CAS 2
power
amplifier

Description Two channel, non phase inverting, audio power amplifier utilizing patented circuit configurations to hold signal carrying transistors in the cascode mode throughout all gain stages. No lag compensation is employed. Dual supplies and active constant current sourcing prevent supply related fluctuations from affecting audio circuits. No output stage "protection" circuits are utilized.

Rated power 100 watts per channel, both channels driven into 8 ohms 20 Hz — 20 kHz.
Harmonic & IHF intermodulation distortion no greater than .03% at rated power. Virtually unmeasurable at small signal levels.
Group propagation delay 2 microseconds.
Phase shift Less than .2 radians 20 Hz — 20 kHz.
Maximum current slewing 10 amperes/microsecond.
Maximum voltage slewing 40 volts/microsecond.
Input impedance 75 kohms.
Damping factor Constant 120 from dc through 20 kHz measured at the output terminals.
Hum and noise Below −90 dB referenced to full power output.

400A
power
amplifier

Description Two channel, non phase inverting, audio power amplifier utilizing patented circuit configurations that hold signal transistors in the cascode mode and maintain the amplifier in class A operation to peak output levels of 160 watts per channel. No lag compensation is employed. An extremely stiff supply and active constant current sourcing prevent supply related fluctuations from affecting audio circuits. No output stage "protection" circuits are utilized.

Rated power 100 watts per channel, both channels driven into 8 ohms 20 Hz — 20 kHz.
Harmonic & IHF intermodulation distortion No greater than .03% at rated power, virtually unmeasurable at small signal levels.
Group propagation delay 2 microseconds.
Phase shift Less than .2 radians 20 Hz — 20 kHz.
Maximum current slewing 10 amperes/microsecond.
Maximum voltage slewing 40 volts/microsecond.
Input impedance 75 kohms.
Damping factor Constant 160 from dc through 20 kHz measured at the output terminals.
Hum and noise Below −90 dB referenced to full power output.

4000
power
amplifier

Description Two channel, non phase inverting, audio power amplifier utilizing patented circuit configurations that hold all signal transistors in the cascode mode and maintain the amplifier in class A operation to peak output levels of 200 watts per channel. A dual secondary supply and doubly regulated current sources prevent supply related fluctuations from affecting audio circuits. No output stage "protection" circuits are utilized.

Rated power 200 watts per channel, both channels driven into 8 ohms 20 Hz — 20 kHz.
Harmonic & IHF intermodulation distortion No greater than .03% at rated power, virtually unmeasurable at small signal levels.
Group propagation delay 2 microseconds.
Phase shift Less than .2 radians 20 Hz — 20 kHz.
Maximum current slewing 10 amperes/microsecond.
Maximum voltage slewing 40 volts/microsecond.
Input impedance 75 kohms.
Damping factor Constant 300 from dc through 20 kHz measured at the output terminals.
Hum and noise Below −90 dB referenced to full power output.

STASIS 1
power
amplifier

Description Single channel, non phase inverting, audio power amplifier utilizing patented circuit configurations that hold performance determining STASIS section in a condition of virtually constant voltage, constant current parameters. Active linear current source section consists of *seventy-two,* high speed (4,000,000 Hz bandwidth), 150 watt rated output devices. Power vs. distortion described in graph format, along with other operating characteristics, will be available as actual production is entered in the first quarter of 1980.

Your Threshold dealer will be pleased to keep you informed of developments.

SL-10
pre-
amplifier

CAS 2 **400 A** **4000** **STASIS 1** **SL-10**

Description Two channel, low level signal processing unit having switch selected capacitance or impedance load characteristics for matching all velocity characteristic cartridges. Built in preliminary gain phono stage for moving coil cartridges. Three high level inputs. Record/monitor facilities for a single recorder. Front panel control functions consist of program selection, source/recorder monitoring, channel balance, and level. Audio circuits are powered from a separate supply module and operate with a total of 20k microfarads. Extremely high power supply rejection through quadruple decoupling.

Preliminary phono gain stage:

Frequency response +0dB, −3 dB .5 Hz through 200 kHz.
Square wave rise time .5 microsecond.
Overload 1 volt peak output.
Distortion .015% second harmonic @ 50 millivolts out.
Noise −85 dB, A weighted referenced to 1 volt out through RIAA stage with 100 ohm source.

RIAA gain stage:

RIAA equalization Less than .15dB deviation 30 Hz — 30 kHz plus 3.5 Hz subsonic rolloff. Fully integrating curve.
Input overload 280 millivolt peak @ 1 kHz.
Distortion Less than .004% @ 1 kHz and 20 kHz, .02% at 20 Hz.
Noise −90 dB, A weighted, referenced to 1 volt out.

High level stage:

Frequency response +0 dB, −3 dB dc through 200 kHz.
Slew rate 150 volts/microsecond.
IHF IM distortion .01% @ 5 volts out into 10 kohm, 1 nanofarad load.
Maximum output before clipping ±10 volts peak.

abridged specifications