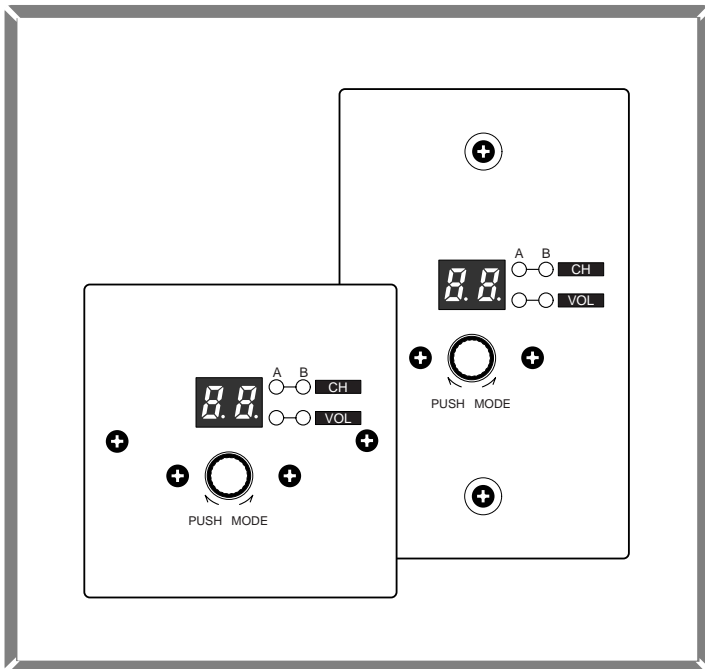


8288 510 000
(399071)



Owner's Manual
NetCIRA series Remote Control Unit
Model **LR-1**

NetCIRA
by **FOSTEX**

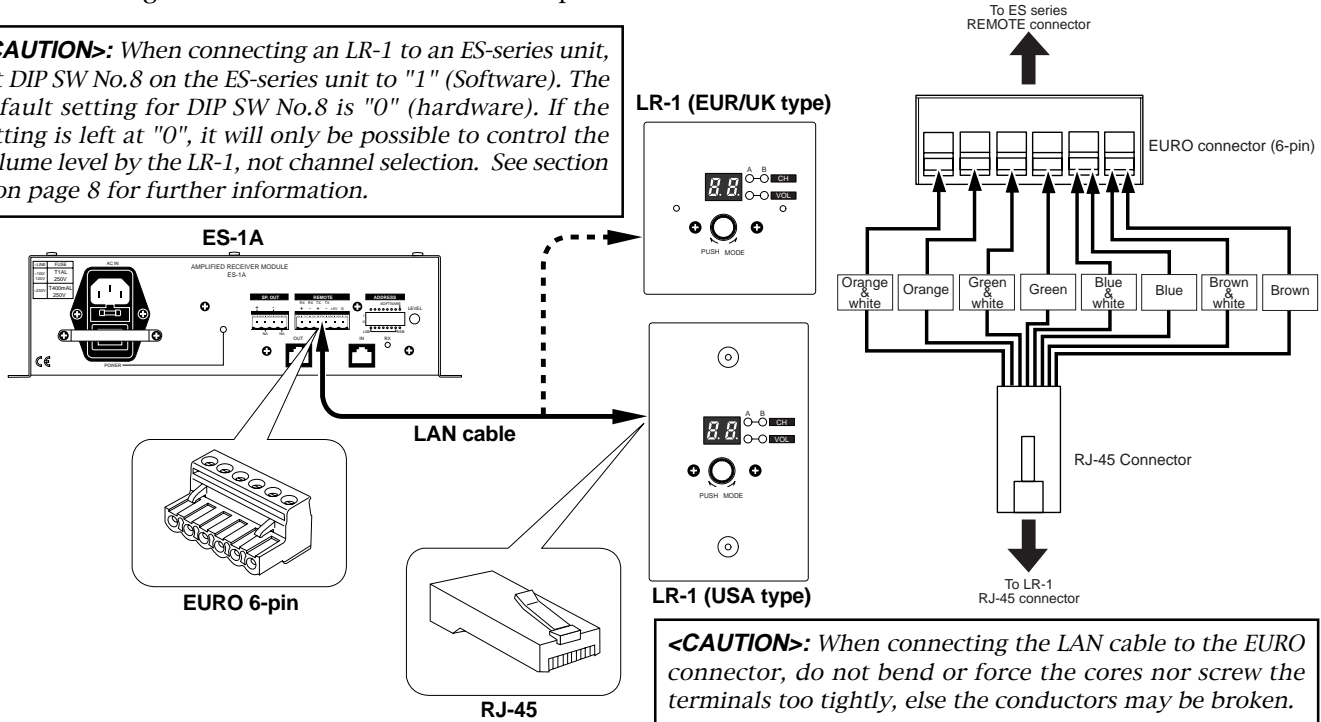
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1. Connection to the NetCIRA ES-series slave unit

