

TeleDelta DFM

Digital FM Modulator / Exciter for Radio Rebroadcast

The TeleDelta DFM digital FM modulator/ exciter is a professional 1RU rack-mount platform for FM rebroadcast in tunnels, underground environments and In-building FM redistribution systems

Compact in design the DFM can ingest digital audio (AES / EBU) along with analog audio sources. The TeleDelta DFM is a full band FM modulator / exciter offering RF output power adjustment across the complete FM band (87 ~ 108.00Mhz)

User setup and control is available via the front panel LCD and push-button controller along with remote management via RS232.



Key Features:

- Digital AES / EBU audio inputs
- Analog and SCA (optional) inputs
- Low latency DSP based stereo generator with variable 19kHz pilot deviation
- Adjustable frequency output across FM bands 87~108Mhz
- Adjustable RF output level
- Front panel LCD display / control
- RS232 remote control interface for PC or other compatible device
- RF power mute can be activated without turning off power supply.

Specifications are correct at time of print. For latest information please contact IPTL www.teledelta.com



TeleDelta DFM

Technical Specification

RF Output Frequency	87.00MHz~108.00MHz, Step 10kHz
Output Power	-8dBm ~ +10dBm
Output Connector	BNC (50 ohm)
Spurious Free Dynamic Range	<-70dB
Residual Amplitude Modulation	<-50dB
Carrier Frequency accuracy	±200Hz
Frequency Stability	1x10(^6)
Modulation Deviation	0~120KHz
Pilot Frequency	19kHz±0.1Hz
Pilot Amplitude	0~12KHz (10% 7.5K)
Analog Audio Input Impedance	600 ohm Balanced
Analog Audio Input Level	-12dBm ~ +8dBm, Step 0.1dB
Digital Audio Input Impedance	110 ohm Balanced
Digital Audio Input Level	0.2~10Vpp
Digital Audio Sample Rate	30kHz~96kHz
Audio gain	-15dB~+15dB, step 0.1dB
Pre-emphasis	0μs, 50μs, 75μs
LR Channel Level Difference	< 0.1dB (100% Modulation)
Frequency Response	< ±0.1dB , 30Hz~ 15000Hz
THD	< 0.1%, (30Hz~ 15000Hz)
Stereo Separation	> 50dB, (30Hz~ 15000Hz)
SNR	> 70dB, (1kHz 100% Modulation)
SCA	BNC (optional)
SCA modulation amplitude	7.5KHz (0dBm)
SCA center frequency	67KHz
SCA frequency deviation	±4KHz
Power Supply	220-240V
Dimensions	1RU, (485mm×305mm×44mm)
Weight	3kgs
Ambient Temp	5~+40 degrees
Relative Humidity	<95%

Ordering Information	
DFM-AES	1RU FM Generator with 1x (selectable) AES Digital + Analog Input
DFM-ANALOG	1RU FM Generator with 1x Analog Input

Specifications are correct at time of print. For latest information please contact IPTL www.teledelta.com

