



BE-1

Remote Line Input Plate

Installation Guide

Introduction

The BE-1 is a remote line input plate for use with the Cloud DCM-1 Digitally Controlled Mixer, and cannot be used with any other Cloud product. This document provides information on how to connect BE-1s into a DCM-1-based audio system. Further information on configuring the DCM-1 itself for use with BE-1s can be found in the DCM-1 Installation and User Guide.

The BE-1 provides a DCM-1-based audio system with a connection point for a balanced stereo line-level audio source, such as a professional DJ console, mixing desk, feeds from broadcast equipment, etc.



Introduction - continued

The BE-I will generally be installed in zones where such equipment is likely to be required. It is also useful for connecting additional permanent equipment with balanced outputs (the DCM-I having only one rear panel balanced line input), in which case it may be installed adjacent to the main equipment rack housing the DCM-I.

The input connectors are latching 3-pin female XLRs, wired to the industry-standard pinout:

PIN	FUNCTION
1	Ground
2	Signal 'hot' (+, phase)
3	Signal 'cold' (-, antiphase)

The BE-I's are electronically balanced, and are optimised for use with signals at a nominal level of 0dBu. No gain adjustment is provided on the panel; if the signal level from the connected equipment is too low or too high, it should be adjusted at source. Note that the BE-I does not provide electrical isolation and external transformers should be employed if isolation is needed and the source equipment does not have transformer-coupled outputs.

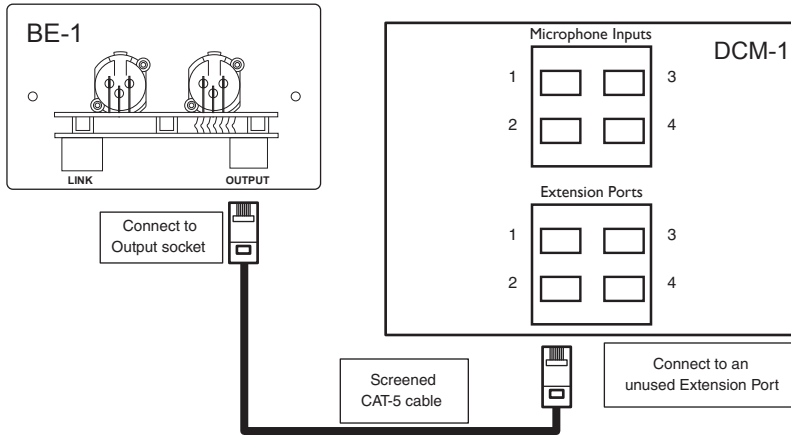
Mounting - mechanical

The Cloud BE-I fits a standard dual-gang electrical back box. The back box used should have a depth of at least 35mm (1.25"). Note that the BE-I is made in various faceplate sizes to suit standard electrical plate sizes in use in the UK, USA and Australia; ensure you have the correct version for your territory.

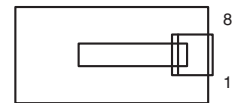
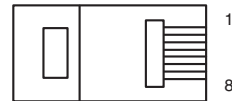
Wiring

The BE-I's OUTPUT connector should be connected to one of the DCM-I's EXTENSION PORTs (Line inputs 1 to 4) with screened CAT-5 cable and shielded RJ45 plugs. Do not connect any other equipment to the phono sockets of the same-numbered Line Input on the DCM-I.

Note that because the cables carry low-level audio, only screened CAT-5 should be used, the foil screen of the cable being bonded to the metal screening can of the plugs. If a BE-I is being mounted in close proximity to the DCM-I, it may be possible to use ready-made screened CAT-5 "patch" cables of an appropriate length. Otherwise, shielded RJ45 plugs should be crimped onto the installed screened CAT-5 cable using the pinout shown below.



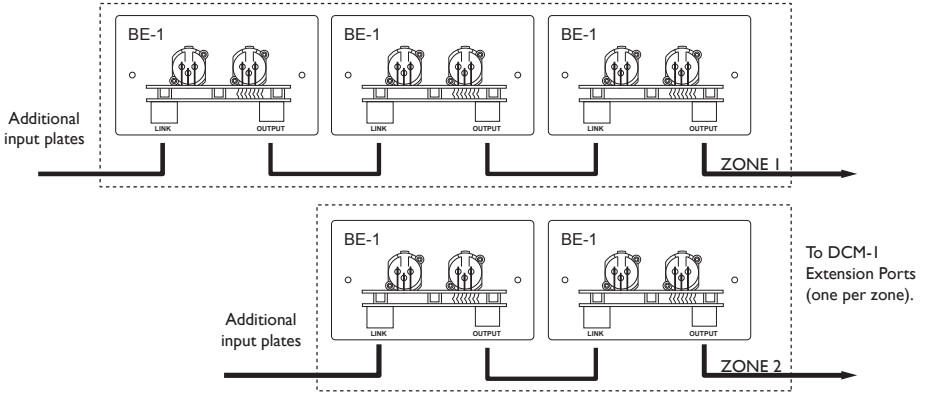
PIN	USE	CAT-5 CORE
1	Left (cold)	White + Orange
2	Left (hot)	Orange
3	Sense	White + Green
4	DC +ve	Blue
5	0v	White + Blue
6	DC -ve	Green
7	Right (hot)	White + Brown
8	Right (cold)	Brown



Connecting Multiple BE-Is

Multiple BE-Is may be “daisy-chained” together to provide input points at different locations in the same zone. Signals applied to plates wired in this way will be summed together to the DCM-I Line Input to which the “last” BE-I in the chain is connected. An internal gating circuit on each plate automatically “disconnects” any chained plates which are not in use, to minimise noise contribution. Chained plates will be treated as a single line input at the DCM-I.

Multiple BE-Is in the same zone may be daisy-chained by connecting the LINK RJ45 socket on the first BE-I (that whose OUTPUT socket is connected directly to the DCM-I) to the OUTPUT socket on the second BE-I, and so on, as shown on page 4.



Interconnecting BE-I and LE-I remote input plates

The Cloud LE-I is an alternative optional remote line input plate, providing an unbalanced stereo line input on phono sockets and a 3.5mm jack socket. BE-I plates may be intermixed with LE-I's in a daisy-chain wiring arrangement in the manner described for BE-I's alone, using the LE-I's OUTPUT and LINK connectors. All the plates on a chain will be treated as a single line input at the DCM-I.

Note that is not possible to intermix BE-I's with Cloud ME-I remote microphone input plates in this manner.

DC Power

The BE-I is powered from the DCM-I's EXTENSION PORTs via the CAT-5 connection. The BE-I consumes 24mA of current from the DCM-I power supply.

If there is any doubt regarding the DCM-I's spare DC power capacity (as might be the case in a very large system with many CDR-I remote controls, level restoration relays, etc.), please refer to page 53 of the DCM-I Installation and User Guide where full details of the DCM-I's PSU ratings can be found.

Should you have any questions concerning the installation and connection of the BE-I, please contact our Technical Support staff (details on front cover).