

# whirlwind PressPower WP

## Introduction

Thank you for selecting the Whirlwind Presspower WP audio press feed distribution box. The Presspower WP is a permanent wall mount unit that delivers broadcast quality audio from 14 mic or line level transformer isolated outputs. Features include a 20 segment led VU display for quick visual level setting, a headphone monitoring section, a tone oscillator for level calibration and a locking cover. There are two balanced input channels, switchable to accept mic or line level signals. Audio can be applied to either the front panel jacks or to remotely located connectors. Each input channel has a switch to select the desired input connector. Connections are available for an optional expander unit, the PRESS2XP, which provides 16 additional mic or line level outputs. Wiring for the expander and the remote inputs must be done at the time of installation. The Presspower WP requires 36V DC power and comes with a provided external power supply.(See Safety Instructions).

## Presspower WP Features

The Whirlwind Presspower WP is a permanent installation version of the industry standard Presspower 2. All the same features are included in this package:

- 14 mic or line level outputs
- XLR or 3.5mm transformer balanced output jacks
- Complete ground isolation between outputs
- 2 mic or line level inputs
- Choose front panel inputs or remote connections
- Expander connection for additional outputs
- Test tone for level calibration
- Headphone monitoring of input signals
- Installs between 16" wall stud centers

## Unpacking

Whirlwind has made every effort to ensure that your equipment is received in the same perfect condition it was in when it left the factory. Please inspect your product for any signs of damage during shipping and report them to your dealer so that a claim can be presented to the shipper. We recommend that you save your packaging material for use in the unlikely event that you need to return your equipment for service. The electronic unit can be removed from the wall box for service without disturbing the power connection.

## Installation

The Presspower WP is designed to fit between standard 16" stud centers. The included backbox should be securely mounted to support the weight of the unit with the cover attached.

36 VDC power is required, and a convenience 2 Pin Phoenix Connector is provided to mate up with the power supply.

Wiring for remote inputs or expander unit audio connections pass through a  $\frac{1}{2}$  -  $\frac{3}{4}$  " conduit knockout in bottom left of the backbox. Shielded 22 AWG wire: Belden® 1266A, West Penn® 291 or equivalent is recommended as a minimum wire gauge. Three pin 3.5mm pluggable screw connectors attach the audio wiring to the unit. The remote inputs are standard balanced audio: plus, minus, and ground. A two pin 3.5mm plug is used for expander 36 VDC power. The expander wiring should terminate in a female Switchcraft® D6F or equivalent. The pinout is as follows:

- Pin 1 = Power negative and both audio grounds
- Pin 2 = Mic level audio minus
- Pin 3 = Mic level audio plus
- Pin 4 = Line level audio plus
- Pin 5 = line level audio minus
- Pin 6 = Power positive

The cover can be installed to open either left or right by changing the position of the lock strike and the magnetic strips. Upon final installation, remove the adhesive backing from the magnetic strips and attach them above and below the lock strike on the exposed box flange.

## CONTROLS AND CONNECTIONS

**1 POWER SWITCH** applies AC voltage to the unit and illuminates the power LED.

**2 HEADPHONE LEVEL CONTROL** adjusts the volume at the 1/4" TRS headphone jack through a range of -60 to +20 dBm. The headphone jack works with stereo headphones and with mono earpieces.

**3 TEST TONE SWITCH** applies a 1 kHz sine wave to all outputs for level calibration during setup. The tone level is +4 dBm or 0 VU in line mode and -43 dBm in mic mode.

**4 FRONT/REAR INPUT SWITCH** determines the source of the audio signal that is sent to the outputs.

**5 INPUT MIC/LINE SWITCH** selects the appropriate circuit for the applied signal. The mic circuit is transformer balanced with a maximum input level of -5 dBm. The line circuit is actively balanced with a maximum input level of +35 dBm. The **MIC** position applies 36 VDC phantom power to the input and activates a low cut filter with a 24 dBm per octave slope, down 3 dBm at 120 Hz. This filter reduces low frequency handling and wind noise. These features are not available in **LINE** mode.

**6 INPUT LEVEL CONTROL** varies the amount of signal delivered to the outputs. The 12 o'clock (U) position yields unity gain in either mic or line mode with approximately 6 dB of gain adjustment 90 degrees in either direction. Large increments of adjustment occur at both ends of pot rotation with a total range of -60 to +20 dBm.

