

PROCISE® High-Definition Professional Surround Sound Amplifiers



- > A world-class, professional 7-channel surround sound power amplifier
- > The perfect companion to the PROCISE® PSPHD surround sound processor
- > Affords unprecedented integration with the PSPHD for seamless control and monitoring
- > Affords native Crestron system integration via Ethernet or Cresnet®
- > Ultra-efficient hybrid design puts immense output power in minimal space
- > Provides the benefits of Class D with the warm, neutral sound quality of Class AB
- > Infinitesimal noise and THD affords pure, natural audio reproduction
- > Robust, isolated channel power supplies ensure maximum dynamic impact
- > DC coupling affords ultimate transparency and frequency response
- > Inrush current limiting provides for gentle power-up
- > Includes front panel signal, clip, and fault indicators for each channel
- > Allows expanded monitoring of temperature, faults, and signal status from PSPHD or control system
- > Heavy duty detachable terminal blocks ease speaker wire termination
- > 24k gold-plated XLR balanced inputs assure optimum signal transfer
- > Premium 7-channel XLR interconnect kits available
- > Includes optional rack ears and front/rear lifting handles
- > Five-space 19" rack-mountable

Your high-end custom theater deserves an exceptional amplifier. Crestron® PROCISE PROAMP amplifiers represent the pinnacle of performance and the ultimate in system integration. Paired with the PSPHD High-Definition Professional Surround Sound Processor, PROAMP delivers an arresting combination of audiophile specs, stunning good looks, unparalleled control, and heart-stopping sound quality.

The Power to Inspire

When Crestron set out to create a multi-channel amp to complement the PSPHD, we knew it would have a showcase appearance and brains beyond anything previously available — and through its design emerged the soul of a true world class cinema amplifier. At its heart is the power and performance to compel any 5, 6, or 7 channel speaker system to its utmost performance. Its custom hybrid design achieves the warmth and neutrality of a Class AB amplifier with all the efficiency benefits of modern Class D, indulging your loudspeakers with tremendous, arousing power — all from one amazingly tight package.

PROAMP amplifiers are offered at two power levels. The flagship PROAMP-7X400 delivers a robust 400 Watts at 8 Ohms, and 700 Watts at 4 Ohms, per channel. Massive twin 1.8 kVA toroidal power transformers direct pure, continuous power to its seven mono amplifier channels, each with its own isolated power supply featuring an immense 168,000 µF total capacitance for astounding dynamic range and headroom. Similarly equipped, the PROAMP-7X250 employs twin 1 kVA toroidal transformers, delivering 250 Watts at 8 Ohms, and 450 Watts at 4 Ohms, per channel.

Efficiency...Amplified

An ultra-efficient circuit and chassis design enables PROAMP amplifiers to produce greater output power in considerably less space compared to other amplifiers. In fact, PROAMP accomplishes its class-leading performance in a mere five rack spaces while maintaining effective cooling with no need for extra clearance above or below.

PROAMP PROCISE® High-Definition Professional Surround Sound Amplifiers



PROAMP-7X400 – Rear View

A Perfect Pairing

Together, the PROAMP amplifier and PSPHD processor possess the unique ability to operate as one, affording functionality unattainable from any other amp/preamp combination. Through a simple Ethernet connection, the two components become paired, enabling seamless control and monitoring of the amplifier through the PSPHD's front panel. While PROAMP provides essential indication of signal and fault conditions on its own faceplate, you can actually confirm the specific fault condition, check the real internal temperature, and even monitor the output level of each amp channel on the face of the PSPHD. Pairing the two components also streamlines remote control and monitoring through a Crestron® control system, providing programmers with a unified device interface for all functions.

Please refer to the [PSPHD](#) spec sheet for additional information.

Protect, Monitor, Control

To help ensure the most seamless user experience and long-lived operation from your amplifier, PROAMP provides several ways to assume control of its essential functions and keep tabs of its operating status and health. On its own, PROAMP possesses the intelligence to protect itself from all types of faults including over temperature, over current, over voltage, under voltage, and DC offset on any channel. Its front panel indicators help alert the user to any fault condition, and provide verification of signal activity and clipping. More detailed status monitoring is available when paired with a PSPHD processor.

