



Bel BCR-A8

Audio confidence monitor



User's Guide

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Contents

CONTENTSINTRODUCTION	3
INTRODUCTION	4
Front panel controls	4
Balance/ Left level	4
Input selector	4
Input level indicators	4
Anti-phase indicator	4
Right level	4
Headphone jack	4
Power on indicator	4
Rear panel	5
Mains input	5
Audio inputs	5
Line outputs	5
FIG 1.1 BCR-A8 FRONT PANEL	6
FIG 1.3 BCR-A8 LINK SETTINGS	7
Analogue input pin connections	8
BCR-A8 Specification	9
Audio Specification	9
General	9
EMC compliance	10

Introduction

The BCR-A8 is a professional audio confidence monitor housed in a 1U rack. The unit features four amplifiers, four speakers and an analogue line output. The BCR-A8 will accept eight pairs of analogue audio inputs.

Front panel controls

Several controls and connectors are located on the front panel, Fig 1.1, from left to right these are:

Balance/ Left level

In the stereo mode this control will adjust the balance between the left and right speakers. In the two-channel mode this control will adjust the left speaker output level. The mode can be selected by adjusting the links shown in Fig 1.3

Input selector

The audio input pair routed to the amplifiers and speakers can be selected using this switch.

Input level indicators

Two LED bar graph PPI displays indicate the current input level. The input level that shows 0dB on these bar graphs can be internally selected to be 0dB or -10dB. Fig 1.3

Anti-phase indicator

A single LED will illuminate to indicate sustained anti-phase on the selected inputs.

Right level

This control adjusts the right speaker output level.

Headphone jack

A 6mm headphone jack is provided on the front panel. Inserting a jack plug will mute the speakers.

Power on indicator

Rear panel

Several connectors are provided on the rear panel, from left to right these are:

Mains input

This is a combination IEC connector, fuse and off/on switch.

Audio inputs

Two 25 way D type connectors are provided to receive the analogue audio inputs. The first of these receives analogue input pairs 5 to 8 and the second input pairs 1 to 4. These inputs are treated as stereo pairs or two independent channels as selected by the internal links. Fig 1.3.

Line outputs

Two male XLR type connectors are provided that carry a line level analogue audio output. The level on these connectors can be adjusted by selecting internal links. Fig 1.3.



