

## Model SF-NP100A Network to 100 W Mono Audio Amplifier - 70 V or 100 V

- 100 Watts RMS Constant Voltage Amplifier
- 70 V or 100 V Output
- Compatible with Dante or AES67 Network Audio Sources
- Converts One Network Audio Signal to a Mono Constant Voltage Output
- Converts Three Network Audio Signals to a Format-A Output on Pairs A, B and C
- Selectable Dante Sample Rates: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
- 0 dBFS Input for 100 W Output
- External Level Control Using RDL D-RLC10KM-Type Remote Level Controls with RJ45
- Special Software Not Required for Module Setup
- LED Indicators: Network Sync, Amplifier Output Level and Status, Correct dc Voltage on Format-A Output
- High-Efficiency Class D Operation
- Thermal and Short-Circuit Protection
- Plenum Rated per UL 2043 Standard



**APPLICATION:** The SF-NP100A is an audio power amplifier that receives four Dante (or AES67) network audio channels. It converts one of the Dante channels to a 70 V or 100 V constant voltage amplified output. The output provides 100 watts for a network digital audio level of 0 dBFS. The other three Dante audio channels are converted to RDL Format-A to feed additional amplifiers or other Format-A receivers.

Input gain is set by the installer using a rear-panel single-turn potentiometer with an associated dual-LED VU meter calibrated to 10 dB below maximum power output. The SF-NP100A is equipped with an internal VCA for setting the amplifier output level. The REMOTE CONTROL RJ45 jack provides for the connection of an RDL D\*-RLC10KM type remote level control. It is also possible to use the RJ45 jack to connect an external  $10 \text{ k}\Omega$  potentiometer or a 0 to 10 Vdc control voltage. VCA control insures long term noise-free level adjustment.

A selectable audio compressor is provided to add up to 15 dB additional headroom to the power amplifier input. The compressor is designed to remain aurally transparent using automatically adjusting attack and release times. The amplifier 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. Valid synchronization to the Dante network is indicated by a green LED visible from the front of the unit.

The SF-NP100A is equipped to operate from an included external 48 Vdc power supply.

The SF-NP100A is constructed in a durable, professional all-metal enclosure suitable for free-standing, surface-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.

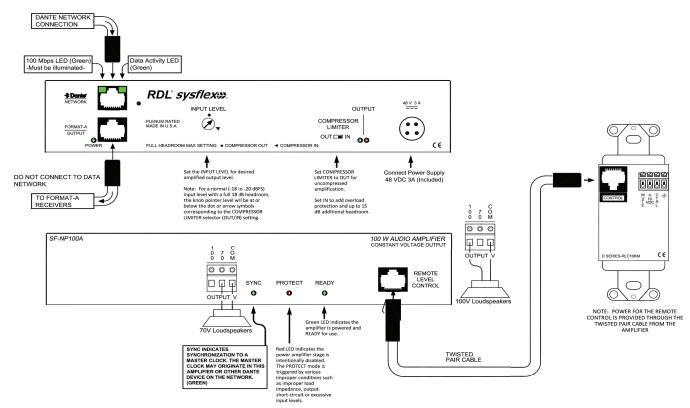


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### Installation/Operation



Declaration of Conformity available from rdlnet.com. Sole EMC specifications provided on product package. Specifications are subject to change without notice.



#### TYPICAL PERFORMANCE Network Input Section

Network Connector: Digital Audio Ethernet Protocol: Digital Audio Sources (4):

Transmission Rate: Sample Rates Supported: Bit Depth Supported:

#### Format-A Output Section

Output:
Output Connection:
Frequency Response:
THD + N:
Noise below +4 dBu:
Crosstalk:
Headroom above +4 dBu:

#### **Amplifier Section**

Power Amplifier Output: Frequency Response: THD+N: Noise: Audio Metering: 100 Mbps
44.1 kHz, 48 kHz (default), 88.2 kHz, 96 kHz
24 bits

RDL TP Format-A
RJ45
20 Hz to 20 kHz (± 0.5 dB)
< 0.01%
< 80 dB
Below noise floor (20 Hz to 20 kHz, -18 dBFS)
> 18 dB

1) Power amplifier input, 2) Format-A Pair A output;

3) Format-A Pair B output; 4) Format-A Pair C output

RJ45 with Link and Speed indicators

Dante or AES67

100 W RMS (70 or 100 V) +0/-3 dB (50 Hz to 20 kHz; -0.25 dB typical at 20 kHz) < 1% (100 W) -85 dB (below max power); <-75 dB (below 1/8 power) Dual-LED VU Meter calibrated to

10 dB below full output power

Gain Adjustment:
VCA:
Indicators (6):

Ambient Operating Environment:
Power Supply (included):
Plenum Rating Standard:
Dimensions:

Package Type: Package Dimensions: Shipping Weight: WEEE weight:

Tariff code:

Compressor:

Selectable (IN/OUT), Threshold 2 dB below rated output, automatic adjusting attack and release times; adds 15 dB headroom to power amplifier input

Single turn audio taper; sets maximum gain RJ45, 0 to 10 Vdc control (see RDL D\*-RLC10M type wall controls)

Front-panel: Ready (green), Overload Shutdown (red), Rear-panel: dual-LED VU meter (2), Format-A Power (green), SYNC (green) 0° C to 50° C 100 to 240 Vac, 50-60 Hz, IEC C14; Output to module: 48 Vdc UL 2043 Height: 1.68 in. (4.27 cm); Width: 8.71 in. (22.12 cm); Depth: 7.8 in. (19.81 cm) Cardboard Box 4.2 in. (10.67 cm) x 11.9 (30.23 cm) x 9.5 (24.13 cm) 5.52 lbs. 4.62 8543.70.9910