

DENON

Professional Audio Brand

Hi-Fi Components



DENON. FOR 70 YEARS, INNOVATION HAS BEEN OUR TRADITION.

1910, the year DENON first started producing records and players, marked the beginning of a DENON tradition that includes many of the audio industry's most significantly accomplished. A direct-drive turntable in 1939. Moving-coil cartridges in 1951. And the invention of commercial PCM recording system in 1972. To name just a few.

It is no wonder that DENON is the prime supplier to the NHK, Japan's equivalent to the BBC.

The equipment shown in this brochure marks DENON's 70th Anniversary as a Professional Audio Brand. Every DENON item, from the accessories to the reference electronics, represents the culmination of 70 years of experience in improving the reproduction of recorded music.

DH-510 7 1/2/15 IPS Half Track "True Professional Performance" Tape Deck

• Outstanding half track performance and stability enhanced a direct drive capstan system, speed servo mechanism using a high precision magnetic recording detection system and an innovative direct tension servo mechanism. • Wide dynamic range amplifier circuit.



SPECIFICATIONS

Type:	3 motors 2-speed stereo tape deck
Heads:	Hard permalloy (R/P) Ferrite (Erase)
Motors:	Capstan: AC servo motor Reel: Eddy current motor x 2
Wow/flutter:	Less than 0.025% (38 cm) Less than 0.03% (19 cm)
Overall S/N ratio	More than 66 dB
Overall 3rd harmonic distortion ratio	Less than 0.1%
Overall frequency response	30 Hz—30 kHz ±3 dB 20 Hz—25 kHz ±3 dB
38 cm/s	
19 cm/s	
Channel separation	More than 50 dB (1 kHz)
Input	
Microphone	0.2 mV, 50 kΩ
Line	61.5 mV, 100 kΩ
Output	
Line	600 Ω load 775 mV
Headphone	8 Ω
Power supply: Power consumption:	AC 120V 60 Hz or AC 200/220/240V, 50 Hz 85W
Dimensions:	455 (W) x 475 (H) x 210 (D) mm
Weight:	22 kg

DR-330 3-Head Tape Tension Servo System Stereo Cassette Deck

• DENON's new tension servo sensor maintains optimum tape tension. • F-alloy combination head offers wide frequency response 25 Hz — 21 kHz ±3 dB, high sensitivity and low distortion. • Quartz locked PLL servo motor drives the capstan for higher tape transport stability. • Double Dolby noise reduction system.



SPECIFICATIONS

Type:	4-track, 2-channel, stereo
Heads:	Record/playback: F-alloy Erase: Double gap ferrite
Motors:	Capstan: Quartz lock PLL DC servo motor Reel: DC motor
Wow and flutter:	Less than 0.04% wrms
Fast forward/Rewind time:	Approx: 85 sec (C-60)
Overall S/N ratio:	More than 67 dB (DOLBY NR switch at ON)
Overall frequency response	25 Hz—21 kHz ±3 dB 30 Hz—20 kHz ±3 dB 30 Hz—19 kHz ±3 dB
METAL tape:	
CrO ₂ tape:	
L.H. tape:	
Crosstalk:	-65 dB (1 kHz)
Input	
Microphone:	0.35 mV/10k Ω
Line:	70 mV/50 k Ω
Output	
Line:	775 mV (load impedance: 10 k Ω)
Headphone:	1.2 mV (load impedance: 8 Ω—2 k Ω)
Power supply:	AC 120 V, 60 Hz or 200/220/240 V, 50/60 Hz
Power consumption:	25 W
Dimensions (W x H x D), weight:	434 x 117 x 300 (mm), 7.0 kg

DR-320 3-Head Tape Tension Servo System Stereo Cassette Deck

• DENON's new tension servo system • 3-head configuration, with DENON's new tape transport system provides better tape contact to the heads. • Double Dolby system further improves the performance of the 3-head system by eliminating tape hiss. • Full DC amplifiers are built into both the record and playback system for wide frequency response. (ACA-10 side wooden cabinet is available)



SPECIFICATIONS

Type:	4-track, 2-channel, stereo
Heads:	Record/playback: F-alloy Erase: Double gap ferrite
Motors:	Capstan: DC servo motor Reel: DC motor
Wow and flutter:	Less than 0.04% wrms
Fast forward/Rewind time:	Approx: 90 sec (C-60)
Overall S/N ratio:	More than 67 dB (DOLBY NR switch at ON)
Overall frequency response	25 Hz—21 kHz ±3 dB 30 Hz—20 kHz ±3 dB 30 Hz—19 kHz ±3 dB
METAL tape:	
CrO ₂ tape:	
L.H. tape:	
Crosstalk:	-65 dB (1 kHz)
Input	
Microphone:	0.35 mV/10 k Ω
Line:	70 mV/50 k Ω
Output	
Line:	775 mV (load impedance: 10 k Ω)
Headphone:	1.2 mV (load impedance: 8 Ω—2 k Ω)
Power supply:	AC 120 V/60 Hz or 200/220/240 V, 50/60 Hz
Power consumption:	25 W
Dimensions (W x H x D), weight:	434 x 117 x 300 (mm), 7.0 kg

