

RDL SF-NP50A Network to 50 W Mono Audio Amplifier/70 or 100 V

The SF-NP50A is an audio power amplifier that converts one Dante network audio channel and one analog input to a 70 V or 100 V constant voltage amplified output. The output provides 50 watts for a network digital audio level of 0 dBFS. Special software is not required to configure the module.

An analog audio source may be connected to either the mono balanced terminal block input or to the unbalanced Mini-Jack which sums the left and right channels to mono. Input gain is set by the installer using a rear-panel single-turn potentiometer with an associated dual-LED VU meter calibrated to 20 dB below maximum power output.

Either the analog input or the network audio input may be used as a paging source. A rear-panel switch is used to set which input has priority. That input utilizes an automatic detection circuit with an adjustable threshold indicated by an LED to attenuate by 25 dB or mute OFF the other input as set by a rear-panel switch. The attenuated input fades up to normal volume when the paging message is finished.

The Dante network audio source drives a balanced line-level output on a detachable terminal block to feed the inputs of other audio equipment or power amplifiers. The output level is +4 dBu balanced for a network level of -20 dBFS.

The SF-NP50A is equipped with an internal VCA for setting the amplifier output level. A detachable terminal block provides for the connection of an external 10 k Ω potentiometer or a 0 to 10 Vdc control voltage. RDL remote controls are available to provide single-turn, multi-turn (rotary encoder) or pushbutton (ramp or fixed level selection) user level control. VCA control insures long term noise-free level adjustment.

The module is equipped with both thermal and output short-circuit protection. The high-efficiency Class D output stage produces minimal heat for all levels of expected voice or music modulation. Upon power-up and during overloads or overheating, an LED MUTE indicator glows yellow and the output is muted. Valid synchronization to the Dante network is indicated by a green LED visible from the front of the unit.

The SF-NP50A is equipped to operate from an included external 24 Vdc power supply. The SF-NP50A monitors the amplifier power and limits the current to protect the power supply from shutting down even during extreme feedback or square wave modulation conditions. A red rear-panel OVERLOAD PROTECT LED flashes when the SF-NP50A reduces power consumption to prevent shutdown of the power supply.

The SF-NP50A is constructed in a durable, professional all-metal enclosure suitable for free-standing, surface-mounted or rack-mounted operation. This full-featured SYSFLEX product is engineered and manufactured in the U.S.A for continuous duty in demanding installations. The versatility of SYSFLEX products adds enormous flexibility in the design and installation of professional A/V systems.

Features:

- 50 Watts RMS Constant Voltage Amplifier
- 70 V or 100 V Output
- Plenum Rated per UL 2043 Standard
- Converts One Dante Network Audio Signal to a Mono Constant Voltage Output
- Selectable Dante Sample Rates: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
- 0 dBFS Input for 50 W Output
- Analog Balanced Mono Input or Unbalanced Stereo Mini-Jack Input
- Automatic Ducking Controlled by Network or Analog Input (Switch-Selectable)
- Ducking Attenuation -25 dB or "off" (Switch-Selectable)
- Balanced Line Output from Network Audio Source
- Automatically Limits Supply Current to Protect Against Power Supply Shutdown
- VCA Control on Detachable Terminal Block
- External Control Using 10 k Ω Potentiometer or 0 to 10 Vdc
- Compatible with RDL Remote Level Controls
- Special Software Not Required for Module Setup
- LED Indicators: Network Sync, Amplifier Mute, Analog Input Level, Ducking Threshold
- High-Efficiency Class D Operation
- Thermal and Short-Circuit Protection