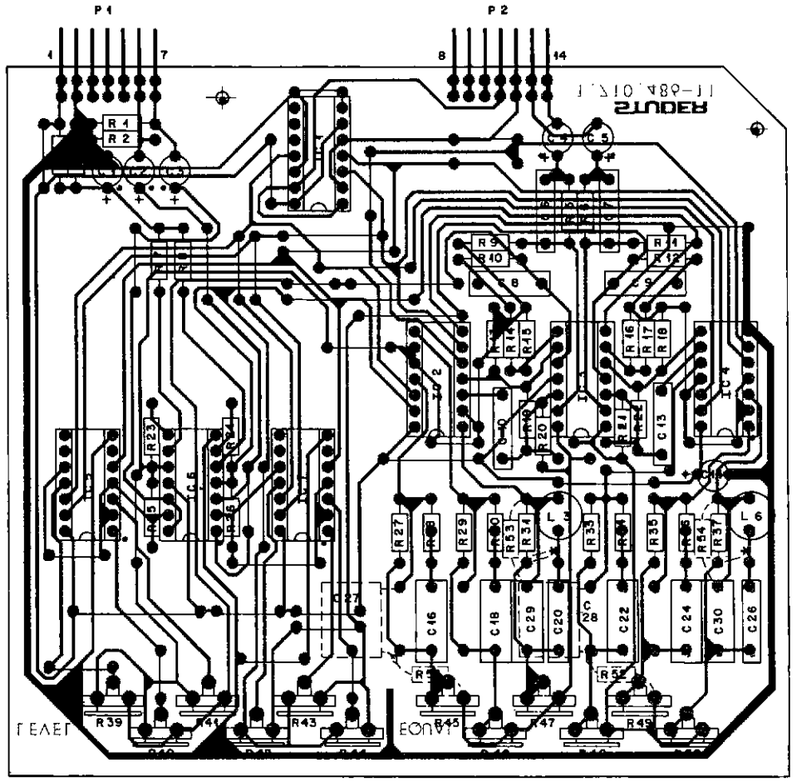
MANUFACTURER: TI=TEXAS INSTRUMENTS M=MOTOROLA N=NATIONAL RA=RAYTHEON
S=STUDER

DRIG 81/02/02 (01) 81/04/01 (02) 81/04/15

RECORD AMPLIFIER PCB 1.710.485 "ESE"



RECORD EQUALIZER PCB 1.710.486 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.22.6100	10 uF	-20%, 25V, EI	
	C.....2	59.22.6100	10 uF	-20%, 25V, EI	
	C.....3	59.22.6100	10 uF	-20%, 25V, EI	
	C.....4	59.22.6100	10 uF	-20%, 25V, EI	
	C.....5	59.22.6100	10 uF	-20%, 25V, EI	
	C.....6	59.11.6332	3.3 nF	5%, 25V, PC	
	C.....7	59.11.6332	3.3 nF	5%, 25V, PC	
	C.....8	59.31.6224	.22 uF	10%, 25V, MPETP	
	C.....9	59.31.6224	.22 uF	10%, 25V, MPETP	
	C.....10	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C.....13	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C.....14	59.22.6100	10 uF	-20%, 25V, EI	
	C.....16	59.11.4103	10 nF	2.5%, 25V, PC	
	C.....18	59.11.4103	10 nF	2.5%, 25V, PC	
	C.....20	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C.....22	59.11.4103	10 nF	2.5%, 25V, PC	
	C.....24	59.11.4103	10 nF	2.5%, 25V, PC	
	C.....26	59.11.4472	4.7 nF	2.5%, 25V, PC	
(01)	C.....27	59.11.6272	2.7 nF	5%, 25V, PC	
(01)	C.....28	59.11.6272	2.7 nF	5%, 25V, PC	
(02)	C.....29	59.11.4472	4.7 nF	5%, 25V, PC	
(02)	C.....30	59.11.4472	4.7 nF	5%, 25V, PC	
	IC.....1	50.07.0070	MC 14070	CMOS	M+TI
	IC.....2	50.07.0066	MC 14066	CMOS	M+TI
	IC.....3	50.05.0232	RC 4136	Quad. Op. Amp.	TI+RAY
	IC.....4	50.07.0066	MC 14066	CMOS	M+TI
	IC.....5	50.07.0066	MC 14066	CMOS	M+TI
	IC.....6	50.05.0232	RC 4136	Quad. Op. Amp.	TI+RAY
	IC.....7	50.07.0066	MC 14066	CMOS	M+TI
	L.....3	62.02.1822	8.2 mH	5%,	
	L.....6	62.02.1822	8.2 mH	5%,	
	P.....1	54.01.0223	7-Pole	Pin-Strip	
	P.....2	54.01.0223	7-Pole	Pin-Strip	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R.....1	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R.....2	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R.....3	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R.....4	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R.....5	57.11.4472	4.7 kOhm	5%, 0.25W, MF	
	R.....6	57.11.4472	4.7 kOhm	5%, 0.25W, MF	
	R.....7	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R.....8	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R.....9	57.11.4471	470 Ohm	5%, 0.25W, MF	
	R.....10	57.11.4273	27 kOhm	5%, 0.25W, MF	
	R.....11	57.11.4471	470 Ohm	5%, 0.25W, MF	
	R.....12	57.11.4273	27 kOhm	5%, 0.25W, MF	
	R.....13	57.11.4123	12 kOhm	5%, 0.25W, MF	
	R.....14	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R.....15	57.11.4133	13 kOhm	5%, 0.25W, MF	
	R.....16	57.11.4133	13 kOhm	5%, 0.25W, MF	
	R.....17	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R.....18	57.11.4123	12 kOhm	5%, 0.25W, MF	
(00)	R.....19	57.11.4222	2.2 kOhm	5%, 0.25W, MF	
(01)	R.....19	57.11.3432	4.3 kOhm	5%, 0.25W, MF	
	R.....20	57.11.4682	6.8 kOhm	5%, 0.25W, MF	
	R.....21	57.11.4682	6.8 kOhm	5%, 0.25W, MF	
(00)	R.....22	57.11.4222	2.2 kOhm	5%, 0.25W, MF	
(01)	R.....22	57.11.3432	4.3 kOhm	5%, 0.25W, MF	
	R.....23	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R.....24	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R.....25	57.11.4134	100 kOhm	5%, 0.25W, MF	
	R.....26	57.11.4134	100 kOhm	5%, 0.25W, MF	
(00)	R.....27	57.11.4153	15 kOhm	5%, 0.25W, MF	
(01)	R.....27	57.11.4333	33 kOhm	5%, 0.25W, MF	
(00)	R.....28	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
(01)	R.....28	57.11.4332	3.3 kOhm	5%, 0.25W, MF	
(00)	R.....29	57.11.4273	27 kOhm	5%, 0.25W, MF	
(01)	R.....29	57.11.4393	39 kOhm	5%, 0.25W, MF	
	R.....30	57.11.4472	4.7 kOhm	5%, 0.25W, MF	
	R.....31	57.11.4153	15 kOhm	5%, 0.25W, MF	
(00)	R.....33	57.11.4153	15 kOhm	5%, 0.25W, MF	

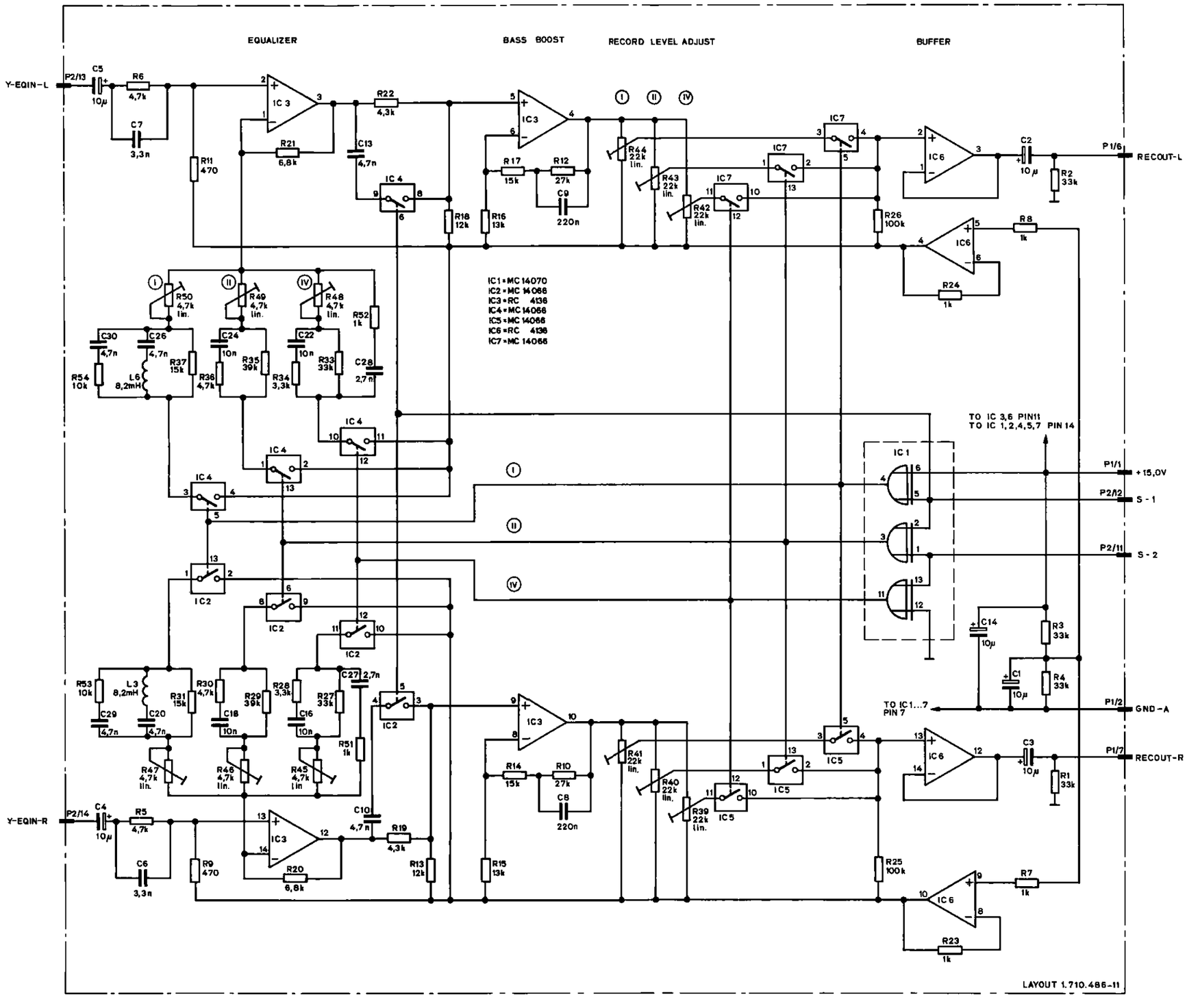
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
(01)	R.....33	57.11.4333	33 kOhm	5%, 0.25W, MF	
(00)	R.....34	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
(01)	R.....34	57.11.4332	3.3 kOhm	5%, 0.25W, MF	
(00)	R.....35	57.11.4273	27 kOhm	5%, 0.25W, MF	
(01)	R.....35	57.11.4393	39 kOhm	5%, 0.25W, MF	
	R.....36	57.11.4472	4.7 kOhm	5%, 0.25W, MF	
	R.....37	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R.....39	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R.....40	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R.....41	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R.....42	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R.....43	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R.....44	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R.....45	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R.....46	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R.....47	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R.....48	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R.....49	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R.....50	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
(01)	R.....51	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
(01)	R.....52	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
(02)	R.....53	57.11.4103	10 kOhm	5%, 0.25W, MF	
(02)	R.....54	57.11.4103	10 kOhm	5%, 0.25W, MF	

EI=Electrolytic, Ta=Tantalum, Cer=Ceramic, PE=Polyester,
PP=Polypropylene, PC=Polycarbonate,
CF=Carbon Film, MF=Metal Film,

