

SONIFEX

Manufacturers of Audio & Video
Products For Radio & TV Broadcasters

Redbox RB-DDA22
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Redbox - Audio Distribution Amplifiers

RB-DDA22

Digital Audio Distribution Amplifier With Multiple Outputs



StudioHub+[®] **RK3** **24^{BIT}**
192^{KS}

// When an input is selected, it is copied to all of the available outputs. There are 5 sets of digital audio outputs, providing 22 outputs in total. //

The RB-DDA22 is a multiple input and multiple output digital audio distribution amplifier designed to accept one of 5 different digital inputs, amplify it and output this to 22 digital audio outputs in 5 different audio formats.

It accepts signals with sample rates in the range 32kHz to 192kHz and distributes them without sample rate conversion.

There are 5 inputs, one each of balanced AES/EBU on an XLR socket, unbalanced AES/EBU on BNC, balanced AES/EBU on an RJ45 socket, unbalanced S/PDIF on a phono socket and a TOSlink optical connection.

An illuminated front panel input select push button is used to choose one of the 5 inputs, or to select the Auto Mode. In Auto Mode the unit interrogates each of the inputs in turn until it finds a lock. The select button flashes to indicate loss of lock and the tri-colour input LEDs around the push button indicate signal presence.

When an input is selected, it is copied to all of the available outputs. There are 5 sets of digital audio outputs consisting of: 6 x balanced AES/EBU on XLR plugs, 6 x professional unbalanced AES/EBU on BNCs, 6 x balanced AES/EBU on RJ45 sockets, 2 x unbalanced S/PDIF on phono sockets and 2 x TOSlink optical outputs, giving 22 outputs in total, 12 balanced and 10 unbalanced.

The RJ45 input and output connections use the StudioHub+[™] wiring standard for the balanced AES/EBU connections.

Note: The BNC outputs can be converted to S/PDIF outputs using a simple locking connector, available separately, giving an additional 6 x S/PDIF outputs, if required.

Technical Specification For RB-DDA22

Audio Specification

Input & Output Impedances: 110Ω ±20% AES/EBU balanced I/O
75Ω ±5% S/PDIF unbalanced I/O
75Ω ±5% TOSlink unbalanced I/O

Signal Level: Balanced: 3V/10V peak to peak min/max
Unbalanced: Min 0.5V±20% peak to peak

Sample Frequencies: 32, 44.1, 48, 88.2, 96, 176.4 or 192kHz

Bit Depth: Up to and including 24 bit

Front Panel Operational Controls & Indicators

Digital Input Select: AES/EBU (XLR), AES/EBU (BNC), AES/EBU (RJ45), S/PDIF or TOSlink optical
Indicators: Input presence indicators via tri-colour LEDs around the input select button

Connections

Digital Inputs: 1 x AES/EBU XLR 3 pin socket
1 x AES/EBU BNC
1 x AES/EBU RJ45 socket (StudioHub+[™])
1 x S/PDIF RCA phono socket
1 x TOSLink optical input

Digital Outputs: 6 x AES/EBU XLR 3 pin plug
6 x AES/EBU BNC
6 x AES/EBU RJ45 socket (StudioHub+[™])
2 x S/PDIF RCA phono socket
2 x TOSLink optical output

Mains Input: Universal filtered IEC, continuously rated 85-264VAC@47- 63Hz, max 10W

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

Equipment Type

RB-DDA22: Digital audio distribution amplifier with multiple outputs

Physical Specification

Dimensions (Raw): 48cm (W) x 10.8cm (D) x 4.2cm (H) (1U)
19" (W) x 4.3" (D) x 1.7" (H) (1U)

Dimensions (Boxed): 53cm (W) x 20.5cm (D) x 6cm (H)
21" (W) x 8" (D) x 2.4" (H)

Weight: Nett: 1.4kg Gross: 2.0kg
Nett: 3.0lbs Gross: 4.4lbs

Accessories

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



* StudioHub+[™] is a registered trademark of Radio Systems Inc

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