

# OPERATING INSTRUCTIONS SUPPLEMENT



Thank you for purchasing the HHB CDR830PLUS. This supplement is intended to provide the user with the additional information required to operate the CDR830PLUS and is to be used in conjunction with the standard Operating Instructions of the CDR830. We recommend that you read this manual first before you start using the CDR830PLUS. We also recommend that you keep this manual in a safe place for easy access in the future.

### ADDITIONAL FEATURES

- Word clock input.
- Balanced digital input.
- Balanced digital output.
- Balanced analogue inputs with selectable line/microphone gain settings.
- Balanced analogue outputs.
- Parallel remote input.

### WORD CLOCK INPUT

In today's digital studio environment, it is becoming more and more important to be able to lock/synchronise all digital equipment to a common sampling frequency or house clock. The effects of 'unlocked' equipment are all too noticeable as signal degradation, crackles and pops as machines 'clock' at different rates.

The CDR830 PLUS automatically detects whether there is a valid word clock signal connected to its word clock BNC input connector and if so, routes all digital outputs via a sample rate converter that is 'locked' to the same sampling frequency as the word clock input signal. If no valid word clock is detected at the input, then digital outputs will be clocked out at the 830's internal clock sampling frequency of 44.1kHz.

*Note: When locked to an external word clock source, the digital outputs do not transmit p/q sub-code information.*

### BALANCED DIGITAL INPUT

The balanced digital input is compatible with both consumer and professional interface protocols. It has the electrical characteristics of a professional balanced interface (110 ohms input impedance).

In order to select the balanced digital input as source, perform the following:

1. Set the rear panel switch labelled SW2 to position 1. 'BAL'
2. Use the front panel INPUT SELECTOR to select COAXIAL.

### BALANCED DIGITAL OUTPUT

The balanced digital output has the electrical characteristics of a professional balanced interface, the format characteristics of a consumer interface and is always active.

### BALANCED ANALOGUE INPUTS

It is possible to record balanced line or microphone level analogue inputs.

In order to select a line level balanced analogue input as source, set the rear panel switch labelled SW1 to position 2. 'BAL +4'. Use the front panel INPUT SELECTOR to select ANALOG.

In order to select a mono or stereo microphone as source, set the rear panel switch labelled SW1 to position 3. 'BAL -60'. Use the front panel INPUT SELECTOR to select ANALOG.

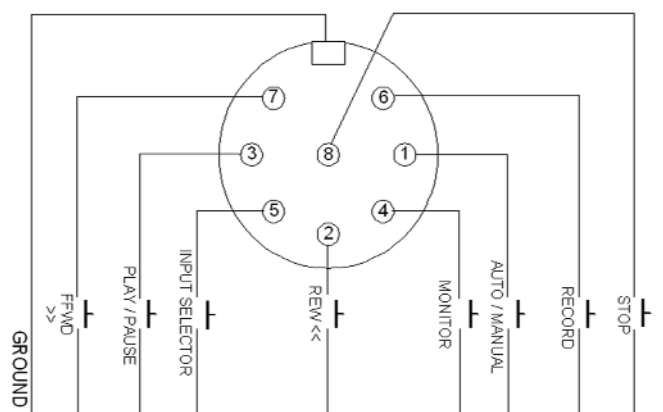
### BALANCED ANALOGUE OUTPUTS

The balanced analogue outputs have an output level of +18dBu for OdBFS.

### PARALLEL REMOTE INPUT (DIN 8-pin)

By connecting the circuit shown below, remote control operation of this unit is possible with external switches. The parallel remote control has priority over the wireless remote control. When the same buttons are pressed at the same time on both units, operation with the parallel remote control will have priority.

REMOTE CONFIGURATION



# TECHNICAL DATA

## HHB CDR830PLUS Compact Disc Recorder



### Balanced Digital Output

Impedance . . . . . 110 ohms  
Amplitude. . . . . 4Vp-p 100 ohms load

### Balanced Digital Input

Impedance. . . . . 110 ohms

### Word Clock Input

Operating Frequency. . . . . 32kHz to 48kHz

### Balanced Analogue Inputs (LINE; +4)

Level required for 0dBFS (gain @max). . . . . +5dBu +/- 1dB  
Frequency response. . . . . 10hz to 20khz +/-1dB  
THD+N. . . . . <0.01%

### Balanced Analogue Inputs (MIC; -60)

Level required for 0dBFS (gain @max). . . . . -57dBu +/- 1dB  
Frequency response. . . . . 20hz to 20khz +/-2dB  
MIC EIN. . . . . -119dB 'A' Weighted +/-1dB  
THD+N. . . . . <0.1%

### Unbalanced Analogue Inputs (LINE; -8)

Level required for 0dBFS (gain @max). . . . . -8dBu +/- 1dB

### Balanced Analogue Outputs

0dBFS gives +18dBu into a 10k load.

### Unbalanced Analogue Outputs

0dBFS gives +8dBu into a 10k load.

NOTE: The specifications and design of this product are subject to change without notice, due to improvements.

Published by HHB Communications Ltd.  
Copyright © 2002 HHB Communications Ltd.  
All rights reserved.



**FIRST WE LISTEN**

**Visit HHB online at [www.hhb.co.uk](http://www.hhb.co.uk)**

**HHB Communications Ltd** · 73-75 Scrubs Lane, London NW10 6QU, UK  
Tel: 020 8962 5000 · Fax: 020 8962 5050 · E-Mail: [sales@hhb.co.uk](mailto:sales@hhb.co.uk)

**HHB Communications USA Inc** · 743 Cochran Street, Buildings E & F, Simi Valley, CA 93065-1976, USA  
Tel: 805 579 6490 · Fax: 805 579 8028 · E-Mail: [sales@hhbusa.com](mailto:sales@hhbusa.com)

**HHB Communications Canada Ltd** · 260 King Street East, Toronto, Ontario M5A 4L5, Canada  
Tel: 416 867 9000 · Fax: 416 867 1080 · E-Mail: [sales@hhbcanada.com](mailto:sales@hhbcanada.com)