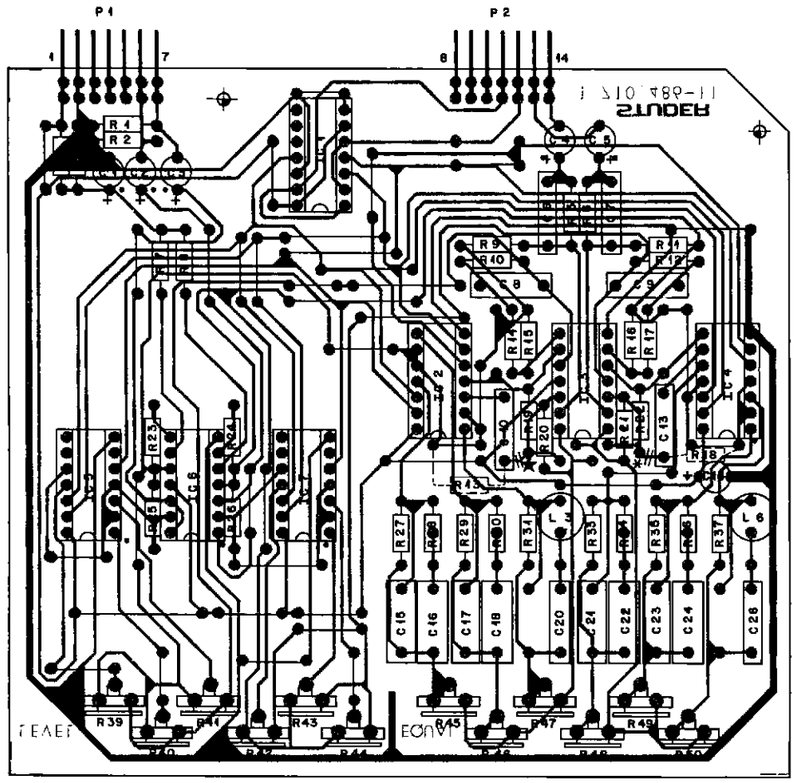
MANUFACTURER: Ray= Raytheon, S=STUDER, Si=Siemens, TI=TEXAS INSTRUMENTS,
M=Motorola,

ORIG. 82/01/13 (01) 82/05/03 (02) 82/11/22

RECORD EQUALIZER PCB 1.710.486 "ESE"



RECORD EQUALIZER PCB A/C 1.710.487–00 "ESE"



★PRINTED CONDUCTOR INTERRUPTED

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C-----1	59.22.6100	10 uF	-20%, 25V, El	
	C-----2	59.22.6100	10 uF	-20%, 25V, El	
	C-----3	59.22.6100	10 uF	-20%, 25V, El	
	C-----4	59.22.6100	10 uF	-20%, 25V, El	
	C-----5	59.22.6100	10 uF	-20%, 25V, El	
	C-----6	59.11.6332	3.3 nF	5%, 25V, PC	
	C-----7	59.11.6332	3.3 nF	5%, 25V, PC	
	C-----8	59.31.6224	.22 uF	10%, 25V, MPETP	
	C-----9	59.31.6224	.22 uF	10%, 25V, MPETP	
	C-----10	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C-----13	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C-----14	59.22.6100	10 uF	-20%, 25V, El	
	C-----15	59.11.3682	6.8 nF	5%, 25V, PC	
	C-----16	59.11.4103	10 nF	2.5%, 25V, PC	
	C-----17	59.11.3562	5.6 nF	5%, 25V, PC	
	C-----18	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C-----20	59.11.3562	5.6 nF	5%, 25V, PC	
	C-----21	59.11.3682	6.8 nF	5%, 25V, PC	
	C-----22	59.11.4103	10 nF	2.5%, 25V, PC	
	C-----23	59.11.3562	5.6 nF	5%, 25V, PC	
	C-----24	59.11.4472	4.7 nF	2.5%, 25V, PC	
	C-----26	59.11.3562	5.6 nF	5%, 25V, PC	
	IC-----1	50.07.0070	MC 14070	CMOS	M+TI
	IC-----2	50.07.0066	MC 14066	CMOS	M+TI
	IC-----3	50.05.0232	RC 4136	Quad. Op. Amp.	TI+RAY
	IC-----4	50.07.0066	MC 14066	CMOS	M+TI
	IC-----5	50.07.0066	MC 14066	CMOS	M+TI
	IC-----6	50.05.0232	RC 4136	Quad. Op. Amp.	TI+RAY
	IC-----7	50.07.0066	MC 14066	CMOS	M+TI
	L-----3	62.02.1822	8.2 mH	5%,	
	L-----6	62.02.1822	8.2 mH	5%,	
	P-----1	54.01.0223	7-Pole	Pin-Strip	
	P-----2	54.01.0223	7-Pole	Pin-Strip	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----1	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R-----2	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R-----3	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R-----4	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R-----5	57.11.4472	4.7 kOhm	5%, 0.25W, MF	
	R-----6	57.11.4472	4.7 kOhm	5%, 0.25W, MF	
	R-----7	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R-----8	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R-----9	57.11.4471	470 Ohm	5%, 0.25W, MF	
	R-----10	57.11.4273	27 kOhm	5%, 0.25W, MF	
	R-----11	57.11.4471	470 Ohm	5%, 0.25W, MF	
	R-----12	57.11.4273	27 kOhm	5%, 0.25W, MF	
	R-----13	57.11.4273	27 kOhm	5%, 0.25W, MF	
	R-----14	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R-----15	57.11.4133	13 kOhm	5%, 0.25W, MF	
	R-----16	57.11.4133	13 kOhm	5%, 0.25W, MF	
	R-----17	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R-----18	57.11.4273	27 kOhm	5%, 0.25W, MF	
	R-----19	57.11.4103	10 kOhm	5%, 0.25W, MF	
	R-----20	57.11.4682	6.8 kOhm	5%, 0.25W, MF	
	R-----21	57.11.4682	6.8 kOhm	5%, 0.25W, MF	
	R-----22	57.11.4103	10 kOhm	5%, 0.25W, MF	
	R-----23	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R-----24	57.11.4102	1.0 kOhm	5%, 0.25W, MF	
	R-----25	57.11.4104	100 kOhm	5%, 0.25W, MF	
	R-----26	57.11.4104	100 kOhm	5%, 0.25W, MF	
	R-----27	57.11.4331	33 kOhm	5%, 0.25W, MF	
	R-----28	57.11.4223	22 kOhm	5%, 0.25W, MF	
	R-----29	57.11.4193	39 kOhm	5%, 0.25W, MF	
	R-----30	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R-----31	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R-----33	57.11.4333	33 kOhm	5%, 0.25W, MF	
	R-----34	57.11.4223	22 kOhm	5%, 0.25W, MF	
	R-----35	57.11.4393	39 kOhm	5%, 0.25W, MF	
	R-----36	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R-----37	57.11.4153	15 kOhm	5%, 0.25W, MF	
	R-----39	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	

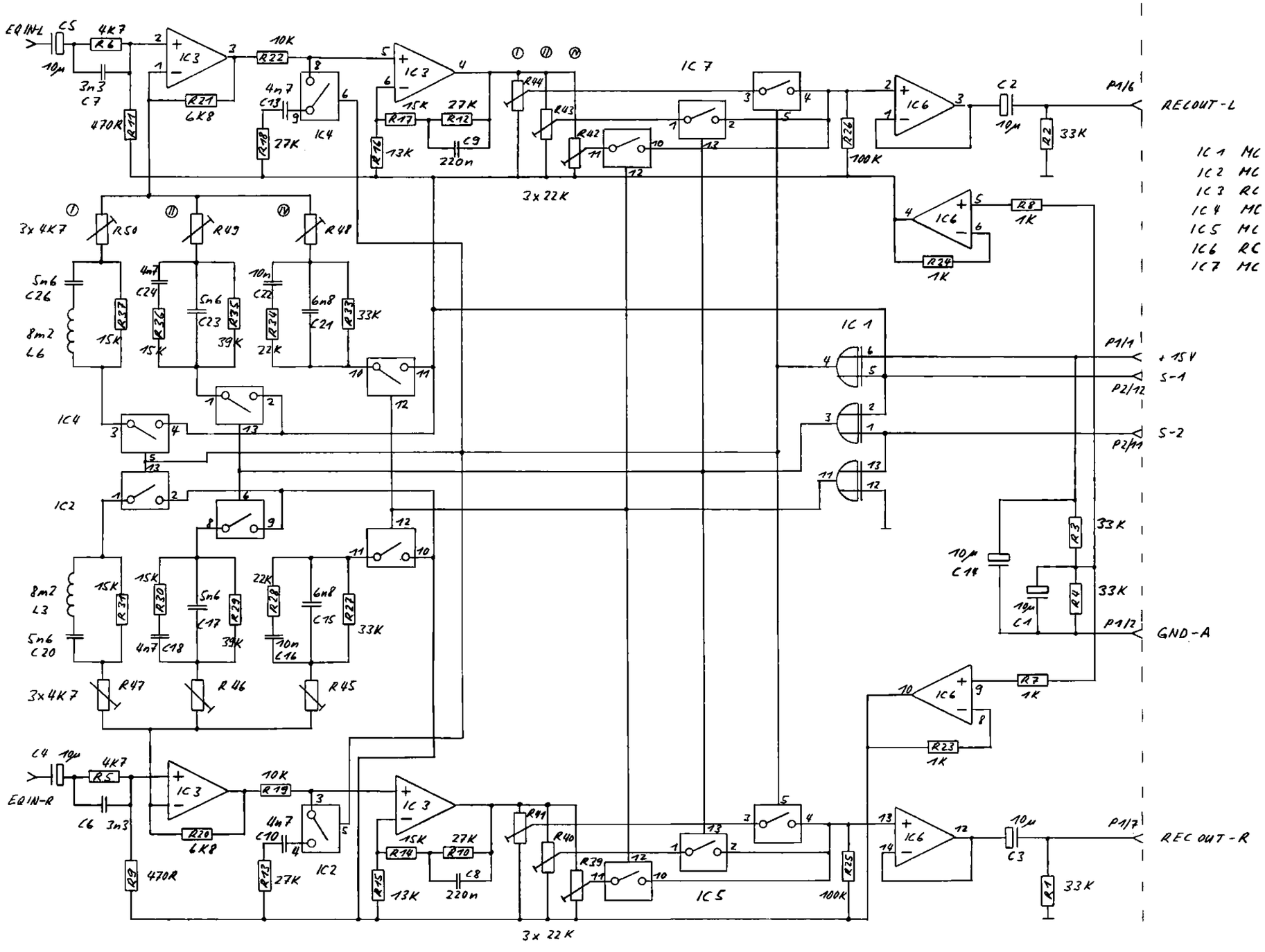
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R-----40	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R-----41	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R-----42	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R-----43	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R-----44	58.02.4223	22 kOhm	20%, .1 W, PCF+LIN	
	R-----45	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R-----46	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R-----47	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R-----48	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R-----49	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	
	R-----50	58.02.4472	4.7 kOhm	20%, .1 W, PCF+LIN	

El=Electrolytic, Ta=Tantalum, Cer=Ceramic, PE=Polyester,
PP=Polypropylene, PC=Polycarbonate,
CF=Carbon Film, MF=Metal Film,

MANUFACTURER: Ray= Raytheon, St=STUDER, Si=Siemens, TI=TEXAS INSTRUMENTS,
MMotorola,

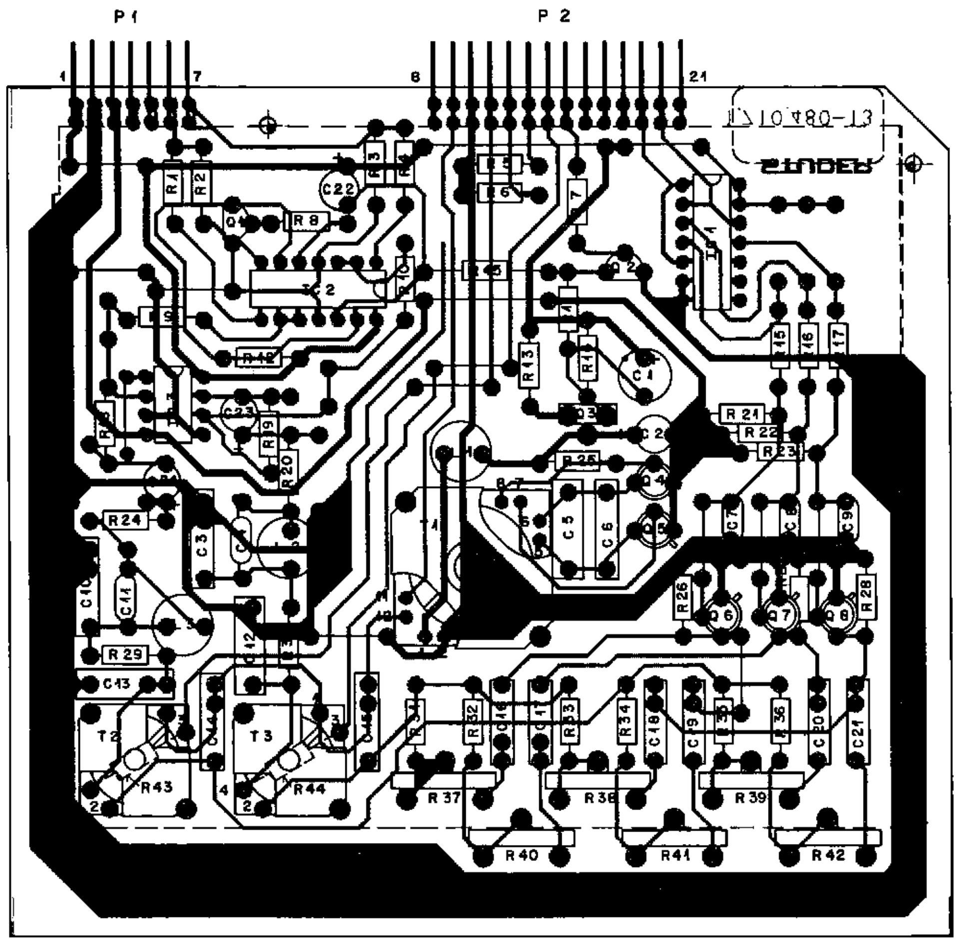
DWG 83/08/23

RECORD EQUALIZER PCB A/C 1.710.487–00 "ESE"