DR240 Two Motor Stereo Cassette Deck

• IC-full logic circuit, feather touch control system. • 2-motor mechanism to drive the capstan and reel independently. • Non slip reel drive system with stable take up torque and improved durability. • Cueing/reviewing and automatic cueing system. • Large VU meter and 3-color LED peak indication for proper level monitoring. (ACA-10 side wooden cabinet is available)



SPECIFICATIONS

Type:	4-track, 2-channel, stereo
Heads:	Record/playback: Sendust Erase: Double gap ferrite
Motors:	Capstan: DC servo motor Reel: DC motor
Wow and flutter:	Less than 0.04% Wrms
Fast forward/Rewind time:	Approx: 90 sec. (C-60)
Overall S/N ratio:	More than 65 dB (DOLBY NR switch at ON)
Overall frequency response	25 Hz—19 kHz ±3 dB 30 Hz—17 kHz ±3 dB 30 Hz—15 kHz ±3 dB
METAL tape:	
CrO ₂ tape:	
L.H. tape:	
Crosstalk:	More than 65 dB (1 kHz)
Input	
Microphone:	0.35 mV/10 k Ω
Line:	70 mV/50 k Ω
Output	
Line:	775 mV (VR: max, load impedance: 10 k Ω)
Headphone:	1.2 mV (load impedance: 8 Ω—2 k Ω)
Power supply:	AC 120 V, 60 Hz or 200/220/240 V, 50/60 Hz
Power consumption:	25 W
Dimensions (W x H x D), weight:	434 x 117 x 300 (mm), 7.0 kg

RC-55 Remote Control Unit (optional)



DL-305 Lightest Amorphous Boron Cantilever MC Type Phono Cartridge

Ensuring excellent acoustic characteristics by newly developed amorphous boron pipe cantilever with light weight vibration system. Obtaining a flat frequency response over a wide range and extends to frequencies as high as 75 kHz.

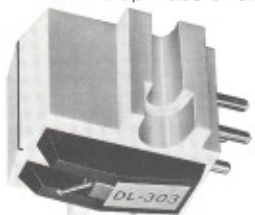


SPECIFICATIONS

Type:	Moving coil type
Output voltage:	0.2 mV (1 kHz 50 mm/sec)
Frequency response:	20 Hz—75 kHz
Output impedance:	40 Ω (20 Hz—20 kHz)
Load impedance:	More than 100 Ω
Channel separation:	Over 28 dB (1 kHz)
Channel sensitivity difference:	1 dB or Less (1 kHz)
Stylus tip:	Special elliptical tip stylus (0.05 × 0.1 mm)
Dynamic compliance:	14×10^{-4} cm/dyne (100 Hz)
Static compliance:	35×10^{-4} cm/dyne
Stylus force:	1.2 g ± 0.2 g
Weight:	5.8 g

DL-303 Lightest Vibration System MC Type Phono Cartridge

• A surprising improvement in the tracking ability was made possible by precise construction of the DL-303's ultra-light vibration system and by the lightest effective tip mass of 0.18mg.



SPECIFICATIONS

Type:	Moving coil type
Output voltage:	0.2 mV (1 kHz 50 mm/sec)
Frequency response:	20 Hz—70 kHz
Output impedance:	40 Ω (20 Hz—20 kHz)
Load impedance:	More than 100 Ω
Channel separation:	Over 28 dB (1 kHz)
Channel sensitivity difference:	1 dB or Less (1 kHz)
Stylus tip:	Special elliptical tip stylus (0.05 × 0.1 mm)
Dynamic compliance:	13×10^{-4} cm/dyne (100 Hz)
Static compliance:	35×10^{-4} cm/dyne
Stylus force:	1.2 g ± 0.2 g
Weight:	5.8 g

DL-301 High Performance MC Type Phono Cartridge

• DENON's unique sophisticated vibration system permits excellent trackability over a wide frequency range. • A special elliptical solid diamond stylus (0.07mm × 0.14mm). • Further improves channel separation.



SPECIFICATIONS

Output voltage:	0.3 mV (1 kHz 50 mm/sec)
Frequency response:	20 Hz—60 kHz
Output impedance:	40 Ω (20 Hz—20 kHz)
Load impedance:	More than 100 Ω
Channel separation:	over 28 dB (1 kHz)
Channel sensitivity difference:	1 dB or Less (1 kHz)
Stylus tip:	Special elliptical tip stylus (0.14 × 0.07 mm)
Dynamic compliance:	13×10^{-4} cm/dyne (100 Hz)
Static compliance:	35×10^{-4} cm/dyne
Stylus force:	1.4 g ± 0.2 g
Weight:	4.7 g

DL-103D "High Trackability" MC Type Phono Cartridge.

• The top of the line in the DL-103 series. • Employs a 0.1mm special stylus tip with a tapered and double construction cantilever. • High trackability that can reproduce flat response up to 65 kHz.



SPECIFICATIONS

Type:	Moving coil type
Output voltage:	0.25mV (1 kHz 50 mm/sec)
Frequency response:	20 Hz—65 kHz
Output impedance:	33Ω (20 Hz—20 kHz)
Load impedance:	More than 100Ω
Channel separation:	Over 28 dB (1 kHz)
Channel sensitivity difference:	Less than 1 dB (1 kHz)
Stylus tip:	0.1 mm special elliptical solid diamond
Stylus force:	1.5 g ± 0.2 g
Compliance:	12×10^{-4} cm/dyne (100 Hz)
Weight:	7.5 g

DL-103S High Performance MC Type Phono Cartridge.

