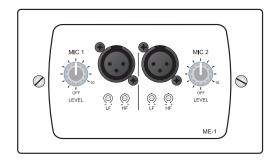
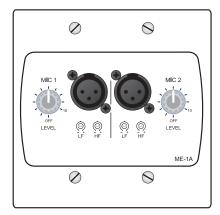


# **ME-ISeries**

# **Microphone Input Modules**







**Installation Guide** 



## Introduction

The ME-I is a remote mic input module for use with the Cloud DCMI range of Digitally Controlled Mixers. It cannot be used with any other Cloud product.

NOTE I:All references to "DCMI" in this Installation Guide can be taken to apply to all models in the DCMI range.

NOTE 2: Unless specifically stated otherwise, all references to "ME-I" in this Installation Guide can be taken to apply to all ME-I mechanical and cosmetic variants.

This document provides information on how to connect ME-Is into an audio system based on a DCMI. Further information on configuring the DCMI itself for use with ME-Is can be found in the DCMI Installation and User Guide.

The ME-I (UK version) and ME-IA (US version) allow one or two microphones to be connected to a DCMI-based audio system. The modules act as a 2-into-I mixer, i.e., if two mics are in use, a mono sum of the two is sent to the DCMI for routing to the zone(s). The two microphone channels are identical.

The ME-IM ("Media" version) is a single-channel 100 mm x 50 mm "Euro-module"; it is electrically identical to one channel of either a ME-I or ME-IA.

The mic input connector(s) are 3-pin latching female XLRs, wired to the industry-standard pinout:

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

Phantom power (12V) can be activated by a rear jumper (see below), permitting the use of either dynamic or condenser microphones. Between -85 dB and +60 dB of gain adjustment is available with the faceplate control to suit almost all types of microphone; when the module is in use, mic volume is adjusted with this control alone. HF and LF EQ adjustment is provided via two screwdriver-operated preset controls; these should be adjusted using the microphone (and ideally, the speaker him/herself) for optimum clarity.

See the DCMI Installation and User Guide (Configuration; Installer Mode; Routing Menu; Enable Mic Inputs), for details of how an ME-I input module is activated.

# **Mounting - mechanical**

#### ME-I (UK version)

The Cloud ME-I fits a standard UK-style dual-gang electrical back box. The box used should have a depth of at least 35 mm.  $2 \times M3.5$  screws are supplied with the module.

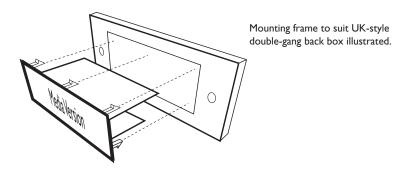
### ME-IA (US version)

The Cloud ME-1A fits a standard US dual-gang electrical 'J' box in vertical orientation. The box used should have a depth of at least  $1\frac{1}{4}$ ".  $4 \times 6-32$  screws are required to secure the module.



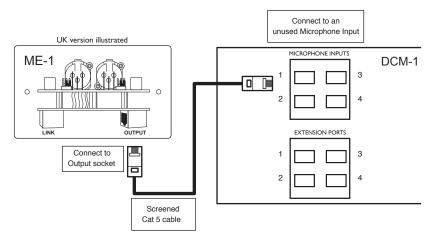
#### ME-IM (Media version)

The Cloud ME-1M is a  $100 \times 50$  mm "Euro-module", and is designed to clip into a mounting frame with this size cut-out (not supplied). Suitable mounting frames are available in most European and other territories, to fit local electrical back box dimensions. Ensure that the back box has a depth of at least 35 mm. The module is secured in place by the six plastic clips (three top, three bottom).



# Wiring

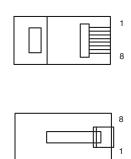
The ME-I's OUTPUT connector should be connected to one of the DCMI's MICROPHONE INPUTs with screened Cat 5 cable and shielded RJ45 plugs.



Note that all ME-Is have two RJ45 connectors, OUTPUT and LINK. On ME-I and ME-IA versions, they are both mounted on the lower PCB, with the OUTPUT connector on the right (looking at the module rear). On ME-IM versions, they are mounted on separate PCBs; the OUTPUT connector is on the upper PCB.

IMPORTANT: 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 an ME-1 is being mounted in close proximity to the DCM1, 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
I	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
SCN	Screen	Connector Shell

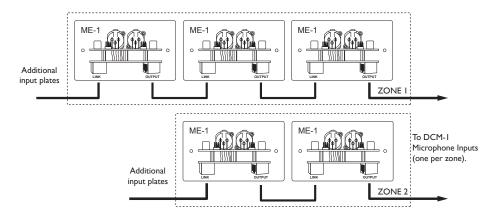




# **Connecting Multiple ME-Is**

Multiple ME-Is may be "daisy-chained" together to provide additional input points, normally in the same zone. Signals applied to modules wired in this way will be summed together and fed to the DCMI Microphone Input to which the "first" ME-I in the chain (that whose OUTPUT socket is connected directly to the DCMI). An internal gating circuit on each module automatically "disconnects" any chained modules which are not in use, to minimise noise contribution. All microphones plugged into ME-Is on such a chained system will be summed together into one mono signal.

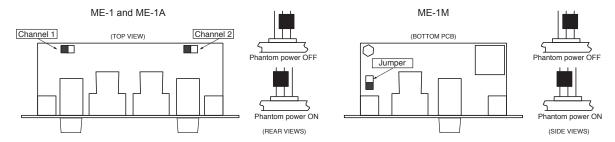
Multiple ME-Is may be daisy-chained together by connecting the LINK RJ45 socket on the first ME-I to the OUTPUT socket on the second ME-I, and so on, as shown below.



#### **Phantom Power**

12 volt phantom power may be enabled on either input channel. The installer should determine what type of microphone(s) are to be used with the ME-I before setting these, as inadvertently-applied phantom power can damage some types of dynamic microphone.

Phantom power is enabled by moving the two jumpers on the rear pcb, as shown below.



# **DC Power**

The ME-I is powered from the DCMI's MICROPHONE INPUTs via the Cat 5 connection. The ME-I and ME-IA consume 43 mA of current at both +12V and -12V from the DCMI power supply; the ME-IM consumes 30 mA.

If there is any doubt regarding the DCMI'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 the DCMI Installation and User Guide (Appendix; PSU capacity) where full details of the DCMI's PSU ratings can be found.

Should you have any questions concerning the installation and connection of the ME-1, please visit www.cloud.co.uk/resources, where you will find additional technical information.

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