

WEL-200RX and WEL-200TX Product Improvements

We greatly appreciate the confidence our customers have placed in EMX Industries, Inc. and our wireless edge link, WEL-200, to help make it a market leader. Our engineering team has recently completed testing on our next release of firmware for the WEL-200 and we are excited to tell you about some of the improvements.

- 1. Improved RF Channel Sniffing** – Upon WEL-200RX (receiver) power up, when no TX (transmitters) are yet paired the WEL200R will “sniff” the airwaves to see if there are other devices (non EMX or EMX) in the vicinity. It will automatically select the cleanest operating frequency out of a possible 25 RF channels.
- 2. Increased Battery Life on the Transmitter** – We have improved the performance of the WEL-200TX so that we now achieve a 2+ year battery life when using the Lithium batteries. We are in the process of doing more testing, but we believe our new battery life may be upwards of 3 years depending on signal quality at the installation site. We will know more after collecting current draw data on the next 1000 units we manufacture.
- 3. Factory Reset While Power is Applied** – Previously the only process for factory reset was to remove WEL-200RX power, press and hold buttons 1 and 4, re-apply power, tighten the screw terminal, and then release the buttons. Now this process can be performed while power is applied to the board simply by pressing channel buttons 1 and 4 – no more need to cycle power.
- 4. Factory Reset Start and Complete Indication** – While the factory reset is in process we fast-flash the receiver status LED. This way you know when to release buttons 1 and 4 (start of the process) and when you run out of time (the 2 minute pairing time). You previously didn’t have any indication.
- 5. Doubled the Max Allowable Pairing Time** – When the installer wanted to pair the RX and TX we previously only gave them 1 minute to go through the process. Since they need to walk from the RX to the TX the 1 minute would often be expired by the time they pressed the TX button to pair, so the unit failed to pair. We doubled that time and now allow them 2 minutes to press the TX button to pair.
- 6. Automatic Self Recovery** – Occasionally the previous WEL-200RX and TX would lock up and the only way to recover was for a service tech to temporarily remove and then replace the batteries -- which required a service call. We now have a self-recovering mode so if the RF module locks up we identify that state, and perform an automatic self-recovery. This eliminates a service call.

The new firmware for the WEL-200 is not compatible with the old firmware, so it will be important to make sure that all units in the installation are using the same version. To make this easy, we are changing the circuit board color to **RED** that include the new versions of firmware (the old version was green). We are putting a **RED** sticker on the back of the transmitter and receiver housing, as well as on the outside of the packaging, so that installers and our distributors can easily make sure that they have matching versions for their installation.