

# STR POWER AMPLIFIER TWO-CHANNEL REVOLUTION



#### The All New STR Power Amplifier



The STR Power Amplifier is the beating heart of a world-class 2-channel sound system. It delivers massive power generation, with audiophile-quality output in a smartly designed component.

Imagine doling out 400 Watts/channel into 8 ohms (both channels driven). Now visualize a massive 600 Watts/channel into 4 ohms, and an astonishing 800 Watts/channel into 2 ohms! The STR Power Amp delivers true no-holds-barred performance.

#### Packed with Innovative Electronics

Inside, the STR Power Amplifier uses two colossal transformers and multiple high-current output devices so the most subtle details and dynamic peaks are handled equally well. Outside, its beautifully designed cosmetics, including a 7-inch graphic control display and secure, highly conductive audiophile connectors provide a perfect match to the STR Preamplifier.

#### FEATURES & FUNCTIONS

- 400W / 600W / 800W continuous into 8 /4 /2 ohms, both channels driven
- · Cascoded complementary feedback input stage
- Sixteen bipolar output devices per channel
- · Dual Mono Design
- · Massive toroidal transformers
- Soft turn-on
- Four power on/off options
- · No rail fuses
- Advanced Load Monitoring<sup>™</sup> Technology
- Graphic front panel display for the power meter, status, and easy setup navigation



STR Power Amplifier pictured with STR Preamplifier (sold separately). Both models available in black or silver finishes.

## Cascoded Complementary Feedback Input Stage

The STR Power Amplifier benefits from our proprietary input topology — a unique departure from the classic differential input stage. Eight low-noise bipolar input devices are configured in a complementary active-loaded cascoded feedback arrangement for reduced distortion, exceptionally linear response and superior bandwidth. Transistors in critical stages are hand-selected and matched for lowest possible distortion.

#### Sixteen Bipolar Output Devices Per Channel

Anthem engineers incorporated sixteen bipolar output devices per channel, resulting in high peak power capability, effortlessly reproducing even the most challenging material. The use of multiple bipolar output devices in class AB configuration also dramatically reduces distortion while ensuring extreme linearity, extensive bandwidth. and stress-free reliability. Experience the immense dynamics of up to 800 clean watts delivered into demanding

# and with both channels driven. Massive Toroidal Transformers

ohms/600W into 4 ohms continuously

2-ohm loads, or 400W into 8

Conservatively rated, in a low-profile design shaped to minimize hum, the low-impedance toroidal power transformers — one for each channel — make no sacrifices when it comes to delivering a upply of pure, clean, low-noise power. Both the power supply impedance and internal cabling inductance are minimized to deliver an unobstructed path for maximum power. This allows the two amplifier channels to produce stable, continuous power at maximum output without affecting one another, even when

driving the lowest impedances. While some amplifiers oscillate or run out of power when driving lower impedance loads, the STR Power Amplifier remains perfectly stable under all conditions.

#### Soft Turn-On

A sequence-controlled soft turn-on significantly reduces power line transients and inrush current during start up, thereby preventing accidental tripping of circuit breakers.

#### Power On/Off Options

In addition to the traditional options for power-on, the STR Power Amplifier allows trigger mode and audio signal sensing to be combined so you would never need to think about

turning the

No Rail Fuses

The amplifier sections are Direct Connected to the power supply capacitor bank. This keeps output impedance remarkably low while making more power available to the amplifier.

Even when driving lower or complex impedance loads, the result is audibly superior performance.

amplifier
on or off
manually. This
can be useful
when using a
preamp with Home
Theater Bypass mode

together with a surround sound processor in the same system.

#### **FEATURES**

#### Advanced Load Monitoring™ Technology

Exclusive ALM™ technology monitors internal temperature, current and voltage to ensure safe and uninterrupted long-term operation. ALM is not in the signal path, so it never gets in the way. Instead, ALM engages instantly, but only in the most extreme circumstances, to protect your amplifier and speakers from damage, while lowering the chance of a line fuse blowing during an over-current condition. The front panel display confirms status at all





STR Power Amplifier Rear Panel

### TECHNICAL SPECS

#### **STR Power Amplifier**

| Output (per channel, continuous, 20 Hz - 20 kHz, <1% THD) | 400 W (8Ω), 600 W (4Ω), 800 W* (2Ω) |  |
|---|-------------------------------------|--|
| THD (400 W)   | 0.0007% (1 kHz), 0.004% (20 kHz)    |  |
| IMD (300 W)   |                                     |  |
| ITU-R (19 kHz + 20 kHz)                                   | 0.0006%                             |  |
| SMPTE (60 Hz + 7 kHz)                                     | 0.0016%                             |  |
| <b>SNR</b> (IEC-A, ref. 400 W)                            | 121 dB                              |  |
| Frequency Response (20 Hz - 20 kHz)                       | ± 0.1 dB                            |  |
| Power Bandwidth (-3 dB at 400 W into 8 ohms)              | 91 kHz                              |  |
| Slew Rate   | 30 V/μs                             |  |
| Damping Factor (20 Hz - 1 kHz)                            | 360                                 |  |
| Channel Separation  | 101 dB (100 Hz), 98 dB (10 kHz)     |  |
| Input Impedance   | 10 kΩ (RCA), 15 kΩ (XLR)            |  |
| <b>Input Sensitivity</b> (for 400 W into $8\Omega$ )      | 2.1 Vrms                            |  |
| Voltage Gain  | 29 dB                               |  |

#### **Power Requirement**

**120V version:** In countries where the line voltage is 120V, this product operates from a single phase AC power source that supplies between 108V and 132V at a frequency of 60 Hz.

**220V-240V version:** In countries where the line voltage is 220V, 230V, or 240V, this product operates from a single phase AC power source that supplies between 198V and 264V at a frequency of 50 Hz.

#### **Power Consumption**

| Standby                 | 310 mW         |
|-------------------------|----------------|
| Idle                    | 65 W           |
| Typical Playback Levels | 150 W - 300 W  |
| High Playback Levels    | 600 W - 1100 W |
|                         |                |

#### **Dimensions**

| Height                           | 6-¾" (17.2 cm)  |
|----------------------------------|-----------------|
| Width                            | 17" (43.2 cm)   |
| Depth (not including power cord) | 18-½" (47 cm)   |
| Weight (unpacked)                | 60 lb (27.3 kg) |

<sup>\*</sup>Maximum 3 seconds due to high current draw.