PAGE 1 OF 1 SC
1.710.487.00
'ESE'
B710 MKII CASSETTE TAPE RECORDER
RECORD EQUALIZER A/C
STUDER
10.11.83

OSCILLATOR PCB 1.710.480–00/–81 "ESE"
OSCILLATOR PCB A/C 1.710.482–00 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.22.3101	100 uF	-10%, 10V El	
	C.....2	59.22.6100	10 uF	-10%, 35V El	
	C.....3	59.11.6332	3.3 nF	5%, 25V PE	
	C.....4	59.34.4271	270 pF	5%, 25V Cer	
	C.....5	59.11.3103	10 nF	5%, 25V PC	
(00)	C.....6	59.11.6272	2.7 nF	5%, 25V PE	
(01)	C.....6	59.11.6272	2.7 nF	5%, 25V PC	
	C.....7	59.32.3103	10 nF	20%, 25V Cer	
	C.....8	59.32.3103	10 nF	20%, 25V Cer	
	C.....9	59.32.3103	10 nF	20%, 25V Cer	
	C....10	59.11.6332	3.3 nF	5%, 25V PE	
	C....11	59.34.4271	270 pF	5%, 25V Cer	
	C....12	59.11.6272	2.7 nF	5%, 25V PC	
	C....13	59.11.6272	2.7 nF	5%, 25V PC	
	C....14	59.11.4472	4.7 nF	5%, 25V PC	
	C....15	59.11.4472	4.7 nF	5%, 25V PC	
	C....16	59.31.4103	10 nF	20%, 25V PE	
	C....17	59.31.4103	10 nF	20%, 25V PE	
	C....18	59.31.4103	10 nF	20%, 25V PE	
	C....19	59.31.4103	10 nF	20%, 25V PE	
	C....20	59.31.4103	10 nF	20%, 25V PE	
	C....21	59.31.4103	10 nF	20%, 25V PE	
(03)	C....22	59.22.8109	1 uF	-20%, 25V, El	
(04)	C....23	59.22.5220	22 uF	-20%, 25V, El	
(04)	C....24	59.22.5220	22 uF	-20%, 25V, El	
	IC....1	50.07.0070	MC 14070	CMOS	M, F
(00)	IC....2	50.07.0066	MC 14066	CMOS	M, F
(05)	IC....2	50.99.0164	MC 14066	CMOS MOTOROLA only!	
	IC....3	50.09.0107	RC 4559	Dual Op. Amp.	TI, RA
	L.....1	62.02.2122	L 1.2mH	5%.	
	L.....2	62.02.1822	L 8.2mH	5%.	
	L.....3	62.02.1822	L 8.2mH	5%.	
	P.....1	54.01.0223	7-Pole	Pin-Strip	AMP
	P.....2	54.02.0274	14-Pole	Pin-Strip	AMP

S T U D E R (05) 83/03/11 Rd OSCILLATOR 1.710.480.81 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	Q.....1	50.03.0436	BC 237		
	Q.....2	50.03.0436	BC 237		
	Q.....3	50.03.0452	BD 140		
	Q.....4	50.03.0434	BFR 18		SGS
	Q.....5	50.03.0436	BFR 18		SGS
	Q.....6	50.03.0434	BFR 18		SGS
	Q.....7	50.03.0434	BFR 18		SGS
	Q.....8	50.03.0434	BFR 18		SGS
	R.....1	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4472	47 kOhm	5%, 0.25W, CF	
	R....10	57.11.4472	47 kOhm	5%, 0.25W, CF	
	R....11	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....12	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R....13	57.11.4569	5.6 Ohm	5%, 0.25W, CF	
	R....14	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....15	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....16	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....17	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....18	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....19	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....20	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....21	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R....22	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R....23	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R....24	57.11.4391	390 Ohm	5%, 0.25W, CF	
	R....25	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R....26	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R....27	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R....28	57.11.4105	1 MOhm	5%, 0.25W, CF	

S T U D E R (05) 83/03/11 Rd OSCILLATOR 1.710.480.81 PAGE 2

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....29	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R....30	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
(00)	R....31	57.11.4332	3.3 kOhm	5%, 0.25W, CF	
(02)	R....31	57.11.4102	1 kOhm	5%, 0.25W, CF	
(00)	R....32	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
(02)	R....32	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
(00)	R....33	57.11.4103	10 kOhm	5%, 0.25W, CF	
(02)	R....33	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
(00)	R....34	57.11.4332	3.3 kOhm	5%, 0.25W, CF	
(02)	R....34	57.11.4102	1 kOhm	5%, 0.25W, CF	
(00)	R....35	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
(02)	R....35	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
(00)	R....36	57.11.4103	10 kOhm	5%, 0.25W, CF	
(02)	R....36	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R....37	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....38	58.19.0503	50 kOhm	20%, 0.15W, Pot, Lin	
	R....39	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....40	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....41	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....42	58.19.0503	50 kOhm	20%, 0.15W, Pot, Lin	
(01)	R....43	57.11.4473	47 kOhm	5%, 0.25W, CF	
(01)	R....44	57.11.4473	47 kOhm	5%, 0.25W, CF	
(03)	R....45	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	T.....1	1.022.205.00		Osc.Coil	S
	T.....2	1.022.141.00		HF-Transf.	S
	T.....3	1.022.141.00		HF-Transf.	S

Cer=Ceramic, El=Electrolytic,
PC=Polycarb., PE=Polyester, CF=Carbon Film,
MANUFACTURER: TI=TEXAS INSTRUMENTS, M=MOTOROLA, F=FAIRCHILD,
SGS=SGS-ATES, S=STUDER,

ORIG 81/01/06 (01) 81/03/25 (02) 81/06/04 (03) 82/05/03 (04) 82/12/17
(05) 83/03/11

S T U D E R (05) 83/03/11 Rd OSCILLATOR 1.710.480.81 PAGE 3

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.22.3101	100 uF	-10%, 10V El	
	C.....2	59.22.6100	10 uF	-10%, 35V El	
	C.....3	59.11.3562	5.6 nF	5%, 25V PE	
	C.....4	59.34.4271	270 pF	5%, 25V Cer	
	C.....5	59.11.3103	10 nF	5%, 25V PC	
	C.....6	59.11.6152	1.5 nF	5%, 25V PE	
	C.....7	59.32.3103	10 nF	20%, 25V Cer	
	C.....8	59.32.3103	10 nF	20%, 25V Cer	
	C.....9	59.32.3103	10 nF	20%, 25V Cer	
	C....10	59.11.3562	5.6 nF	5%, 25V PE	
	C....11	59.34.4271	270 pF	5%, 25V Cer	
	C....12	59.11.6272	2.7 nF	5%, 25V PC	
	C....13	59.11.6272	2.7 nF	5%, 25V PC	
	C....14	59.11.4472	4.7 nF	5%, 25V PC	
	C....15	59.11.4472	4.7 nF	5%, 25V PC	
	C....16	59.31.4103	10 nF	20%, 25V PE	
	C....17	59.31.4103	10 nF	20%, 25V PE	
	C....18	59.31.4103	10 nF	20%, 25V PE	
	C....19	59.31.4103	10 nF	20%, 25V PE	
	C....20	59.31.4103	10 nF	20%, 25V PE	
	C....21	59.31.4103	10 nF	20%, 25V PE	
	C....22	59.22.8109	1 uF	-20%, 25V, El	
	C....23	59.22.5220	22 uF	-20%, 25V, El	
	C....24	59.22.5220	22 uF	-20%, 25V, El	
	IC....1	50.07.0070	MC 14070	CMOS	M, F
(00)	IC....2	50.07.0066	MC 14066	CMOS	M, F
	IC....2	50.99.0164	MC 14066	CMOS MOTOROLA only!	
	IC....3	50.09.0107	RC 4559	Dual Op. Amp.	TI, RA
	L.....1	62.02.2122	L 1.2mH	5%.	
	L.....2	62.02.1822	L 8.2mH	5%.	
	L.....3	62.02.1822	L 8.2mH	5%.	
	P.....1	54.01.0223	7-Pole	Pin-Strip	AMP
	P.....2	54.02.0274	14-Pole	Pin-Strip	AMP

S T U D E R (00) 83/08/23 LU OSCILLATOR A/C 1.710.482.00 PAGE 1

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	Q.....1	50.03.0436	BC 237		
	Q.....2	50.03.0436	BC 237		
	Q.....3	50.03.0452	BD 140		
	Q.....4	50.03.0434	BFR 18		SGS
	Q.....5	50.03.0434	BFR 18		SGS
	Q.....6	50.03.0434	BFR 18		SGS
	Q.....7	50.03.0434	BFR 18		SGS
	Q.....8	50.03.0434	BFR 18		SGS
	R.....1	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....3	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....4	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4101	100 Ohm	5%, 0.25W, CF	
	R.....7	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R.....8	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4472	47 kOhm	5%, 0.25W, CF	
	R....10	57.11.4472	47 kOhm	5%, 0.25W, CF	
	R....11	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....12	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R....13	57.11.4569	5.6 Ohm	5%, 0.25W, CF	
	R....14	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....15	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....16	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....17	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....18	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....19	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....20	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R....21	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R....22	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R....23	57.11.4223	22 kOhm	5%, 0.25W, CF	
	R....24	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R....25	57.11.4153	15 kOhm	5%, 0.25W, CF	
	R....26	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R....27	57.11.4105	1 MOhm	5%, 0.25W, CF	
	R....28	57.11.4105	1 MOhm	5%, 0.25W, CF	

S T U D E R (00) 83/08/23 LU OSCILLATOR A/C 1.710.482.00 PAGE 2

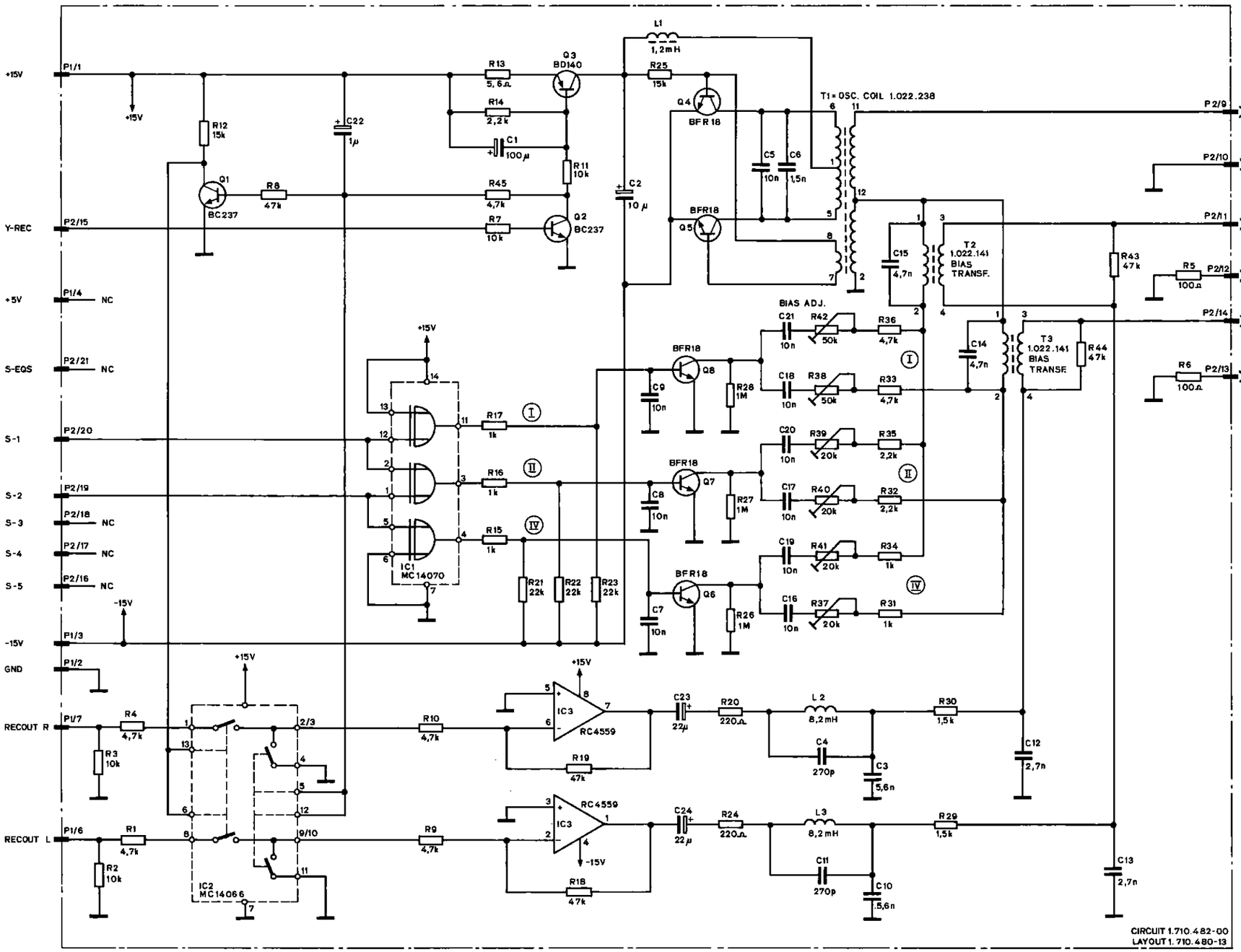
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....29	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R....30	57.11.4152	1.5 kOhm	5%, 0.25W, CF	
	R....31	57.11.4561	560 Ohm	5%, 0.25W, CF	
	R....32	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....33	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R....34	57.11.4561	560 Ohm	5%, 0.25W, CF	
	R....35	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....36	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	R....37	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....38	58.19.0503	50 kOhm	20%, 0.15W, Pot, Lin	
	R....39	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....40	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....41	58.19.0203	20 kOhm	20%, 0.15W, Pot, Lin	
	R....42	58.19.0503	50 kOhm	20%, 0.15W, Pot, Lin	
	R....43	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....44	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....45	57.11.4472	4.7 kOhm	5%, 0.25W, CF	
	T.....1	1.022.238.00		Osc.Coil A/C	St
	T.....2	1.022.141.00		HF-Transf.	St
	T.....3	1.022.141.00		HF-Transf.	St

