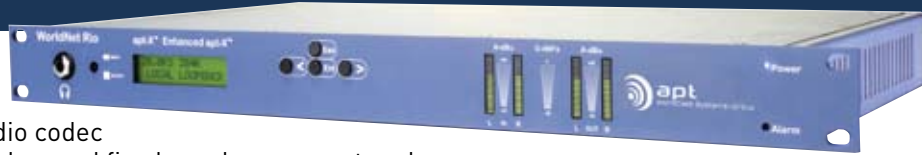


WorldNet Rio

Outstanding Audio Quality and Reliable Connections over Synchronous Links



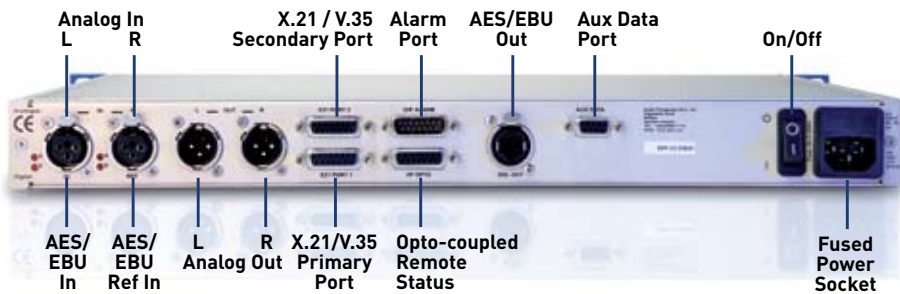
WorldNet Rio is a fully-featured, multi-algorithm audio codec enabling bidirectional stereo audio transport over high speed fixed synchronous networks.

The unit connects to X.21/V.35 or fractional T1/E1 links at rates up to 576kbps with a second X.21 interface offering automatic backup should the primary connection fail. An optional T1 / E1 interface can also be added. Incorporating low delay Standard apt-X (16 bit) and Enhanced apt-X (16 and 24 bit) algorithms, the WorldNet Rio also offers the option of MPEG Layer II coding, ensuring compatibility with a wide range of audio codecs.

Asynchronous auxiliary data can be embedded at rates of up to 9,600 baud. Opto-coupled inputs on the unit are capable of driving up to five relay outputs and the onboard relays on the WorldNet Rio will also indicate various alarm conditions. Configuration and control is straightforward; the front panel comprises a numeric keypad, menu navigation keys and an LCD display. SNMP is available as an option.

Audio input and output levels are easily monitored via the headphone socket and audio level bars.

WorldNet Rio : Back Panel View



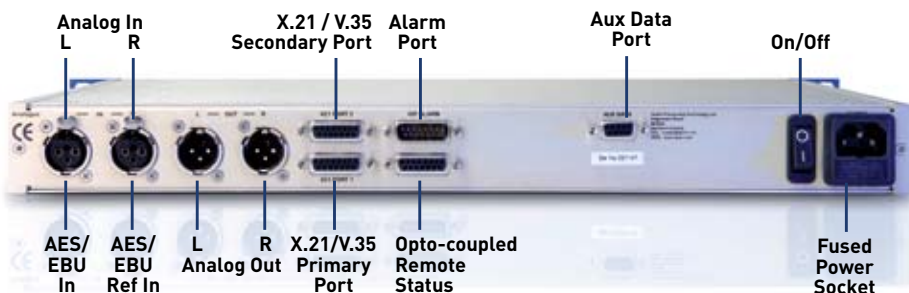
WorldNet Rio Lite



The WorldNet Rio Lite is based on the WorldNet Rio but with a streamlined feature set, offering customers a bespoke solution at reduced cost. The number of audio modes has been reduced to two with a single algorithm, determined prior to order by the customer. A minimum order quantity applies.

The WorldNet Rio Lite is a cost effective solution in delivering high quality audio for inter-studio networking, remote/outside broadcasts and STL applications achieved by the utilisation of permanent digital links such as T1, E1, Satellite or Microwave.

WorldNet Rio Lite : Back Panel View



Technical Specification

Physical	Size	1U x 19" Rackmount
	Dimensions	44mm x 482mm x 255mm 1.75" x 19" x 10"
	Weight	2.25Kg / 5lbs
	Power Supply	100-250VAC, 50-60Hz (optional 48VDC Supply)
	Power Consumption	<15W
	Environmental	0°C to +55°C, 95% humidity

X.21/V.35	15 Way D Type DTE, RS422 levels Rates 56-576 kbit/s
T1 / E1 (Data Rates)	Optional - RJ45 T1 (1.544Mbit/s) E1 (2.048 Mbit/s)
Aux Data	9 pin D Type, RS232 level
Data Rates (embedded)	1200, 2400, 4800, 9600 Baud
Control	Front Panel or optional SNMP
Digital Audio I/O	AES/EBU, Balanced XLR-3, Impedance 110 Ω
Digital Ref Input	XLR-3
Analog Audio I/O	Balanced XLR-3, Input Impedance >10k / 600 Ω Output Impedance <50 / 600 Ω
Alarms	Alarms on 25 pin D Type
Opto-Coupler	15 way D Type, 4 Inputs driving 4 Relay Outputs

Digital Operation	32kHz, 44.1kHz,* 48kHz
Digital Audio Bandwidth	10Hz through to 22.5kHz mono & stereo
Analog Operation	8kHz-48kHz
Analog Audio Bandwidth	10Hz through to 22.5kHz mono & stereo
Sample Rate Converter	3:1 (with bypass modes)
A/D Converter	24-bit/96kHz sigma-delta
Standard Coding	Standard apt-X, Enhanced apt-X 16-Bit & 24-Bit
Multi-algorithm Pack 1	ISO/MPEG 1/2 Layer II
Compression Ratio	apt-X: 4:1 others: Variable
Coding Delay	Standard apt-X 2.5ms @48kHz Fs Enhanced apt-X 1.9ms @48kHz Fs
Dynamic Range	16 Bit > 85dB, 24 Bit > 120dB
Phase Response Linear	DC to Fs/2
Pass Band Ripple	< 0.2dB

Audio