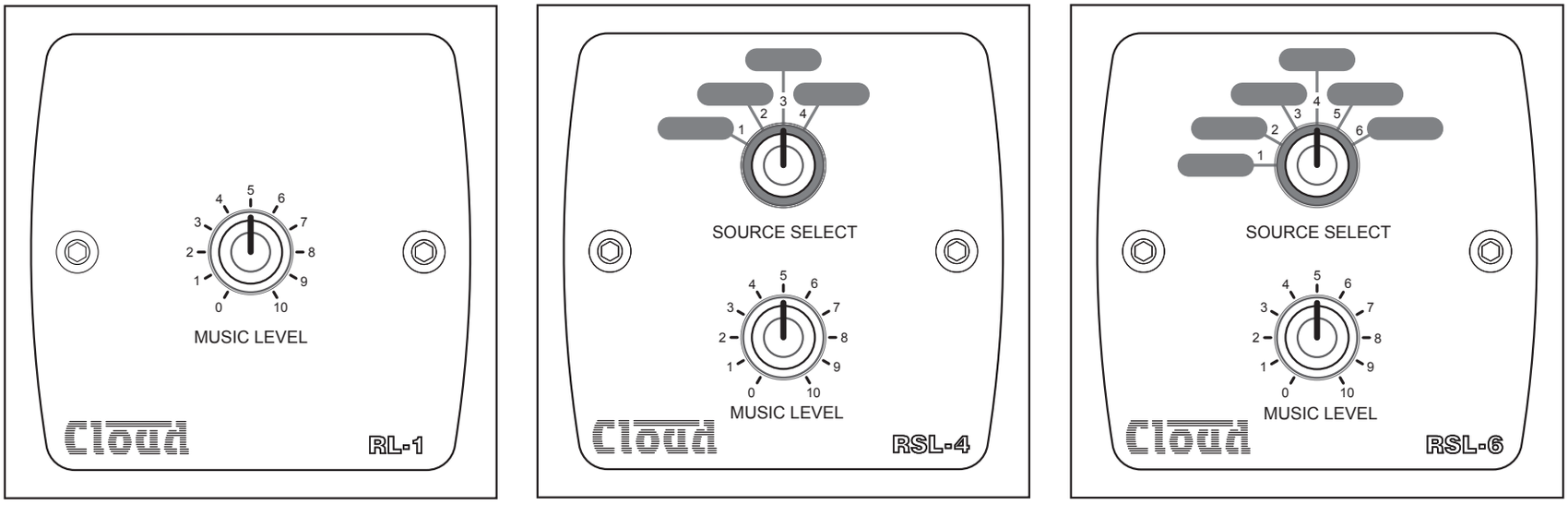
RL Series and RSL Series

Remote Control Plates



Installation Guide

Contents

Introduction 4

Remote plate types 4
Compatible Cloud products 6
Single and multi-channel operation 9

Device configuration 11

Wiring details 13

CX163 stereo control options 16
Wiring diagrams 17

Introduction

Cloud RL Series and RSL Series remote control plates are accessories for a wide range of Cloud zoners, mixer-amplifiers and power amplifiers. They are compatible with all current (relevant) products, and also with numerous discontinued products.

RL plates adjust the signal level in an audio channel of a Cloud device, and thus allow audio volume in an area to be controlled locally.

RSL plates provide the same volume control function as RL plates, but additionally allow remote selection of music source, when used in conjunction with Cloud devices that have multiple line inputs.

Remote plate types

Functionally, there are three models of remote plate:

- RL-1: provides remote volume control of an audio channel.
- RSL-4: provides remote volume control of an audio channel, and also remote selection of the music source for that channel, when used with devices having up to four line inputs.
- RSL-6: as RSL-4, but for use with devices having up to six line inputs.

Further, each model is available in three physical sizes:

UK versions:

These are available in black or white finish; the part number is suffixed 'B' or 'W' respectively. All UK versions of the plates fit 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 plate.

