



Bel BCR-A1 OB

Audio confidence monitor



User's Guide

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Bel (Digital Audio) Ltd.
Unit 3
Horwood Court
Bletchley
Milton Keynes
Bucks
MK11RD
United Kingdom
Tel: +44 (0)1908 641063
Email: info@beldigital.com
Web: www.beldigital.com

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Introduction

The BCR-A1 OB 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-A1 OB will accept one pair of analogue 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

Aux inputs

There are two RCA phono input connectors provided on the front panel for convenient temporary monitoring. These inputs operate in parallel with the rear panel inputs.

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 +4dB or 0dB. Fig 1.3

Anti-phase indicator

A single LED will illuminate to indicate sustained anti-phase on the 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 female XLR type connectors are provided to receive the analogue audio inputs. These inputs are treated as a stereo pair 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-A1 OB Front panel



Fig 1.2 BCR-A1 OB Rear panel

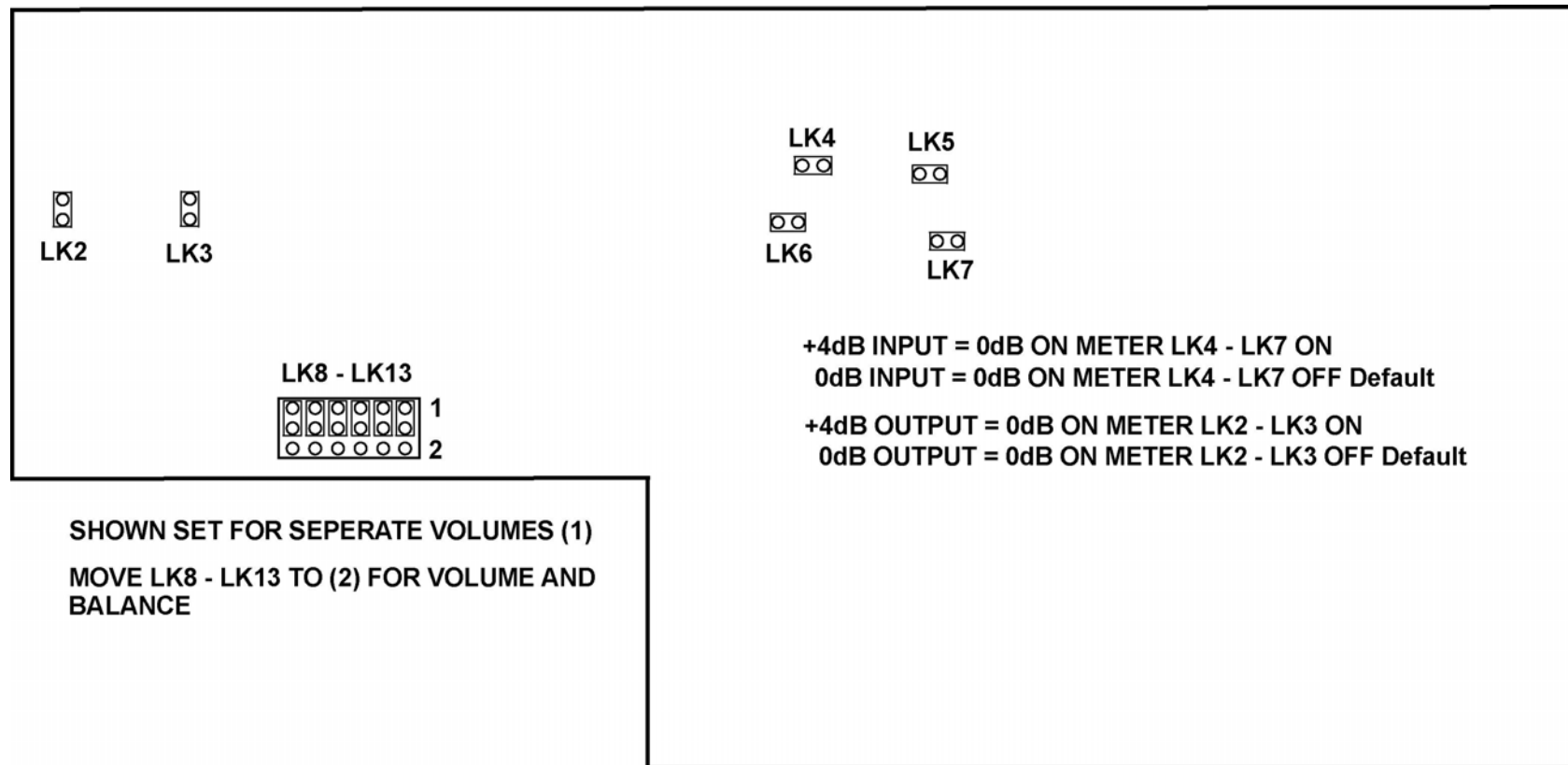


Fig 1.3 BCR-A1 OB link settings

BCR-A1 OB Specification

Audio Specification

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

General

Power requirements	90-260 VAC 40/60Hz
Power consumption	30W Max
Dimensions	483mm x 200mm x 44.3mm
Weight	4kg

EMC compliance

The BCR-A1 OB 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.