Cer=Ceramic, El=Electrolytic,
PC=Polycarb., PE=Polyester, CF=Carbon Film,
MANUFACTURER: TI=TEXAS INSTRUMENTS, M=MOTOROLA, F=FAIRCHILD,
SGS=SGS-ATES, St=STUDER

ORIG 83/08/23

S T U D E R (00) 83/08/23 LU OSCILLATOR A/C 1.710.482.00 PAGE 3

OSCILLATOR PCB 1.710.480–00/–81 "ESE"
OSCILLATOR PCB A/C 1.710.482–00 "ESE"



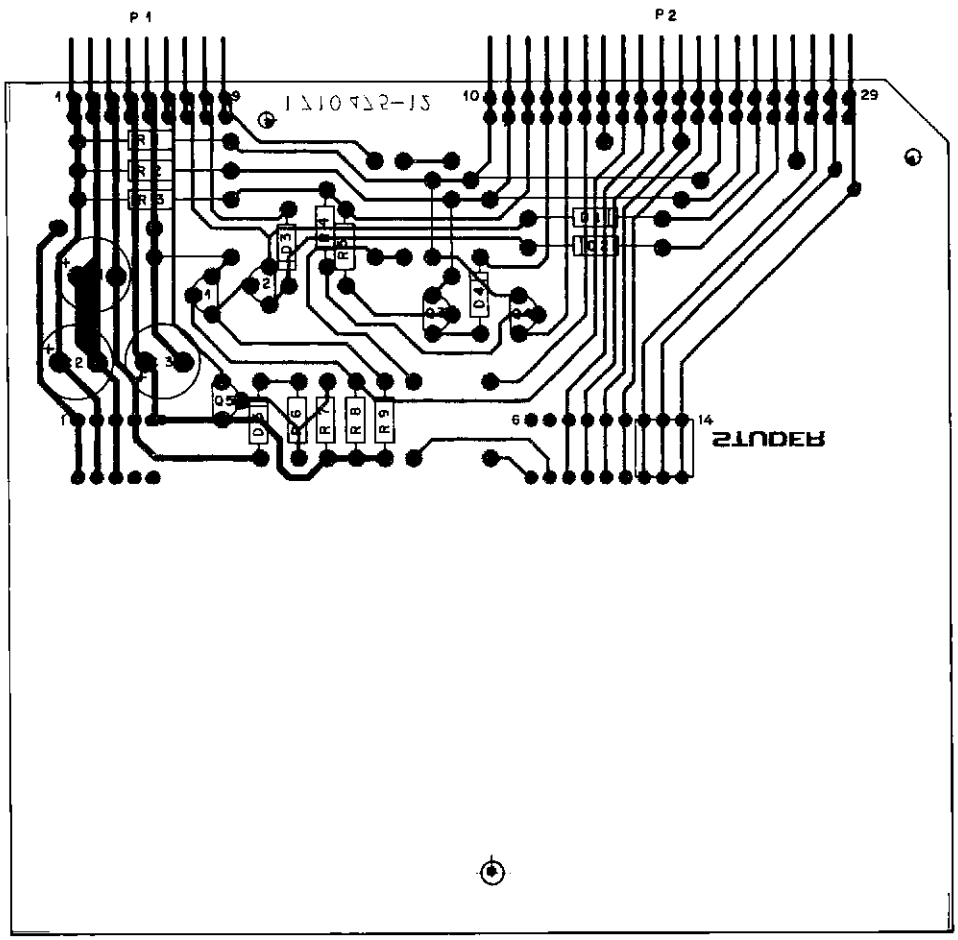
VERSION 1.710.480–81:
T1 = 1.022.205
C6 = 2.7n
C3/C10 = 3.3n
R20/R24 = 390

VERSION 1.710.480–00:
C22 = MISSING
R45 = REPLACED BY WIRE BRIDGE

1.710.480–00/–81 VALID FOR UNITS EQUIPPED WITH HEAD ASSEMBLY 1.710.190
1.710.482–00 VALID FOR UNITS EQUIPPED WITH HEAD ASSEMBLY 1.710,191

PAGE 1 OF 1
SC 1.710.482.00
B710 MKII CASSETTE TAPE DECK
OSZILLATOR A/C
STUDER
0 10.11.83 Lu.

AUDIO LOGIC CONTROL PCB 1.710.475



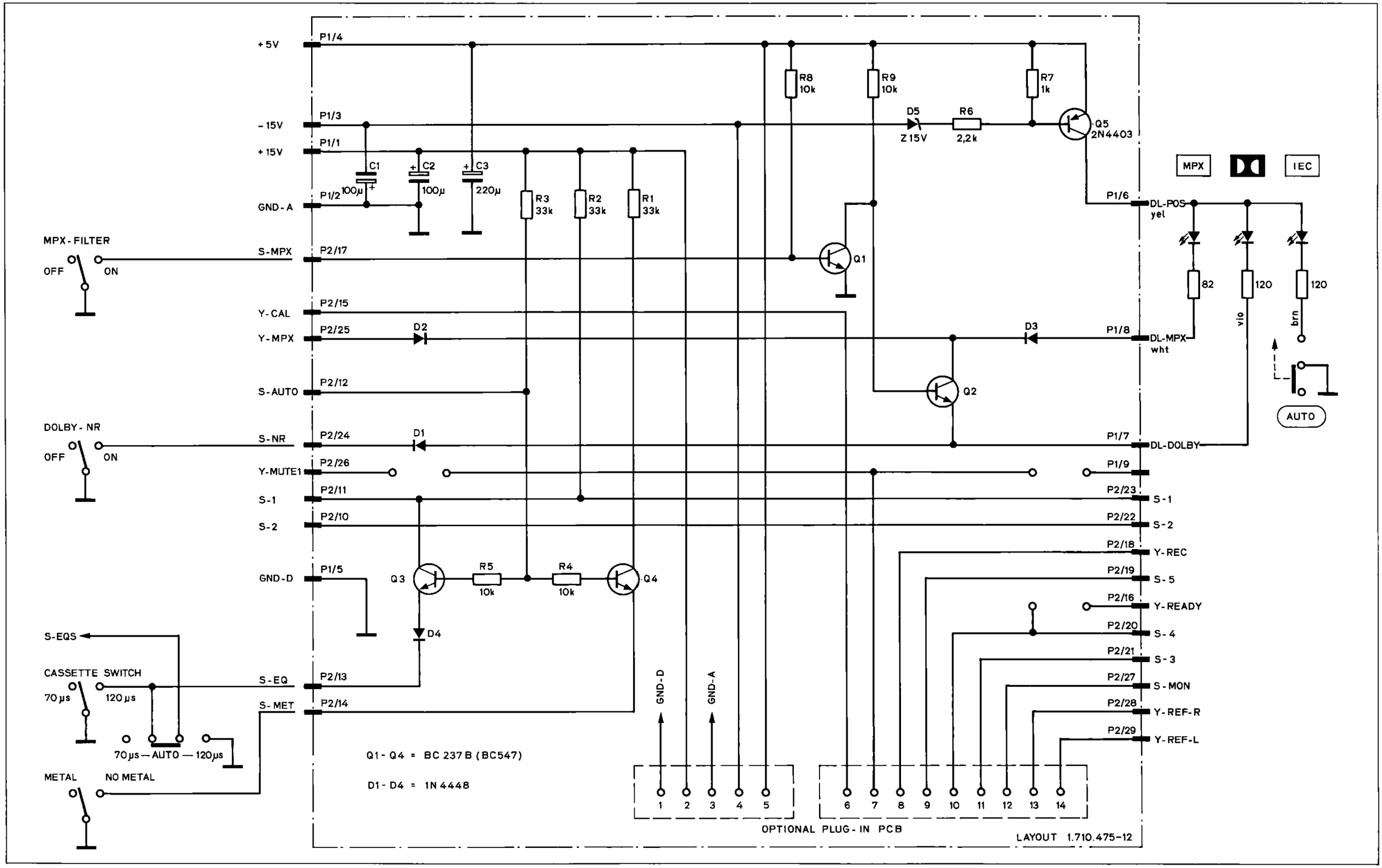
IND.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C	1	59.22.4101	100 uF	-10%, 16V	EI
C	2	59.22.4101	100 uF	-10%, 16V	EI
C	3	59.22.2221	220 uF	-10%, 6.3V	EI
D	1	50.04.0125	1N 4448		Si
D	2	50.04.0125	1N 4448		Si
D	3	50.04.0125	1N 4448		Si
D	4	50.04.0125	1N 4448		Si
D	5	50.04.1119	Z 15V	5% 0.4OW	
P	1	54.01.0220	9-Pole	Pin-Strip	AMP
P	2	54.01.0261	2C-Pole	Pin-Strip	AMP
Q	1	50.03.0436	BC 237		NPN
Q	2	50.03.0436	BC 237		NPN
Q	3	50.03.0436	BC 237		NPN
Q	4	50.03.0436	BC 237		NPN
Q	5	50.03.0351	2N 4403	BC 327-25	PNP
R	1	57.11.4333	33 kOhm	5%, 0.25W, CF	
R	2	57.11.4333	33 kOhm	5%, 0.25W, CF	
R	3	57.11.4333	33 kOhm	5%, 0.25W, CF	
R	4	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	5	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	6	57.11.4222	2.2kOhm	5%, 0.25W, CF	
R	7	57.11.4102	1 kOhm	5%, 0.25W, CF	
R	8	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	9	57.11.4103	10 kOhm	5%, 0.25W, CF	

