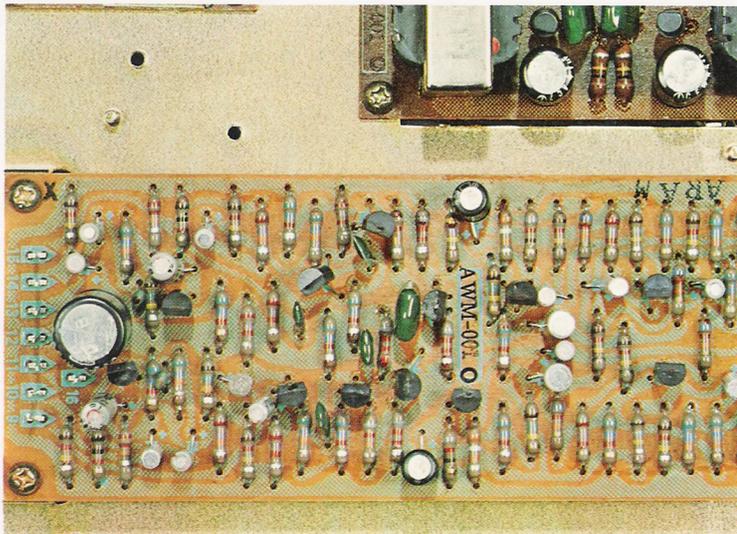
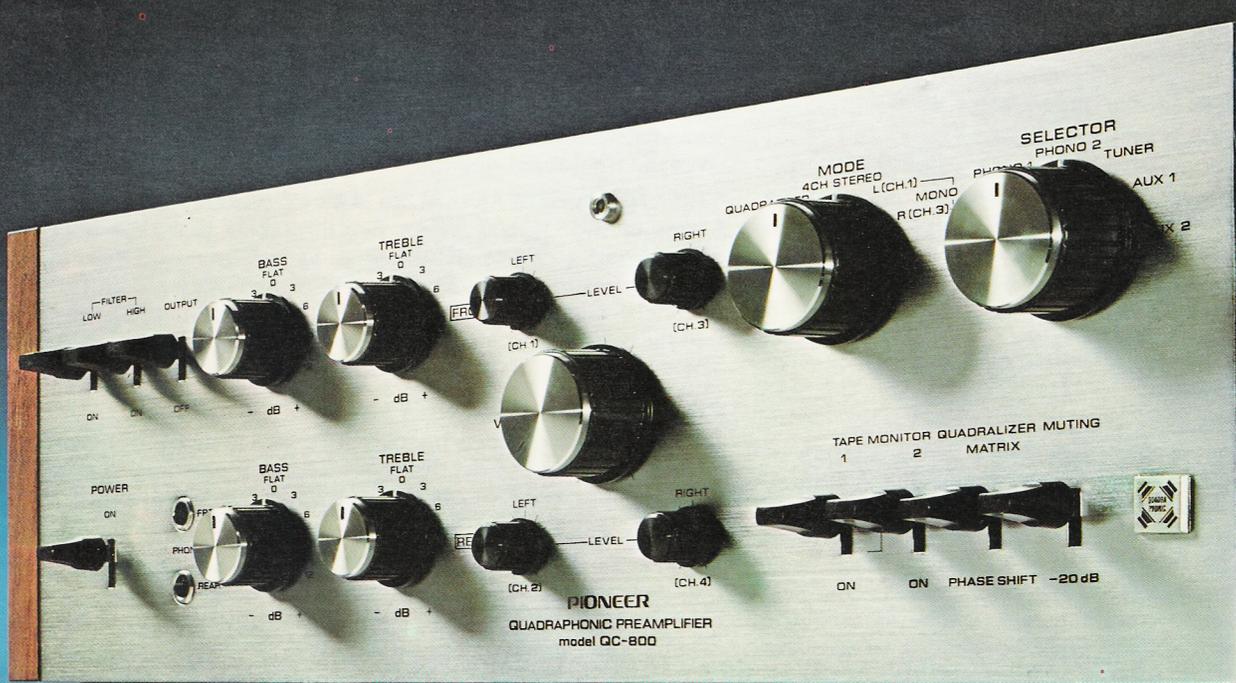


**PIONEER®**

# QC-800

**A single unit, four-channel preamplifier with unique Quadralizer for the creation of a living presence sound field in the home.**



Quadraphonic stereo is the ultimate in sound realism, and with Pioneer's Model QC-800, a quadraphonic power amp (or two stereo amplifiers) and four speakers you can enjoy this sound brilliance today in your own home. This well-made, highly-advanced unit is unusually versatile. It provides a choice of two totally different four-channel effects, which are created from any existing two-channel stereo source (tape, disc or FM), as well as discrete four-channel stereo, the most genuine and thrilling four-channel sound. And it can also be used as a conventional two-channel stereo preamplifier if you intend to wait until adding another pair of speakers to your existing stereo set. The QC-800 is a perfect match for Pioneer's Quadraphonic Power Amplifier (Model QM-800). And it's your most versatile introduction to the grandeur of four-channel stereo, a solid investment in the sound of the future that Pioneer has perfected today.

