JVA Solar Wi-Fi Anywhere®
Quick Start Guide

WA150
PTE2704

Introduction

The PTE2704 JVA Wi-Fi Anywhere® (WA150) provides an integrated Wireless Cellular USB Dongle (Wingle) power supply with a solar battery charger and management system.

This product provides a Wi-Fi network wherever a 3G/4G signal is available*. The Wi-Fi can then be used to connect an IP device or Internet of Things (IoT) device to the Cloud (Internet).

The JVA Solar Wi-Fi Anywhere® is installed with an ALDI SIM card at the factory, all you need to do is:

1. Register the SIM card

2. Connect any Wi-Fi enabled device to the network provided

This quick-start guide explains how to deploy your WA150 and connect a battery ready for Wi-Fi connections.

*An external cellular antenna (included) may be connected to increase reception. An upgraded YAGI style antenna is available from sales@jva-fence.com.au

Specifications

Component	Information
Solar Panel	**Nominal 12v Solar Panel** **(maximum open circuit voltage - 22v DC)** Maxmium Power 150W
Battery	**Nominal 12.8v DC** **Minimum Battery size 225Ah** A larger battery may be required if any additional 12v device is connected to the battery
Outputs(1)	**12v DC SAE Connector** Used for powering the IP Monitor

Component	Information
Outputs (2)	**12v DC Battery Connector**
	Alligator clips for battery connection
SIM	**Full Size**
Wi-Fi	**2.4GHz b/g/n**
	Up to 10 connections at a time
Network (Huawei E8372)	**3G** 850/2100MHz
	4GX 700MHz **+ 4G** B1/3/7/21
Antenna Connector	**Female SMA**
	Ensure antenna is mounted away from sources of interference such as AC or high voltage cables.

Troubleshooting

Fault	Likely Cause	Remedy
No lights are on	Power is not connected	Check power connections
	Power wires are reversed	Check battery polarity
Battery not charging	Solar wiring backwards	Check that the Solar + goes to the left-hand screw terminal
	Broken cables	Check that the battery cables are not damaged
	Solar panel broken	Check solar panel for physical damage (broken glass, bent frame etc.)

Fault	Likely Cause	Remedy
Cannot connect to Wi-Fi	Low signal from 3G/4G	Check management page of Wingle
	Out of Wi-Fi range (~10m)	Move closer to Wingle
	SIM card not inserted correctly	Re-insert SIM card

If the unit is still not working correctly, contact your nearest JVA distributor for technical support.

Before you start

Activate the SIM card

Activate your SIM card and test it in a mobile phone. The Wi-Fi network allows a data-only connection, the number of devices connected to the module will determine how much data will be used.

As a guide, a single IP Energiser or IP Monitor will use less than 1MB per day, so for connecting a single IP Energiser, an upper limit of 500MB per year is an option with a lot of headroom.

Tools Needed:

• H6 Hex allen key (Solar Bracket)

• 13mm wrench (Solar Bracket)

• 14mm wrench (U-bolt)

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Deployment and Orientation

1. Unpack the solar kit from it's packaging. Look inside the packaging for a set of U-Bolts.

2. Remove the U-Bolts from the zip lock bag and mount it to the top and bottom panel of the bracket.

(A) U-Bolt x 2   (B) Top or Bottom Panel

(C) Washers x 4   (D) Spring Washers x 4   (E) Hex Nut x 4
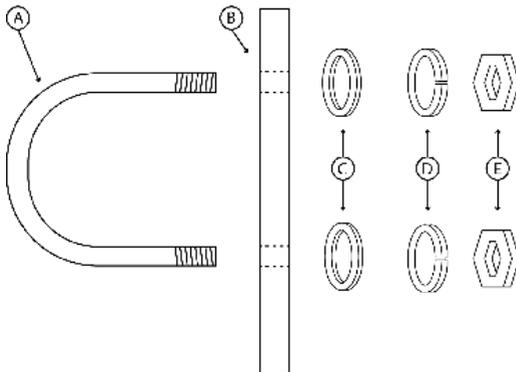
3. Mark the mounting pole. This is where the top of the U-bolt will be. Slide the U-bolts over the pole and tighten when the top bolt aligns with the previous marking.

4. Loosen the 6 bolts on the inside of the frame. DO NOT completely remove these bolts. Lift the bottom of the solar panel until the attached arms holding it are angled at 90 degrees. Tighten all 6 bolts again and face the panel north.

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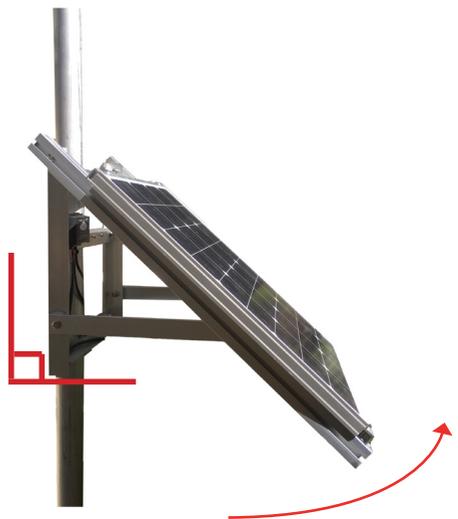
5. If you have a JVA energiser it can be installed between the solar panel and the pole. There are 2 mounting screws that can be used to hang the energiser up.

6. If your JVA energiser is fitted, plug it into the middle lead (load output) of the Wi-Fi Anywhere®. The energiser aligator leads and plug pack will be unused (left over).

