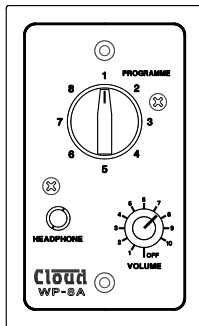
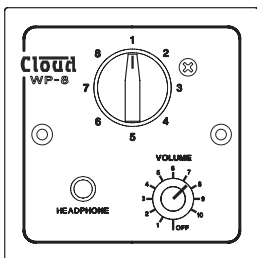




WP-8 and WP-8A Headphone Stations



Installation Guide

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Safety Information

The Cloud WP-8 contains no active electronics and thus requires no AC or DC voltage supply. Safety precautions are therefore minimal.

Introduction

The WP-8, part of the Cloud Headphone Distribution System, is a remote headphone station that connects to an output of either a CAM-16 Audio Distribution Matrix or a CAS-16 Audio Distribution Sub-Station, using standard CAT-5 cable. In addition to a stereo headphone socket for connection of a pair of personal headphones, it has controls allowing a user to select the music source (from those connected to the CAM-16), and to adjust the headphone volume. It also provides outputs for a pair of small loudspeakers; these can also be used to feed the inputs of an external power amplifier or powered speakers. When used in this way, the panel's controls also set the source and level for the external equipment.

The WP-8 fits standard UK-style single-gang electrical back boxes, either surface-mounting or flush-fitting. Recommended back box depth is 25 mm. Two M3.5 x 20 fixing screws are supplied with each WP-8 plate.

US Versions:

The WP-8A is electrically and functionally identical, but the faceplate has different physical dimensions (4.51" x 2.76") which allows it to be mounted into a standard single-gang US-style back box (with vertical orientation). All information in this manual applies equally to both mechanical versions.

What's in the Box

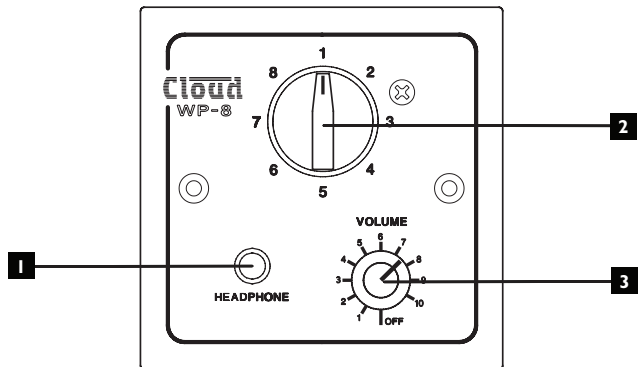
Please check the box for damage before opening. If there is damage, please contact your Cloud agent and the shippers.

The box should contain the following items:

- WP-8 or WP-8A Headphone Station
- 2 qty M3.5 x 20 panel fixing screws*
- This manual

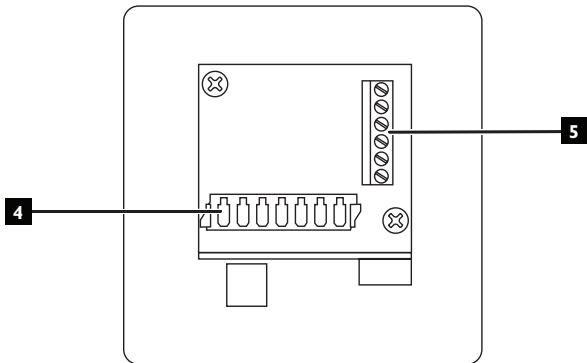
* Not supplied with WP-8A

Top view



1. Headphone socket
2. Music source selection switch
3. Headphone volume control

Rear view



4. IDC connector block for hard-wiring
5. Screw-terminal block for external amplifier/speaker connection

Installation

Mechanical

The Cloud WP-8 is designed to be wall mounted. It is the same physical size as a UK-style single-gang electrical plate and can be flush-mounted in the back box provided, or in a standard surface box with a minimum depth of 25 mm. Fixing screws are provided.

The WP-8A, the US variant of the WP-8, fits a standard US-style electrical box.

Connections

The only electrical connection required is a single CAT-5 cable. This is terminated on the WP-8's rear PCB at an 8-way IDC (Insulation Displacement Connector) connection block.

Note that the total cable run from the CAM-16 or CAS-16 to a WP-8 should not exceed 100 m.

