

# LONG RANGER 650

## Single Channel RF Transmitter & Receiver

### LONG RANGER 650

- Up to 450 ft open air range.
- Up to 68 billion codes.
- Operating frequency 315 MHz.
- Receiver learns up to 15 transmitters, no need to set DIP switches.
- Transmitter operates on 12VDC alkaline battery.
- Transmitter available in single or two-button key-fob and single, two or four button visor clip style.



### FEATURES

- Receiver operating voltage 11V DC-24V AC/DC with current drain as low as 8mA making it suitable for solar applications
- Form "C" relay output NO/COM/NC, 4-output modes 1sec, 4sec momentary, toggle and latch.
- Receiver available in single channel or two channel.

### ORDERING INFORMATION

LR 650-TX	One button transmitter
LR 650-RX	One channel receiver
LR 650-RX-4X	One channel receiver in NEMA 4 housing
LR 652-TX	2 Button transmitter
LR 652-RX	2 Channel receiver
LR-DIPOLE	Extended Range Antenna
LR 650-TX1B/VC	Single button visor clip
LR 650-TX2B/VC	Two button visor clip
LR 650-TX4B/VC	4-button visor clip

We accept Visa, MasterCard, American Express card orders and company purchase orders with approved credit.

**EMX INDUSTRIES, INC.**  
4564 Johnston Parkway  
Cleveland, Ohio 44128

Telephone:  
1-800-426-9912  
216-518-9888

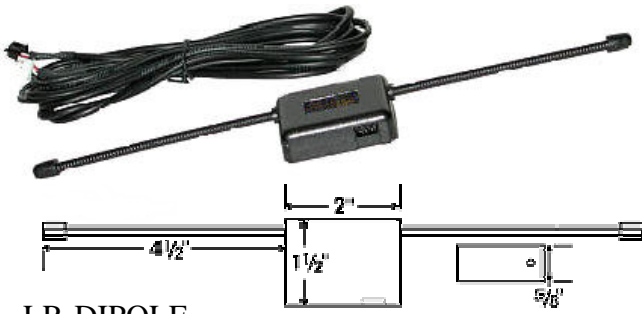
Fax: 216-518-9884

WEB: <http://www.emxinc.com>

Email: [salesupport@emxinc.com](mailto:salesupport@emxinc.com)

Technical Support: [technical@emxinc.com](mailto:technical@emxinc.com)

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LR-DIPOLE

**Extended Range Antenna**

- 1100 foot Max.
- Easily plugs into connector on receiver motherboard
- **9 feet of coax included**
- 5 VDC @ 4.0mA current draw
- 315 MHz Frequency
- Sensitivity 0.89mV @ -108dBm
- Bandwidth 3.0 MHz (-3dB)
- Works on LR 650-RX and LR 652-RX



LR 650-RX



LR 652-RX



LR 650-TX1B/VC



LR 650-TX2B/VC



LR 650-TX4B/VC



LR 650-TX



LR 652-TX

**Technical Specifications LR 650 and LR 652 Receivers**

Operating Frequency	315 MHz
Operating Voltage	11 – 17.5 VDC; 11 – 16 VAC (LR 652) 11 – 24 VDC; 11 – 24 VAC (LR 650)
Operating Distance	450 feet open air 1100 feet with optional dipole antenna (LR-Dipole)
Operating Temperature	-4° F to + 162°F (-20°C to + 72° C)
Current Draw	8 mA @ 12 VDC (standby) / 60 mA per channel @ 12 VDC (activated) (LR 652) 15 mA @ 12 VDC (standby) / 45 mA @ 12 VDC (activated) (LR 650)
Sensitivity	-87 dBm (typical)
Data Format	PWM
RF Codes	68 Billion
RF Channels	1 (LR 650) 2 (LR 652)
Number of stored Transmitter codes	15 per channel x 2 (LR 652)
Receiver outputs	Form “C” dry contact (N.O./N.C./Common) x 2 (LR 652) 10A @ 24 VDC
Output Modes (Programmable)	4-sec. Momentary (default), 1-sec. Momentary, toggle or latch (cutting jumper)
Connectors	Quick connect screw terminals
Case Material	High-impact ABS plastic
Approvals	FCC

**WARRANTY**

EMX INC. the product described herein for a period of 2 years under normal use and service from the date of sale to our customer. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage.

There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein.

EMX Inc. sole responsibility and liability, and purchaser’s exclusive remedy shall be limited to the repair or replacement at EMX’s option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship.