

# SONIFEX

**RB-DEED8**

Dolby® E Encoder 8 Channel, Digital Inputs

**RB-DEDD8**

Dolby® E & Dolby Digital Decoder 8 Channel, Digital Outputs

# Catalogue





## RB-DEED8 Dolby® E Encoder 8 Channel, Digital Inputs



**Category:** Dolby Encoders & Decoders.

**Product Function:** Encodes up to 8 digital audio channels into a single Dolby E bitstream output.

**Typical Applications:** To produce a Dolby E encoded stream for distribution around a facility as a stereo AES3 pair.

**Features:** 8 x balanced or unbalanced digital audio inputs, independent input level controls, 2 x Dolby E bitstream outputs, genlock input, 8 programmable GPIOs, metadata input, Ethernet or front panel control & configuration.

The RB-DEED8 is a Dolby® E Encoder. It encodes up to 8 digital audio channels into a single Dolby bitstream output. There is also an extra Dolby output for connection to monitoring equipment.

Each digital input channel has independent level control, which can be adjusted from -24dB through to +24dB in 0.5dB steps. The digital inputs and outputs can be selected to be either balanced or unbalanced AES/EBU specification, and can be connected through either BNC or D-type connectors. These I/O connections are paralleled, allowing one type to be used per input or output.

Metadata can be input to the encoder using RS-485 via the external 9-pin D-type socket

on the rear panel and can also be viewed using the SCI software.

A video input is used to genlock the audio output and Dolby® E encoding to a known video reference. This input autodetects between NTSC, PAL or Tri-level sync.

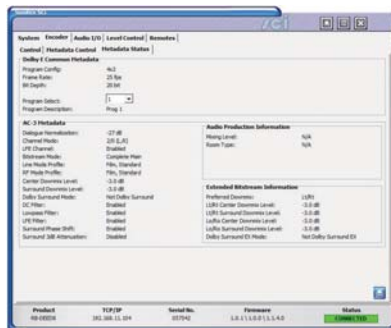
8 general purposes inputs and 8 outputs are available on a rear panel 25 way D-type socket whose function can be programmed using the menu, e.g. alarm outputs for loss of input or encoder errors.

The unit is controlled locally using the front panel display and control knob but can be remote controlled via an ethernet connection using the Sonifex SCI software.

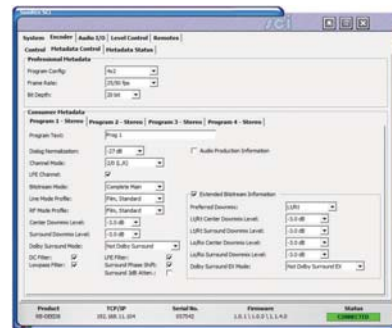
### Specification For RB-DEED8

Specification	
Output Sample Rate:	48kHz
Input Sample Rates:	CH1/2 & CH3/4: 32-192kHz CH5/6 & CH7/8: 32-48kHz
Input & Output Impedance:	75Ω/110Ω selectable
Signal Level (un-terminated):	Unbalanced: 1Vp-p +/- 20% Balanced: 6.6Vp-p +/- 20%
Digital Audio I/O: Inputs:	8 input channels via 4 x BNCs or 25 way D-type socket (AES3)
Dolby Output 1:	1 x Dolby bitstream output via BNC
Dolby Output 2:	1 x Dolby bitstream output via BNC or 25 way D-type socket (AES3)
Digital Audio Connectors:	6 x BNC 1 x 25-way D-type socket
Metadata:	SMPTE-RDD06, 9 way D-type socket
Video Reference	
Reference Type:	Autodetect NTSC, PAL or Tri-level sync
Impedance:	75Ω
Connector:	1 x BNC
LTC Input:	1 x BNC (not used)
Operational Control	

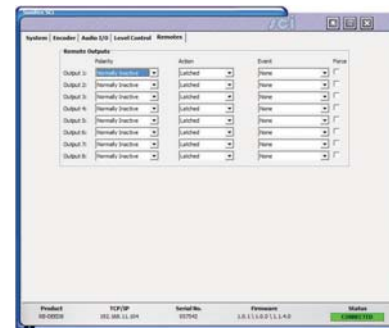
Dolby® and the double-D symbol are registered trademarks of Dolby Laboratories.



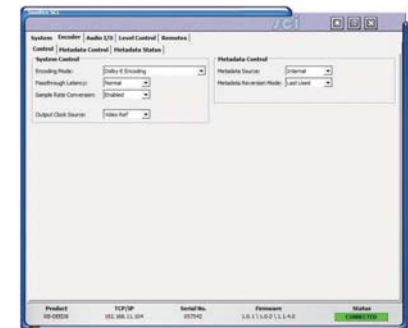
SCI Encoder Metadata Status Page.



