

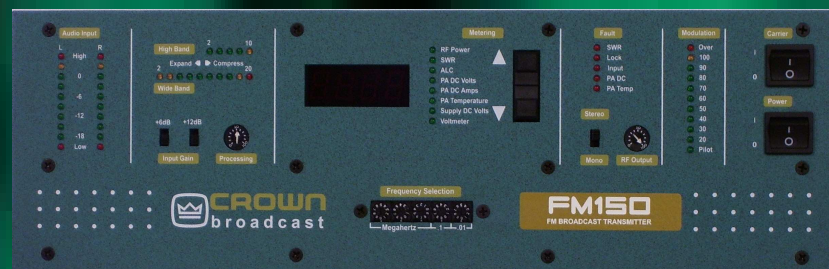
# CROWN BROADCAST

## FM150 Broadcast Transmitter

- Frequency Agile from front panel
- SWR metering from remote control
- Ability to control output power from remote control
- 3-Year warranty
- 24 hour service support
- Meets or exceeds all FCC requirements

**NEW for 2007!**

**Innovative  
Technology for  
Broadcast  
Confidence**



The FM150 is an economical stand-alone transmitter that delivers a high level of performance required for today's demanding broadcast needs. Continuing the Crown legacy of high quality and reliability, the FM150 delivers versatility without compromise.

The FM150 is available in three configurations: The FM150E is a basic exciter with composite input only. The FM150T is a perfect choice for the lower power broadcaster, with its built in audio processor and stereo generator. The 50% upgrade in power over our previous FM100 allows the end user to accommodate line loss without upgrading to the next higher power Crown unit saving hundreds of dollars. The FM150R is the translator option with built in receiver.

Reliable operation is still the major design criterion in all Crown Broadcast products. With low loss circuit boards and copper heat spreaders in the RF chain, the unit functions with less heat and improved life span. A robust power supply with switching voltage and power regulators for AC or DC operation allow the FM150 to be used anywhere power can be generated.

**CROWN BROADCAST**  
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# FM150

## Technical Specifications

Long-Term Reliability

System Versatility

Rapid Customer Response

Advanced Technology

Frequency Range.....	87 to 108MHz (Japanese frequency available 74-90MHz as an option) Front panel agile
RF Power .....	15 to 150 watts with front panel adjustment
RF Output Impedance.....	50 Ohms unbalanced
VSWR.....	1.7:1 Maximum with automatic fold-back at higher VSWR
Frequency Stability.....	Better than +/- 1 KHz over operating temperature range
Modulation Type.....	Direct Frequency Modulation of Carrier
Modulation Indication.....	LED Indicators with Peak indicators
FM S/N Ratio (FM noise).....	Better than 60 dB (70 to 80 dB typical)
Asynchronous AM S/N Ratio.....	Better than 50 dB referenced to 100% modulation @ 100 Hz, no de-emphasis.
Synchronous AM S/N Ratio.....	Better than 50 dB with 100% modulation @ 100 Hz, no de-emphasis (typical >60dB)
RF Harmonics/Spurious Products.....	Better than -70 dB (-80 dB typical)
RF Bandwidth.....	+/-120 KHz, better than -35 dB; +/-240 KHz better than -45 dB
Temperature.....	0 to 50 degrees C
Humidity.....	0 to 80% @ 20 degrees C (non-condensing)
Maximum Altitude.....	10,000 ft (3,000 m)
AC power.....	100 to 120 or 220 to 240 volts AC +/- 10%, 50 to 60 Hz
Power factor.....	Greater than 97% (lagging)
DC Power.....	36 to 60 VDC (60V required for full output)
Power Consumption.....	420VA
Regulatory Notification for FCC part 73 and 74.....	Meets FCC requirements
RF Output connector.....	Standard type N, 50 Ohm
Chassis dimensions.....	5.25 x 16.5 x 17.5 inches (13.4 x 41.9 x 44.5 cm) exclusive of rack mounts but inclusive of connectors
Weight.....	29 pounds (13.2 Kg) shipping weight = 37 pounds (16.7 Kg)

### Wide Band composite operation

- Composite Inputs.....1
- Composite Input level.....3.8 Vp-p for +/-75KHz deviation
- Composite total harmonic.....< 0.05% from 50Hz to 15 Hz distortion + noise (0.03 typical)
- Sub-carrier inputs.....3
- Sub-carrier input level.....3.8 Vp-p for +/-75KHz deviation
- Sub-carrier amplitude response...+/-0.3 dB from 40Hz to 100KHz

### Monaural operation w/ built in Audio Processor

- Audio Input impedance.....50 Kohms bridging, balanced
- Audio Input level.....3.8 Vp-p for +/-75KHz deviation
- Audio Frequency response...Conforms to 75uS pre-emphasis curve for +/-0.25 dB from 50Hz to 15KHz
- Pre-emphasis.....Selectable 50, 75 uS or flat

### Stereo Operation w/ built in Audio Processor and Stereo Generator

- Audio Input impedance.....50 Kohms bridging, balanced
- Audio Input level.....-10 dBm to +10 dBm selectable for 75KHz deviation @400Hz
- Frequency response.....+/-0.3 dB from 50Hz to 10KHz, +/-1.0dB from 10Hz to 15KHz
- Total Harmonic distortion + Noise.....0.4% or less @ 15KHz (0.2 typical)
- Stereo Separation.....Better than 40 dB from 50Hz to 15KHz
- Linear Cross Talk.....Main to sub and sub to main, -40 dB or better from 50 Hz to 15 KHz
- 38 KHz Sub-carrier suppression.....+/- >60 dB
- Pilot Stability.....+/- .5 Hz @ 9% modulation

International

**RADIO & ELECTRONICS**  
Corporation

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