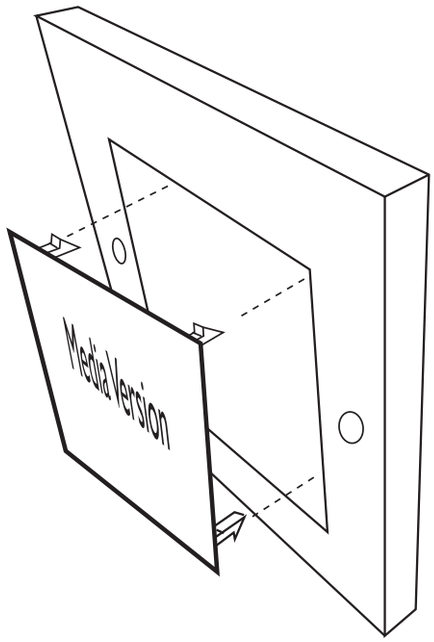
US versions:

The RL-1A, RSL-4A and RSL-6A are electrically and functionally identical to the UK versions, but the faceplates have different physical dimensions (4.51" x 2.76") which allow them to be mounted into a standard US-style back box (with vertical orientation). Both black and white finishes are available; the part numbers are suffixed 'B' and 'W' respectively.

'Media' versions:

The RL-1M, RSL-4M and RSL-6M are electrically and functionally identical to the UK versions, but are in the form of 50 mm x 50 mm Euro-modules, which can be fitted into either UK or other European back boxes with the appropriate mounting frame.

The Media module is secured in place by the four plastic clips; two at the top, two at the bottom (see diagram below). Both black and white finishes are available; the part numbers are suffixed 'B' and 'W' respectively.



NOTE: All information in this manual applies equally to all mechanical versions.

Compatible Cloud products

The table below summarises which current Cloud products are compatible with each type of plate. For older products, please consult the product's Installation Guide, www.cloud.co.uk, or contact Cloud's Technical Dept.

PRODUCT	RL-1/1A/1M	RSL-4/4A/4M	RSL-6/6A/6M
Venue Mixers			
Z4II	✔		✔
Z8II	✔		✔
Z4MK3	✔		✔
Z8MK3	✔		✔
Zone Mixers			
CX163	✔		
CX263	✔		✔
CX261	✔		✔
CX462	✔		✔
Integrated Mixer-amplifiers			
MA60	✔	✔	
MA60MEDIA	✔	✔	
36/50	✔		✔
46/50	✔		✔
46-120	✔		✔
46-120MEDIA	✔		✔

Power amplifiers	RL-1/1A	RSL-4/4A	RSL-6/6A
MPA60	✔		✔
MPA120	✔		✔
MPA240	✔		✔
CXV225*	✔		
CXV425*	✔		
CXA450*	✔		
CXA850*	✔		
CXA6*	✔		
VTX4120	✔		
VTX4240	✔		
VTX4400	✔		

* These models require VCA cards to be installed before they can be used with remote control plates.
Full installation instructions are provided with the VCA card kit, and can also be found in the Installation Guide for the model.

Single and multi-channel operation

RL and RSL remote plates are primarily designed to provide remote control of a single audio channel. A single channel will often correspond to a single zone or area of a building, and the remote plate will therefore control the audio in that zone, but see NOTE below. Many of the products listed above have two or more audio channels; on all such Cloud devices, provision is made for connecting separate remote control plates to as many channels as required. (The CX163 stereo zone mixer has a slightly different arrangement; see *Wiring details* on page 13 and *Wiring diagrams* on page 17 and 18 for further information.)

NOTE: It is possible to control two or more channels of a Cloud multi-channel device "in parallel" from a single remote plate; this might be desirable where, e.g., more than one channel of a mixer-amplifier is powering speakers in the same zone, due to room size.

