HEADPHONE DISTRIBUTION SYSTEM





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PUMP STATION 16 & SUB STATION 16

Listening to a personal choice of music or video sound track can reduce the tedium of exercising or waiting.

The Cloud Headphone Distribution System has been specially developed to meet the needs of users who would benefit from having an entertainment facility at their fingertips.

Whether exercising, adding a tan or patiently waiting for something to happen, the Pump Station is designed to provide the entertainment, offering 8 stereo sound sources, any of which can be selected to operate through a pair of stereo headphones via the RH-8 or WP-8 control panel with a total capacity of 256 control panels on one system.

The RH-8 (available in Charcoal or Ivory) can be mounted onto the frame of an exercise machine or any convenient flat surface. The WP-8 is suitable for wall mounting onto a standard UK electrical back box (WP-8A available for USA). They are both simple to understand and easy to operate.

A direct link to a paging system is provided allowing messages to be heard by every user. The music signal is lowered during announcements.

The Cloud CP32 headphones ensure optimum performance; they are light, comfortable and robust. Replacement ear pads are available.

The Pump Station 16 is the system controller with 8 stereo line inputs, global input, music mute and line output. It has the capacity to connect sixteen RH-8 or WP-8 control panels.

The Sub Station 16 can be linked to the Pump Station 16 to provide 16 extra control panels. A total of 15 Sub Station 16 expansion units can be linked to a single Pump Station 16 making a total system capacity of 256 control panels.







RH-8 ivory



TECHNICAL SPECIFICATIONS

The Pump Station 16 has the capacity to connect up to sixteen RH-8 or WP-8 control panels. More control panels can be added by linking the 16 channel Sub Station 16 expansion unit. Up to fifteen Sub Station 16 units can be driven by one Pump Station 16 making a total system capacity of 256 remote control panels.

All eight stereo line inputs have a pre-set gain trimmer and signal LED for perfect level setting. A balanced 'Global' input with priority is provided; this can be used to link the house PA system to the Pump Station for paging purposes. Channel 16 is fitted with a mono, balanced line output; this can be linked to the general music system using the channel 16 RH-8 or WP-8 to control the line output signal (normally with no headphone connected).

A music mute facility is included and when connected to a fire alarm control panel, the music signals will mute when the alarm is activated; the global input will operate normally at all times.

SYSTEM CAPACITY

The Pump Station 16 has the capacity to connect 16 RH-8 or WP-8 remote control panels; sixteen extra control panels can be connected with the addition of a Sub Station 16. A total of 15 Sub Station 16 expansion units can be wired to a single Pump Station 16 making a total system capacity of 256 control panels.

The Sub Station 16 is supplied with a multi-core expansion link cable and the whole system is linked using the 'expansion link' in a 'daisy chain' format all driven from a single Pump Station 16.

LINE INPUTS

Eight stereo line inputs are provided; these are compatible with a wide range of stereo signal sources including CD players, tuners, satellite receivers, VCRs and TV sets (via the SCART socket). RCA phono connectors are used with adjacent gain controls and a signal LED for optimum level setting.

GLOBAL INPUT

A global, mono, balanced input with priority over the music signals is provided to link to a paging system. This input is compatible with line level signals or a dynamic microphone. A channel access contact is provided to interface with a paging microphone. A 200Hz high pass filter can be selected to improve the intelligibility of speech.

CHANNEL 16 LINE OUTPUT

In addition to all the normal functions, channel 16 has a line level, mono, balanced output. This can be used to feed a signal to a separate sound system. The RH-8 or WP-8 wired to channel 16 will control the source and adjust the music level (the RH-8/WP-8 should be used without headphones).

REMOTE MUSIC MUTE

The Pump Station can be wired to a fire alarm control panel to provide muting of the music signals during an alarm condition. The Global input will operate at all times.

RH-8 CONTROL PANEL

The control panel, which is available in Ivory or Charcoal, is supplied with all the accessories required to mount the unit onto the framework of exercise machinery; it can also mount onto a flat surface such as a bulkhead or wall. Two methods of termination are provided: a RJ45 type data socket can be accessed through the rear panel; for hard wired installations, screw terminals are provided internally. The RH-8 is supplied with a 3m cord set fitted with 8 pole FCC68 data plugs (RJ45). An optional 3m curly cable is available for use on equipment that needs to be adjusted in height.

WP-8 WALL MOUNTED CONTROL PANEL

This remote control module is a dedicated wall mounting unit that is compatible with the Pump Station-16 and Sub Station-16. The WP-8 Remote control panel has facilities that allow a user to select the music level and music source whilst monitoring the signal through stereo headphones and/or low power speakers. The module is primarily aimed at venues such as tanning suites and treatment rooms where users may wish to listen to any one of the eight available programmes.

The WP-8 has two low impedance, low power speaker outputs each with a different operation. The first is a normal low impedance speaker output, the second provides a similar low impedance output that is disconnected when headphones are connected to the WP-8. The WP-8A is available to suit single gang US style mounting boxes.

CLOUD CP32 HEADPHONES

These dynamic stereo headphones are small, light, robust and comfortable. They have a superb frequency response and the whole system is designed to give optimum performance when using the CP32. The CP32 is made for Cloud by Sennheiser.

SYSTEM WIRING

Every RH-8 or WP-8 control panel should be independently wired to the equipment rack using unscreened CAT 5 cable. For the RH-8, we suggest that the RJ45 type connector on the Pump Station or Sub Station is wired to a RJ45 data socket floor mounted close to the respective exercise machine. The 3m cord set supplied with the RH-8 can then be used to link the RH-8 control panel to the floor socket. Cost savings can be made by wiring the RJ45 on the Pump Station or Sub Station directly to the screw terminals within the RH-8. The WP-8 wall mounted control panel is fitted with a 'push-down' type of IDC connector and should be wired directly to the RJ45 connectors mounted on the rear panel of the Pump Station or Sub Station.

POWER SUPPLY

The Pump Station 16 and the Sub Station 16 are supplied with an external plug-top transformer that is fully compliant with the relevant safety standards. The European transformer is CE marked, and the US transformer is both UL and CSA approved.

Line Inputs

Frequency response	20Hz - 20kHz ±0.5dB
Input level	-14dBu (155mV) to +6dBu (1.55V)
Input impedance	47kΩ
Input gain range	20dB
Input level indicator	LED - illuminates above a fixed threshold
Input connector	2 x RCA phono jack (stereo)

Global Input

Frequency response	20Hz - 20kHz ±1 dB
High pass filter	-3dB @200Hz - 3 pole (with in/out switch)
Gain range	0dB to 50dB
Input impedance	5kΩ
CMR	>70dB @ IkHz
Access contact	Channel off/on by closing contact

Headphone Output - via RH-8 or WP-8 Control Panel

Nominal output level	100mW rms per channel with 32 Ω load
Optimum load impedance	32Ω
Recommended headphones	Cloud CP32

Line Output - Channel 16 - Pump Station 16

Nominal output level	0dBu (775mV)
Minimum Ioad	600Ω

General Specifications

Pump Station 16 & Sub Station 16		
Power consumption	25VA with approved external transformer	
Width	482.6mm (19.0")	
Height	88.0mm (3.50") - 2U	
Depth	170.0mm (6.70") + connectors	
Weight	4.0kg net	

Power Transformer

Output	15V AC 1.25A 18.5VA
Weight	0.52kg net



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