

Ranger™ Long Range Transmitter and Receiver, Models WRT-4 and WRR-42



The Ranger™ Long Range Transmitter, model WRT-4, and Receiver, model WRR-42, comprise Farpointe Data's long range identification solution. Commonly known as 'clickers', Ranger is ideal for long range access control applications, such as opening parking gates, raising and lowering vehicle barriers, arming and disarming alarm systems, as well as those applications calling for emergency duress. Like a proximity card, the WRT-4 may also be used as a proximity credential, compatible with the entire range of *Pyramid Series Proximity™* readers.

...most secure access control method...

Ranger takes advantage of a secure digital anti-playback routine, based upon a custom rolling code variant of the Tiny Encryption Algorithm, providing perhaps the most secure method of controlling access from a long distance. This fast and efficient cipher results in both best-in-class security, virtually eliminating the risk of code sniffing and unauthorized duplication, and read range. Readrange between the WRT-4 Ranger Transmitter and WRR-42 Ranger Receiver is field adjustable, with a maximum of up to 150-feet (46m).

...easy to carry four-button WRT-4 Transmitter...

With a nominal physical size of 2.3 x 1.3 x 0.5 inches (58.4 x 33 x 12.7mm) and red LED indicator, the easy-to-carry four-button WRT-4 Ranger Transmitter is delivered standard on a key ring. WRT-4's are sequentially coded in either a standard 26-bit Wiegand or custom Wiegand format, all with exact number sequences. This makes it easy to add Ranger to any standard access control system. As a cross-reference, the WRT-4's internal ID number is marked on its back.

...Ranger Receiver outputs Wiegand data...

The WRR-42 Ranger Receiver operates from 8 to 24 VDC, with a nominal current draw of 80 mA. Housed in a weather resistant enclosure, the physical size of the WRR-42 is 6.3 x 3.5 x 2.4 inches (160 x 89 x 61mm). It includes a drill template providing mounting provisions to a USA or European wall box, as well as pre-drilled holes in the four corners allowing installation to a flat surface. The WRT-4 includes beeper and multi-color LED indicators standard. The two channel Ranger Receiver (Channels A or B) allows Ranger Transmitter data to be outputted over a pair of Wiegand outputs. Formatting of the Wiegand data outputted is dependant upon the specific programmed format of the individual WRT-4 Transmitter.

Features and Benefits

Long Range

>>Up to 150 feet (46m)! Ideal for vehicle access without lowering the window!

Adjustable Read Range

>>Adaptable for a range of applications, from up to 150 feet to just a few feet.

Encrypted Rolling Code Transmission

>>Best-in-class security, hardened against code grabbing and scanning.

Pass-Thru Wiegand Output

>>Compatible with all standard access systems.

Familiar Size

>>Transmitter comes on a key ring, or fix mount with Velcro

Multi-Technology

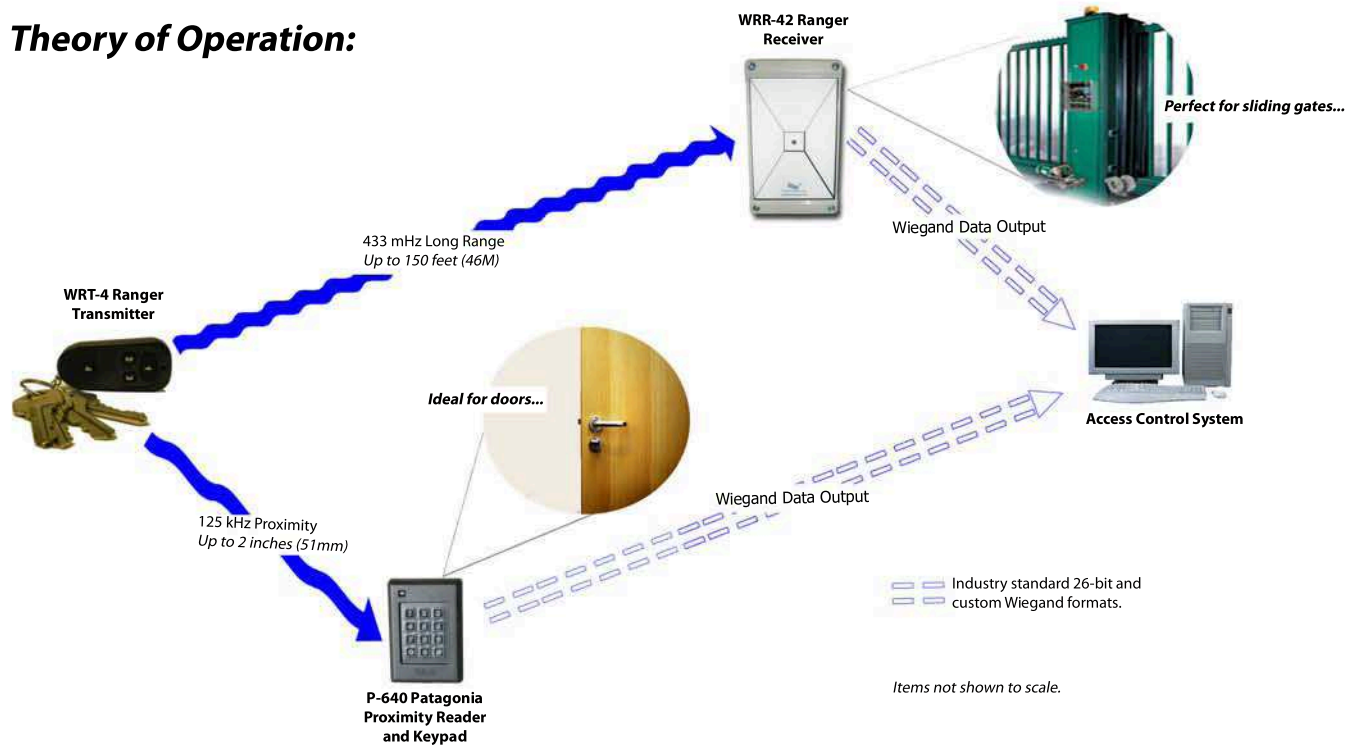
>>Transmitter combines long range ID with the simplicity of proximity



