



## CTs 2 - CHANNEL SERIES

# CTs 1200

## Architectural & Engineering Specifications

### CTs 1200 (120 V, 60 Hz models)

The power amplifier shall be a solid-state two-channel model employing Multi-Mode® (AB+B) output circuitry.

The amplifier shall contain protection circuitry which limits the drive level placed on the output devices before their SOA (Safe Operating Area) is exceeded. This protection circuitry shall calculate the instantaneous voltage across and current through the output devices while factoring in their simulated junction temperatures to predict how close they are to their operating limits. This protection shall be called "JTS."

The amplifier shall contain protection from shorted, open and mismatched loads, general overheating, DC, high-frequency overloads, under/over voltage, and internal faults.

If an amplifier channel starts to overheat, the Thermal Level Control (TLC) circuit shall engage that channel's input compressor in an amount proportional to the amount of overheating, in order to generate less heat. If the channel becomes too hot for safe operation, the channel shall shut off, and the Thermal Indicator for that channel shall illuminate brightly to alert the user that a state of thermal stress or overload has caused the channel to shut down.

The front-panel control shall be a power switch.

Rear-mounted controls shall include Channel Level Controls, High Pass Filter Switches (one per channel), and a Mode Switch. The High Pass Filter Switch shall select between flat and two position of rolloff. The two-position Mode Switch selects between Dual or Bridge-Mono operation.

The recommended load impedance in Dual mode shall be 2/4/8/16 ohms, 70V, and 100V with T-170V or TP-170V. The load impedance in Bridge-Mono mode shall be 4/8/16 ohms, 100V with T-170V or TP-170V, 140V, and 200V with T-170V or TP-170V. The amplifier shall be safe when driving any kind of load, including highly reactive ones.

The rear-mounted output connector shall be one four-pole touch-proof terminal strip. Rear-mounted input connectors shall be 3-pin balanced barrier connectors on the standard PIP2-BBY module. This module shall include a "Y" Input Switch which combines both input signals.

The amplifier shall be fully compatible with and shall provide appropriate input cables and connectors for Crown® PIP2 modules. The amplifier shall be fully compatible with Harman Pro System Architect and the Crown IQ System®.

Front panel indicators shall include a yellow Bridge-Mode Indicator that illuminates when the Mode Switch is set to the "Bridge" position (and flashes if the Mode Switch is changed while the amplifier is powered up, indicating that the amplifier must be powered off and on to reset the Mode), a green Ready Indicator (one per channel) that illuminates when the channel is initialized and ready to produce audio output, a green Signal Indicator (one per channel) that illuminates to indicate the presence of input signals above -40 dBu, a red Clip Indicator that illuminates when the THD of the channel's output signal rises to a level typically considered as the onset of audible clipping (and illuminates during Thermal Level Control or input overload), a red Thermal Indicator (one per channel) that illuminates when a state of thermal stress or overload has caused the channel to shut down (and illuminates in all channels if the power supply goes into thermal overload), a red Fault Indicator (one per channel) that flashes when a fault condition has occurred in the channel, a yellow Data Indicator that flashes during control data activity (if the amplifier is equipped with an IQ-PIP2 module and is connected to a control system), and a blue Power Indicator that illuminates when the amplifier has been turned on and AC power is available (and flashes when the amplifier shuts off due to an under-/over-voltage condition on the AC mains).

The power amplifier shall meet or exceed the following performance criteria. Input sensitivity for rated output: 1.4 V. Rated output with both channels driven in Dual mode with 0.1% THD (20 Hz to 20 kHz): 250 watts per channel into 2 ohms, 600 watts per channel into 4 ohms, 600 watts per channel into 8 ohms, 300 watts per channel into 16 ohms, 600 watts per channel (70V), and 600 watts per channel (100V with T-170V or TP-170V). Rated output in Bridge-Mono mode with both channels driven at 0.1% THD (20 Hz to 20 kHz): 500 watts into 4 ohms, 1200 watts into 8 ohms; 1200 watts into 16 ohms, 1200 watts (100V with T-170V or TP-170V), 1200 watts (140V), and 1200 watts (200V with T-170V or TP-170V). Frequency Response at 1 watt, 20 Hz to 20 kHz: ±0.25 dB. Signal to Noise Ratio below rated power (20 Hz to 20 kHz): better than 105 dB A-weighted. Total Harmonic Distortion at full rated power from 20 Hz to 20 kHz: less than 0.1%. Damping Factor: greater than 3000 from 10 to 100 Hz. Crosstalk (below rated power, 20 Hz to 1 kHz): greater than 80 dB. Common Mode Rejection (20 Hz to 1 kHz): 50 dB. DC Output Offset: less than 2 mV. Input Impedance (nominal): 10 kilohms balanced, 5 kilohms unbalanced. Maximum Input Level (before input compression): +20 dBu rms. Power Draw at Idle (120 VAC mains, all channels in 4/8 ohm mode): 24 watts (standby mode).

The amplifier chassis shall be constructed of steel with a durable black finish and shall be designed for continuously variable-speed forced-air ventilation from the front panel to the back panel.

The dimensions of the amplifier shall allow for 19 inch (48.3 cm) EIA standard (RS-310-B) rack mounting. The amplifier shall be 3.5 inches (8.9 cm) tall, and 14.25 inches (36.2 cm) deep behind the rack-mounting surface.

The amplifier shall weigh 23.4 pounds (10.6 kg).

The amplifier shall be designated the Crown CTs 1200.



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