As show in the diagram below, the NetCIRA LR-1 is used together with a NetCIRA ES-series slave unit such as the ES-1, ES-2, ES-1A, ES-2A, ES-1PRO or ES-2PRO. A enhanced category 5 (CAT5e) straight UTP LAN cable is used to connect the RJ-45 connector on the rear of the LR-1 to the EURO 6-pin REMOTE connector on the ES unit. Please refer to the diagram below for how to wire the 6-pin EURO connector.

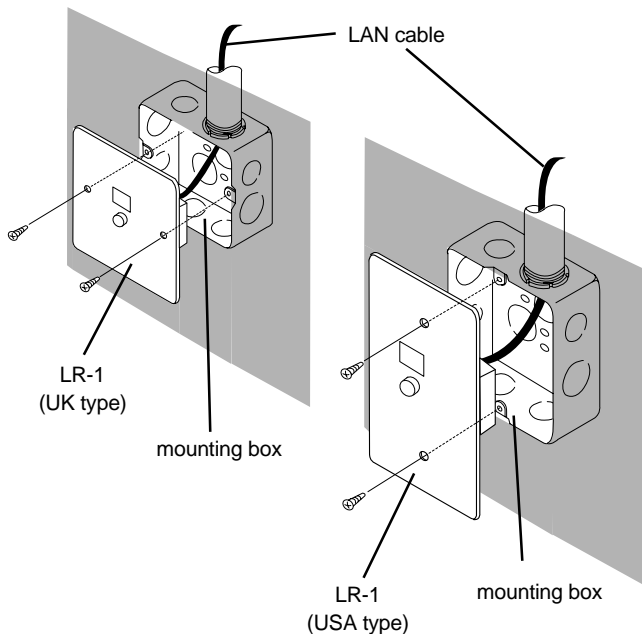
<CAUTION>: When connecting an LR-1 to an ES-series unit, set DIP SW No.8 on the ES-series unit to "1" (Software). The default setting for DIP SW No.8 is "0" (hardware). If the setting is left at "0", it will only be possible to control the volume level by the LR-1, not channel selection. See section 8 on page 8 for further information.



<CAUTION>: When connecting the LAN cable to the EURO connector, do not bend or force the cores nor screw the terminals too tightly, else the conductors may be broken.

2. Installing LR-1 into wall (USA & UK type)

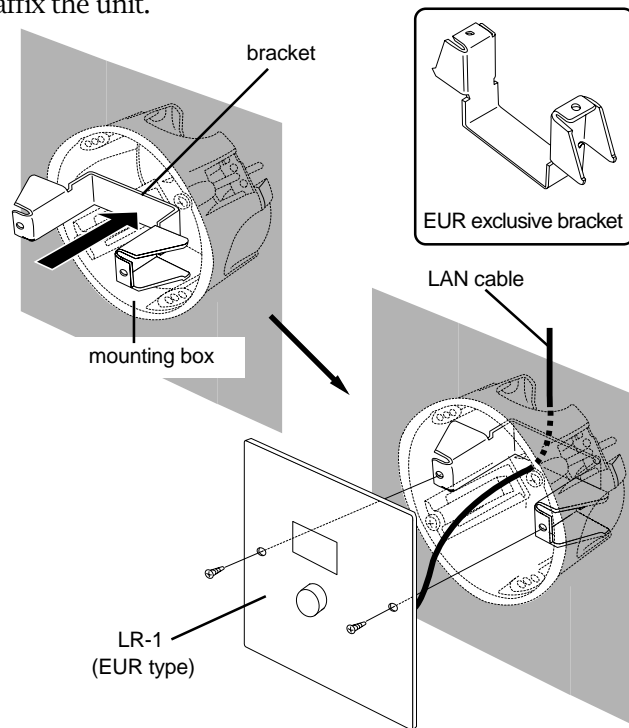
The LR-1 USA and UK type panels should be installed into the wall as indicated in the diagram below.



Note: the LR-1 USA type panel may also be used in Australia, New Zealand and Japan.