7. Attach the red and black eyelet crimps to the battery. To find a battery that will suit you, visit our website: https://jva-fence.com.au/solar.php
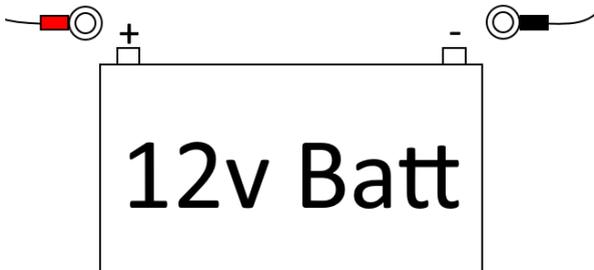
8. Alternative wiring:**

Alternatively, the energiser can be connected to the battery directly using the alligator leads that came with the energiser.

** The Wi-Fi Anywhere® middle lead (load output) will remain unused. The plug pack provided with the energiser will also be unused.

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Overview

Weatherproof Plastic Enclosure

Wingle

Antenna Port

Solar Panel   Load Output   Battery

Labels on board image:
- D6 (USB_5V)
- Solar/Batt Selector
- Batt Level
- Battery Fuse
- 24Hr Reset
- Solar Fuse
- D1 (Solar)
- Solar Panel
- Load Output
- Battery
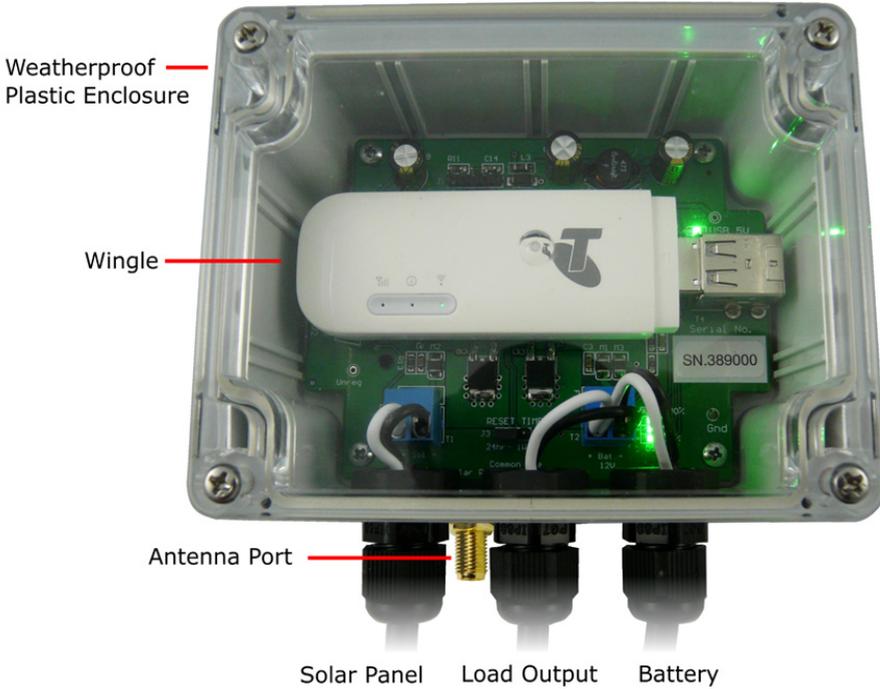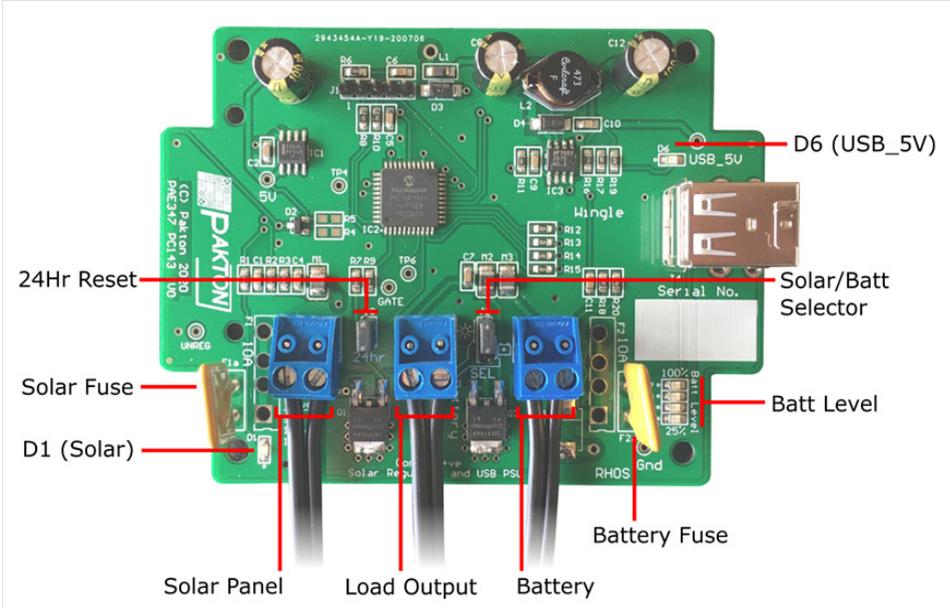
LED Indicators

D1 (Solar)	Solid on when solar panel in sunlight Blinking when solar panel in low power conditions Off when no solar power detected
D6 (USB_5V)	Solid on when USB Power is turned on
Batt Level	Shows battery level from bottom to top: 25% to 100% Bottom LED flashes if battery is disconnected or bad

JVA Distributors

If you have questions or need further assistance, please email us at sales@jva-fence.com.au or call

Region	Number
Australia	0731 030 582
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For more information on our complete range of electric fencing products please see the JVA website at https://www.jva-fence.com.au