



## The **ROADCASTER**<sup>®</sup> Series

*Frequency Agile VHF/UHF*

### **REMOTE PICK UP TRANSMITTER/RECEIVER**

- ◆ 16 Channels Front Panel Selectable
- ◆ Transmitter Contains Built in Compressor
- ◆ Transmitter Contains Front Panel 4- Channel Microphone Mixer
- ◆ Rated for 40 watts Continuous Duty
- ◆ Compatible with “Marti” Systems
- ◆ Both Receiver and Transmitter have Front Panel Display of Frequency
- ◆ Portable Transmitter - Only 13 Pounds
- ◆ Transmitter can operate from 110/220 vac or 12 volt DC Power
- ◆ Rack Mountable Receiver with XLR Balanced Analog Output

The *Energy-Onix Roadcaster* has been designed to deliver outstanding performance at any one of 16 preset channels in the VHF (150 to 170 MHz) or UHF (450-475 MHz) frequency ranges. These channels have been allocated by the FCC for Broadcasters to originate programs from remote locations such as shopping malls, athletic events, or special events.

The combination of *The Roadcaster* and appropriate antennas will reliably provide a 30 to 40 mile RF connection to the receiving antenna, which is normally mounted at the transmitter tower. Normally the receiving antenna is an Omni directional, high gain antenna, while the transmitting antenna is a high gain directional antenna.

*The Roadcaster* transmitter can operate from either a conventional AC source (115 or 220v) or a 12 volt DC battery. Thus it can be installed in a mobile van and, together with its front panel mixer, can serve as a “Remote Studio”.

Since both the transmitter and receiver are interchangeable with Marti Equipment they can be used to replace a “non- working” unit.



## **ENERGY-ONIX**

*The Transmitter People*

Box 801 • 1306 River Street • Valatie, New York 12184  
VOICE: 518.758.1690 / 888.324.6649 • Fax 518.758.1476  
E-MAIL: [energy-onix@energy-onix.com](mailto:energy-onix@energy-onix.com)  
WEB SITE: [www.energy-onix.com](http://www.energy-onix.com)

# Transmitter Specifications

## ELECTRICAL SPECIFICATIONS

RF Power Output: 40 watts UHF and VHF

Spurs and Harmonics: -70db or better  
FM Noise and Hum: - 60db or better  
Frequency Stability: .0001%  
Frequency Range: 450 - 475 MHz UHF  
(in 6.5KHz steps)  
150-170 MHz VHF(in 5KHz steps)

RF Power Control: Digital, Closed Loop  
2-40watts

Channels: 16 selectable from Main Menu  
Compressor: User Selectable audio  
Compressor 30 db range  
Limiter: Modulation limiter to avoid  
over modulation.

Deviation: +/- 5khz to +/- 10khz  
Frequency Response: 50HZ to 8000HZ  
Metering: Digital metering via LCD  
display of Forward and  
Reflected power, and audio  
modulation.

Audio Inputs: Build in 4 ch "mic" mixer with  
one microphone input  
switchable from Menu as a  
line input. Inputs are 600 ohm  
balanced.

Power Requirements: 120 VAC @ 2 amps max  
220 VAC @ 1 amp max  
12 VDC @ 13 amps max

Temperature Range: -30 to +60 degrees C  
Distortion: Less than 1% Typically 0.5%  
Pre-Emphasis: 6db /octave Beginning  
@100HZ

## MECHANICAL SPECIFICATIONS

Size: 13.5" Wide, 10" Deep, 5" High  
Weight: Approximately 13 lbs.  
Rear Panel Connections: AC  
Power Cord, DC Power Cord  
(Optional), 120/220 VAC Selector  
Switch (Recessed), Power  
Switch Type "N" Female  
Connector for Antenna.

Front Panel Controls: Four XLR Female Microphone  
Connectors, (2) 1/4" headphone  
jacks (4) Rotary Type  
Microphone Fader Controls,  
(4) Menu Selection Keys.

Cooling: Large internal heat sink provides  
adequate cooling with digital  
temperature sensing and fan  
control. The DC brushless fan is  
low speed to eliminate any noise  
in local microphones.

Protective Case: Heavy duty 1/8" aluminum case  
overhangs all controls to protect  
them from damage in transit.  
A carry handle makes unit easy  
tomaneuver.

## Rack Mount Receiver Specifications

### ELECTRONIC SPECIFICATIONS

Sensitivity: .35uv for 20db quieting  
IF: Dual conversion, 45 MHz  
and 455 KHz

Selectivity: 75-80db  
Intermod: 80db  
Squelch: Digital with 2ms attack and  
decay time

RSSI: LCD Signal strength bar graph  
Audio output: 0 dbm, 600 ohms balanced

### MECHANICAL SPECIFICATIONS

Size: 19" Wide, 3" Deep, 5.25" High  
Weight: Approximately 2 lbs.  
Power Requirements: 120 VAC @ .02 amps  
220 VAC @ .01 amp  
12 VDC @ .2 amps

Temperature Range: -30 to +60 Degrees C  
Rear Panel Connections: Wall Transformer Power  
Cord, Power Switch, Type  
"N" Female Connector for  
Antenna, XLR female  
receptacle for Audio Output.

Front Panel Controls: (2)1/4" headphone jacks, with  
level control. Backlit LCD  
Display for metering.



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