



PS-20

Power Supply

The RTS® PS-20 is the new flagship of a complete independent TW power supply. The PS-20 features two- and four-channel operation, RTS® monitoring, two-channel program input, audio linking, and three-mode operation: RTS® 2-channel, RTS® 4-channel and Clear-Com® mode. It also has double the power output of the PS-31 per channel, which will increase the number of user stations and belt-packs which can be connected substantially.

The PS-20 features two channels of communication where both channels are “wet”, meaning there is power on each channel (RTS® two-channel mode). In RTS® four-channel mode, the audio signals and DC exist on the same wire. The PS-20 can also be switched into Clear-Com® mode. The PS-20 has a 3-pin XLR (male) connector on the front of the system, where a RTS® user station can connect and monitor activity on either or both channels. A single PS-20 power supply has 1.8 ampere per channel which means the user can power up more stations (see specifications for details). If additional user stations or belt-packs are needed, two PS-20's can be joined together to double the power capability. A pair of standard stereo plug connectors are available on the back of the power supply to connect two PS-20's through audio linking as well. The PGM IN (3-pin XLR female Program Input) connector can be used to send audio to both CH 1 and/or CH 2.

Features

Selectable Mode Operation

The PS-20 is selectable between RTS 2-channel, RTS 4-channel and Clear-Com® mode.

Audio Linking

There is an audio link connection (1/4" (6.3mm) Stereo plug) on the back of the unit.

Monitoring

The 3-pin XLR Monitoring output connector on the front of the PS-20 allows the user to connect a RTS® user station to monitor a channel or both channels.

Status Indicators

There is a green status indicator for each channel on the front of the unit. Each of these indicators will remain lit during normal operation, but will turn RED during a channel current overload condition. Output current is automatically reduced during an overload, and normal operation is restored when the overload is removed.

Program Input

There is a Program Input connector on the rear panel. This can be used to connect a device that both channel 1 and channel 2 can listen to at the same time. A Channel Select switch on the front panel assigns the program to either or both channels. A Level control adjusts the program level to the intercom channel.

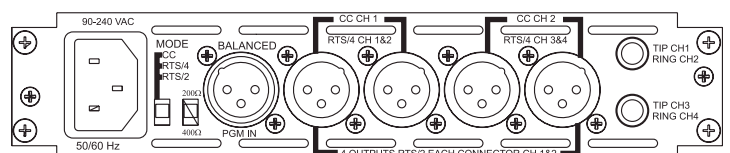
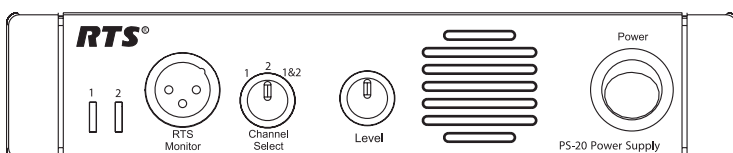
Intercom Channels Connections

Intercom channels (user stations) are connected to the rear panel of the PS-20 with 3-pin XLR connectors.

Selectable Termination Impedance

The IMPEDANCE SELECT switch on the rear panel allows each channel to be set for 200Ω or 400Ω operation. Select 200Ω for each channel operated independently. Select 400Ω for each channel connected to another channel.

Line Drawing



PS-20 Specifications

General

Input Voltage: 90 to 264 VAC, 50 to 60 Hz
Output Voltage: 28 VDC to 32 VDC
Output Current: 2.00 Amps Maximum per channel
Termination Impedance: Selectable 200 Ω / 400 Ω
1.8 Amps maximum per channel
Ripple: < 0.2 V
Program Input Levels:
Nominal +2 dBu
Balanced, High Impedance >10 k Ω
Two-Wire Output Levels:
Nominal 30 VDC
Unbalanced, selectable 200 Ω / 400 Ω

Monitor Output:
Nominal Gain of 0 dB for 1000 mVRMS input level on the program input. 30 VDC nominal, 100 mA maximum.
Audio Link: Nominal input 2 dBu with a Gain of 0 dB

Connections

Type: 3-pin XLR male (RTS 2-channel Mode)
Pin 1 Common for Audio and DC
Pin 2 30 VDC and Mixed Audio Channel 1
Pin 3 30 VDC and Mixed Audio Channel 2

Type: 3-pin XLR male (RTS 4-channel Mode)
Pin 1 Common for Audio and DC
Pin 2 30 VDC and Mixed Audio Channel 1 or 3
Pin 3 Mixed Audio Channel 2 or 4

Type: 3-pin XLR male (Clear-Com Mode)
Pin 1 Common for Audio
Pin 2 30 VDC
Pin 3 Mixed Audio Channel 1 or 2

Program Input

Type: 3-pin XLR female
Pin 1 Common
Pin 2 Balanced Audio + Input
Pin 3 Balanced Audio - Input

Audio Link

Input ¼" Stereo Phono Jack
Tip: CH1
Ring: CH2
Sleeve: Ground

Output ¼" Stereo Phono Jack
Tip: CH3
Ring: CH4
Sleeve: Ground

AC Input

Type: Universal AC Plug
Pin 1 Hot
Pin 2 Neutral
Pin 3 Earth Ground

Monitor Output

Type: 3-pin XLR male (RTS 2-channel Mode)
Pin 1 Common for Audio and DC
Pin 2 30 VDC and Mixed Audio Channel 1
Pin 3 30 VDC and Mixed Audio Channel 2

Type: 3-pin XLR male (RTS 4-channel Mode)
Pin 1 Common for Audio and DC
Pin 2 30 VDC and Mixed Audio Channel 1
Pin 3 Mixed Audio Channel 2

Type: 3-pin XLR male (Clear-Com Mode)
Pin 1 Common for Audio
Pin 2 30 VDC
Pin 3 Mixed Audio Channel 1 or 2

Environmental

Operating Temperature: 0° C - 50° C (32° F to 122° F)
Storage: -40° C to 70° C (-40° F to 158° F)
Humidity: 0 to 95%, non-condensing

Dimensions and Finish

Height: 1.72" (44 mm) - 1 RU
Width: 8.186" (207.9 mm)
Weight: Under 5lbs.

Finish: Thermoplastic front panel, Aluminum case, RTS light gray paint - black silkscreen.

Mounting: MCP Style rack kit or (included rubber adhesive feet).

Ordering Information

PS-20

Power Supply
Catalog Number:
90007854000 US Power Cord
90007854100 Euro Power Cord
90007854200 UK Power Cord

This specifications information is preliminary and is subject to change without notification.
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