An RL-1 Series plate may be wired in parallel to more than one channel of an amplifier or zoner, but note that the "law" of the control will differ from that obeyed when it is used with a single channel. When wired to several channels in parallel, this may produce an inconvenient "cramping" of the control's operation at one end of the range.

RSL-4 and RSL-6 Series remote control plates require modifications for multi-channel operation. This topic is NOT covered in this manual. Installers requiring this option should download the appropriate Cloud Technical Note from www.cloud.co.uk, and carry out the modifications described before installing the plates.

Device configuration

Most RL/RSL-compatible Cloud products will require minor configuration changes when remote control plates are installed to ensure correct operation.

RL Series plates:

When adding RL Series remote control plates, it will generally be necessary to disable the front panel music level control, so that volume may be adjusted only by the plate. On most units, this is done by operating a rear panel push-button switch. However, on devices with multiple music sources, doing this will also disable the front panel music source control. To maintain control of music source from the front panel, internal jumpers must be set to the appropriate position. The products to which this applies are those which are also compatible with RSL plates (see *Compatible Cloud products* table on page 6).

RSL Series plates:

When adding RSL-4 Series or RSL-6 Series remote control plates, it will generally be necessary to disable both the front panel music level and source selection controls, so that full control is via the plate. On most units, this can be done by operating a rear panel push-button switch.

IMPORTANT: With both types of plate, it is essential that installers check the Installation Guide for the specific product to which they are connecting the plates. This will give full details of the configuration procedure. If necessary, Installation Guides for all products can be found at www.cloud.co.uk.

On multi-channel (or multi-zone) devices, the configuration changes necessary for remote control are always per-channel or per-zone. Channels (or zones) to which remote control plates are not fitted will operate from the unit's local controls in the normal way.

Wiring details

In most cases, remote control plates connect to their host devices via per-channel, 3-pin 5 mm-pitch screw terminal connectors on the device's rear panel. The only exception is the CX163, which has a 4-pin connector. The connector will be labelled **REMOTE LEVEL**, **REMOTE LEVEL/ SOURCE**, **REMOTE MUSIC CONTROL**, or something similar, depending on the device.

On all types of remote control plate, connection at the plate is via a rear 3-pin screw-terminal connector.

RL Series plates: Connection may be via single- or twin-core screened cable. RL Series plates can generally be connected to devices that support remote music source selection with single-core cable, but two-core screened cable is required when connecting to devices that do not support this.

RSL Series plates: These always require twin-core screened cable.

The use of crimp ferrule-type terminals is recommended for the cable terminations as this will provide a much more reliable long-term connection. Recommended maximum cable length is 100 m (328 ft.)

The wiring scheme to be adopted varies between devices. See the table below to check which of the wiring diagrams on page 17 and 18 should be followed to connect a particular type of plate to a specific device.

PRODUCT	RL-1/1A/1M	RSL-4/4A/4M	RSL-6/6A/6M
Venue Mixers			
Z4II	A		E
Z8II	A		E
Z4MK3	A		E
Z8MK3	A		E
Zone Mixers			
CX163	C or D*		
CX263	A		E
CX261	A		E
CX462	A		E
Integrated Mixer-amplifiers			
MA60	A	E	
MA60MEDIA	A	E	
36/50	A		E
46/50	A		E
46-120	A		E
46-120MEDIA	A		E

Power amplifiers	RL-1/1A/1M	RSL-4/4A/4M	RSL-6/6A/6M
MPA60	A		E
MPA120	A		E
MPA240	A		E
CXV225	B		
CXV425	B		
CXA450	B		
CXA850	B		
CXA6	B		
VTX4120	B		
VTX4240	B		
VTX4400	B		