• Retaining the construction of the DL-103, the DL-103S's vibration system is much lighter, and high trackability is possible with higher compliance at lighter stylus force. • Flat response up to 60 kHz.

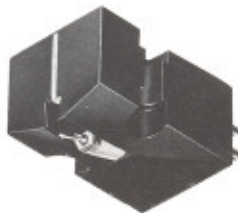


SPECIFICATIONS

Type:	Moving coil type
Output voltage:	0.3 mV (1 kHz 50 mm/sec)
Frequency response:	20 Hz—60 kHz
Output impedance:	40Ω (20 Hz—20 kHz)
Load impedance:	More than 100Ω
Channel separation:	Over 25 dB (1 kHz)
Channel sensitivity difference:	1 dB or less (1 kHz)
Stylus tip:	Special elliptical tip stylus
Stylus force:	1.8 ± 0.3 g
Compliance:	8×10^{-4} cm/dyne (100 Hz)
Weight:	7.8 g

DL-103, DL-103/T MC Type Phono Cartridge. .

• The basic model of DL-103 series which was specifically designed for professional use. • Moving coil type cartridge design for the ultimate tone quality. • This highly respected model has been the standard for playback of phono records over the past 15 years by broadcasting and business. • DL-103/T is furnished with its own wide band transformer which can extract the DL-103 full potential.



SPECIFICATIONS

Type:	Moving coil type
Output voltage:	0.3 mV (1 kHz 50 mm/sec)
Frequency response:	20 Hz—45 kHz
Output impedance:	40Ω (20 Hz—20 kHz)
Load impedance:	More than 100Ω
Channel separation:	Over 25 dB (1 kHz)
Channel sensitivity difference:	1 dB or less (1 kHz)
Stylus tip:	0.65 mil round stylus
Stylus force:	2.5 ± 0.3 g
Compliance:	5×10^{-4} cm/dyne (100 Hz)
Weight:	8.5 g
TRANSFORMER	
Step-up ratio:	1:10
Primary impedance:	40Ω
Secondary impedance:	4 kΩ
Frequency response:	20 Hz—40 kHz (±1 dB)
Load impedance:	50 kΩ or more
Dimensions:	51 (W) × 38 (H) × 115 (D) mm
Weight:	300 g

POA-3000 "Class A" Power Amplifier

- Output stage delivers incredibly high 180W of "class-A" output power per channel. • DENON's newly patented "real bias circuit" couples exceptionally high efficiency with high output power.
- Newly developed direct DC servo control circuit eliminates drift of the DC off set voltage, while reducing noise and distortion.

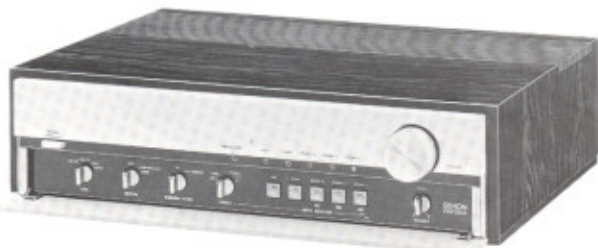


SPECIFICATIONS

Type:	Class A operation power amplifier
Music power:	250W + 250W (8 Ω)
Output power:	180W per channel, min. RMS, both channel driven, at 8 ohms from 20 Hz to 20 kHz, no more than 0.005% total harmonic distortion
Intermodulation distortion:	Less than 0.003%
(60 Hz/7 kHz 4/1 at rated output):	
Power bandwidth:	5 Hz—100 kHz (T.H.D. 0.02%)
Input sensitivity/impedance:	1V/50 kΩ
Output impedance:	0.04Ω 1 kHz
Damping factor:	200 (1 kHz)
S/N ratio:	Better than 122 dB (1HF-A)
Transmission characteristic:	1 Hz—350 kHz +0, -3 dB
Separation:	Better than 100 dB (20 Hz—10 kHz) Better than 85 dB (20 Hz—20 kHz)
Slew rate:	Better than ±300V/μs
Power supply:	AC 120V 60 Hz or AC 220V 50 Hz
Power consumption:	1,300W (MAX.) IEC 570W UL
Dimensions:	495 (W) × 188 (H) × 459 (D) mm
Weight:	34 kg

-2000 "Non-NFB Equalizer" Pre Amplifier.

- Newly developed "non-NFB real time equalizer amplifier" eliminates the time delay distortion inherent in the NFB-type pre-amps. • TIM distortion: 0.003%, IM distortion: 0.002%. • DENON's real time flat amplifier achieves incredibly small RIAA deviation from 20 Hz to 100 kHz ±0.2 dB. • Built-in MC cartridge head amplifier with performance indential to the DENON Model HA-1000.



