This Quick Start Guide is intended for experienced installation technicians. It is a basic reference to ensure all installations are properly made.

1.0 Description
Wireless Radio Transmitters and Long Range Receivers with an integrated receive antenna comprise Vicon's high frequency, long-range identification solution. Intended for security access control applications, the transmitter's wireless communication is based upon a secure, digital, anti-playback routine. VAX-LRT Transmitters are available in either a two-button (VAX-LRT2) or four-button (VAX-LRT4) configuration, with each corresponding to its own Wiegand output on the Receiver. Each Transmitter includes an integrated red LED, used to indicate both positive button press and battery strength.

The transmitters are equipped standard with a potted proximity module allowing the Transmitter to also be used as a close-range access credential. Transmitters ship standard with a proximity module compatible with VAX Proximity readers.

2. Transmitter Layout

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 Enrollment
Transmitter must be clicked twice within a Receiver's read range to be learned upon initial Receiver power up. This synchronizes the transmitter and receiver rolling codes. If the transmitter is clicked more than five times outside of the Receivers read range the transmitter and receiver will be desynchronized. To re-sync, click twice again within read range.

5.0 Time-Out
VAX-LRT transmitters make use of a time-out feature to preserve battery life and prevent interference with other transmitters on the field. When a button is held down continuously the transmitter will transmit the code once and shutdown and will power up once the button is released.
6.0 Battery Replacement
Transmitters include a replaceable CR2032, 3.3V, lithium battery. 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:

1. Using a coin, place it in the gap (2-piece unit) near the key ring holder and twist to pop the transmitter open.
2. Remove the old battery.
3. Insert the new CR2032, 3.3V, lithium battery. Be sure the plus (+) side of the battery is facing up (visible when installed).
4. Snap both pieces together.

7.0 Range
Read range between the Transmitter and Receiver depends on the Receiver model being used. Please review the VAX Receiver datasheet for more information.

8.0 Troubleshooting

<table>
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<tr>
<th>Issue/Possible Cause</th>
<th>Corrective Action</th>
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</thead>
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<tr>
<td>No data received/Transmitter not enrolled</td>
<td>Transmitter must be clicked twice to be learned by the Receiver upon initial Receiver power up</td>
</tr>
<tr>
<td>Short Read Range/Receiver Knob</td>
<td>Adjustable knob should be set to the maximum setting (certain models only)</td>
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<tr>
<td>Some Buttons not working/Receiver Capability</td>
<td>Receiver model VAX-LRR4 requires adjusting button selection jumper.</td>
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<tr>
<td></td>
<td>Receiver Model VAX-LRR2 only works with the VAX-LRT2 (2-button Transmitter)</td>
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Should any of the corrective actions mentioned above not improve performance, please contact Vicon Technical Support directly.

1. This lithium battery is widely available, and commonly used in electronic devices, including cameras and remote controls.
2. Dispose of the battery according to local requirements. Recycle when possible.
3. For best performance the Transmitter should 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.

Many Vicon Data Readers carry the following certifications:

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.