EI=Electrolytic,
CF=Carbon Film, Si=Silicon,

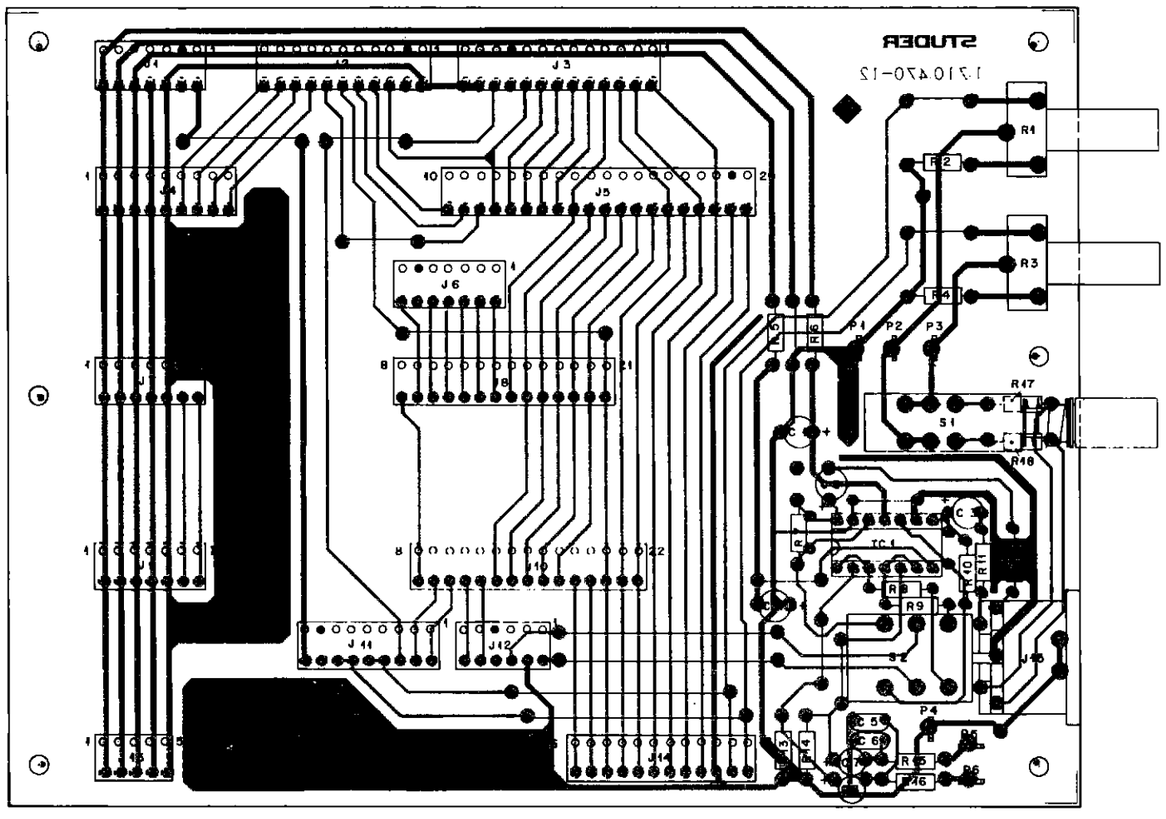
CRIG 80/12/10

S T U D E R 81/02/27 RH AUDIO LOGIC CONTROL 1.710.475-00 PAGE 1

AUDIO LOGIC CONTROL PCB 1.710.475



INTERCONNECTION PCB 1.710.470



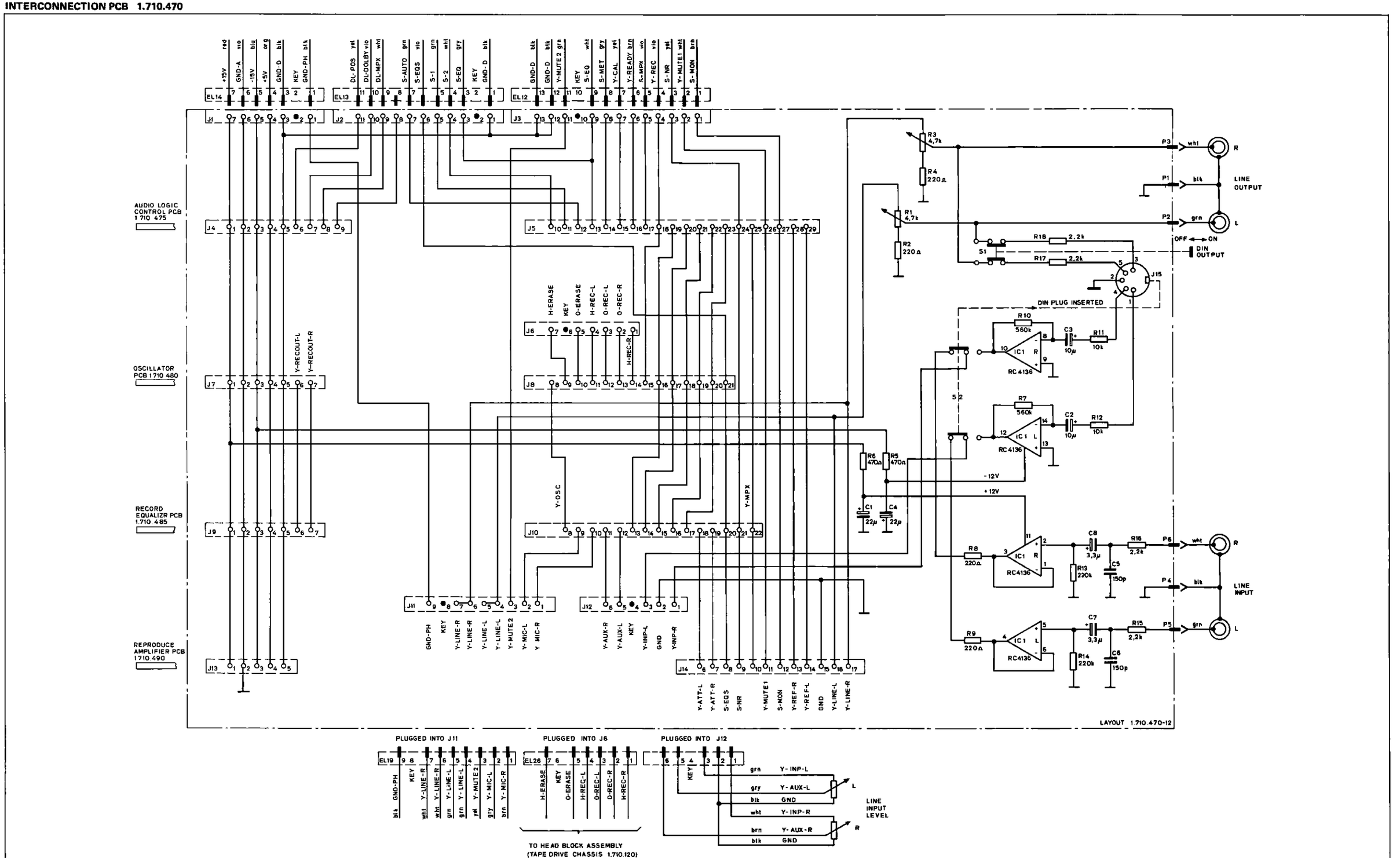
IND.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C	1	59.22.5220	22 uF	-10%, 25V El	
C	2	59.30.6339	3.3 uF	-20%, 25V Ta	
C	3	59.30.6339	3.3 uF	-20%, 25V Ta	
C	4	59.22.5220	22 uF	-10%, 25V El	
C	5	59.32.1151	150 pF	20%, 25V Cer	
C	6	59.32.1151	150 pF	20%, 25V Cer	
C	7	59.30.6339	3.3 uF	-20%, 25V Ta	
C	8	59.30.6339	3.3 uF	-20%, 25V Ta	
J	1	54.01.0218	7-Pole	CIS-Socket-Strip	
J	2	54.01.0291	11-Pole	CIS-Socket-Strip	
J	3	54.01.0292	13-Pole	CIS-Socket-Strip	
J	4	54.01.0217	9-Pole	CIS-Socket-Strip	
J	5	54.01.0226	20-Pole	CIS-Socket-Strip	
J	6	54.01.0218	7-Pole	CIS-Socket-Strip	
J	7	54.01.0218	7-Pole	CIS-Socket-Strip	
J	8	54.01.0293	14-Pole	CIS-Socket-Strip	
J	9	54.01.0218	7-Pole	CIS-Socket-Strip	
J	10	54.01.0219	15-Pole	CIS-Socket-Strip	
J	11	54.01.0217	9-Pole	CIS-Socket-Strip	
J	12	54.01.0216	6-Pole	CIS-Socket-Strip	
J	13	54.01.0288	5-Pole	CIS-Socket-Strip	
J	14	54.01.0215	12-Pole	CIS-Socket-Strip	
J	15	54.02.0321	5-Pole	DIN-Socket	
IC	1	50.05.0232	RC 4136	Dual Op. Amp.	Ray, Ti
R	1	1.710.470.02	4.7 kOhm	Pot. Meter	S
R	2	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	3	1.710.470.02	4.7 kOhm	Pot. Meter	S
R	4	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	5	57.11.4471	470 Ohm	5%, 0.25W, CF	
R	6	57.11.4471	470 Ohm	5%, 0.25W, CF	
R	7	57.11.4364	560 kOhm	5%, 0.25W, CF	
R	8	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	9	57.11.4221	220 Ohm	5%, 0.25W, CF	
R	10	57.11.4564	560 kOhm	5%, 0.25W, CF	

IND.	PCS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R	11	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	12	57.11.4103	10 kOhm	5%, 0.25W, CF	
R	13	57.11.4224	220 kOhm	5%, 0.25W, CF	
R	14	57.11.4224	220 kOhm	5%, 0.25W, CF	
R	15	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
R	16	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
R	17	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
R	18	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
S	1	1.710.470.01	2x U	Pushbutton-switch	S
S	2	55.01.0306	2x U	Plug-actuated slide-switch	S

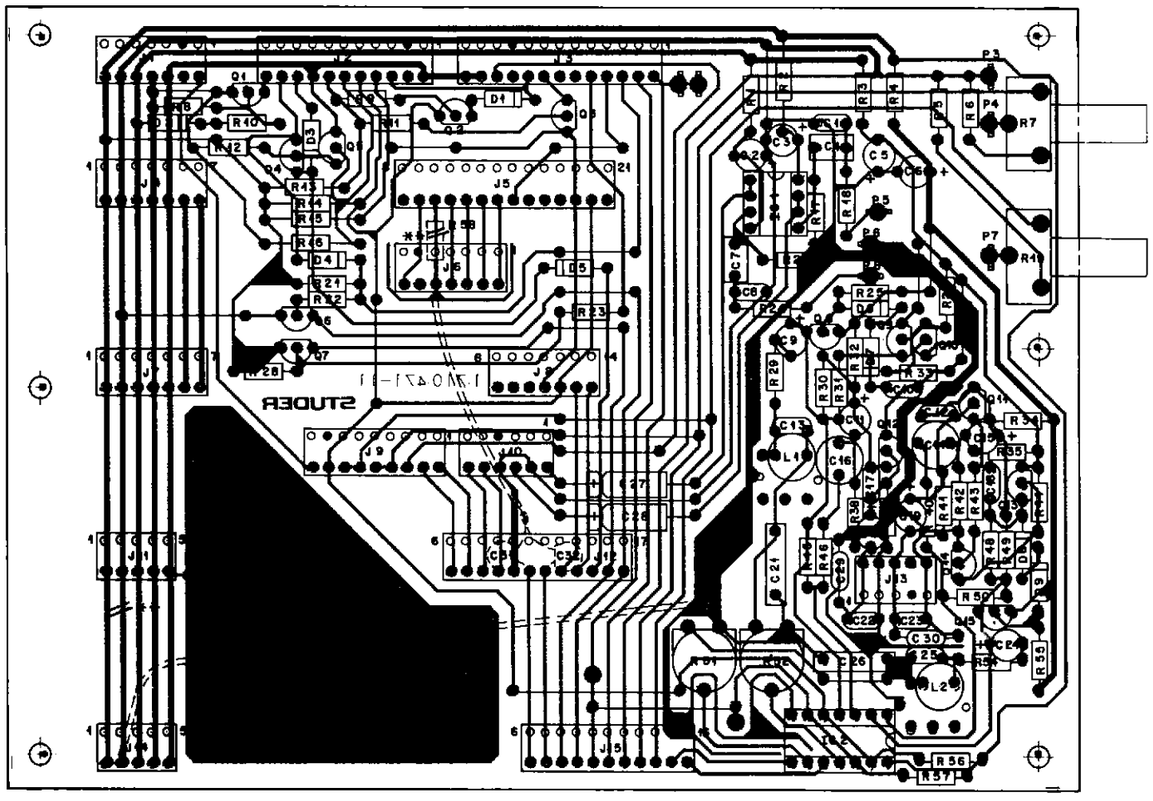
El=Electrolytic, Ta=Tantalum,
CF=Carbon Film,
MANUFACTURER: Ray= Raytheon, S=STUDER, Ti=TEXAS INSTRUMENTS,