SPECIFICATIONS

Type:	Non-NFB real time equalizer amplifier
• Equalizer amp. section (PHONO 1,2—REC OUT)	
Input sensitivity/impedance:	2.5mV/50kΩ: PHONO-1 2.5mV/100Ω, 50kΩ: PHONO-2 380mV (1 kHz) 23V/150mV
Max. allowable input:	
Max. output/rated output:	20Hz—100kHz ±0.2dB
RIAA deviation:	
• MC head amp. section (PHONO-3—REC OUT)	
Input sensitivity/impedance:	0.125mV/100Ω: PHONO-3
Max. allowable input:	19mV (1 kHz)
Total harmonic distortion:	Less than 0.003% (20Hz—20kHz)
Frequency response:	20Hz—100kHz ±0.2dB
S/N ratio:	79dB—157dB(V) (input noise level)
• Flat amp. section (AUX. IN—PRE OUT)	
Input sensitivity/impedance:	150mV/50kΩ
• R AUX. TAPE (PB-1,2):	
Intermodulation distortion:	Less than 0.002% 20Hz—20kHz
Subsonic filter:	Less than 105dB
Frequency response:	10Hz—500kHz +0dB, -1dB (10Hz—100kHz +0dB, -0.1dB)
Subsonic filter:	16Hz, 12dB/oct
Power supply:	AC 120V 60Hz or 220V 50Hz
Power consumption:	37W (IEC), (UL)
Dimensions:	455(W) × 132(H) × 357(D)mm
Weight:	11kg

PMA-950 "Class A" Integrated Amplifier

- High performance class A amplifier and this real bias circuit ensures outstanding efficiency and high output power. • Super wide range equalizer amplifier achieves incredibly RIAA deviation from 20 Hz — 100 kHz ±0.2 dB. • Capacitorless design for all signal circuits from phono input to speaker output. • Real drive circuit reduces distortion during speaker drive by 1/50 • Improving S/N ratio and reduce distortion with direct DC servo circuit.



SPECIFICATIONS

Type:	All stage direct DC servo circuit class A operation
• POWER AMPLIFIER SECTION	
Output power:	85W per channel, min. RMS, both channel driven, at 8 ohms from 20 Hz to 20 kHz, no more than 0.01% total harmonic distortion
Intermodulation distortion	
(60 Hz/7 kHz 4/1 at rated output):	Less than 0.004%
Power bandwidth	
(both channels driven):	5 Hz—100 kHz (T.H.D. 0.03%)
Frequency response (at 1W output)	1 Hz—250 kHz +0, -3 dB
Input sensitivity/impedance:	150 mV/40 k Ω
Output impedance:	0.1 Ω (1 kHz)
S/N ratio:	110 dB (1 HF-A)
• PRE AMPLIFIER SECTION	
Max. output/rated output:	10V/150 mV
Input sensitivity/impedance:	PHONO 1,2 MM: 2.5 mV/47 k Ω 1,2 MC: 125 μV/100 Ω
RIAA deviation:	TUNER, AUX, TAPE 150 mV/40 k Ω
S/N ratio:	20 Hz—100 kHz ±0.2 dB PHONO 1,2 MM: 90 dB (input 25 μV) MC: 75 dB TUNER, AUX, TAPE: 110 dB
Tone control:	BASS: 100 Hz ±8 dB TREBLE: 10 kHz ±8 dB
Subsonic filter:	18 Hz - 6 dB/oct
Loudness control:	Low 100 Hz +7 dB High 10 kHz +6 dB
Power supply, Power consumption:	AC 120V/60 Hz 265 W or AC 220/240V, 50/60 Hz 510 W
Dimensions:	470(W) × 140(H) × 410(D)mm
Weight:	15 kg

PMA-550 "Direct A" Integrated Amplifier

- Power stage with a non-switching direct servo circuit uses DENON's zero cross linear bias system to deliver a generous 100W of output power per channel. • Perfect RIAA characteristics over 20 Hz—100 kHz ±0.2 dB range. • Direct DC servo circuit eliminates capacitors from all signal circuit to improve S/N ratio and reduce distortion.



SPECIFICATIONS

Type:	All stage direct DC servo circuit
• POWER AMPLIFIER SECTION	
Output power:	100W per channel, min. RMS, both channel driven, at 8 ohms from 20 Hz to 20 kHz, no more than 0.02% total harmonic distortion
Intermodulation distortion	
(60 Hz/7 kHz 4/1 at rated output):	Less than 0.008%
Power bandwidth	
(both channels driven):	5 Hz—100 kHz (T.H.D. 0.035%)
Frequency response (at 1W output)	1 Hz—400 kHz +0, -3 dB
Input sensitivity/impedance:	150mV/40 k Ω
Output impedance:	0.1 Ω (1 kHz)
• PRE AMPLIFIER SECTION	
Max. output/rated output:	10V/150 mV
Input sensitivity/impedance:	PHONO 1 MM: 2.5mV/50 kΩ 2 MC: 125 μV/100 Ω
RIAA deviation:	TUNER, AUX, TAPE 150mV/40 kΩ
S/N ratio:	20 Hz—100 kHz ±0.2 dB PHONO 1 MM: 90 dB 2 MC: 73 dB
Tone control:	TUNER, AUX, TAPE: 108 dB, BASS: 100 Hz ±8 dB TREBLE: 10 kHz ±8 dB
Subsonic filter:	18 Hz - 6 dB/oct
Loudness control:	Low 100 Hz +7 dB High 10 kHz +6 dB
Power supply, Power consumption:	AC 120V/60 Hz 255W or AC 220/240V 50/60 Hz 510W
Dimensions:	434 (W) × 132 (H) × 407 (D) mm
Weight:	13.5 kg

PMA-540 "Direct A, Real Drive Circuit" Integrated Amplifier

- Non-switching power amplifier delivers 60 W + 60 W power output.
- Super equalizer amplifier provides a wide RIAA deviation from 20 Hz — 100 kHz ± 0.2 dB.
- Real drive circuit reduces distortion during speaker drive by 1/50.
- Newly developed real time tone control circuit prevents deterioration in sound quality.
- Provided with A, B speaker system for individual ON OFF switch.



