Ranger Long-Range Wireless Radio Transmitter

These Operating Instructions are a basic guide in the proper use and care of the Ranger Transmitters. Additional information may be downloaded from the Farpointe Data website found at www.farpointedata.com; under Products > Ranger™ Long Range Transmitters and Receivers.

The Ranger Long-Range Wireless Radio Transmitter is compliant with the following organizations:







FCC compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

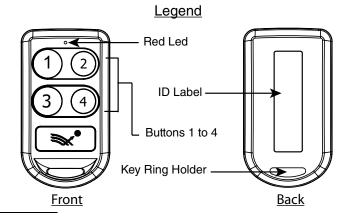
Product can be used without license conditions or restrictions in all European Union countries, including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, United Kingdom, as well as other non-EU countries, including Iceland, Norway, and Switzerland.

1.0 Description

Wireless Radio Transmitters (commonly known as "clickers") and Long Range Receivers with integrated antenna form Farpointe Data's ultra-high frequency, long-range identification solution known as Ranger. Intended for security access control applications, Ranger's wireless communications are based upon a secure, digital, anti-playback routine¹.

Ranger Transmitters feature one or four-buttons, each corresponding to its own Wiegand output on the Ranger Receiver. Each Transmitter includes an integrated red LED, used to indicate positive button press as well as battery strength. They are also equipped standard with a proximity module for use with Farpointe's *Pyramid Series* Proximity $^{\text{TM}}$ readers. This allows the Transmitter to be used as a close-range proximity access credential².

2.0 Transmitter Layout



1. Eliminates the risk of code sniffing and unauthorized duplication. As such, the Transmitter must be clicked twice to be learned by the Receiver upon initial Receiver power up.

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2. Formatting of the proximity module matches that of the Transmitter.



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3.0 **Output Formats**

Transmitters are sequentially coded in either the industry standard 26-bit Wiegand format or custom Wiegand formats, with exact number sequences. As a cross reference the Transmitters' internal ID number is printed on the ID label found on the back of the Transmitter.

Specific coding details, including format, facility code, and ID range can be found on the Transmitter shipping box, as well as the shipment's packing list.

4.0 **Battery Replacement**

Transmitters include a replaceable CR2032, 3 Volt lithium battery¹. The battery should be replaced when a button press does not result in a flash of the LED, reliable read range, and/or an output from the Receiver. To replace the battery, follow the directions below:

- Unsnap the back of the case using a small coin.
- Remove the old battery.²
- Insert the new CR2032 3 Volt lithium battery. Be sure the plus (+) side of the battery is oriented according to marking inside of unit.
- Replace the back of the case, snapping it back into place.

Range³ 5.0

Maximum read range between the Transmitter and Receiver is up to 150-feet (45.7 m).4

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^{4.} The read range between the Transmitter and Receiver may be adjusted at the Receiver. As shipped, the Receiver is set for the maximum read range. This may be reduced to a minimum of several feet by an adjustment on the Receiver.



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^{1.} The CR2032 3 Volt lithium battery was specifically selected for use with the Ranger Transmitter. When placing, only use this type of battery. It supports a relatively high current drain when used on an intermittent basis, such as when a button is pressed. This alkaline battery is widely available, and commonly used in electronic devices, including cameras.

^{2.} Dispose of the battery according to local requirements. Recycle when possible.

^{3.} For best performance it is important that the Transmitter be used as far from interference sources as possible. These sources may include, but are not limited to, large metal obstructions, such as duct work and appliances, as well as magnetic fields and radio emissions.