3. Installing LR-1 into wall (EUR type)

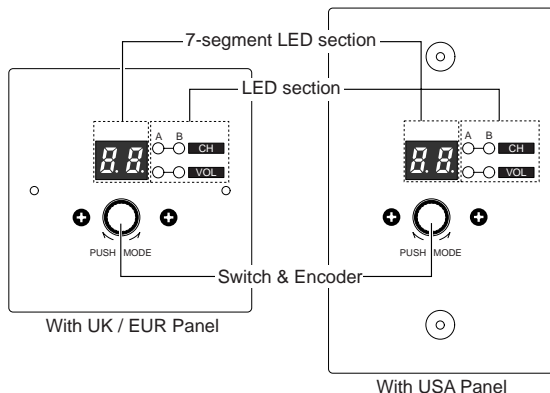
When mounting LR-1 EUR type panels, a special EUR bracket included with the product should be attached to the wall/mounting box first as show in the diagram below. After this is done, connect the LAN cable and affix the unit.



4. Identifying the slave unit

The LR-1 obtains the IOCR (Input & Output Channel Register) information from the FPGA of the connected ES-series unit and identifies whether it is a 1CH unit (ES-1/ES-1A/ES-1PRO) or 2CH unit (ES-2/ES-2A/ES-2PRO). LR-1 will then set its operation MODE automatically depending which ES-series unit it is connected to.

5. Appearance

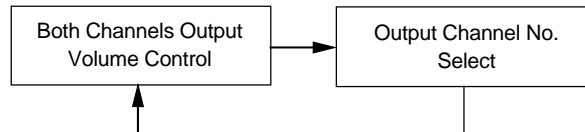


<CAUTION>: Do not rotate the encoder too fast. If you do, there is a chance that the channel/volume level will not change correctly. This is due to the delay in the LR-1's internal processing, but is not a malfunction.

6. Operation when 1CH slave unit is connected

6-1. MODE

Each time the rotary encoder is pressed, the operation MODE changes as follows:



When booting up, LR-1 is set to "Both Channels Output Volume Control" MODE.

6-2. Volume Control

Rotating the encoder controls the volume level in 16 steps (0 ~ 15). Rotating the encoder clockwise turn the volume level up and counter-clockwise turns the volume level down.

When the volume level reaches its maximum (15), the volume level cannot be increased further. Likewise, when the volume level reaches its minimum (0), the volume level cannot be decreased further.

The volume level of both the A and B channels are changed, at the same level, simultaneously.

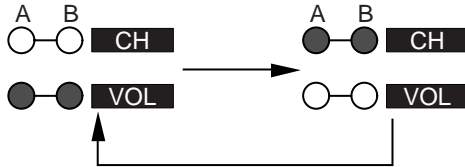
6-3. Channel Select

Rotating the encoder selects from the 64 channels fed to the ES-series slave unit which is connected to the LR-1. Rotating the encoder clockwise increases the channel selection and counter-clockwise decreases the channel selection.

If the channel number reaches 64 and the encoder continues to be rotated clockwise, the channel will go back to 1 and begin its downwards cycle again. Likewise, when the channel number reaches 1 and the encoder continues to be rotated counter-clockwise, the channel will go to 64 and beginning its downwards cycle again.

6-4. LED

Each time the rotary encoder is pressed, the LR-1 shifts to its next operation. The LED corresponding to the selected MODE is lit, as per the diagram below.



6-5. 7 segment LED

The 7-segment displays the value of the selected MODE. The current volume level is displayed when in volume control MODE, while the currently selected channel is displayed when in channel select MODE.

7. Operation when 2CH slave unit is connected

7-1. "Stereo" & "Parallel" operation

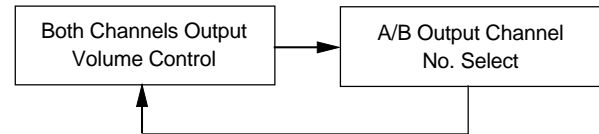
When connected to a 2CH ES-series slave unit, either a "STEREO" or "PARALLEL" behaviour ("Operation") can be selected by the installer. In both settings, various MODES can be selected. When the LR-1 is first booted-up by connection to an ES-series slave unit, it defaults to Stereo operation.

7-1-1. Selection and indication

By pressing and holding down the rotary encoder for about 10 seconds, Stereo or Parallel operation can be alternately selected. When LR-1 sets to Stereo, all LEDs flash. When LR-1 set to Parallel, the top two and bottom two LEDs flash alternately.