CPIC 81/02/24

INTERCONNECTION PCB 1.710.470



INTERCONNECTION PCB (WITH REPRODUCE EQUALIZATION) 1.710.471–00



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	C.....1	59.32.1151	150 pF	20%, 25V,	Cer
	C.....2	59.22.5220	22 uF	-10%, 25V,	El
	C.....3	59.22.5220	22 uF	-10%, 25V,	El
	C.....4	59.06.0334	330 nF	10%, 25V,	PE
(00)	C.....5	59.22.3470	47 uF	-10%, 10V,	El
(02)	C.....5	59.22.3121	100 uF	-10%, 10V,	El
(00)	C.....6	59.22.3470	47 uF	-10%, 10V,	El
(02)	C.....6	59.22.3121	100 uF	-10%, 10V,	El
	C.....7	59.06.0334	330 nF	10%, 25V,	PE
	C.....8	59.32.1151	150 pF	20%, 25V,	Cer
	C.....9	59.22.6100	10 uF	-10%, 25V,	El
	C....10	59.32.0100	10 pF	20%, 25V,	Cer
	C....11	59.22.3470	47 uF	-10%, 10V,	El
	C....12	59.32.1151	150 pF	20%, 25V,	Cer
	C....13	59.34.4271	270 pF	5%, 25V,	Cer
	C....14	59.05.2103	10 nF	2.5%, 25V,	PP
	C....15	59.22.3470	47 uF	-10%, 10V,	El
	C....16	59.05.2103	10 nF	2.5%, 25V,	PP
	C....17	59.32.1151	150 pF	20%, 25V,	Cer
	C....18	59.32.0100	10 pF	20%, 25V,	Cer
	C....19	59.22.3470	47 uF	-10%, 10V,	El
	C....20	59.22.3470	47 uF	-10%, 10V,	El
	C....21	59.11.4472	4.7 nF	2.5%, 25V,	PC
	C....22	59.34.2151	150 pF	5%, 25V,	Cer
	C....23	59.34.2151	150 pF	5%, 25V,	Cer
	C....24	59.22.6100	10 uF	-10%, 25V,	Cer
	C....25	59.34.4271	270 pF	5%, 25V,	Cer
	C....26	59.11.4472	4.7 nF	2.5%, 25V,	PC
(01)	C....27	59.25.4100	10 uF	-10%, 25V,	El
(01)	C....28	59.25.4100	10 uF	-10%, 25V,	El
(02)	C....29	59.34.2151	150 pF	20%, 25V,	Cer
(02)	C....30	59.34.2151	150 pF	20%, 25V,	Cer
(02)	C....31	59.32.1330	33 pF	20%, 25V,	Cer
(02)	C....32	59.32.1330	33 pF	20%, 25V,	Cer
	D.....1	50.04.0125	1N4448		Si any
	D.....2	50.04.1119	Z 15V	5%,400mW	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	D.....3	50.04.0125	1N4448	Si	any
	D.....4	50.04.0125	1N4448	Si	any
	D.....5	50.04.0125	1N4448	Si	any
	D.....6	50.04.0125	1N4448	Si	any
	D.....7	50.04.0125	1N4448	Si	any
	D.....8	50.04.0125	1N4448	Si	any
	D.....9	50.04.0125	1N4448	Si	any
	IC....1	50.09.0107	NE 4559	Dual Op. Amp.	Ray/TI
	IC....2	50.07.0066	NE 14066	CMOS	Ay TI
	J.....1	54.31.0218	7-Pole	CIS-Socket-Strip	
	J.....2	54.01.0291	11-Pole	CIS-Socket-Strip	
	J.....3	54.01.0292	13-Pole	CIS-Socket-Strip	
	J.....4	54.01.0218	7-Pole	CIS-Socket-Strip	
	J.....5	54.01.0293	14-Pole	CIS-Socket-Strip	
	J.....6	54.31.0218	7-Pole	CIS-Socket-Strip	
	J.....7	54.01.0218	7-Pole	CIS-Socket-Strip	
	J.....8	54.01.0218	7-Pole	CIS-Socket-Strip	
	J.....9	54.01.0217	9-Pole	CIS-Socket-Strip	
	J....10	54.01.0216	6-Pole	CIS-Socket-Strip	
	J....11	54.01.0288	5-Pole	CIS-Socket-Strip	
	J....12	54.01.0215	12-Pole	CIS-Socket-Strip	
	J....13	54.01.0288	5-Pole	CIS-Socket-Strip	
	J....14	54.01.0288	5-Pole	CIS-Socket-Strip	
	J....15	54.01.0291	11-Pole	CIS-Socket-Strip	
	L.....1	62.02.1822	L 8.2MH	5%,	
	L.....2	62.02.1822	L 8.2MH	5%,	
	P.....1	54.02.0320		AMP Flat-pin	
	P.....2	54.02.0320		AMP Flat-pin	
	P.....3	54.02.0320		AMP Flat-pin	
	P.....4	54.02.0320		AMP Flat-pin	
	P.....5	54.02.0320		AMP Flat-pin	
	P.....6	54.02.0320		AMP Flat-pin	
	P.....7	54.32.0320		AMP Flat-pin	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	P.....8	54.02.0320		AMP Flat-pin	
(00)	Q.....1	50.03.0496	BC 560	PNP	Si
(03)	Q.....1	50.03.0625	BC 327	PNP	Mot
	Q.....2	50.03.0497	BC 550	NPN	Si
	Q.....3	50.03.0497	BC 550	NPN	Si
	Q.....4	50.03.0497	BC 550	NPN	Si
	Q.....5	50.03.0497	BC 550	NPN	Si
	Q.....6	50.03.0497	BC 550	NPN	Si
	Q.....7	50.03.0496	BC 560	PNP	Si
	Q.....8	50.03.0497	BC 550	NPN	Si
	Q.....9	50.03.0497	BC 550	NPN	Si
	Q....10	50.03.0497	BC 550	NPN	Si
	Q....11	50.03.0496	BC 560	PNP	Si
	Q....12	50.03.0496	BC 560	PNP	Si
	Q....13	50.03.0497	BC 550	NPN	Si
	Q....14	50.03.0497	BC 550	NPN	Si
	Q....15	50.03.0497	BC 550	NPN	Si
	R.....1	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....2	57.11.4102	1 kOhm	5%, 0.25W, CF	
(00)	R.....3	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
(02)	R.....3	57.11.4272	2.7 kOhm	5%, 0.25W, CF	
(00)	R.....4	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
(02)	R.....4	57.11.4272	2.7 kOhm	5%, 0.25W, CF	
	R.....5	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R.....6	57.11.4221	220 Ohm	5%, 0.25W, CF	
	R.....7	1.710.470.02	4.7 kOhm	POT. METER	S
	R.....8	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R.....9	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....10	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....11	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....12	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....13	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R....14	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R....15	57.11.4333	33 kOhm	5%, 0.25W, CF	
	R....16	57.11.4103	10 kOhm	5%, 0.25W, CF	

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
	R....17	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R....18	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....19	1.710.470.02	4.7 kOhm	POT. METER	S
	R....20	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R....21	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....22	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....23	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....24	57.11.4222	2.2 kOhm	5%, 0.25W, CF	
	R....25	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....26	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....27	57.11.4273	27 kOhm	5%, 0.25W, CF	
	R....28	57.11.4333	33 kOhm	5%, 0.25W, CF	
(02)	R....29	57.11.4471	470 Ohm	5%, 0.25W, CF	
(02)	R....29	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
(00)	R....30	57.11.4274	270 kOhm	5%, 0.25W, CF	
(02)	R....30	57.11.4334	330 kOhm	5%, 0.25W, CF	
	R....31	57.11.4331	330 Ohm	5%, 0.25W, CF	
	R....32	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R....33	57.11.4132	1 kOhm	5%, 0.25W, CF	
	R....34	57.11.4224	220 kOhm	5%, 0.25W, CF	
	R....35	57.11.4273	27 kOhm	5%, 0.25W, CF	
(03)	R....36	57.11.4221	220 Ohm	5%, 0.25W, CF	
(02)	R....36			Replaced by C27	
(00)	R....37	57.11.4221	220 Ohm	5%, 0.25W, CF	
(02)	R....37			Replaced by C28	
	R....38	57.11.4181	180 Ohm	5%, 0.25W, CF	
	R....39	57.11.4134	100 kOhm	5%, 0.25W, CF	
	R....40	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R....41	57.11.4104	100 kOhm	5%, 0.25W, CF	
	R....42	57.11.4181	180 Ohm	5%, 0.25W, CF	
	R....43	57.11.4102	1 kOhm	5%, 0.25W, CF	
	R....44	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....45	57.11.3632	4.3 kOhm	1%, 0.25W, CF	
	R....46	57.39.6491	6.49 kOhm	1%, 0.25W, MF	
	R....47	57.11.4224	220 kOhm	5%, 0.25W, CF	
(00)	R....47			Replaced by C29	
(02)	R....48	57.11.4331	330 Ohm	5%, 0.25W, CF	

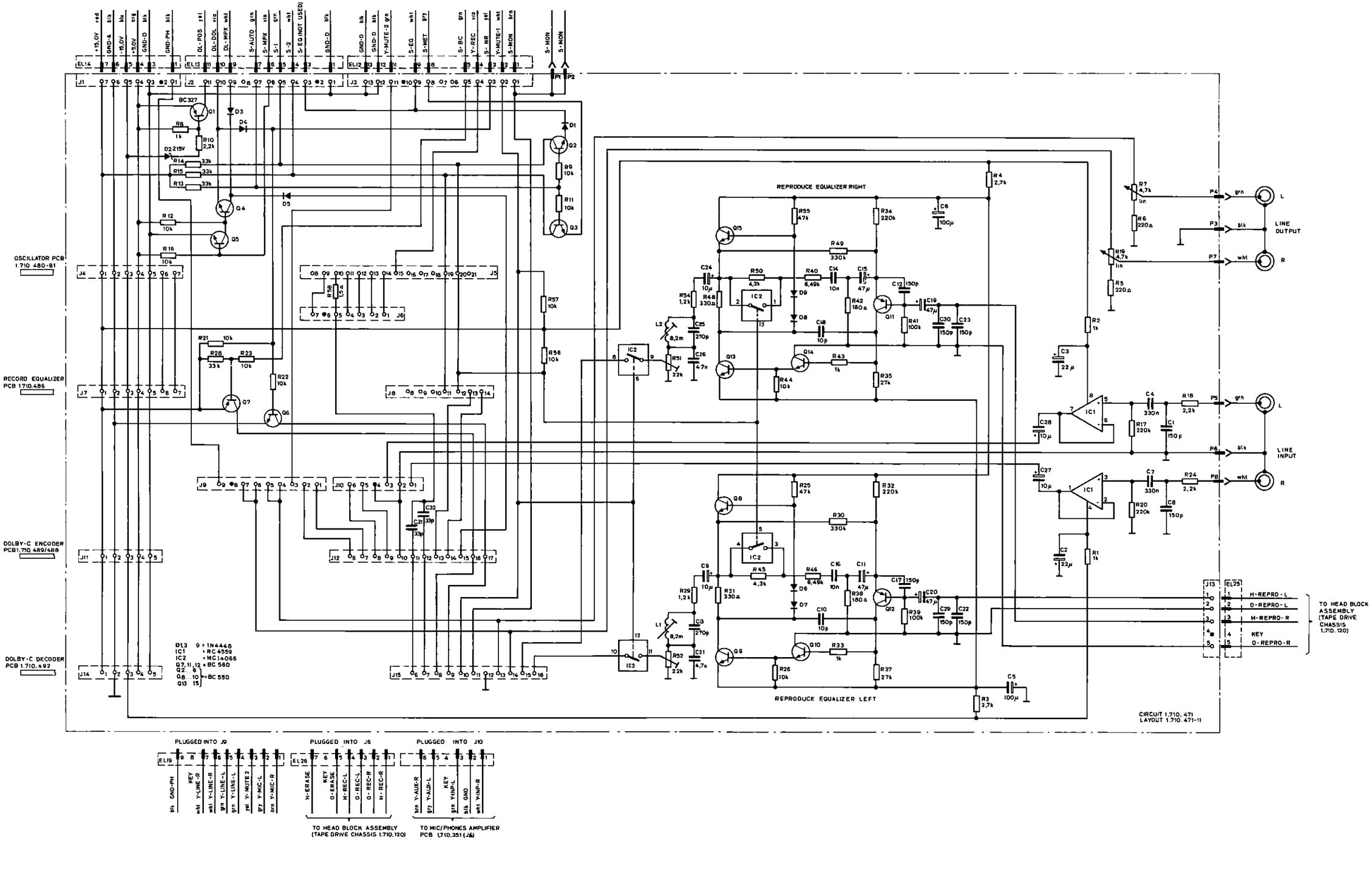
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
(00)	R....49	57.11.4274	270 kOhm	5%, 0.25W, CF	
(02)	R....49	57.11.4334	330 kOhm	5%, 0.25W, CF	
	R....50	57.11.3632	4.3 kOhm	1%, 0.25W, MF	
	R....51	58.02.5223	22 kOhm	20%, 0.10W, PCF,LIN	
	R....52	58.02.5223	22 kOhm	20%, 0.10W, PCF,LIN	
(00)	R....53	57.11.4224	220 kOhm	5%, 0.25W, CF	
(02)	R....53			Replaced by C30	
(00)	R....54	57.11.4471	470 Ohm	5%, 0.25W, CF	
(02)	R....54	57.11.4122	1.2 kOhm	5%, 0.25W, CF	
	R....55	57.11.4473	47 kOhm	5%, 0.25W, CF	
	R....56	57.11.4103	10 kOhm	5%, 0.25W, CF	
	R....57	57.11.4103	10 kOhm	5%, 0.25W, CF	
(02)	R....58	57.11.4159	1.5 Ohm	5%, 0.25W, MF	

El=Electrolytic, Ta=Tantalum, Cer=Ceramic, Et=Electrolytic,
Pc=Polyester, PP=Polypropylene, PC=Polycarbonate,
CF=Carbon Film, MF=Metal Film,

