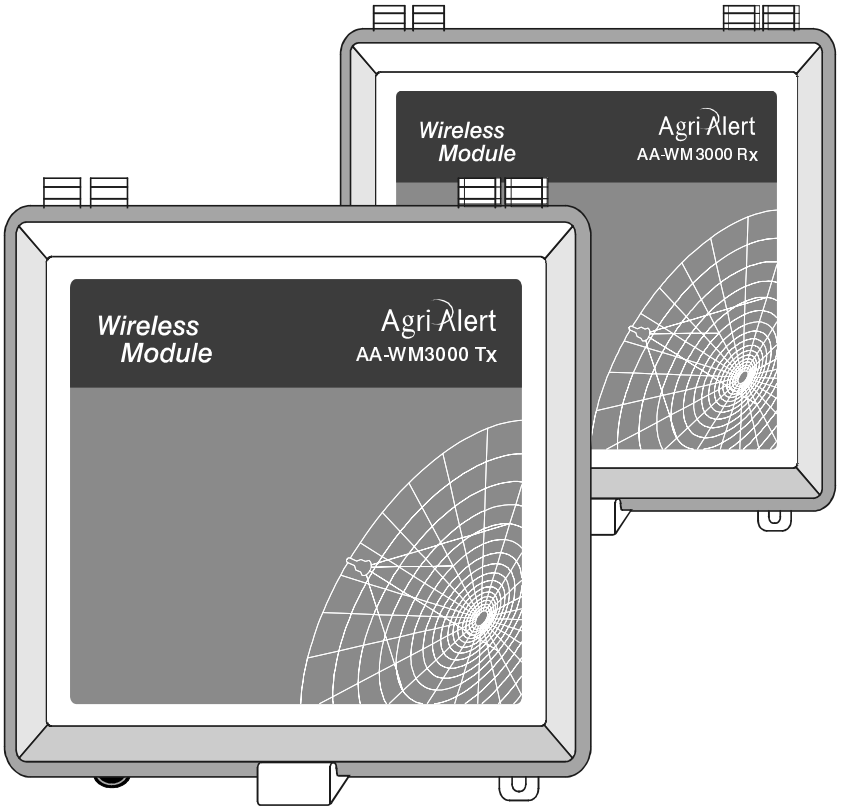
Agri-Alert

WM3000

WIRELESS MODULES



INSTALLATION INSTRUCTIONS

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Manufacturer:

VIATRON
ELECTRONIQUE • ELECTRONICS

Viatron Electronics
5200, Armand-Frappier
St-Hubert (Quebec)
Canada
J3Z 1G5

WARNINGS

The warranty can be void if this product is used in a manner not specified by the manufacturer.

Every effort has been made to ensure that this manual is complete, accurate and up-to-date. The information contained in it is however subject to change without notice due to further developments.

This device complies with Part 15 of the FCC rules, operation of this device is subject to the following conditions: 1. This device may not cause interference. 2. This device must accept any interference, including interference that may cause undesired operation.

The AA-WM3000 wireless modules are designed for use with the AA 800T, the AA 2400, and the AA 9600 Agri Alerts.

Installation

Mounting Instructions & Connections

0. Mount the Agri Alert and the power pack in the desired location.

1. Locate the AA-WM3000Rx close by in a suitable location so there are the least amount of obstructions to the transmission signal between the Rx and the Tx.

2. Check that the on/off switch (Fig.1, #2) of the receiver is in the "off" position.

3. Connect the 12vdc power cord supplied with the receiver, to the fused Aux. 12 volt dc supply in the Agri Alert. Be careful to observe the correct polarity when making the connections.

4. Plug the other end of the power cord into the receiver. (Fig. 1, #3)

5. Connect each one of the channel relay outputs (Fig.1, #4) to a separate zone input on the Agri Alert.

6. Program the zone types in the Agri Alert as "Dry Contact" with the appropriate N/O or N/C , W or W/O ELR designations.

Program the zone Recognition Times to (2) two seconds. 00:00:02. (Caution: programming the recognition times at more than 3 seconds will prevent the Agri Alert from getting the signal from the receiver relay when an alarm occurs.)

7. Locate the transmitters in the desired locations again being careful to choose a location that will have the least amount of signal obstructions between it and the receiver.

8. Connect the 9 volt battery supplied, to the connector (Fig 2, #10) and properly secure the battery in the holder provided (Fig.2 #9).

9. Set the dip switches as explained in the following section.

Setting the Dip Switches

1. Set the 8 dip switches (Fig.1, #1) on the receiver to the desired positions. Each receiver must be set to a different switch combination. (There are 256 possible combinations to choose from.)