7-1-2. Stereo operation

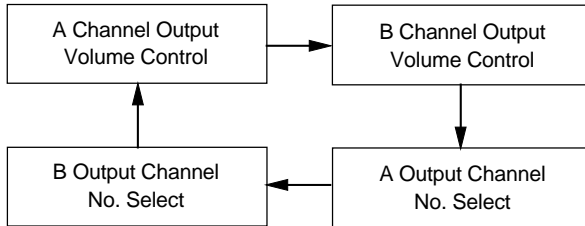
Each time the rotary encoder is pressed, the MODE changes as follows:



When booting up or when "Stereo" operation is selected, LR-1 is automatically defaults to "Both Channels Output Volume Control" MODE.

7-1-3. Parallel operation

Each time the rotary encoder is pressed, the MODE changes as follows:



When "Parallel" operation is selected, LR-1 automatically defaults to "A Channel Volume Control" MODE.

7-2. Volume Control

Rotating the encoder controls the volume level in 16 steps (0 ~ 15). Rotating the encoder clockwise turn the volume level up and counter-clockwise turns the volume level down.

When the volume level reaches its maximum (15), the volume level cannot be increased further. Likewise, when the volume level reaches its minimum (0), the volume level cannot be decreased further.

7-2-1. Stereo operation

Both A & B outputs levels will be controlled at the same time and at the same level.

7-2-2. Parallel operation

The A & B outputs levels may be individually set and controlled.

7-3. Channel select

Rotating the encoder selects from the 64 channels fed to the ES-series slave unit connected to the LR-1. Rotating the encoder clockwise increases the channel selection and counter-clockwise decreases the channel selection.

If the channel numbers reaches 64 and the encoder continues to be rotated clockwise, the channel will go back to 1 and begin its downwards cycle again. Likewise, when the channel number reaches 1 and the encoder continues to be rotated counter-clockwise, the channel will go to 64 and beginning its downwards cycle again.

7-3-1. Stereo operation

Only the odd channel numbers can be selected in Stereo operation (1, 3, 5,... 63) while the B output channel is set to A + 1 (2, 4, 6,...64), however, on the 7-segment LED display, the user will only see output channels 1 to 32 displayed to make operation easier i.e. the user will be presented with the choice of 32 stereo channels in "Stereo" operation.

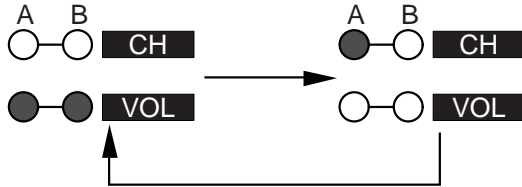
7-3-2. Parallel operation

In "Parallel" operation, the A & B channels may be set independently of each other.

7-4. LED display

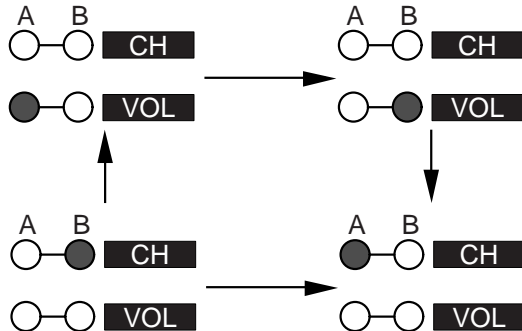
7-4-1. Stereo operation

Each time the rotary encoder is pressed, the LR-1 shifts to the next MODE. The LED corresponding to the selected MODE is lit, as per the diagram below.



7-4-2. Parallel operation

Each time the rotary encoder is pressed, the LR-1 shifts to the next MODE. The LED corresponding to the selected MODE is lit, as per the diagram below.



7-5. 7-segment LED

The 7-segment displays the value of the selected MODE. The current volume level is displayed when in volume control MODE (A & B in Stereo operation; A or B in Parallel operation), while the currently selected channel is displayed when in channel select MODE (1-32 in Stereo operation; 1-64 in Parallel operation). When changing operation between Stereo and Parallel, all LEDs will be unlit.

8. Operation when ES-series slave unit is in Hardware setting

8-1. Switch

8-1-1. Stereo operation

When the connected ES-series slave unit is in Hardware setting, the LR-1 allows only access to "both channels output volume control" MODE. Pressing the rotary encoder will have no effect and the user will not be able to change the channel.

8-1-2. Parallel operation

When the connected ES-series slave unit is in Hardware setting, the LR-1 defaults to "A channel output volume control" MODE. Each time the rotary encoder is pressed, the MODE cycles between "A channel volume control" and "B channel volume control", however, the user will not be able to change the channel.