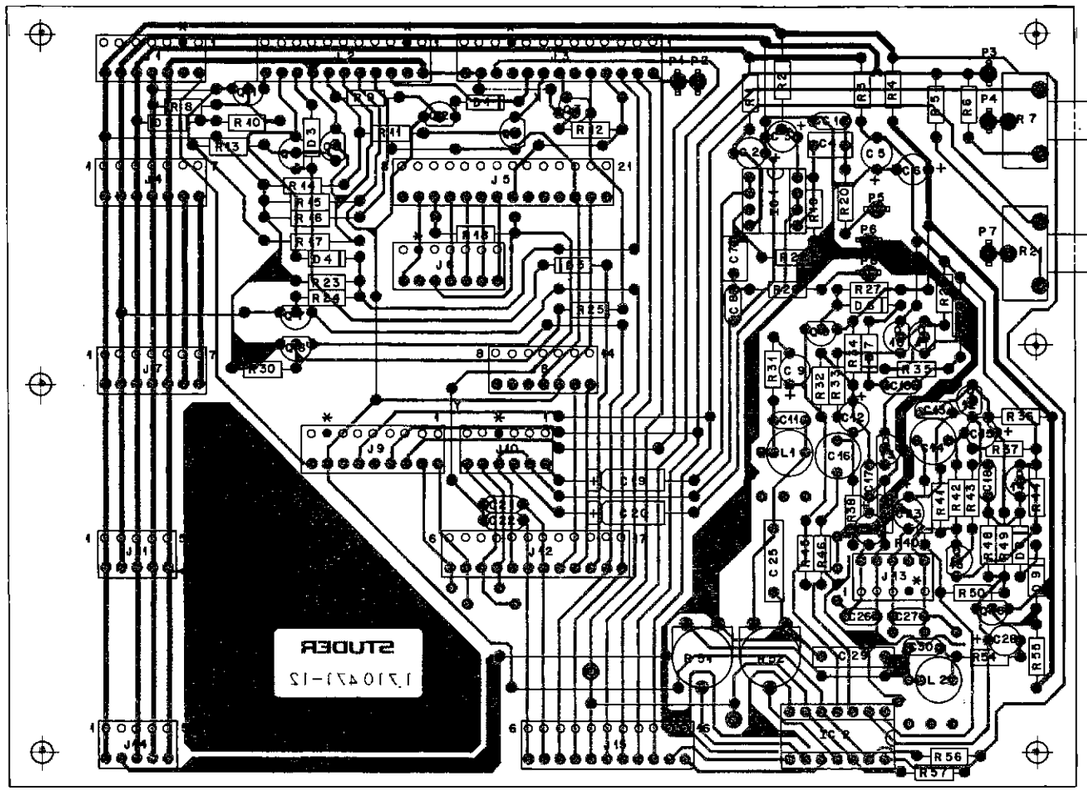
MANUFACTURER: Ray=Raytheon, S=STUDER, Ti=TEXAS INSTRUMENTS,
Mot=Motorola

DRIG 82/01/07 (01) 82/03/10 (02) 82/05/03 (03) 82/10/22

INTERCONNECTION PCB (WITH REPRODUCE EQUALIZATION) 1.710.471–00



INTERCONNECTION PCB (WITH REPRODUCE EQUALIZATION) 1.710.471–81 "ESE"
INTERCONNECTION PCB (WITH REPRODUCE EQUALIZATION) A/C 1.710.472–00 "ESE"



IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
C.....1		59.32.1151	150 pF	20%, 25V, Cer	
C.....2		59.22.5220	22 uF	-10%, 25V, El	
C.....3		59.22.5220	22 uF	-10%, 25V, El	
C.....4		59.06a.0334	330 nF	10%, 25V, PE	
C.....5		59.22.3101	100 uF	-10%, 10V, El	
C.....6		59.22.3101	100 uF	-10%, 10V, El	
C.....7		59.06a.0334	330 nF	10%, 25V, PE	
C.....8		59.32.1151	150 pF	20%, 25V, Cer	
C.....9		59.22.6100	10 uF	-10%, 25V, El	
C.....10		59.32.0100	10 pF	20%, 25V, Cer	
C.....11		59.34.4271	270 pF	5%, 25V, Cer	
C.....12		59.22.3470	47 uF	-10%, 10V, El	
C.....13		59.32.1151	150 pF	20%, 25V, Cer	
C.....14		59.05.2103	10 nF	2.5%, 25V, PP	
C.....15		59.22.3470	47 uF	-10%, 10V, El	
C.....16		59.05.2103	10 nF	2.5%, 25V, PP	
C.....17		59.32.1151	150 pF	20%, 25V, Cer	
C.....18		59.32.0100	10 pF	20%, 25V, Cer	
C.....19		59.25.4100	10 uF	-10%, 25V, El	
C.....20		59.25.4100	10 uF	-10%, 25V, El	
C.....21		59.32.1330	33 pF	20%, 25V, Cer	
C.....22		59.32.1330	33 pF	20%, 25V, Cer	
C.....23		59.22.3470	47 uF	-10%, 10V, El	
C.....24		59.22.3470	47 uF	-10%, 10V, El	
C.....25		59.11.4472	4.7 nF	2.5%, 25V, PC	
C.....26		59.34.4271	270 pF	5%, 25V, Cer	
C.....27		59.34.4271	270 pF	5%, 25V, Cer	
C.....28		59.22.6100	10 uF	-10%, 25V, El	
C.....29		59.11.4472	4.7 nF	2.5%, 25V, PC	
C.....30		59.34.4271	270 pF	5%, 25V, Cer	
D.....1		50.04.0125	1N4448	SI	any
D.....2		50.04.1119	Z 15V	5%,400mW	
D.....3		50.04.0125	1N4448	SI	any
D.....4		50.04.0125	1N4448	SI	any
D.....5		50.04.0125	1N4448	SI	any
D.....6		50.04.0125	1N4448	SI	any

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
D.....7		50.04.0125	1N4448	SI	any
D.....8		50.04.0125	1N4448	SI	any
D.....9		50.04.0125	1N4448	SI	any
IC....1		50.09.0107	RC 4559	Dual Op. Amp.	Ra:TI
IC....2		50.07.0066	MC 14066	HEF 4066 CMOS "ESE"	Mot,Ph
J.....1		54.01.0218	7-Pole	CIS-Socket-Strip	AMP
J.....2		54.01.0291	11-Pole	CIS-Socket-Strip	AMP
J.....3		54.01.0292	13-Pole	CIS-Socket-Strip	AMP
J.....4		54.01.0218	7-Pole	CIS-Socket-Strip	AMP
J.....5		54.01.0293	14-Pole	CIS-Socket-Strip	AMP
J.....6		54.01.0218	7-Pole	CIS-Socket-Strip	AMP
J.....7		54.01.0219	7-Pole	CIS-Socket-Strip	AMP
J.....8		54.01.0218	7-Pole	CIS-Socket-Strip	AMP
J.....9		54.01.0217	9-Pole	CIS-Socket-Strip	AMP
J.....10		54.01.0216	6-Pole	CIS-Socket-Strip	AMP
J.....11		54.01.0288	5-Pole	CIS-Socket-Strip	AMP
J.....12		54.01.0215	12-Pole	CIS-Socket-Strip	AMP
J.....13		54.01.0288	5-Pole	CIS-Socket-Strip	AMP
J.....14		54.01.0288	5-Pole	CIS-Socket-Strip	AMP
J.....15		54.01.0291	11-Pole	CIS-Socket-Strip	AMP
L.....1		62.02.1822	L 8.2mH	5%,	
L.....2		62.02.1822	L 8.2mH	5%,	
P.....1		54.02.0320		Flat-pin	AMP
P.....2		54.02.0320		Flat-pin	AMP
P.....3		54.02.0320		Flat-pin	AMP
P.....4		54.02.0320		Flat-pin	AMP
P.....5		54.02.0320		Flat-pin	AMP
P.....6		54.02.0320		Flat-pin	AMP
P.....7		54.02.0320		Flat-pin	AMP
P.....8		54.02.0320		Flat-pin	AMP
Q.....1		50.03.0351	BC 327	PNP	Mot
Q.....2		50.03.0497	BC 550	NPN	Sie

IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
Q.....3		50.03.0497	BC 550	NPN	Sie
Q.....4		50.03.0497	BC 550	NPN	Sie
Q.....5		50.03.0497	BC 550	NPN	Sie
Q.....6		50.03.0497	BC 550	NPN	Sie
Q.....7		50.03.0497	BC 550	NPN	Sie
Q.....8		50.03.0496	BC 560	PNP	Sie
Q.....9		50.03.0497	BC 550	NPN	Sie
Q.....10		50.03.0497	BC 550	NPN	Sie
Q.....11		50.03.0497	BC 550	NPN	Sie
Q.....12		50.03.0496	BC 560	PNP	Sie
Q.....13		50.03.0496	BC 560	PNP	Sie
Q.....14		50.03.0497	BC 550	NPN	Sie
Q.....15		50.03.0497	BC 550	NPN	Sie
Q.....16		50.03.0497	BC 550	NPN	Sie
R.....1		57.11.4102	1 kOhm	5%, 0.25W, CF	
R.....2		57.11.4102	1 kOhm	5%, 0.25W, CF	
R.....3		57.11.4272	2.7 kOhm	5%, 0.25W, CF	
R.....4		57.11.4272	2.7 kOhm	5%, 0.25W, CF	
R.....5		57.11.4221	220 Ohm	5%, 0.25W, CF	
R.....6		57.11.4221	220 Ohm	5%, 0.25W, CF	
R.....7		1.710.470.02	4.7 kOhm	POTM. METER	St
R.....8		57.11.4102	1 kOhm	5%, 0.25W, CF	
R.....9		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....10		57.11.4222	2.2 kOhm	5%, 0.25W, CF	
R.....11		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....12		57.11.4333	33 kOhm	5%, 0.25W, CF	
R.....13		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....14		57.11.4333	33 kOhm	5%, 0.25W, CF	
R.....15		57.11.4333	33 kOhm	5%, 0.25W, CF	
R.....16		57.11.4333	33 kOhm	5%, 0.25W, CF	
R.....17		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....18		57.11.4159	1.5 Ohm	5%, 0.25W, MF	
R.....19		57.11.4224	220 kOhm	5%, 0.25W, CF	
R.....20		57.11.4222	2.2 kOhm	5%, 0.25W, CF	
R.....21		1.710.470.02	4.7 kOhm	POTM. METER	St
R.....22		57.11.4224	220 kOhm	5%, 0.25W, CF	

