

## 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](http://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

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