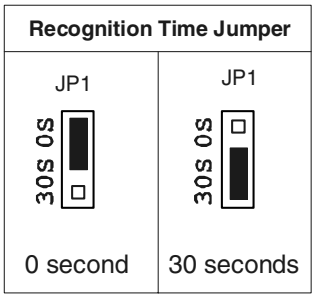
2. Set the first 8 dip switches on the transmitter (Fig.2 #5) to the same positions as the settings on the receiver that it is going to be transmitting signals to.

3. Set the last switches 9 & 10 (Fig.2, #6) according to the channel desired in the receiver (see chart below).

Switch 9	Switch 10	Channel
ON	ON	1
OFF	ON	2
ON	OFF	3
OFF	OFF	4

Setting the Recognition Time

The recognition time is the time an alarm input must be active before it constitutes a valid alarm condition. To set this delay, place the Recognition Time jumper at the right position on the circuit board of the transmitter: 0 or 30 seconds.



Testing

1. Be sure that the Agri Alert is powered up and that the appropriate zones are activated.

2. Turn on the receiver by pushing the on/off switch (Fig.1, #2) to the "on" position. The red LED light should now be on. (Fig.1, #11)

3. At the transmitter, set the Recognition Time jumper (Fig.2, #7) to 0 second. Close up then enclosure then press the test push button (Fig.2, #13) on the outside of the box. When the push button has been activated, the transmission LED (Fig.2, #12) lights up for 4 seconds and the *Low Batt* LED (Fig.2, #14) lights up at low intensity while pressing the button.

4. Check that the receiver has actually received the signal and that the proper channel has activated. This must also result in the zone on the Agri Alert being triggered. Be aware that the channel relay (Fig.1, #4) in the receiver will only be activated for a period of 4 seconds on each transmission from a transmitter that is assigned to it. This will mean that when you acknowledge an alarm from a wireless zone in the Agri Alert, the alarm zone may appear normal again. This is because the channel relay has already reset itself. Use the alarm memory key to review the alarms that have occurred. (You could also adjust the alarm "reset time" in the Agri Alert to a higher value if desired.)

5. Each transmitter must be tested for proper functioning and signal transmission. The receiver must receive the signal each time the transmitter is triggered or the transmitter should be relocated. In some cases, it may be best to relocate the receiver as well.

6. When you are satisfied with the location of the transmitters, connect the alarm sensors (normally open) to the input terminals (Fig.2, #8) on each transmitter.

7. Finish your testing by creating an actual alarm condition at each sensor and ensuring that the desired result is achieved at the Agri Alert.

8. Remember to place the Recognition Time jumper back to the proper setting when your tests are complete.

Important Notes

Whenever changes have been made to the *Recognition Time* jumper or to any of the "dip switches" on the receiver or on the transmitters, the on/off switch on the receiver must to moved to the "off" position and then back to the "on" position. This will reset the receiver and will ensure that it is properly aligned with the transmitters that are programmed to it. Always perform a test after making any changes to the dip switches or any of the jumpers.

- For maximum range between the transmitter and receiver, the receiver should be mounted horizontally on a wall and as high off the floor as possible.

- The input configuration to the WM3000Tx must be a normally open dry contact for this unit to function properly.

- Although the maximum range is about 3000 feet, things such as hills, trees, metal siding and stucco can all reduce the range.

- Battery life in the transmitter will largely depend on how many times the transmitter is required to operate and the battery's ambient temperature.

- As a precaution, test the battery regularly by sending a test transmission.

Under normal conditions the expected battery life is approximately 1 year and therefore it is recommended that the battery be replaced after one year. Test the transmitter to know if it is working properly.

- Use discretion when choosing wireless alarm transmission over hardwired systems. Due to the inherent risks of using wireless battery operated equipment, the customer must be aware of, and willing to accept the limitations involved with this equipment.

Alarm Signals

The WM300Tx sends an alarm signal to the WM3000Rx (and the Agri Alert) when one of the two following situations occurs:

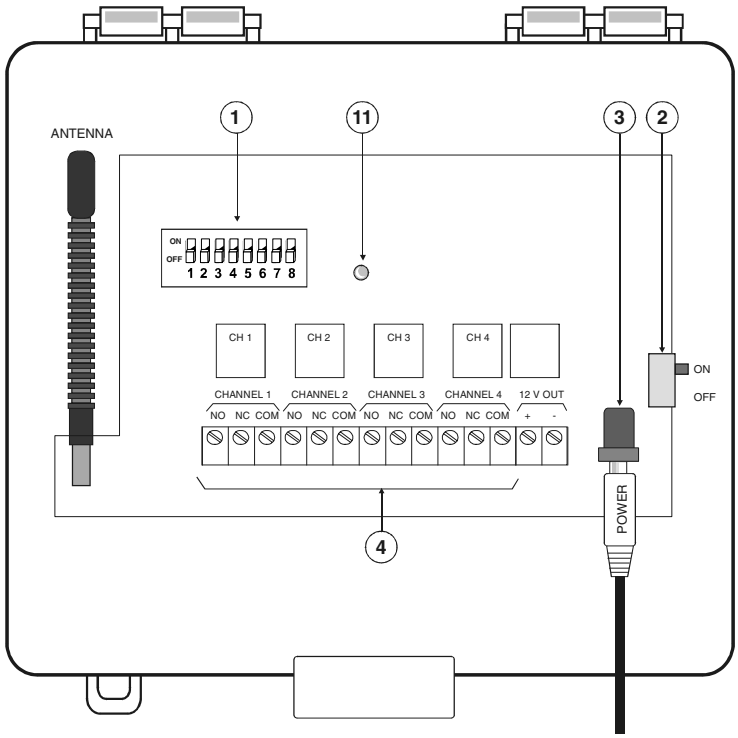
Relay Activation
When the device connected to the input terminals of the transmitter is activated (the normally open contact closes), the WM3000Tx waits for the Recognition Time and then sends an alarm signal to the WM3000Rx (and the Agri Alert). The WM3000Tx will re-transmit the alarm signal every 10 minutes for as long as the signal is present at the input terminals.

Low Battery
The WM3000Tx also sends an alarm signal when the transmitter's battery is too low. In this case, the Low Battery pilot light located in the transmitter slowly flashes at low intensity. The WM3000Tx sends the alarm signal to the WM3000Rx (and the Agri Alert) every 30 minutes for a low battery.

Technical Specifications

Frequency 433.92 MHz
Type of modulation: FSK modulation
Power output: 10 mW
Operating voltage: 12VDC
12 volt DC output current: 400 mA maximum
Relay output rating: 24VDC at 3 Amp

Wiring Diagram



1	Dip switches	[Receiver]
2	On-Off switch	[Receiver]
3	Power cord connector	[Receiver]
4	Channel relay outputs	[Receiver]
5	Dip switches 1-8	[Transmitter]
6	Dip switches 9-10	[Transmitter]
7	Recognition time jumper	[Transmitter]
8	Input terminals	[Transmitter]
9	Battery holder	[Transmitter]
10	Battery connector	[Transmitter]
11	Status LED	[Receiver]
12	Transmission LED	[Transmitter]
13	Push button	[Transmitter]
14	Low Battery LED	[Transmitter]

Figure 1: Receiver

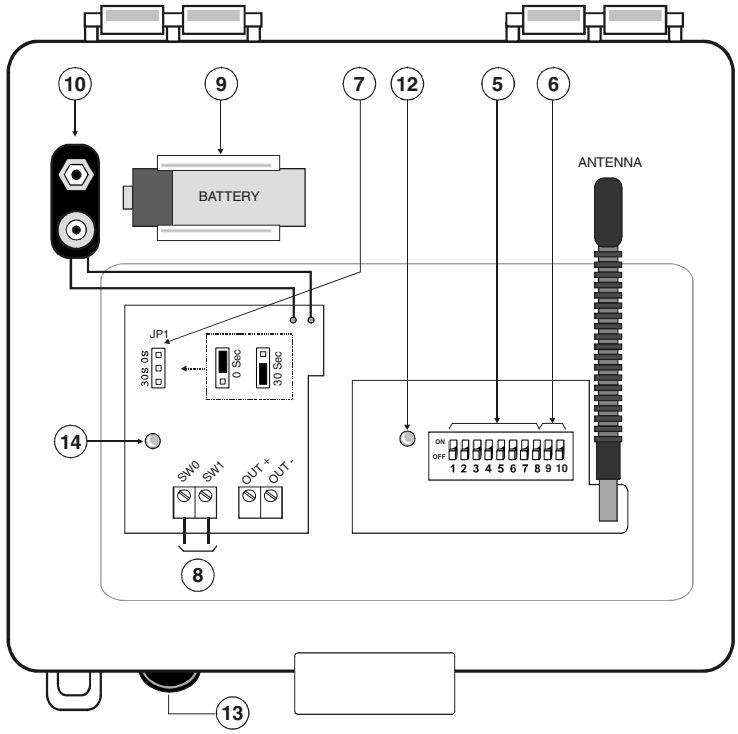


Figure 2: Transmitter