**7 INPUT XLR** female connector is RF filtered with pin 2 positive.

**8 OUTPUT MIC/LINE SWITCH** selects the signal level at each output. Mic level is 43 dBm below line level.

**9 OUTPUT XLR** male connectors are transformer isolated and ground lifted from each other, pin 2 is positive.

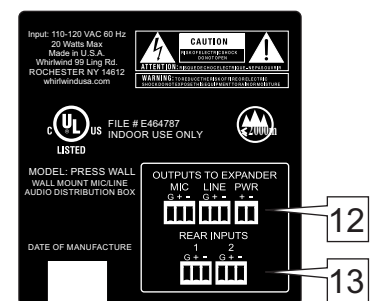
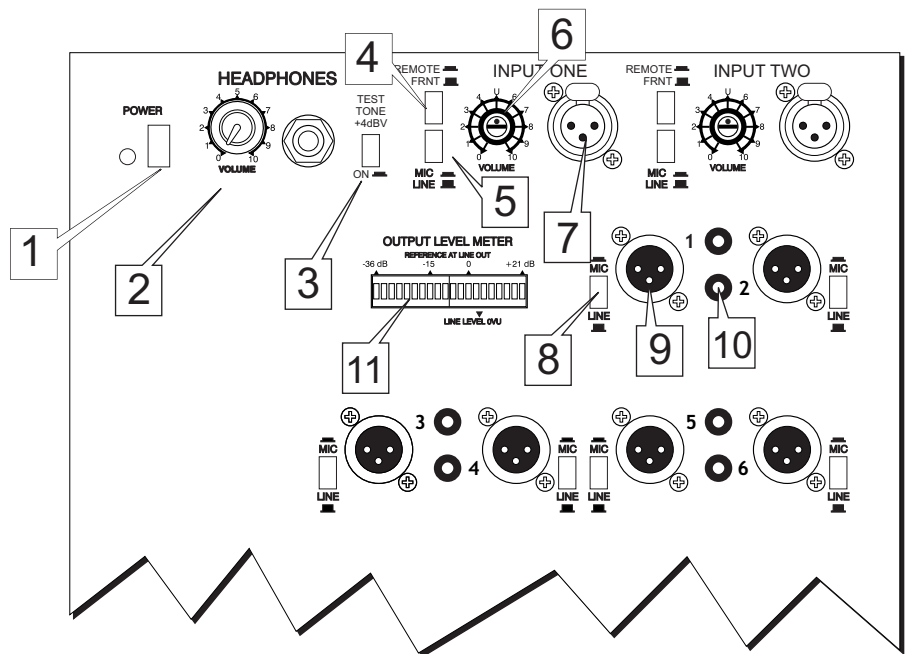
**10 OUTPUT 3.5 MM JACK** is wired positive signal to tip and negative to ring. Do not use this and the XLR output simultaneously.

**11 20 SEGMENT LED METER** with 3 dB per segment resolution provides a wide range display with 1 dB accuracy.

**12 OUTPUT EXPANDER TERMINALS** for connection of the PRESS2XP 16 channel expander module are located in the recessed compartment inside. Three pin 3.5mm pluggable screw connectors for mic and line audio and a two pin for power are provided with the unit.

**13 REMOTE INPUT TERMINALS** are also located in the recessed compartment. Three pin 3.5mm pluggable screw connectors are provided with the unit.

**14 DC POWER CONNECTION** is a Phoenix type. The chassis connector is provided. For long termination to the 36V DC Power Supply. Wire to be provided by the installer. 24 AWG wire is recommended as a minimum wire gauge.



## **Safety:**

1. Read instructions - All the safety and operating instructions should be read before operating the unit. The term "unit" here forth refers to the remote power supply.
1. Retain instructions - The safety and operating instructions should be retained for future references.
2. Head Warnings - All warnings pertaining to the Presswall and Power Supply should be adhered to.
3. Follow Instructions - All operating and use instructions should be followed.
4. Water and Moisture - The unit should not be used near water - for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, and the like.
5. The unit should be situated away from heat sources such as power amplifiers and power conditioning filters.
6. Grounding - Precautions should be taken so that the safety grounding means are not defeated and the protective earth terminal/safety ground should be connected to a mains outlet with a protective earth/safety ground connection.
7. Power Cord Protection - Power supply cords, AC and 2 pin DC, should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs and the point where they exit from the power supply and unit. Strain relief holes are provide to secure 36VDC wire coming out of the supply.
8. When not using the unit- The power cord of the supply should be unplugged from the AC outlet when left unused for a long period of time.
9. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure.
10. The user should not attempt to service or modify the unit unless qualified to do so and under the guidance of WHIRLWIND Service Technician.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. WARNING RISK OF ELECTRIC SHOCK DO NOT OPEN AVIS RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of "Dangerous Voltages" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

## **Product Specifications:**

### **Frequency Response:**

-.5 dBm 20 Hz to -2 dBm @ 16 kHz

### **Input Impedance:**

Mic: 1.5k Ohms

Line: 200k Ohms

### **Maximum Input Level:**

Mic: -5 dBm

Line: +50 dBm

### **Output Impedance:**

Mic: 150 Ohms

Line: 150 Ohms

### **Maximum Output Level:**

Mic: -5 dBm into 2k Ohms

Line: +23 dBm into 2k Ohms

**Total Harmonic Distortion:** 0.021% at 1 kHz, mic  
@ unity gain

### **Isolation Between Outputs:**

Mic: Greater than 95 dBm

Line: Greater than 60 dBm

**Power Draw DC mode:** 60 W max.

Finished Size (flush mount): 14.25"x14.25"x 4"

Wall Cutout: 12"x12"

Weight w/ case: 24 lb.

Shipping weight: 26 lb.