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Theory of Operation:



Each four-button Ranger Transmitter integrates the convenience of long range identification with the simplicity of traditional proximity access control. For example, for long range access button-1 may be used for the parking gate, button-2 for lobby access, button-3 for arming/disarming of an alarm system, and button-4 reserved for emergency duress. Then for traditional proximity access the Transmitter can be simply presented to any *Pyramid Series Proximity™* reader, allowing it to act as a regular Pyramid Series credential. It is important to note the Wiegand data transmitted upon either button press or presentation is identical.

WRT-4 Ranger Transmitter Specifications:

Read Range:	
Button Press: Up to 150-feet (46m) with WRR-42 Receiver ¹	
Presentation: Up to 2 inches (51mm) with P-500 ¹	
Secure Transmission Technology:	Rolling Code + Custom Tiny Encryption Algorithm Variant ²
Dimensions:	2.3 x 1.3 x 0.5 inches (58.4 x 12.7 x 0.5mm) nominal
Weight:	0.7 oz. (21.8g) nominal
Operation:	
Button Press: Long Range 433 mHz (Active-Battery Powered)	
Presentation: 125 kHz Proximity (Passive-Not Battery Powered) ³	
User Indicator:	Red LED, Flashes Upon Button Press
Operating Temperature:	-25 to +50 degrees C
Buttons:	4-Buttons, Labeled 1 thru 4
Battery:	Replaceable 27A, NM27-sized 12 Volt Alkaline Battery
Color:	Black
Marking:	Date Code and ID
Formats:	Wiegand (26-bit Industry Standard and Custom Wiegand formats)
Compatibility:	
Button Press: Ranger Receiver, Model WRR-42	
Presentation: Pyramid Series Readers	
Warranty:	The WRT-4 carries a limited 1-year warranty against defects in materials and workmanship
Certifications:	FCC, IC, CE and C-Tick

WRR-42 Ranger Receiver Specifications:

Read Range:	Installer Adjustable, Up to 150-feet (46m) with WRT-4 Transmitter ¹
Secure Transmission Technology:	Rolling Code + Custom Tiny Encryption Algorithm Variant ²
Dimensions:	6.3 x 3.5 x 2.4 inches (160 x 89 x 61mm) nominal
Weight:	9.3 oz. (289.3g) nominal
Operation:	433 mHz
Power:	8 to 24 VDC at 80 mA nominal
User Indicators:	LED's and Audio Tone Standard
Enclosure:	White IP66 Compliant Plastic Enclosure
Formats:	Wiegand (26-bit Industry Standard and Customs Wiegand Formats)
Channels:	2, Channel A or Channel B, Installer Selectable
Wiegand Outputs:	2 Per Channel
Compatibility:	Ranger Transmitter, Model WRT-4
Warranty:	The WRR-42 carries a limited 1-year warranty against defects in material and workmanship
Certifications:	FCC, IC, CE, and C-Tick

¹Read range may be affected by local installation conditions.

²Creates perhaps the most secure method of controlling access available today. This fast and efficient cipher results in both best-in-class security, virtually eliminating the risk of code sniffing and unauthorized duplication.

³Proximity Compatibility: *Pyramid Series Proximity* readers, cards and tags