Fig 1.1 BCR-A8 Front panel



Fig 1.2 BCR-A8 Rear panel

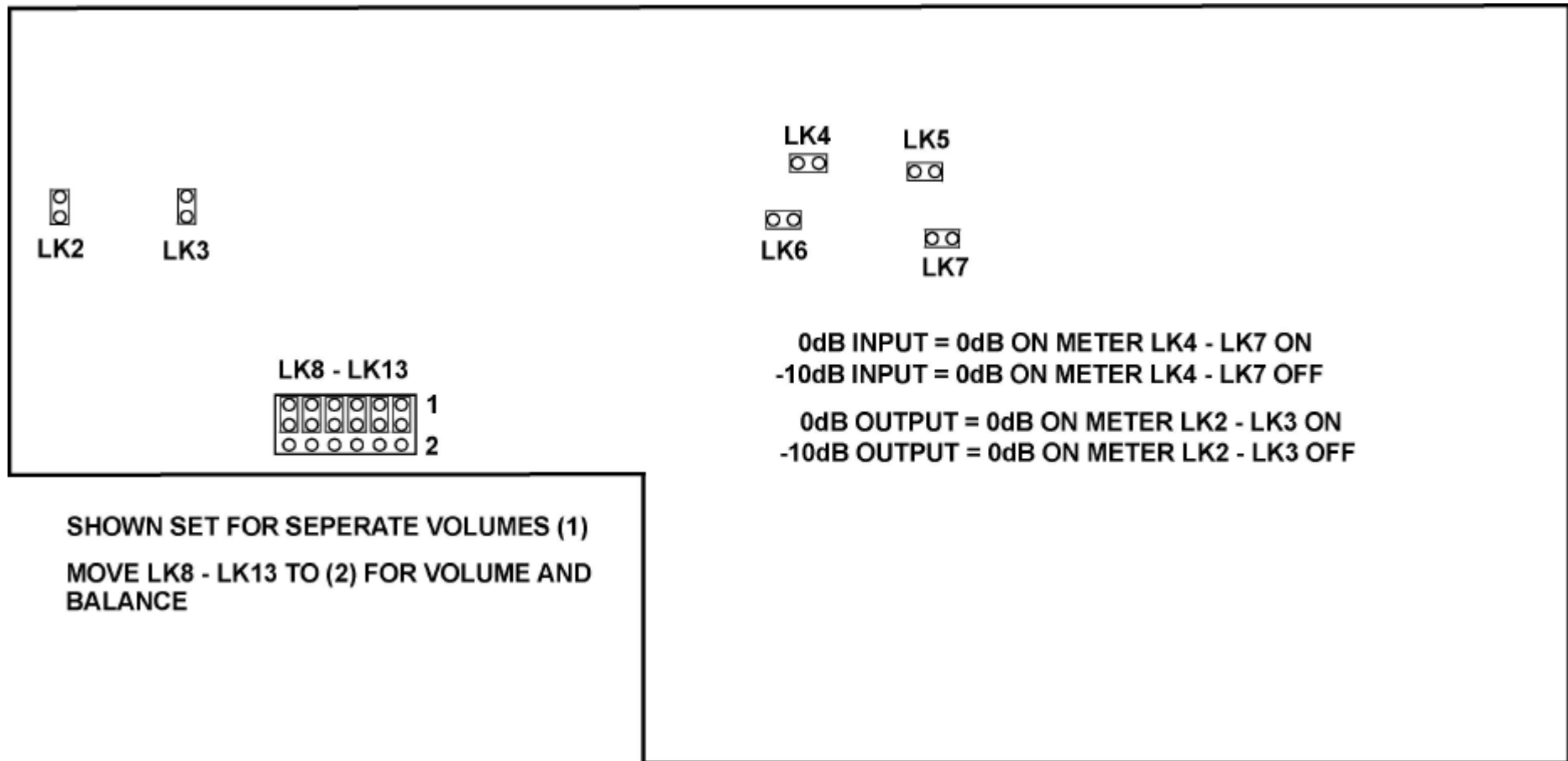


Fig 1.3 BCR-A8 link settings

Analogue input pin connections

Analogue inputs 1 – 4

Analogue inputs 5 - 8

Pin	Function	Pin	Function
1	Left 1 +	1	Left 5 +
2	Left 1 –	2	Left 5 –
3	Ground	3	Ground
4	Left 2 +	4	Left 6 +
5	Left 2 –	5	Left 6 –
6	Ground	6	Ground
7	Left 3 +	7	Left 7 +
8	Left 3 –	8	Left 7 –
9	Ground	9	Ground
10	Left 4 +	10	Left 8 +
11	Left 4 –	11	Left 8 –
12	Ground	12	Ground
13	Ground	13	Ground
14	Ground	14	Ground
15	Right 1 +	15	Right 5 +
16	Right 1 –	16	Right 5 –
17	Ground	17	Ground
18	Right 2 +	18	Right 6 +
19	Right 2 –	19	Right 6 –
20	Ground	20	Ground
21	Right 3 +	21	Right 7 +
22	Right 3 –	22	Right 7 –
23	Ground	23	Ground
24	Right 4 +	24	Right 8 +
25	Right 4 –	25	Right 8 –

BCR-A8 Specification

Audio Specification

Analogue inputs	8 Pairs differential, 25k Ω impedance on 2 x 25 way D connectors
Analogue outputs	50 Ω impedance differential on XLR connector
Hum & noise main output	more than 80dB below full output.
Hum & noise line output	100dB below full output
Peak acoustic output	100dB SPL (@ 2ft)
Level meters	2x10 element LED PPI bar graphs
Speakers	2 mid/treble and 2 bass

General

Power requirements	90-260 VAC 40/60Hz
Power consumption	30W Max
Dimensions	483mm x 256mm x 44.3mm
Weight	4kg

EMC compliance

The BEL 2120 was designed and tested to comply with the EMC directive numbers EN55103, EN55022 and EN55082-1 when used as directed.



It is recommended that, where possible, all cables be good quality screened twisted pairs with the screening braid connected to pin 1 on the XLR connector. Optimum performance is obtained using double-screened cable with separate ground returns.