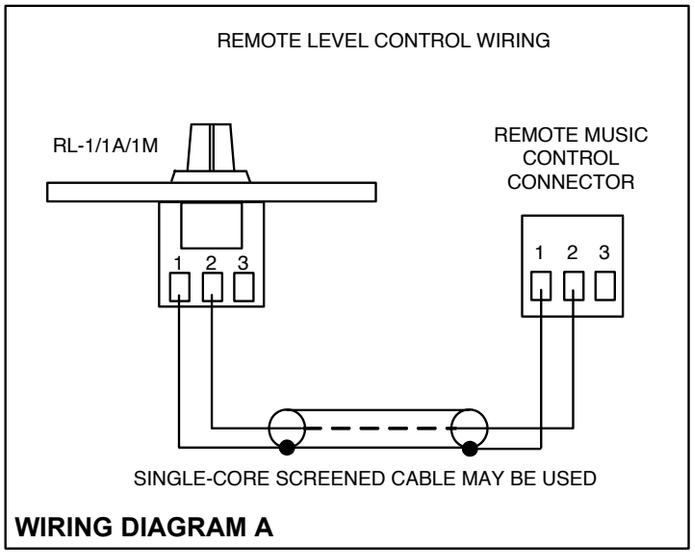
*See “CX613 stereo control options” on page 16.

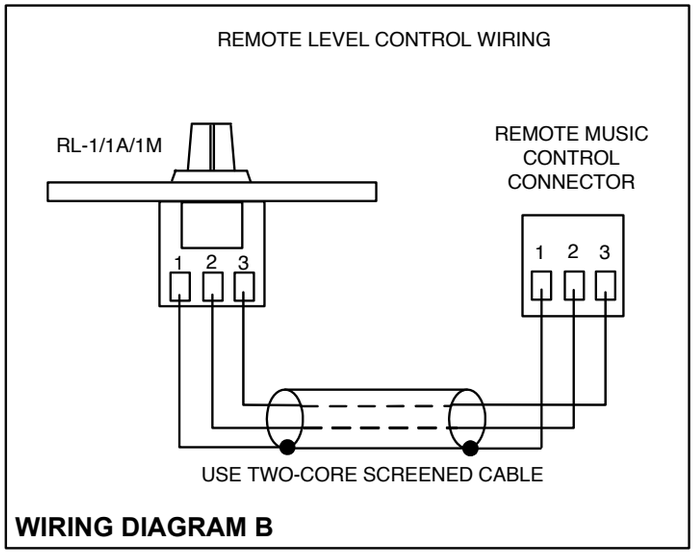
CX163 stereo control options

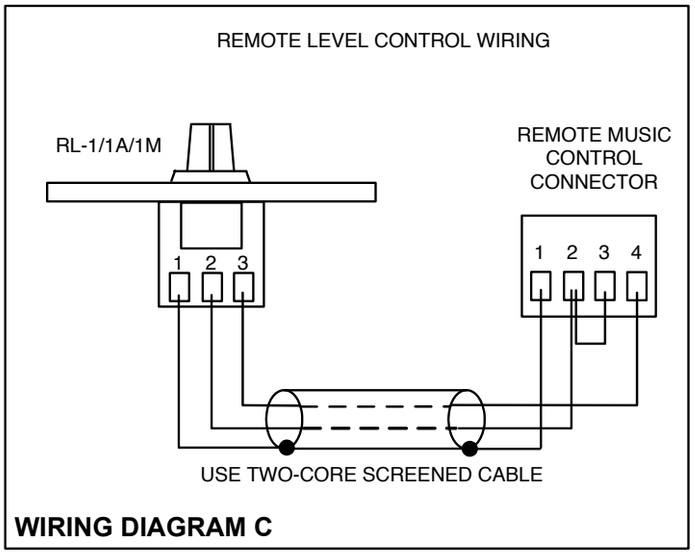
The CX163 is a two-zone stereo mixer and has a different remote control connector to other Cloud units. When using RL Series remote level control plates with a CX163, the installer has the option of using a single RL Series plate to control both left and right channels together (i.e., stereo operation), or of using two separate RL Series plates to control the left and right channels independently. For stereo operation, use wiring diagram C. For separate L/R control, use wiring diagram D.