SPECIFICATIONS

Type:	All stage direct DC servo circuit
POWER AMPLIFIER SECTION	
Output power:	65 W per channel, min. RMS, both channel driven, at 8 ohms from 20 Hz to 20 kHz, no more than 0.03% total harmonic distortion
Intermodulation distortion (60 Hz/7 kHz: 4/1 at rated output):	Less than 0.005%
Power bandwidth (both channels driven):	4 Hz — 100 kHz (THD: 0.1%)
Frequency response (at 1 W output):	1.5 Hz — 250 kHz +0, -3 dB
Input sensitivity/impedance:	150 mV/40 k Ω
Output impedance:	0.08 Ω (1 kHz)
PRE AMPLIFIER SECTION	
Max. output/rated output:	10V/150 mV
Input sensitivity/impedance:	PHONO MM: 2.5 mV/50 k Ω MC: 0.25 mV/100 Ω TUNER, AUX, TAPE: 150 mV/40 k Ω
RIAA deviation:	20 Hz — 100 kHz ± 0.2 dB
S/N ratio (IHF-A):	PHONO MM: 88 dB MC: 72 dB TUNER, AUX, TAPE: 106 dB
Tone control:	BASS: 100 Hz ± 8 dB TREBLE: 10 kHz ± 8 dB
Subsonic filter:	18 Hz -6 dB/oct
Loudness control:	Low 100 Hz +7.5 dB High 10 kHz +5.5 dB
Power supply, Power consumption:	AC 120/60 Hz 200 W or AC 220/240 V 50/60 Hz
Dimensions:	434(W) x 112(H) x 390(D)mm
Weight:	9.7 kg

PMA-510 "High c/p Direct A" Pre-main Amplifier

- Highly efficient non-switching power amplifier delivers large output power of 50W per channel.
- Super equalizer amp and non-switching power amp, 2-stage pre-main amp equipped with direct DC servo circuit substantially improves S/N ratio while reducing distortion.
- Super equalizer amplifier offers surprisingly wide range of reproduction.

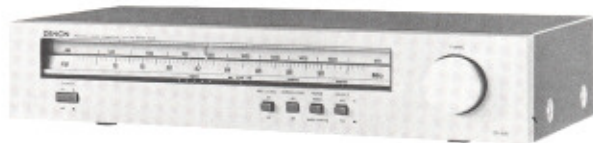


SPECIFICATIONS

Type:	All stage direct DC servo circuit
POWER AMPLIFIER SECTION	
Rated output (Both channels driven):	50W + 50W 70W + 70W
20 Hz — 20 kHz 8 Ω	
1 kHz (4 Ω)	
Total harmonic distortion:	Less than 0.009%
20 Hz — 20 kHz	
Intermodulation distortion (60 Hz/7 kHz: 4/1 at rated output):	Less than 0.004%
Power bandwidth (both channels driven):	5 Hz — 80 kHz (THD: 0.1%)
Frequency response (at 1 W output):	4 Hz — 150 kHz +0, -3 dB
Input sensitivity/impedance:	150 mV/40 k Ω
Output impedance:	0.13 Ω
PRE AMPLIFIER SECTION	
Max. output/rated output:	10V/150 mV
Input sensitivity/impedance:	PHONO MM: 2.5 mV/50 k Ω MC: 0.25 mV/100 Ω TUNER, AUX, TAPE: 150 mV/40 k Ω
RIAA deviation:	20 Hz — 100 kHz ± 0.3 dB (MM)
S/N ratio:	PHONO MM: 88 dB MC: 68 dB TUNER, AUX, TAPE: 104 dB
Tone control:	BASS: 100 Hz ± 8 dB TREBLE: 10 kHz ± 8 dB
Subsonic filter:	18 Hz -6 dB/oct
Loudness control:	Low 100 Hz +7.5 dB High 10 kHz +5.5 dB
Power supply, Power consumption:	AC 120V/60 Hz 130W or AC 220/240V 50/60 Hz 395W
Dimensions:	434 (W) x 112 (H) x 390 (D) mm
Weight:	9.2 kg

TU-520 "Servo Locked" AM/FM Stereo Tuner

- Newly developed quadrature detector circuit ensures S/N ratio of 84 dB.
- IF amplifier achieves high selectivity and low distortion with three stages of ceramic filters.
- FM MPX stage employing a newly developed low-noise PLL-MPX-IC provides high S/N ratio.
- Servo-locked circuit built in for accurate, stable tuning.
- Signal tuning system with LED's.