SCI Encoder Metadata Control Page.



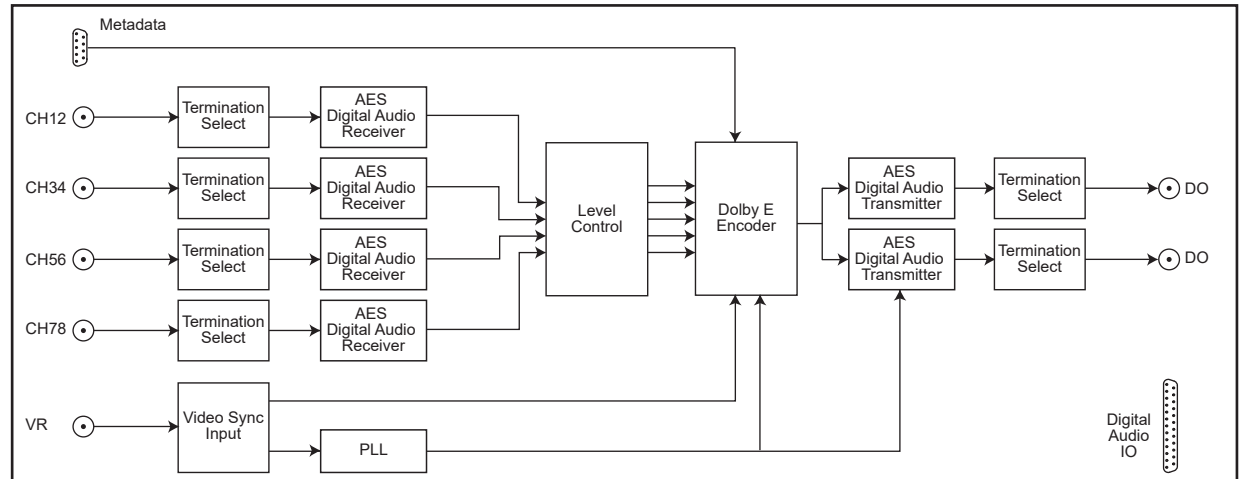
SCI Remote Outputs Page.



SCI Encoder Control Page.



Display:	Vacuum fluorescent display
System Navigation:	Rotary selector with integral push-switch
<b>Additional Connections</b>	
Ethernet Port:	10/100Mbps, RJ-45
Remote Input/Output Port:	25-way 'D'-type socket
Serial Port:	RS232, 9 way D-type
Power Supply:	Universal filtered IEC, continuously rated 85-264VAC @47-63Hz, fused
Fuse Rating:	Anti-surge fuse 1A 20 x 5mm
<b>Physical Specifications</b>	
Dimensions (Raw):	48cm (W) x 15.8cm (D*) x 4.2cm (H)
Dimensions (Boxed):	19" (W) x 6.2" (D*) x 1.7" (H) (1U)
Weight:	59cm (W) x 27.5cm (D*) x 11cm (H) 23.2" (W) x 10.8" (D*) x 4.3" (H)
	Nett: 1.8kg      Gross: 2.3kg Nett: 4.0lb      Gross: 5.1lb
* Note that this product is deeper than standard Redboxes	
<b>Equipment Type</b>	
RB-DEED8	Dolby® E encoder 8 channel, digital inputs
<b>Accessories</b>	
RB-RK3:	1U Rear panel rack kit for large Redboxes



RB-DEED8 Block Diagram.



## RB-DEDD8 Dolby® E & Dolby Digital Decoder 8 Channel, Digital Outputs



**Category:** Dolby Encoders & Decoders.

**Product Function:** Decodes up to 10 digital audio channels from a Dolby E or Dolby Digital bitstream.

**Typical Applications:** To decode 5.1 or

7.1 audio for a surround sound amplifier.

**Features:** 10 x balanced or unbalanced digital audio outputs (8 digital audio, 2 Aux), independent output level controls, 1 x Dolby E or D bitstream input, 1 x Dolby E or D bitstream output, genlock input, 8 programmable GPIOs, metadata output, Ethernet or front panel control & configuration.

The RB-DEDD8 is a Dolby® E & Dolby Digital Decoder. It decodes an incoming Dolby bitstream and transmits the decoded outputs on BNC or D-type connectors on the rear panel. The Dolby input is also looped through to allow connection to other Dolby receiver equipment.