Wiring diagrams

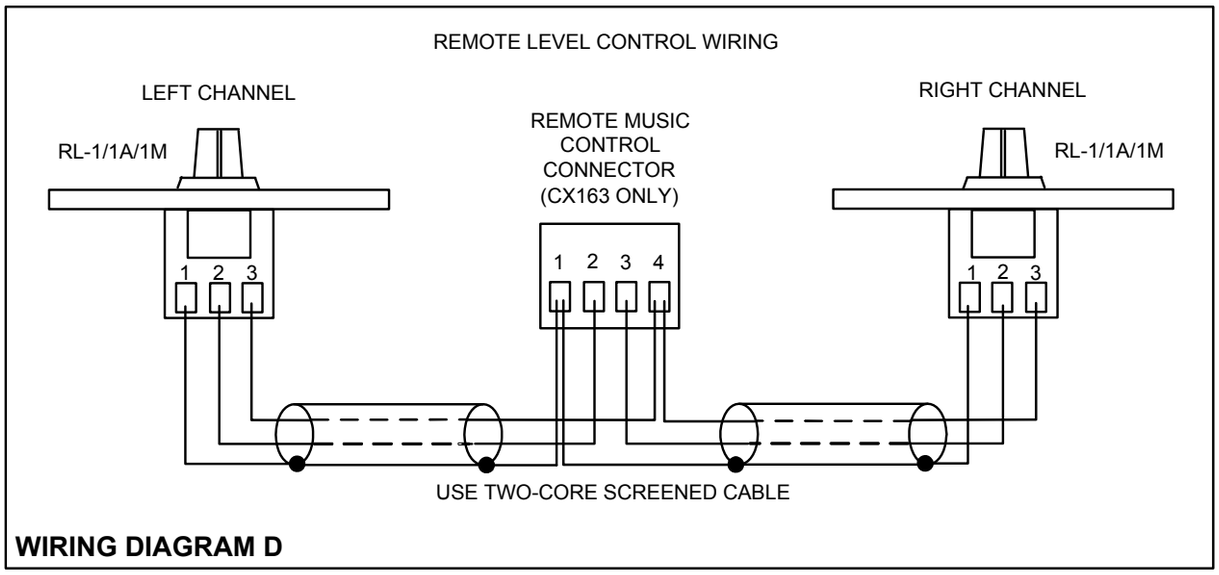
RL-1/1A/1M





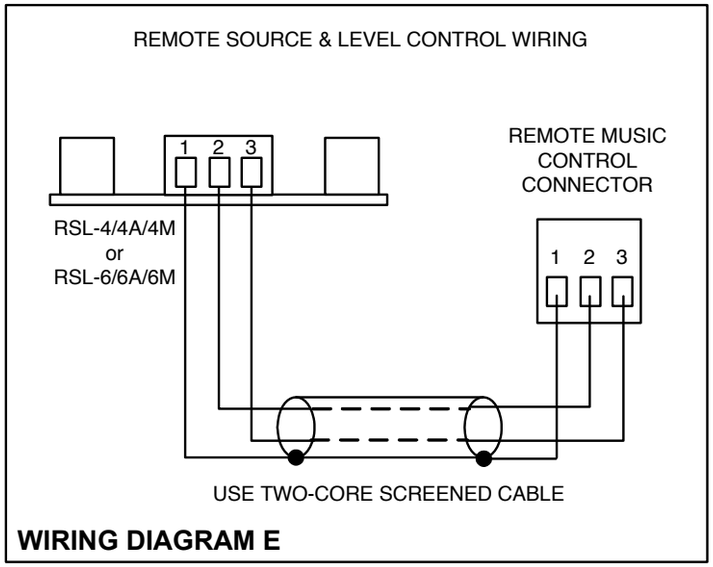


RL-1/1A/1M



WIRING DIAGRAM D

RSL-4/4A/4M or RSL-6/6A/6M



WIRING DIAGRAM E

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