SPECIFICATION

FM section	
Tuning frequency:	88 — 108 MHz
Usable sensitivity:	1.7 μ V (9.8 dBf)
Effective selectivity:	65 dB
S/N:	Stereo 80 dB Mono 84 dB
Total harmonic distortion:	Stereo 0.06% Mono 0.05%
Capture ratio:	1.0 dB
AM suppression:	55 dB
Image rejection:	56 dB
IF rejection:	95 dB
Frequency response:	20 Hz — 15 kHz +0.2 dB, -1.5 dB
Stereo separation:	55 dB (1 kHz)
AM section	
Tuning frequency:	525 — 1,605 kHz
Usable sensitivity:	18 μ V
T.H.D.:	0.4%
Power supply:	AC 120V, 60 Hz or AC 220/240V 50/60 Hz
Power consumption:	8W
Dimensions:	434 (W) x 93 (H) x 300 (D) mm
Weight:	4.5 kg

DRA-600 "Class A Amplification, Synthesized Tuning" AM/FM Stereo Receiver

- Non-switching class A amplifier with large output power 60W + 60W.
 - Quartz-PLL frequency synthesizer for accurate tuning.
 - Built-in head amplifier for MC type cartridge.
 - Elegant clean design.
- (ACA-3 side wooden Cabinet (optional))



SPECIFICATIONS

Power amplifier section	
Type:	Non-switching class A amplifier
Music power:	120 W + 120W (4 Ω)
Output power:	60W per channel, min. RMS, both channel driven, at 8 ohms from 20 Hz to 20 kHz, no more than 0.08% total harmonic distortion
Intermodulation distortion:	0.03%
S/N ratio:	82dB
Power bandwidth:	5 Hz — 100 kHz (T.H.D. 0.5%)
Frequency response:	20 Hz — 20 kHz ± 0.5 dB
Input sensitivity/impedance:	2.5 mV/47 k Ω
Tone control:	Bass 100 Hz ± 10 dB Treble 10 kHz ± 10 dB
Loudness control:	Low 100 Hz +8 dB, High 10 kHz +4 dB
Crosstalk:	70 dB
FM section	
Tuning frequency:	88 — 108 MHz
Usable sensitivity:	1.7 μ V (9.8 dBf)
Effective selectivity:	60 dB
S/N ratio:	Stereo 70 dB, Mono 75 dB
Total harmonic distortion:	Stereo 0.30%, Mono 0.15%
Frequency response:	20 — 15,000 Hz ± 0.2 dB
AM section	
Tuning frequency:	525 — 1,605 kHz
Usable sensitivity:	53 dB
Effective selectivity:	30 dB
S/N ratio:	55 dB
Power supply:	AC 120 V, 60 Hz or AC 220/240 V, 50/60 Hz
Power consumption:	130W
Dimensions:	434 (W) x 112 (H) x 390 (D) mm
Weight:	10 kg

DP-60L "DENON Quartz" Auto Lift D.D. Turntable.

- Low mass straight tonearm provides superb tonal quality with improved trackability.
- Replaceable with attached S-shaped type tonearm.
- Turntable motor controlled by DENON's magnetic speed detection and quartz-controlled phase-locked servo control system for accuracy and stability.
- Tonearm is automatically lifted at the end of the record by an angular-control motor.



SPECIFICATIONS

Drive system:	Direct drive by AC servo motor
Speed control:	Servo control with frequency detection
Speed:	33-1/3 rpm, 45 rpm.
Speed deviation:	Less than 0.002%
Wow/flutter:	Less than 0.015% wrms
Rumble:	Less than -78 dB (DIN-B)
Turntable platter:	Aluminum alloy diecast 300mm
Tonearm type:	Straight and S-shaped type compatible with automatic arm lift
Effective length:	244 mm
Overhang:	14 mm
Stylus force range:	0-2.5 g (0.1 g direct reading)
Acceptable weight of cartridge:	12-18 g (including shell)
Power supply, Power consumption:	AC 120V 60 Hz or AC 220/230/240V 50/60 Hz 15W
Dimensions:	485 (W) x 180 (H) x 410 (D) mm
Weight:	13 kg

DP-33F "DENON Quartz" Fully Automatic D.D. Turntable.

- Electronic servo-controlled tonearm automatically functions without affecting performance whatsoever.
- Newly developed servo lifter minimizes impact on stylus when lowering onto or lifting from the disc.
- Highly accurate speed detection with exclusive magnetic recorded system with quartz-lock.
- Convenient front panel controls permits operation with dust cover closed.



SPECIFICATIONS

Drive system:	Direct drive by AC servo motor
Speed control:	Servo control with frequency detection
Speed:	33-1/3 rpm, 45 rpm.
Speed deviation:	Less than 0.002%
Wow/flutter:	Less than 0.015% wrms
Rumble:	Less than -78 dB (DIN-B)
Turntable platter:	Aluminum alloy diecast 300 mm diam.
Tonearm type:	Static balance S-shaped
Effective length:	220 mm
Overhang:	16 mm
Stylus force range:	0-2.5 g (0.1 g direct reading)
Acceptable weight of cartridge:	15-21 g (including shell)
Power supply, Power consumption:	AC 120V 60 Hz or AC 220/230/240V 50/60 Hz 15W
Dimensions:	450 (W) x 140 (H) x 403 (D) mm
Weight:	10 kg

DP-55K "DENON Quartz" Armless D.D. Turntable.

- Ultra-high quality turntable featuring quartz phase-locked control plus DENON's highly precise magnetic detection system for speed accuracy smooth sure electronic brake system.
- Furnished with a newly designed base for maximum isolation from unwanted vibrations.



