



advanced media technologies

Frequency Agile CATV Modulator

DSM-170



Vital Stats:



- 54-552 MHz
- 60 dBmV output
- Unique agile output filter system provides unparalleled combined C/N performance
- Exceeds FCC specifications
- BTSC stereo compatible 4.5 MHz interface
- Digital channel display
- PLL frequency synthesized tuning
- Selectable frequency offsets (+/- 12.5 & 25.0 KHz)
- Separate audio / video I.F. loops
- SAW filtered
- Low profile (1-3/4" high)
- Compatible with most scrambling systems

DSM-170 Frequency Agile CATV Modulator Specifications

RF

Output Frequency Range	54 ~ 552 MHz
Visual Carrier Output Level	+ 60 dBmV
Output Impedance	75Ω, F type female
Output Level Control Range	0 dB ~ -10 dB (adjustable)
Aural-to-Visual Carrier Ratio	-12 dB ~ -25 dB
Visual Carrier Frequency Stability	± 2.5 kHz
Aural Carrier Frequency	4.5 MHz ± 500 Hz above visual carrier
Spurious Rejection	≥ 60 dB below visual carrier at + 60 dBmV with A/V carrier ratio -15 dB
Carrier Offset Frequency	± 12.5 KHz ± 25.0 KHz selectable

VIDEO

Input Level	0.7 ~ 2.0 V p~p
Input Impedance	75Ω F type female
Frequency Response	± 1 dB (50 Hz ~ 4.2 MHz)
S/N	≥ 60 dB
Differential Gain	3% typical
Differential Phase	3% typical

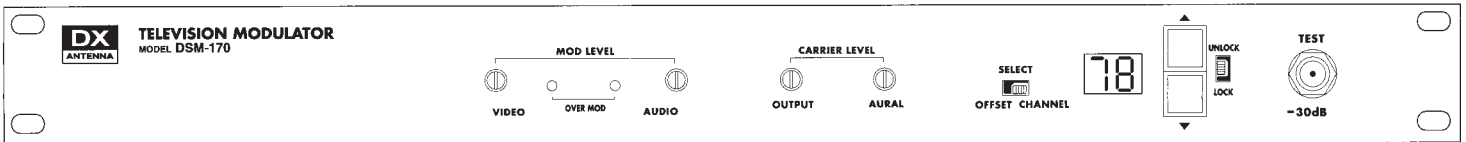
AUDIO

Input Level	-10 dBm ~ +10 dBm
Input Impedance	600Ω Balanced
Total Harmonic Distortion	≤ 0.5%
Frequency Response	± 1dB (50 Hz ~ 15 kHz) Monaural w/75µs pre-emphasis ± 1dB (50 Hz ~ 105 KHz) BTSC, MTS baseband, no pre-emphasis
S/N	≥ 60 dB
MTS 4.5 MHz Input Level	-10 dBm (75Ω)

GENERAL

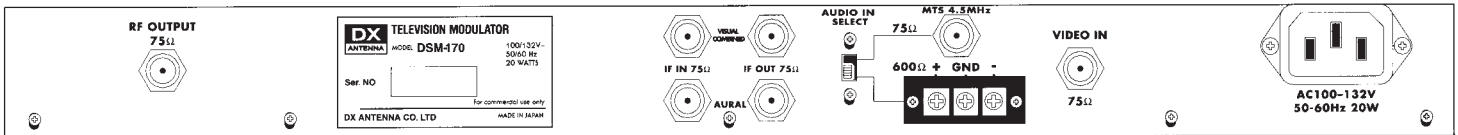
Power Input	100 ~ 132 VAC 50, 60 Hz
Power Consumption	≤ 20 W
Operating Temperature	0°C ~ 50°C
Size	Standard 19" rack mountable
Weight	7.7 lbs.

*Specifications are subject to change without notice due to product improvements



Front Panel Features

- Video modulation level control
- Video modulation level indicator
- Audio modulation level indicator
- Audio modulation control
- Output carrier level control
- Aural carrier level control
- FCC offset/channel selector
- Output channel indicator
- Channel select buttons
- Lock/Unlock switch
- -30 dB test terminal



Back Panel Features

- RF output connector
- Audio IF loop thru connectors
- Video IF loop thru connectors
- BTSC / normal audio switch
- BTSC 4.5 MHz input connector
- Audio input terminal (600 ohm balanced)
- Video input connector (75 ohm)
- Removable power cord (AC terminal)