 **PIONEER**

# QC-800

## YOUR OWN ACOUSTICAL FIELD

The exclusive Pioneer Quadralizer contained within the QC-800 creates an all-encompassing four-channel sound field in your home, giving you the same, full, life-like sensation of being in an acoustically perfect concert hall.

## CHOOSE YOUR FOUR-CHANNEL SYSTEM

The Quadralizer creates four-channel sound from any existing two-channel stereo source—either tape, discs or FM. And the QC-800 gives you a choice of three totally different four-channel effects.

## DISCRETE FOUR-CHANNEL STEREO

This is both the most authentic in terms of sound quality, and the most expensive since it requires a four-channel tape deck and special four-channel tapes. The sound is reproduced at a very high degree of fidelity, since the tape deck reproduces sound recorded on each of four separate tracks.

## MATRIX-TYPE FOUR-CHANNEL STEREO

The "matrix" system of four-channel sound is one of the quadralizing effect systems in the QC-800. This system creates a room-enveloping sound field, when signals from a two-channel program source are fed through a unique matrix circuitry contained within the preamplifier. These signals are analyzed and divided into four different signals which are then fed to four loudspeaker systems for sound reproduction. The matrix system is highly suitable for the reproduction of popular music or small combo group performances.

## PHASE SHIFT FOUR-CANNEL STEREO

The "phase shift" system of four-channel sound is another of the quadralizing effect systems in the QC-800. With this system, the conventional left and right stereophonic channels are reproduced from the two loudspeaker systems situated in front of the listener. But added to this sound is a phase-shifted "wall of sound" or concert hall effect which emanates from the pair of loudspeakers placed behind the listener. The result is the rich depth of a live performance, a slight enveloping echo effect

through the two rear speakers, a thrilling musical experience. The Pioneer phase shift system is especially effective in the reproduction of classical or operatic music.

## HIGH STABILITY HEAD AMPLIFIER

The head amplifier section of the QC-800 incorporates a 3-stage direct-coupling negative feedback circuit utilizing low-noise silicon transistors and emitter-to-emitter feedback. These features result in accurate equalizing characteristics with a wide dynamic range and stable performance.

## SWITCH-TYPE TONE CONTROLS

The tone control amplifier is a directly coupled three-stage desing with a low-noise FET in its first stage. Its high, stable input impedance assures precise tone control at any setting without affecting the head amplifier. The tone controls are true switch types which regulate negative feedback. Each switching step has an effect of  $\pm 3$  dB. Additionally, separate controls are provided for front and rear channels, permitting total control over the total tonal quality.

## VERSATILE INPUTS AND AUXILIARY CONTROLS

Inputs of the QC-800 accept two turntables, two tape decks, a tuner and a choice of two other sound sources. There are separate headphone jacks for monitoring both front and rear channels. Controls include an output on/off switch, a  $-20$  dB muting switch, high and low filters and a tape monitor switch. Versatility of the unit is practically unlimited.

## CHANNEL LEVEL CONTROLS

Each of the four channels is equipped with a level control, which permits total control over the sound field intensity even when different speaker types are used for front and rear listening

## TAPE-TO-TAPE DUPLICATING

Because the QC-800 has a pair of tape deck inputs, tape-to-tape duplicating may be accomplished with ease. Normal two-channel tape-to-tape duplicating is also possible, as if four-channel tape-to-tape duplicating.

## SPECIFICATIONS

### SEMICONDUCTORS

FET (s):	4
Transistors:	32
Diodes:	3

### PREAMPLIFIER SECTION

Output Voltage	OUTPUT 1, 2; 4V/less than
/Impedance:	5 ohms (2 CH.)
Harmonic Distortion:	Less than 0.05% (2V output)
Frequency Response:	10 to 70,000 Hz $\pm 1$ dB
Input Sensitivity	
/Impedance:	PHONO 1, 2; 4mV/50 Kohms (2CH.)
(1KHz for rated output)	TUNER, 250mV/180Kohms (4CH.)
	AUX 1, 2; 250mV/180 Kohms (4CH.)
	TAPE MONITOR 1, 2; 250mV/200 Kohms (4CH.)
Recording Output:	TAPE REC 1, 2 (pin jack); 250mV (4CH.)

Bass Control:	$-9$ dB, $+12$ dB/100Hz (3dB step)
Treble Control:	$-12$ dB, $+9$ dB/10KHz (3dB step)
Low Filter:	$-8$ dB/50 Hz
High Filter:	$-8$ dB/10KHz
Equalization Curve:	PHONO; RIAA S.T.D.
Muting:	$-20$ dB
Hum and Noise (IHF):	PHONO; more than 80 dB
	TUNER, AUX; more than 100 dB
Channel Separation	PHONO; more than 50 dB
(1KHz)	TUNER, AUX; more than 50 dB
Phones:	For (CH. 1, CH. 3) & (CH. 2, CH. 4)

### MISCELLANEOUS

Power Requirements:	110, 120, 130, 220, 240V (switchable)
Power Consumption:	5 watts (max.)
Dimensions (overall):	$16\frac{1}{8}$ (W) $\times$ $5\frac{1}{16}$ (H) $\times$ $13\frac{1}{4}$ (D) inches
	430(W) $\times$ 145(H) $\times$ 337(D)mm
Weight:	16 lb. 12 oz./ 7.6 Kg



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