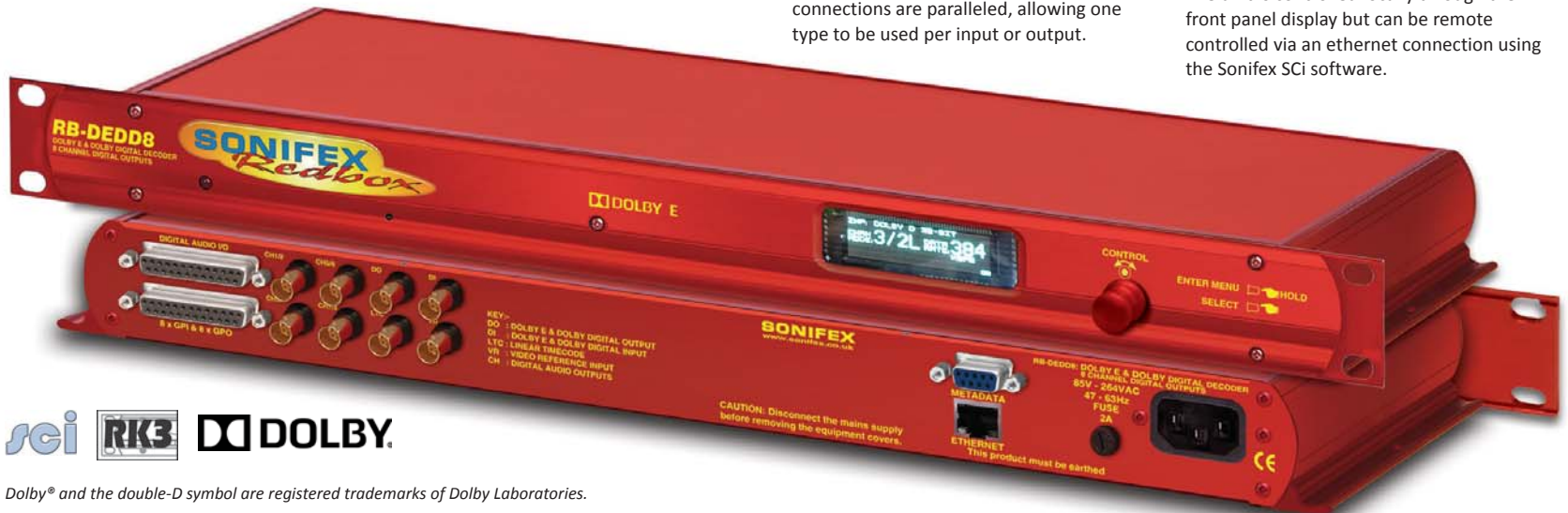
Each digital output channel has independent level control, which can be adjusted from -24dB through to +24dB in 0.5dB steps. The digital inputs and outputs can be selected to be either balanced or unbalanced AES/EBU specification, and can be connected through either BNC or D-type connectors. These I/O connections are paralleled, allowing one type to be used per input or output.

The metadata output from the decoder is transmitted using RS-485 via the external 9-pin D-type socket on the rear panel and can also be viewed using the SCI software.

A video input is used to genlock the audio outputs and Dolby® E decoding to a known video reference. This input autodetects between NTSC, PAL or Tri-level sync.

8 general purposes inputs and 8 outputs are available on a rear panel 25 way D-type socket whose function can be programmed using the menu, e.g. alarm outputs for loss of input or decoder errors.

The unit is controlled locally through the front panel display but can be remote controlled via an ethernet connection using the Sonifex SCI software.



Dolby® and the double-D symbol are registered trademarks of Dolby Laboratories.

### Specification For RB-DEDD8

#### Specification

Output Sample Rate:	48kHz
Input Sample Rates:	32-48kHz
Input & Output Impedance:	75Ω/110Ω selectable
Signal Level (Un-terminated):	Unbalanced: 1Vp-p ±20% Balanced: 6.6Vp-p ±20%
Digital Audio I/O:	
Dolby Input:	1 x Dolby bitstream input via BNC
Outputs:	8 x Digital audio output channels & 2 x Auxiliary audio output (stereo downmix) channels via 5 x BNCs or 25 way D-type socket
Dolby Output:	1 x Dolby bitstream output via BNC or D-type
Digital Audio Connectors:	7 x BNC 1 x 25 way D-type socket

Metadata: SMPTE-RDD06, 9 way D-type socket

#### Video Reference

Reference Type: Autodetect NTSC, PAL or Tri-level sync

Impedance: 75Ω

Connector: 1 x BNC

LTC Output: 1 x BNC (not used)

#### Operational Control

Display: Vacuum fluorescent display

System Navigation: Rotary selector with integral push-switch

#### Additional Connections

Ethernet Port: 10/100Mbps, RJ-45

Remote Input/Output Port: 25-way 'D'-type socket

Serial Port: RS232, 9 way D-type socket

Power Supply: Universal filtered IEC, continuously rated 85-264VAC @47-63Hz, fused

Fuse Rating: Anti-surge fuse 1A 20 x 5mm

#### Physical Specifications

Dimensions (Raw): 48cm (W) x 15.8cm (D\*) x 4.2cm (H)  
19" (W) x 6.2" (D\*) x 1.7" (H) (1U)