8-2. Encoder

8-2-1. Volume Control MODE

Rotating the encoder controls the volume level in 16 steps (0 ~ 15). Rotating the encoder clockwise turn the volume level up and counter-clockwise turns the volume level down.

When the volume level reaches its maximum (15), the volume level cannot be increased further. Likewise, when the volume level reaches its minimum (0), the volume level cannot be decreased further.

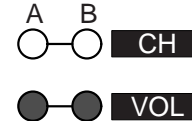
8-2-2. Channel select MODE

Channel selection on LR-1 is not possible when the connected ES-series unit is in hardware setting.

8-3. 7-segment LED & LED indication

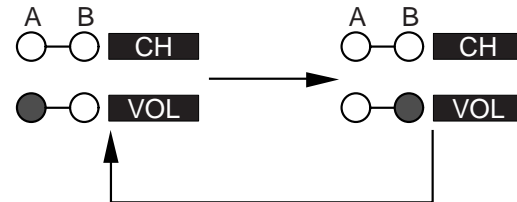
8-3-1. Stereo operation

As this MODE is fixed, the A & B channel output volume control LEDs are permanently lit, as per the diagram below:



8-3-2. Parallel operation

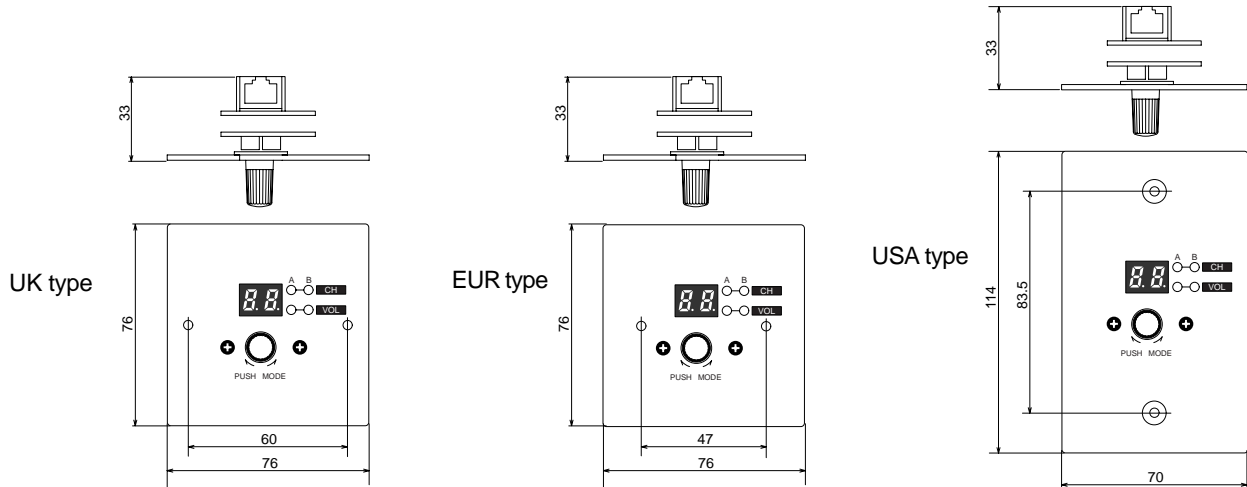
Each time the rotary encoder is pressed, the LR-1 shifts to the next MODE. The LED corresponding to the selected MODE is lit, as per the diagram below.



9. Specifications

IN/OUT port connector:	RJ-45	<Pin assignments> 1: TXD (+), 2: TXD (-), 3: RXD (+), 4: +5V, 5: +5V, 6: RXD (-), 7: GND, 8: GND
Recommended Cable:	Use "straight" category 5 Enhanced LAN cables.	
Cable length:	50m or less	
Weight:	USA type: Approx. 150g	EUR/UK type: Approx. 120g
Dimensions:	USA type: 70.0 (W) x 114.0 (H) x 33.0 (D) mm	EUR/UK type: 76.0 (W) x 76.0 (H) x 33.0 (D) mm

* As a cushioning material, a biodegradable plastic is used in this product.



Declaration of EC Directive

This equipment is compatible with the EMC Directive (89/336/EEC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility. This equipment is compatible only when connected to fostex specified product.

The Affect of Immunity on this Equipment

Please comply to the precautions below to make this equipment compatible with European Specification EN61000-6-1 (coexistence of electromagnetic waves - common immunity specification).

NetCIRA
by **FOSTEX**

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