SPECIFICATIONS

Drive system:	Direct drive by AC servo motor
Speed control:	Servo control with frequency detection
Speed:	33-1/3 rpm, 45 rpm.
Wow/flutter:	Less than 0.015% wrms
Rumble:	Less than -78 dB (DIN-B)
Turntable platter:	Aluminum alloy diecast 300mm diam.
Power supply power consumption:	AC 120V 60Hz 15W
Dimensions:	510 (W) x 185 (H) x 425 (D) mm
Weight:	13kg

DP-30LS "Auto Lift" D.D. Turntable.

- Smooth arm lifter with angular control motor.
- Easy-to-use front panel controls.
- New material for the base prevents acoustic feedback.
- Statically balanced S-shaped tonearm. (black).
- Auto lift mechanism with non-contact record end sensor.



SPECIFICATIONS

Drive system:	Direct drive by AC servo motor
Speed control:	Servo control with frequency detection
Speed:	33-1/3 rpm, 45 rpm.
Wow/flutter:	Less than 0.018% wrms
Rumble:	Less than -78 dB (DIN-B)
Turntable platter:	Aluminum alloy diecast 300 mm
Tonearm type:	Static balance S-shaped with automatic arm lift
Effective length:	220 mm
Overhang:	16 mm
Stylus force range:	0-2.5 g (0.1 g direct reading)
Acceptable weight of cartridge:	5-10 g (for head shell provided)
Power supply, Power consumption:	AC 120V 60 Hz or AC 220/230/240V 50/60 Hz 15W
Dimensions:	450 (W) x 140 (H) x 403 (D) mm
Weight:	9.5 kg

DP-80 "DENON Quartz" Split Platter Construction D.D. Turntable

- DENON quartz. • Split platter construction eliminates external vibrations. • Smooth rotor 3-phase AC servo motor creates virtually no vibration. • Pulse width modulation driving system consumes very little power and offers improved S/N ratio.



SPECIFICATIONS

Drive system:	Direct drive by 3 phase AC servo motor
Speed Control:	Frequency detection servo system phase locked to a quartz crystal oscillation
Speed:	33-1/3 rpm, 45 rpm
Speed deviation:	Less than 0.002%
Wow/flutter:	Less than 0.015% wrms
Rumble:	Less than -80 dB (DIN-B)
Turntable platter:	Newly developed double-Construction Platter aluminum alloy diecast 308 mm dia.
Power supply, Power consumption:	AC 100V 50/60 Hz 8W
Dimensions, Weight:	376 diam. 140 (H) mm, 10 kg

DP-75 "DENON Quartz" Split Platter Construction D.D. Turntable

- Newly introduced split platter construction turntable perfectly isolates external vibration and speaker pressure. • Wow and flutter less than 0.015% and S/N ratio greater than 80 dB achieved by DENON's magnetic speed detection and quartz controlled phase-locked servo control system. • Turntable mat designed with the aid of laser holographic analysis.



SPECIFICATIONS

Drive system:	Direct drive servo system
Speed control:	Frequency detection servo system phase locked to a quartz crystal oscillation
Speed:	33-1/3 rpm, 45 rpm
Speed deviation:	Less than 0.002%
Wow/flutter:	Less than 0.015% wrms
Rumble:	Less than -80 dB (DIN-B)
Turntable platter:	Double construction platter aluminum alloy diecast 308 mm dia.
Power supply, Power consumption:	AC 120/200/220/240 V 50/60 Hz 15W
Dimensions:	376 dia. 140 (H) mm
Weight:	10 kg

HA-1000 MC Head Amplifier "142 dB Dynamic Range"

- Independent power supply eliminates the possibility of noise through external inductive magnetic field. • Input signal-to-noise level -157 dB (V). • 142 dB dynamic range.



SPECIFICATIONS

Input impedance:	100Ω
Voltage gain:	32 dB/24 dB/MM (pass)
Output voltage (max.):	3V rms
Input noise level (RIAA EQ + IHF "A"):	-157 dB/V rms (input short)
Frequency response:	8 Hz -600 kHz + 0 dB -1 dB
Harmonic distortion (20 Hz-20 kHz):	Less than 0.008% (0.3V)
Intermodulation distortion (60 Hz/7 kHz):	Less than 0.008% (0.3V)
Crosstalk (1 kHz):	Less than -70 dB
High cut filter:	100 kHz -6 dB/oct
Power supply:	AC 120 V 60 Hz or AC 220/240V 50/60 Hz
Power consumption:	12W
Dimensions Amp:	125 (W) x 68 (H) x 292 (D) mm
Power:	107 (W) x 65 (H) x 141 (D) mm
Weight Amp:	1.8 kg
Power:	1.4 kg

HA-500 MC Head Amplifier "-157 dB Input Signal-to-Noise Level"

- Advanced circuit technology virtually eliminates T.I.M. • The unbelievable S/N ratio is the result of using a super-low-noise transistor for the first stage. • The amazing dynamic range of 141 dB is accomplished by using class A operation circuit in the final stage.