For the greatest flexibility, PROAMP includes both Cresnet® and high-speed Ethernet to enable direct control and monitoring via a Crestron control system (in lieu of a PSPHD). Whether communicating with the control system directly or via a PSPHD, PROAMP lets you control amplifier power, mute individual channels, monitor temperature and signal status, and receive fault alerts, all from a Crestron touchpanel, computer or mobile device. Signals from the amplifier may also be utilized to enable custom

automation, such as reducing audio levels when clipping is sensed, or regulating climate control in the equipment room in response to amp temperature.

Please contact your Crestron representative to explore the possibilities for your custom application.

Professional, Precise...PROCISE!

In today's elaborate home theaters and corporate auditoria, electronic noise and distortion is the last thing you want to hear. To this end, PROCISE PROAMP amplifiers are designed to produce pristine, accurate audio — and nothing more. A hybrid, DC coupled topology preserves the audio signal throughout without coloring or adding noise. So, even during the quietest moments of a high-resolution film soundtrack or original master recording, you'll be enveloped in studio-silent ambiance, every nuance revealed, so when the sound comes up—you'll be convinced you're a part of it.

SPECIFICATIONS

Audio – PROAMP(I)-7X400

Typical of 7 Mono Channels:

Output Power: 400 Watts per channel at 8 Ohms;
700 watts per channel at 4 Ohms

Power Bandwidth: 5Hz to 45kHz -3dB

Frequency Response: 20Hz to 20kHz ±0.1dB

THD: 0.02%

IMD: 0.05%

S/N Ratio: 117dB A-weighted

Crosstalk: 105dB

PROAMP PROCISE® High-Definition Professional Surround Sound Amplifiers

Damping Factor: >250

Gain: 23dB

Input Sensitivity: 4 Vrms produces 400W into 8 Ohms

Audio – PROAMP(I)-7X250

Typical of 7 Mono Channels:

Output Power: 250 Watts per channel at 8 Ohms;
450 watts per channel at 4 Ohms

Power Bandwidth: 5Hz to 45kHz -3dB

Frequency Response: 20Hz to 20kHz ±0.1dB

THD: 0.01%

IMD: 0.05%

S/N Ratio: 115dB A-weighted

Crosstalk: 105dB

Damping Factor: >250

Gain: 23dB

Input Sensitivity: 3.2 Vrms produces 250W into 8 Ohms

Communications

Ethernet: For control, console, and pairing with PSPHD; 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP

Cresnet: For control and console, Cresnet slave

Connectors

LAN: (1) 8-wire RJ45 with 2 LED indicators;

10Base-T/100Base-TX Ethernet port;

Green LED indicates link status;

Amber LED indicates Ethernet activity;

Straight-thru LAN cable included for direct connection to PSPHD

NET: (2) 4-pin 3.5mm detachable terminal blocks;

Cresnet slave ports, paralleled

120V~60Hz MAX 12A (top, PROAMP-7X250 and PROAMP-7X400):

(1) IEC C14 male chassis plugs, main power input #1;

Mates with removable power cord (included);

Includes a 15 Amp circuit breaker;

Requires an independent 15 Amp, 120 Volt AC feed

240V~50Hz MAX 6A (top, PROAMPI-7X250 and PROAMPI-7X400):

(1) IEC C14 male chassis plugs, main power input #1;

Mates with removable power cord (included);

Includes an 8 Amp circuit breaker;

Requires an independent 8 Amp, 220-240 Volt AC feed

120V~60Hz MAX 12A (bottom, PROAMP-7X400 only): (1) IEC C14 male chassis plug, main power input #2;

Mates with removable power cord (included);

Includes a 15 Amp circuit breaker;

Requires an independent 15 Amp, 120 Volt AC feed; must be a separate circuit from power input #1

240V~50Hz MAX 6A (bottom, PROAMPI-7X400 only): (1) IEC C14 male chassis plug, main power input #2;

Mates with removable power cord (included);

Includes an 8 Amp circuit breaker;

Requires an independent 8 Amp, 220-240 Volt AC feed; must be a separate circuit from power input #1

INPUTS L, R, SL, SR, SBL, SBR, C: (7) 3-pin XLR female;

Balanced line-level audio inputs;

Input Impedance: 24k Ohms balanced;