First pass the CAT-5 cable through a suitable hole in the back box. Using an IDC insertion tool, connect it to the 8-way IDC block as follows:

TERMINAL	CAT-5 CORE
1	Brown
2	White + Brown
3	Green
4	White + Blue
5	Blue
6	White + Green
7	Orange
8	White + Orange

We recommend that some form of cable retention is employed to secure the CAT-5 cable to the back box; a cable tie with an adhesive cable tie base will normally be adequate. Stick the base to the inside of the box if there is room, or to the rear of the box if it is of the cavity wall fixing type.

Connecting an external amplifier and/or speakers

The WP-8 is provided with additional outputs, which can be used to drive external low-power loudspeakers directly, active loudspeakers or the line inputs of an external amplifier. Both stereo and mono configurations are possible.

Connections are made to the 6-way screw-terminal block **5** on the rear PCB. The pinout of this connector block is as follows:

PIN	MARKED	CHANNEL	PURPOSE
1	0V	LEFT	Output – (0V)
2	L+		Switched output +
3	L+		Permanent output +
4	0V	RIGHT	Output – (0V)
5	R+		Switched output +
6	R+		Permanent output +

Note that both ‘switched’ and ‘permanent’ outputs are available. The switched outputs are wired internally via switch contacts on the front panel headphone

socket, and mute when a jack plug is inserted in the socket. The permanent outputs are continuously active.

The WP-8's external outputs can provide 150 mW of power in stereo or 300 mW in mono, into 8 ohm speakers. (The impedance of the speakers is not critical.)

NOTE: Take care when wiring a WP-8 since wiring errors can cause incorrect operation.

Connecting loudspeakers – stereo operation

Connect the loudspeakers as shown in Fig. 1 if continuous operation is required, or as in Fig. 2, if the speakers should mute when headphones are connected.

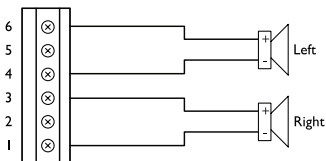


Fig. 1

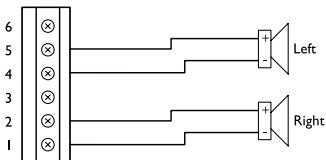


Fig. 2

Connecting loudspeakers – mono operation

Outputs may be paralleled if a single mono output is required. Connect the loudspeaker as shown in Fig. 3 if continuous operation is required, or as in Fig. 4, if the speaker should mute when headphones are connected.

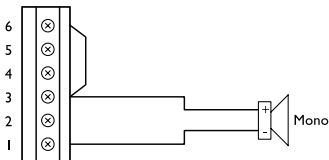


Fig.3

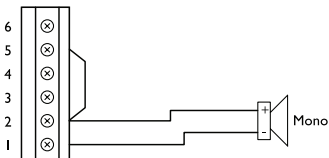


Fig.4

Driving powered loudspeakers or external amplifiers

A line level signal may be derived from the outputs by the addition of 1k ohm resistors; this may be used to drive active loudspeakers or the inputs of a separate external amplifier. Again, either stereo or mono operation may be employed. Use the wiring shown in Fig. 5 (continuous) or Fig. 6 (switched) for stereo operation, or Fig. 7 (continuous) or Fig. 8 (switched) for mono operation.

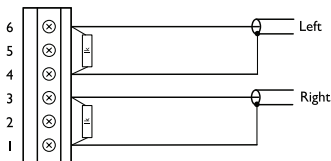


Fig.5

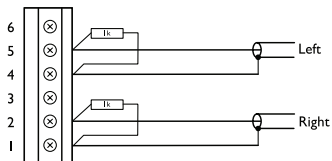


Fig.6

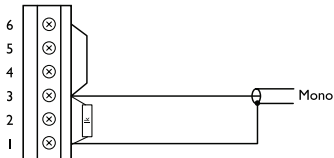


Fig.7

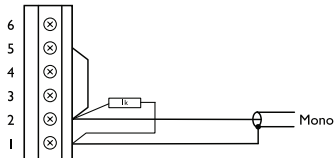


Fig.8

Operation

The WP-8 has a 3.5 mm 3-pole jack socket for headphones **1**. The WP-8 is suitable for headphones having an impedance of 32 ohms. We recommend the Cloud CP32 headphones for use with the headphone distribution system.

The music source can be selected (from those available) with the source selection switch **2** and the headphone volume adjusted with the level control **3**.



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