

Long Range Series

LR 650-TX

Single Code Transmitter

- Frequency 315 MHz.
- Range up to 650 feet.
- 68 Billion Codes Possible
- Flashing LED Indicator
- 12 VDC Alkaline Battery with key chain ring.



Size: 2" x 1.5" x 0.59"
(50 x 38 x 15mm)

LR 652-TX

Two Code Transmitter

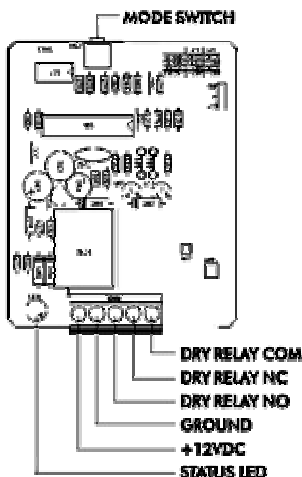
- Frequency 315 MHz.
- Range up to 650 feet.
- 68 Billion possible codes
- Flashing LED Indicator
- 12 VDC Alkaline Battery with Key chain ring



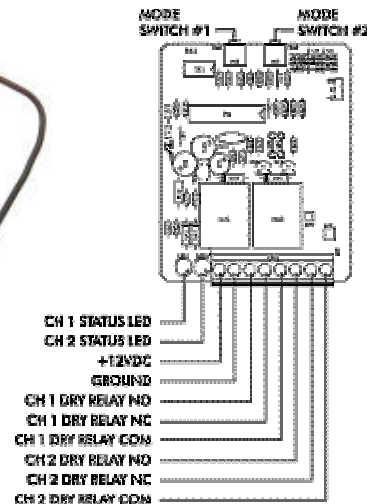
Size: 2" x 1.25" x .45"
(51 x 32 x 11mm)



LR 650
Size 3.25" x 2.7" x 1.1"
(83 x 68 x 27.5mm)



LR 652
Size: 3.25" x 2.7" x 1.1"
(83 x 68 x 27.5mm)



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	650 feet open air 1600 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	2 (LR 652) 1 (LR 650)
Number of stored Transmitter codes	15 per channel, 30 per receiver (LR 652) 15 per receiver (LR 650)
Receiver outputs	Form "C" dry contact (N.O./N.C./Common) x 2 (LR 652) 10A @ 24 VDC Form "C" dry contact (N.O./N.C./Common) x 1 (LR 650) 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

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Long Range Series

OPERATION

LR 650		LR 652	
Mode Switch	One	Mode Switch	Two (one per channel)
Enter Learn Mode:	Press and hold mode switch for 3 seconds. LED will flash fast.	Enter Learn Mode:	Press and hold mode switch for 3 seconds. LED will flash fast. Repeat for each channel
Learn Transmitter Code:	Within 15 seconds of entering learn mode, press the transmitter button. LED will flash one time when transmitter is learned.	Learn Transmitter Code:	Within 15 seconds of entering learn mode, press the transmitter button. LED will flash one time when transmitter is learned.
Clear Memory:	After entering learn mode, press the mode switch again for 3 seconds. LED will flash twice to indicate memory clear.	Clear Memory:	After entering learn mode, press the mode switch again for 3 seconds. LED will flash twice to indicate memory clear.
Reset Latched Output:	Press mode switch momentarily and release	Reset Latched Output:	Press mode switch momentarily and release
LED Indicator		LED Indicator	
Steady On	RF reception (receiver is receiving RF signal from coded transmitter) great for trouble shooting	Steady On	RF reception (receiver is receiving RF signal from coded transmitter) great for trouble shooting
Fast Flash	In code learning mode	Fast Flash	In code learning mode
One Flash	A transmitter code is learned	One Flash	A transmitter code is learned
Two Flashes	All learned codes are cleared	Two Flashes	All learned codes are cleared

Note: Programming other than default 4-second momentary output is accomplished by the following:

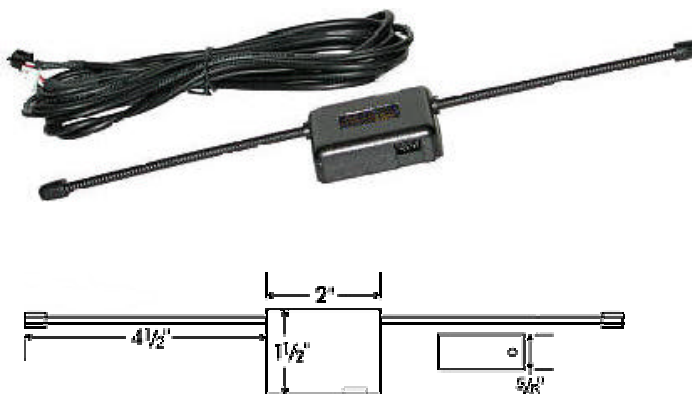
	4-s.mom	1-s. mom	Toggle	Latch
LP1	Uncut	Uncut	Cut	Cut
LP2	Uncut	Cut	Uncut	Cut
LP3	Cut to use external antenna			

Optional Accessories

LR-DIPOLE

Extended Range Antenna

- 1600 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



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