

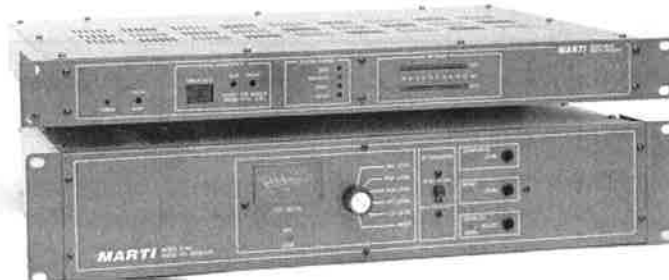
MARTI

MD-2E DIGITAL ENCODER MD-2D DIGITAL DECODER

The Digital Solution for Composite STL Systems



MD-2E and STL-15C Composite Transmitter



MD-2D and R-15C Composite Receiver

COMPLETE DIGITAL SYSTEMS

The **MARTI STL-15C** Transmitter and companion **R-15C** Receiver can be combined with the **MD-2E** and **MD-2D** Digital Modems to form a high-quality frequency-synthesized Digital Radio Link. Systems are available from 140 MHz to 960 MHz.

Complex systems can be built having multiple relay (Repeater), bi-directional (Full Duplex) and automatic switching hot-standby features.

SYSTEM SPECIFICATIONS

- Channel crosstalk: - 85 dB
- Audio frequency response: 15 Hz. to 15 KHz. ± 0.25 dB
- Distortion at 1 KHz.: 0.01%
- Distortion at 10 KHz.: 0.015%
- Dynamic range: 93 dB typical
- Signal to Noise Ratio: 80 dB or better
- Sensitivity at 10^{-4} bit error rate (BER): - 85 dBm
- Max BER for no loss in audio quality: 10^{-4} or less
- Audio coding method: APT -x (others upon request)
- Audio delay: 3.8 ms or less

MODEM SPECIFICATIONS	MD-2E Encoder	MD-2D Decoder
Analog Audio Inputs	XLR female, 600 ohm balanced	XLR female, 600 ohm balanced
Analog Audio Levels	-10 to +16 dBm Adjustable	-10 to +16 dBm Adjustable
Digital Coded Output Signal	0.4 to 8 volts P-P into 10K ohm load	0.8 to 5 volts P-P into 600 ohm load
Sample Rate	36 KHz	
RCS, regenerated coded signal output (for STL multi-hops)		BNC, 1 volt peak to peak (P-P)
Data Rate Resolution	16 bit	
Digital Audio Input	XLR female, 110 ohms, balanced	
Standard	AES/EBU	
Digital Audio I/O Sample Rate	32 KHz., 44.1 KHz. or 48 KHz.	48 KHz. (32 KHz. or 44.1 KHz. upon request)
RDS Input	BNC, 10K ohm unbalanced	BNC, unbalanced
MPX + RDS output		BNC, 10K ohms unbalanced
MPX input		
Data Input - Encoder,	4800 bps, RS-232, 9 pin female D connector	4800 bps, RS-232, 9 pin female D connector
Data Output Decoder		Analog audio input peaks, system fault indicators, RDS and Data, QRC
Indicators	Analog audio input peaks, AES/EBU status, system fault indicators, RDS and Data	0 to 45 Degrees C.
Temperature Range	0 to 45 Degrees C.	110/230 VAC, 50/60 Hz., 38 Watts
Power Requirements	110/230 VAC, 50/60 Hz., 34 Watts	19" x 14" x 1.57" (483 x 357 x 44 mm)
Dimensions	19" x 14" x 1.57" (483 x 357 x 44 mm)	10.2 lbs. (4.6 Kg.) net
Weight	9.75 lbs. (4.4 Kg.) net	