

Description

The Vigil Vitality Wireless Receiver (ZRX) is used to receive transmissions from wireless devices and communicate the data back to the central computer. The Vitality Wireless Receiver operates on the 2.4GHz IEEE 802.15.4 wireless platform. The ZRX is connected to the network via low voltage cable (CAT5 or similar) which carries both the data and power so that no additional power outlets are required at the locations of the wireless receivers. The cable is terminated at the ZRX with RJ45 modular plugs or on the screw terminal connector depending on system configuration. One ZRX covers a radius of approximately 30-50 feet depending on building construction.



Wiring Instructions

1. There are two options for wiring the ZRX depending on your system configuration. Use the two RJ45 sockets when using CAT5 cable for the installation. Use the one 4-pin screw terminal connector when using 2 pair (4 conductor) 20AWG stranded cable.
2. Ensure cables are labelled as IN and OUT.
3. For CAT5 applications, terminate the incoming and outgoing CAT5 cable in RJ45 modular plugs as shown in Figure 1.
4. For 4 conductor cable applications, terminate the both the incoming and outgoing cable in the 4-pin screw terminal connector in the order shown in Figure 2. Note that there will be two white/blue conductors (in and out) in the CAN L terminal, two blue conductors in the CAN H terminal, etc.
5. For EOL (End of Line) device ONLY: Add a 100Ohm resistor across the CANHI and CANLOW wires (Blue and White Blue terminals) as shown in Figure 3.

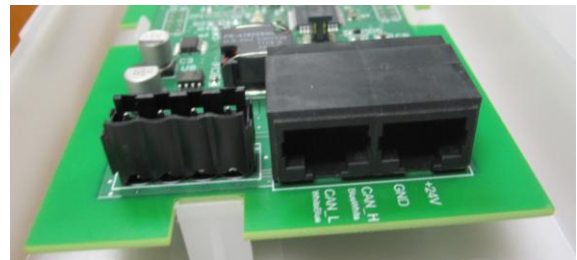


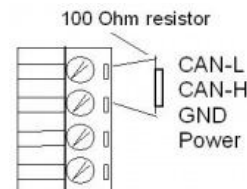
Figure 1. RJ45 Modular Plug Wiring

Conductor	Use
White/Blue	CAN L
Blue	CAN H
Green	GND
White/Brown	GND
Brown	GND
White/Orange	+24V
Orange	+24V
White/Green	+24V

Figure 2. 4-pin Screw Terminal Wiring

From Left to Right:
 CAN L White/Blue
 CAN H Blue
 GND Green/WhiteBrown/Brown
 +24V WhiteOrange/Orange/WhiteGreen


Figure 3. End of Line Termination



Vigil Health Solutions Inc. dedicated to improving seniors' quality of life through creative technology.

Mounting Instructions

- Screw mount to wall or ceiling using mounting holes and appropriate mounting hardware for location. Mounting hardware not supplied. Keep metal screws away from antenna side of circuit board. The antenna is located on the opposite end of the board from the connectors.
- Receivers are typically mounted above the ceiling tile in a corridor. Receivers may also be mounted below the ceiling or on the ceiling.

 **Do not mount Wireless Receivers on or near metal objects (HVAC, I Beams, etc) or electrical devices (motors, high voltage switching, etc) as they can interfere with the wireless signals**

Specifications

PHYSICAL		ELECTRICAL	
Height	163mm (6.4")	Operating Voltage	10-40V DC
Width	108mm (4.25")	Input Voltage	24V
Depth	48mm (1.9")	Standing Current	8mA, 28.5mA burst
Enclosure Material	White Plastic	Connections	RJ45 modular socket or 4 pin screw terminal connector
Mounting Method	Screw in drywall	Cable	CAT5E 4 Pair 24AWG or 2 pair 20AWG stranded
Temperature Ratings			
Operating:	0°C to 50°C (32°F to 122°F)		
Storage/ Transport:	-55°C to 85°C (-67°F to 185°F)		

FCC/IC Statements

FCC ID UI6-ZRX

- 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- To Comply with FCC/IC RF exposure limits for general population/uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

IC: 6706A-ZRX

- This Device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- Cet appareil est conforme avec les norme(s) exemption de licences RSS d'Industrie Canada. Opération est sujet au deux conditions suivantes. (1) Cet appareil ne peut causer d'interférences, et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Vigil Health Solutions Inc. dedicated to improving seniors' quality of life through creative technology.