SPECIFICATIONS

Input impedance:	100Ω
Voltage gain:	24 dB/0 dB/32 dB
Maximum output voltage:	Better than 2.5Vrms
Input noise level (RIAA EQ + IHF "A"):	-157 dB/Vrms (input short)
Frequency response:	10 Hz-600 kHz + 0, -1 dB at 24 dB
	10 Hz-600 kHz + 0, -3 dB at 32 dB
	Less than 0.008% (output at 0.3V)
Harmonic distortion (20 Hz-20 kHz):	Less than 0.008% (output at 0.3V)
Intermodulation distortion	Less than -70 dB
60 Hz/7 kHz = 4/1):	AC 120V/60 Hz
Crosstalk (1 kHz):	or AC 220/240V 50/60 Hz
Power supply:	12W
Power consumption:	125 (W) x 71 (H) x 305 (D) mm
Dimensions:	2.2 kg
Weight:	

AU-340 MC step-up Transformer "High Performance Super Permalloy Core"

- Wide band range and minimum distortion are made possible by using a high performance super permalloy core. • Independent multi-shield for right/left channels.



Step-up ratio:	1:10 (40Ω), 1:33 (32)
Primary impedance:	32, 40Ω
Secondary impedance:	4 kΩ
Frequency response:	10 Hz-120 kHz (+0.5, -1.0 dB)
Distortion:	0.05% (20 Hz-20 kHz, 40Ω)
Channel balance:	0.5 dB or less
Dimensions:	155 (W) x 70 (H) x 215 (D) mm
Weight:	2.1 kg

AU-320 MC Step-up Transformer "High S/N Ratio"

- High performance model designed to extract excellent performance from a wide variety of MC cartridge. • Two types of input impedances, plus two pairs of inputs.



Step-up ratio:	1:10 (at 40Ω; 4 kΩ)
Primary impedance:	32, 40Ω
Secondary impedance:	4 kΩ
Frequency responses:	10 Hz-100 kHz (±1 dB)
Phase characteristics:	20 Hz-50 kHz (10° or less)
Dimensions:	97 (W) x 65 (H) x 155 (D) mm
Weight:	800 g

AU-310 MC Step-up Transformer.

- Excellent phase, distortion and crosstalk characteristics, extremely flat and wide frequency response. • High S/N ratio achieved through the use of double-shielding.



Step-up ratio:	1:10
Primary impedance:	40Ω
Secondary impedance:	4 kΩ
Frequency response:	20 Hz-40 kHz (±1 dB)
Load impedance:	50 kΩ or more
Dimensions:	51 (W) x 53 (H) x 181 (D) mm
Weight:	650 g

DA-401 Light Weight Low Effective Mass Tonearm

● Light weight tonearm—effective mass 7.5 g ● Dynamic damping mechanism



SPECIFICATIONS

Type: S-shaped, static balance type with dynamically damped system

Overall length: 322 mm
 Effective length: 244 mm
 Effective mass: 7.5 g
 Overhang: 14 mm
 Tracking error: 2.5° (max.)
 Stylus force: 0—2 g (with graduations in increment of 0.1 g)
 Head shell (exclusive type): High rigid shell, 2 pcs.
 Height adjustment range: 42—70 mm
 Cueing device: Oil-damping type
 Anti-skating device: Non-contact magnetic control type (with release mechanism)
 weight: 4—10 g
 Acceptable cartridge: weight: 4—10 g
 stylus force: 2 g or less

DA-307 Dynamically Damped Tonearm

● Non-contact magnetic control anti-skating device ● Dynamic damping mechanism



SPECIFICATIONS

Type: Static balance type with dynamically damped system

Overall length: 322 mm (max.)
 Effective length: 244 mm
 Overhang: 14 mm
 Adjustable height: 42—70 mm (between arm board surface and arm pipe central line)
 Tracking error: 2.5° (max.)
 Stylus force: 0—2.5 g direct reading (Vernier dial type)
 Acceptable cartridge weight: 5—10 g
 Head shell: Die-casted magnesium alloy (6 g)
 Inside force canceller: Magnetic control type
 Cueing: Oil damped
 Output cord: Low capacitance cord with 5P connector

DK-300 Universal Turntable Base

Extra heavy weight base excellent for eliminating feedback and resonances.
 Dimensions: 555(W) × 183(H) × 453(D)mm
 Weight: 14kg



DK-110 Universal Turntable Base

Heavy weight base for reducing the acoustic feedback and resonance.
 Dimensions: 555(W) × 183(H) × 453(D)mm
 Weight: 10kg



AD-3 Record Weight

Dimensions: 38φ × 22(H)mm
 Weight: 145g



ARC-75 Interior Center Rack



Dimensions: 600(W) × 1104(H) × 470(D) mm
 Weight: 34 kg

AH-9 Open Type Stereo Headphone



SPECIFICATIONS

Type

Impedance
 Sensitivity
 Max input
 Frequency response
 Weight

Open earcup design dynamic stereo headphone
 600 Ω
 103 dB/mW
 100 mW
 20 Hz-22,000 Hz
 100 g (without cord)

AH-7 Open Type Stereo Headphone



Open earcup design dynamic stereo headphone
 65 Ω
 100 dB/mW
 100 mW
 20-22,000 Hz
 100 g (without cord)

AH-5 Open Type Stereo Headphone



Open earcup design dynamic stereo headphone
 32 Ω
 102 dB/mW
 100 mW
 20 Hz-22,000 Hz
 50 g (without cord)

PCL-7 Magnesium Alloy Head Shell

Weight: 8.5g



PCL-5 Magnesium Alloy Diecast Head Shell

Weight: 6g



PCL-4 Aluminum Alloy Head Shell

Weight: 9g



All specifications are subject to change for improvement without prior notice.