Dimensions (Boxed): 59cm (W) x 27.5cm (D\*) x 11cm (H)  
23.2" (W) x 10.8" (D\*) x 4.3" (H)

Weight: Nett: 1.8kg Gross: 2.3kg  
Nett: 4.0lb Gross: 5.1lb

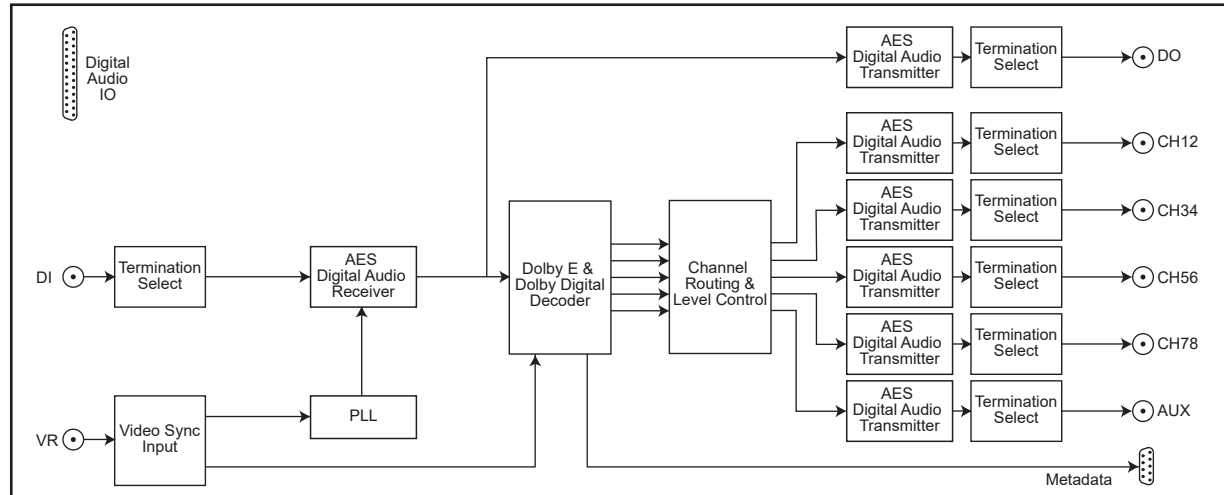
\* Note that this product is deeper than standard Redboxes

#### Equipment Type

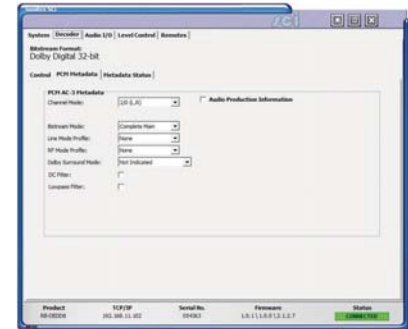
RB-DEDD8 Dolby® E & Dolby Digital decoder 8 channel, digital outputs

#### Accessories

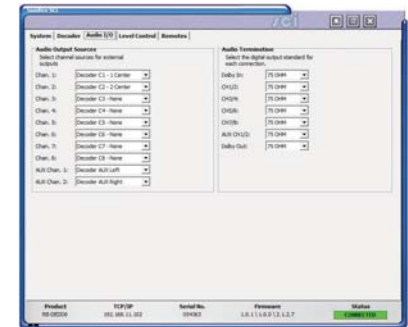
RB-RK3: 1U Rear panel rack kit for large Redboxes



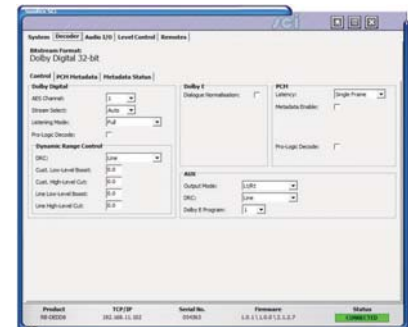
RB-DEDD8 Block Diagram.



SCI Decoder PCM Metadata Page.



SCI Audio I/O Page.



SCI Decoder Control Page.

# **SONIFEX**

[www.sonifex.co.uk](http://www.sonifex.co.uk)

---

## **UK Office:**

### **Sonifex Ltd**

61 Station Road, Irthlingborough,

Northants, NN9 5QE, UK

Tel: +44 (0) 1933 650700

Fax: +44 (0) 1933 650726

Email: [sales@sonifex.co.uk](mailto:sales@sonifex.co.uk)

## **Australian Office:**

### **Sonifex Pty Ltd**

12/6 Leighton Place,

Hornsby NSW 2077, Australia

Tel: +61 (2) 9987 0499

Fax: +61 (2) 9476 4950

Email: [sales@sonifex.com.au](mailto:sales@sonifex.com.au)