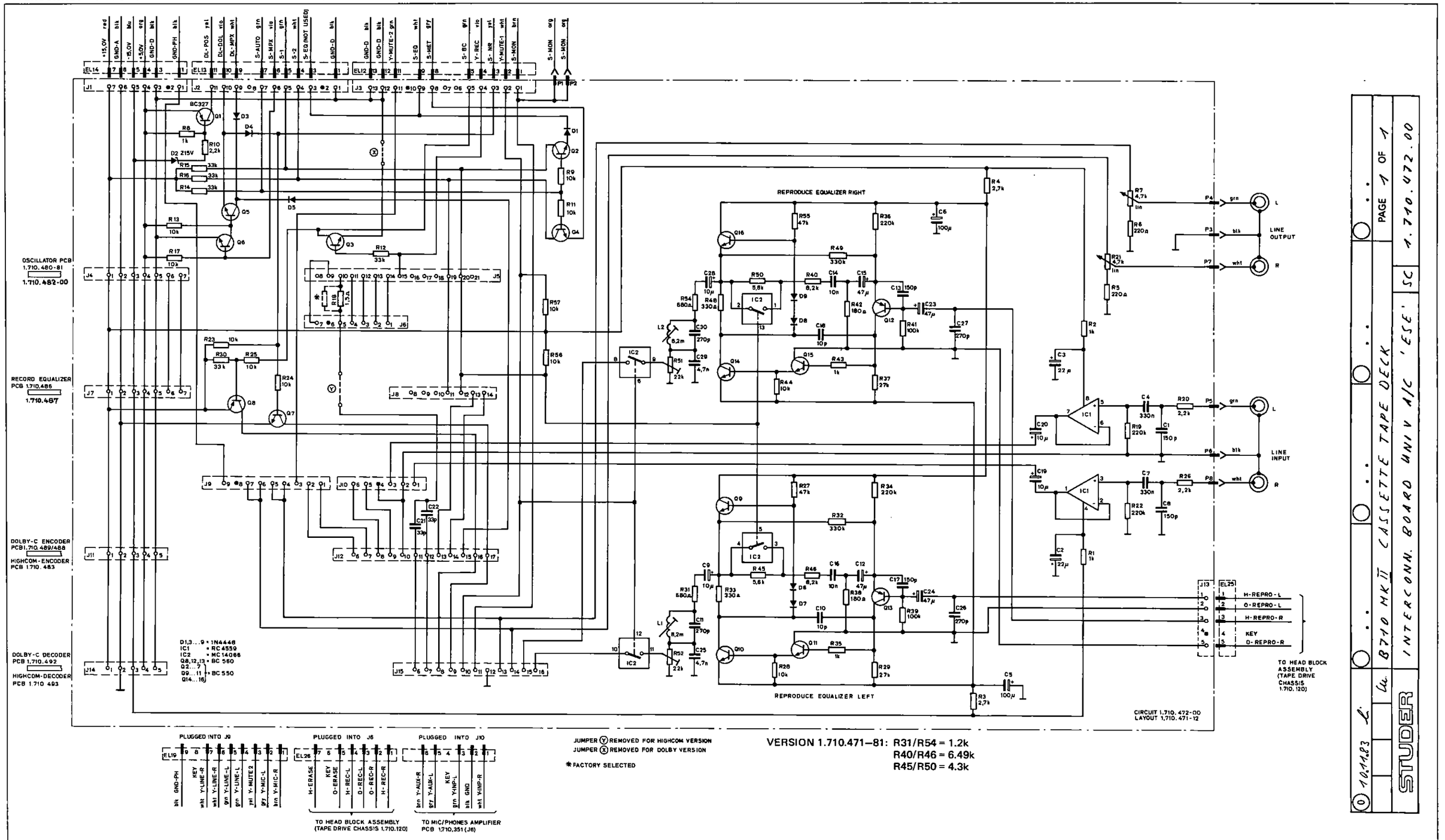
IND.	POS.NO.	PART NO.	VALUE	SPECIFICATIONS / EQUIVALENT	MANUF.
R.....23		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....24		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....25		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....26		57.11.4222	2.2 kOhm	5%, 0.25W, CF	
R.....27		57.11.4473	47 kOhm	5%, 0.25W, CF	
R.....28		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....29		57.11.4273	27 kOhm	5%, 0.25W, CF	
R.....30		57.11.4333	33 kOhm	5%, 0.25W, CF	
R.....31		57.11.4681	680 Ohm	5%, 0.25W, CF	
R.....32		57.11.4334	330 kOhm	5%, 0.25W, CF	
R.....33		57.11.4331	330 Ohm	5%, 0.25W, CF	
R.....34		57.11.4224	220 kOhm	5%, 0.25W, CF	
R.....35		57.11.4102	1 kOhm	5%, 0.25W, CF	
R.....36		57.11.4224	220 kOhm	5%, 0.25W, CF	
R.....37		57.11.4273	27 kOhm	5%, 0.25W, CF	
R.....38		57.11.4181	180 Ohm	5%, 0.25W, CF	
R.....39		57.11.4104	100 kOhm	5%, 0.25W, CF	
R.....40		57.11.4822	8.2 kOhm	2%, 0.25W, MF	
R.....41		57.11.4104	100 kOhm	5%, 0.25W, CF	
R.....42		57.11.4181	180 Ohm	5%, 0.25W, CF	
R.....43		57.11.4102	1 kOhm	5%, 0.25W, CF	
R.....44		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....45		57.11.4562	5.6 kOhm	2%, 0.25W, MF	
R.....46		57.11.4822	8.2 kOhm	2%, 0.25W, MF	
R.....48		57.11.4331	330 Ohm	5%, 0.25W, CF	
R.....49		57.11.4334	330 kOhm	5%, 0.25W, CF	
R.....50		57.11.4562	5.6 kOhm	2%, 0.25W, MF	
R.....51		58.02.5223	22 kOhm	20%, 0.10W, PCF+LIN	
R.....52		58.02.5223	22 kOhm	20%, 0.10W, PCF+LIN	
R.....54		57.11.4681	680 Ohm	5%, 0.25W, CF	
R.....55		57.11.4473	47 kOhm	5%, 0.25W, CF	
R.....56		57.11.4103	10 kOhm	5%, 0.25W, CF	
R.....57		57.11.4103	10 kOhm	5%, 0.25W, CF	

El=Electrolytic, Cer=Ceramic,
PE=Polyester, PP=Polypropylene, PC=Polycarbonate,
CF=Carbon Film, MF=Metal Film,

MANUFACTURER: Mot=MOTOROLA, Ph=PHILIPS, Ra=RAYTHEON,
St=STUDER, Sie=SIEMENS, TI=TEXAS INSTRUMENTS.

DRIG 83/08/23

INTERCONNECTION PCB (WITH REPRODUCE EQUALIZATION) 1.710.471–81 "ESE"
INTERCONNECTION PCB (WITH REPRODUCE EQUALIZATION) A/C 1.710.472–00 "ESE"

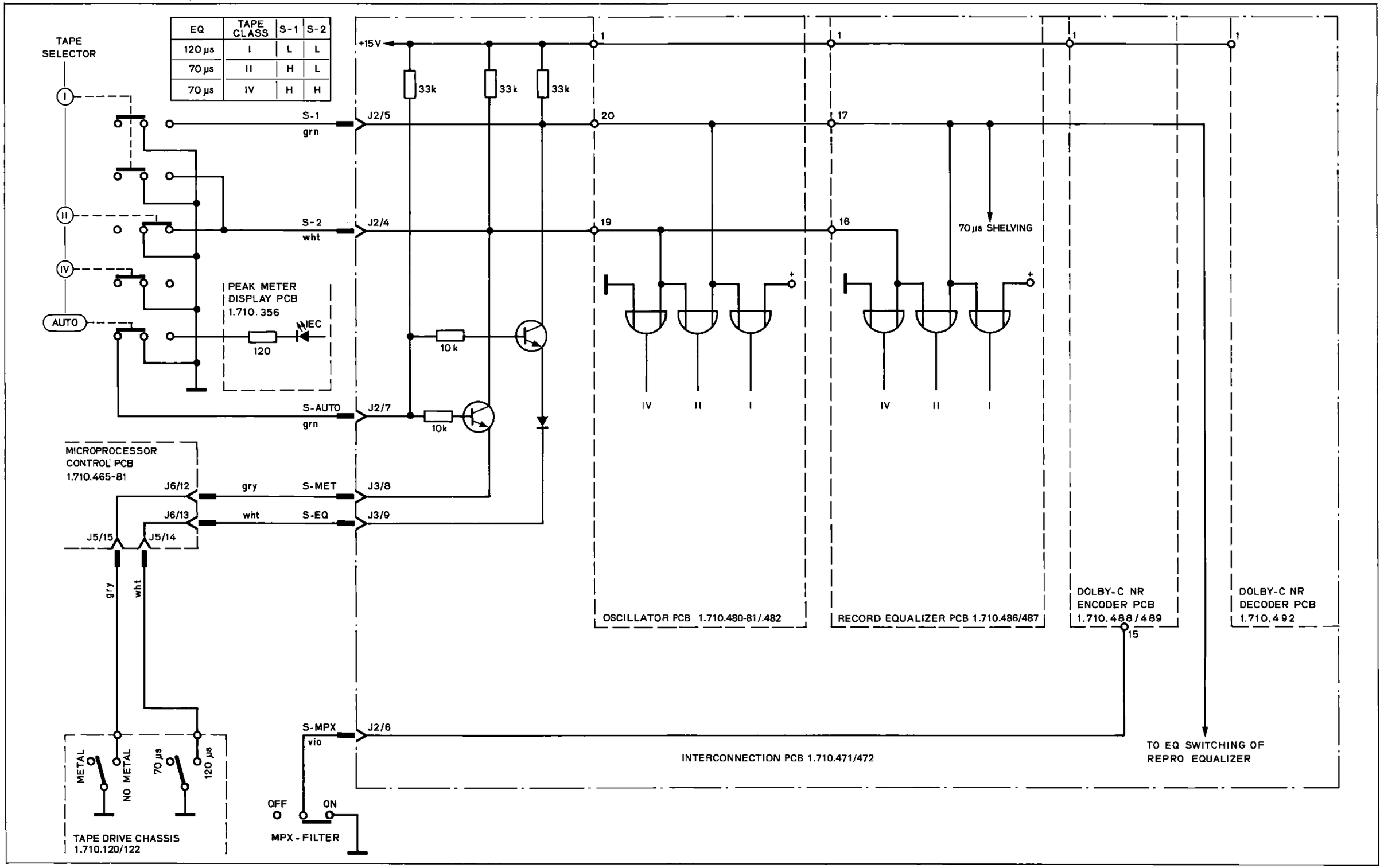


VERSION 1.710.471–81: R31/R54 = 1.2k
R40/R46 = 6.49k
R45/R50 = 4.3k

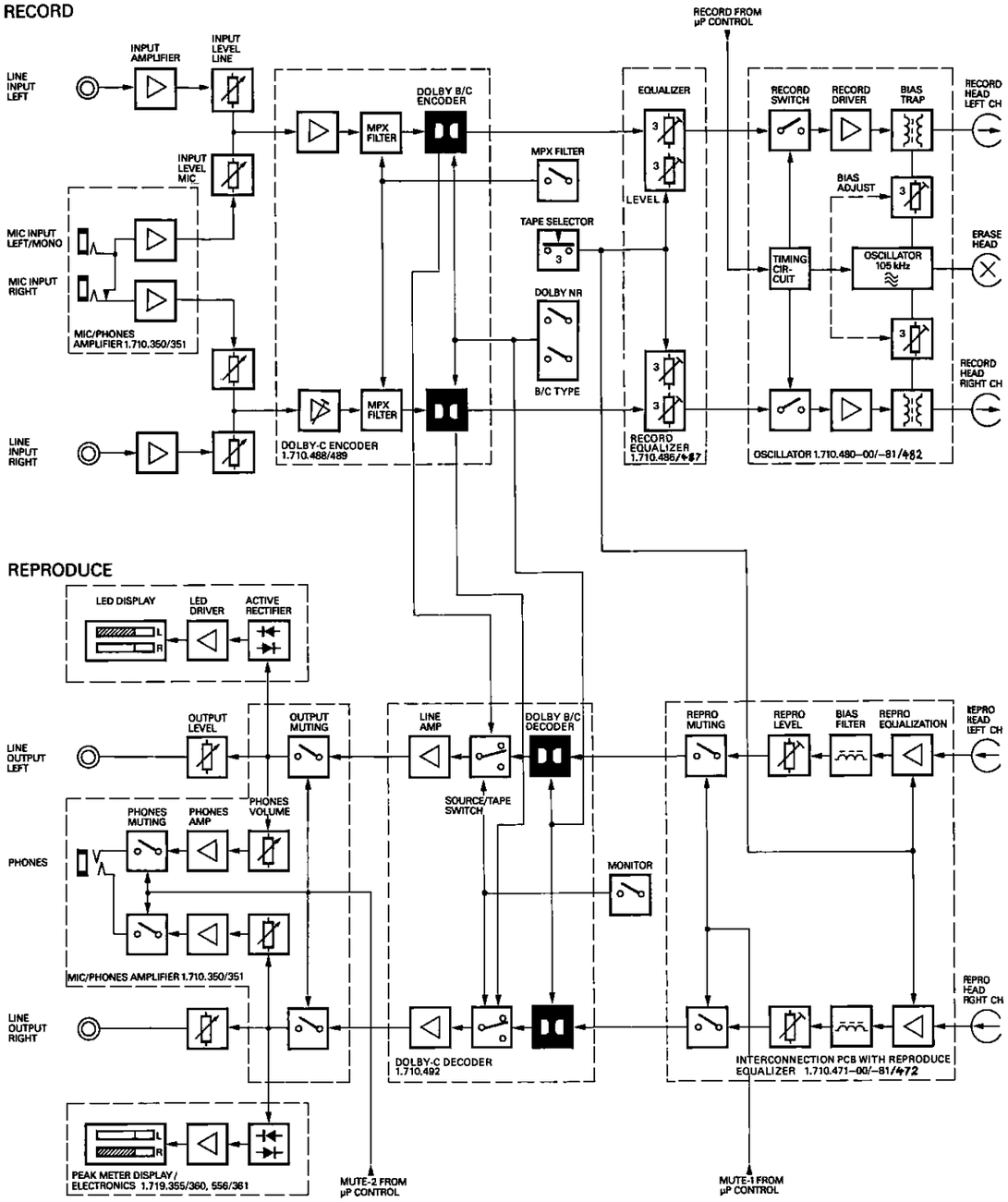
1.710.471–81 VALID FOR UNITS EQUIPPED WITH HEAD ASSEMBLY 1.710.190
1.710.472–00 VALID FOR UNITS EQUIPPED WITH HEAD ASSEMBLY 1.710.191

PAGE 1 OF 1 | SC | 1.710.472.00
B710 MKII CASSETTE TAPE DECK
INTERCONN. BOARD UNIV A/C 'ESE'
10.11.83 W. L.
STUDER

WIRING OF CASSETTE CODING SWITCHES



AUDIO BLOCK DIAGRAM MKII



AUDIO BLOCK DIAGRAM MKI