Maximum Input Level: 4 Vrms balanced

OUTPUTS L, R, SL, SR, SBL, SBR, C: (7) 2-pin 7.62mm 41A detachable terminal blocks;

Power amplifier outputs;

Wire Size: Terminals accept up to 10 AWG

G: 6-32 screw, chassis ground lug

Controls & Indicators

PWR 1: (1) green LED, indicates power switch is enabled and power is present at the upper power input

PWR 2 (PROAMP[I]-7X400 only): (1) green LED, indicates power switch is enabled and power is present at the lower power input

NET: (1) amber LED, indicates communication with Cresnet system

TEMP: (1) red LED, indicates an over-temperature condition

SIGNAL L, R, SL, SR, SBL, SBR, C: (7) green LEDs, indicate signal presence on the corresponding channel

CLIP L, R, SL, SR, SBL, SBR, C: (7) amber LEDs, indicate a clipping condition on the corresponding channel

FAULT L, R, SL, SR, SBL, SBR, C: (7) red LEDs; indicate over-temperature, over-current, over or under power supply voltage, or DC offset condition on the corresponding channel

RESET: (1) miniature pushbutton, clears all channel fault indications if condition is resolved

Power: (1) toggle switch, enables/disables amplifier power

NETWORK/DIRECT (rear): (1) slide switch, selects whether connection to PSPHD is via LAN or direct connection

OVERRIDE/SETUP (rear): (1) miniature pushbutton and (1) red LED, used for touch-settable ID (TSID) in conjunction with Crestron Toolbox™ software, for activating override mode for testing, and for pairing with PSPHD

Power Requirements

Main Power, PROAMP-7X400: 2 x 12 Amps @ 120 Volts AC, 60 Hz;

Important: Requires two independent 15 Amp circuits!

Main Power, PROAMP-7X250: 12 Amps @ 120 Volts AC, 60 Hz

Main Power, PROAMPI-7X400: 2 x 6 Amps @ 220-240 Volts AC, 50 Hz;

Important: Requires two independent 8 Amp circuits!

Main Power, PROAMPI-7X250: 6 Amps @ 220-240 Volts AC, 50 Hz

Cresnet Power Usage: none

Environmental

Temperature: 41° to 104°F (5° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

PROAMP PROCISE® High-Definition Professional Surround Sound Amplifiers

Heat Dissipation, PROAMP(I)-7X400: 650 BTU/Hr (400W@8Ω),
1100 BTU/Hr (700W@4Ω)

Heat Dissipation, PROAMP(I)-7X250: 350 BTU/Hr (250W@8Ω),
625 BTU/Hr (400W@4Ω)

Enclosure

Chassis: Metal, vented sides, ultra-quiet speed-controlled fan cooling

Front Panel: Aluminum with plastic overlay

Mounting: Freestanding or 5U 19-inch rack-mountable (detachable feet, rack ears, and handles are pre-installed)

Dimensions

Height: 9.24 in (235 mm), 8.70 in (221 mm) without feet

Width: 19.0 in (483 mm), 17.28 in (439 mm) without rack ears

Depth: 21.14 in (537 mm), 18.36 in (467 mm) without front and rear handles

Weight

PROAMP(I)-7X400: 108 lbs (49 kg)

PROAMP(I)-7X250: 105 lbs (48 kg)

MODELS & ACCESSORIES

Available Models

PROAMP-7X250: PROCISE® High-Definition Professional Surround Sound Amplifier, 7x250W

PROAMP-7X400: PROCISE® High-Definition Professional Surround Sound Amplifier, 7x400W

PROAMPI-7X250: PROCISE® High-Definition Professional Surround Sound Amplifier, 7x250W - International Version, 230V

PROAMPI-7X400: PROCISE® High-Definition Professional Surround Sound Amplifier, 7x400W - International Version, 230V

Included Accessories

PSPHD: PROCISE® 7.3 High-Definition Professional Surround Sound Processor

CBL-PRO-XLR-2_7KIT: PROCISE® XLR Balanced Audio Interconnects, 2 ft, 7-Pack

CBL-PRO-XLR-6_7KIT: PROCISE® XLR Balanced Audio Interconnects, 6 ft, 7-Pack

Notes:

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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