



Wireless Interface Operation & Installation Guide

OPERATION AND INSTALLATION INSTRUCTIONS

WiTi Wireless Trailer Interface

WiTi is designed and developed in Australia and complies with Australian Design Rules when installed as directed. **WiTi** replaces the cables connecting a tow vehicle and trailer or caravan with an advanced wireless interface. **WiTi** consists of a primary unit in the tow vehicle and a secondary unit in the trailer or caravan. **WiTi** transmits all lighting and braking signals using wifi technology and supports all brands of electric brake controllers.

WiTi Anti-Theft System

WiTi includes a revolutionary anti-theft system. In the event an attempt is made to steal the caravan or trailer, **WiTi** detects movement and initiates anti-theft mode. All the lights flash, an alarm sounds for 30 seconds and the brakes are applied to bring the caravan or trailer to a complete stop, making it impossible to tow.

To activate the anti-theft press and hold the button on the remote control until the lights flash once. This is followed by a three second safety pause and then a double flash to indicate the system is armed. To deactivate press and hold the button on the remote control and the lights will flash once.

WiTi incorporates an advanced safety system to ensure the anti-theft system cannot be accidentally activated whilst the caravan or camper trailer is being towed. After activating the system, if movement is detected during the three second safety pause the system will not arm. The lights will not flash twice and the system must be deactivated again before another arming sequence is initiated.

Break Away

WiTi provides an optional integrated break away system that complies with ADR38/04 and New South Wales VIB06. The break away system will apply the brakes and bring the caravan or trailer to a complete stop in the event the caravan separates from the tow vehicle. The brakes remain active for a period of fifteen minutes and the lights flash to warn other motorists. This option must be included at the time of purchase as retro fitting will require the return and reprogramming of the trailer unit.

Low Voltage Alarm

WiTi features a low voltage alarm. If voltage drops below 11V on the battery in the trailer or caravan, the horn will sound and the trailer lights will flash to alert the driver. **WiTi** must be connected to a charging source immediately in order to suspend the low voltage alarm.



WARNINGS & SAFETY INSTRUCTIONS

Do not operate WiTi unless you have read and understood this manual and WiTi is installed as per the instructions.

- Ensure the cable used to install **WiTi** is of adequate thickness to provide the necessary current for the circuit.
- **WiTi** must be installed away from environmental conditions that may cause damage to the unit's circuitry including water, salt spray and humidity.
- An initial pairing must complete when first installed. If the trailer unit is installed first and it fails to pair with the vehicle unit after a few minutes it will enter Anti-Theft only mode. To pair again, remove power to both units to reset them and then power up again. This only needs to be done once on initial power up or when power is disrupted and only if they do not immediately pair. Once completed they units will remain paired.
- **WiTi** includes a low voltage alarm. In the event voltage drops below 11V the horn will sound briefly and the lights will flash every 3 seconds. The unit must be connected to a suitable charging circuit to cease the alarm.
- **WiTi** automatically pairs when in range but it is always good practice to check the lights before towing to ensure they are all operating.

Specifications

	Vehicle Unit	Trailer Unit
Nominal System Voltage	12V	12V
Operating Voltage	9V - 15V	9V-15V
Standby Current	<10mA	<10mA
Operating Temp	-20C – 60C	-20C – 60C
Max. Trailer Axles		3 Axles
Lighting circuit/s max draw		10A
Braking circuit max draw		25A
Maximum Rated Current	5A	30A
Weight	270g	300g

Contents

1. Trailer Unit
2. Vehicle Unit
3. Alarm horn
4. 2 X Remote Controls



INSTALLATION INSTRUCTIONS

Vehicle Installation

Install the vehicle unit into an area where it will be out of harms way and not subject to impact or excessive vibration. **WiTi** can be secured to any flat surface using strong double sided tape. Typical installation areas would be in the boot of a vehicle or canopy of a Ute.

It is recommended that **WiTi** is installed in parallel with the existing vehicle wiring harness to allow towing of non **WiTi** enabled trailers.

The 12V+ power lead is of a heavier gauge than the other wires. This must be connected to a permanent power supply and the circuit protected with a 5 Amp fuse.

Wire Colour	Function
Yellow	Left Indicator
Green	Right Indicator
Red	Brake Light
Brown	Driving Lights
Black	Reverse Lights
Blue	Electric Brake Controller Input
White NEG	Earth Return
Red 12V+	12v+ – this must be connected to a permanent power source in the vehicle and protected with a 5A fuse.

Trailer Installation

The trailer unit **must be installed vertically** with the wiring harness protruding from the bottom of the unit. **WiTi** uses gravity to initialise the anti-theft system and if not installed vertically functionality could be compromised.

The **WiTi** trailer unit can be installed anywhere inside the caravan or in an exterior toolbox on a trailer. **WiTi** should be secured to a flat surface using strong double sided tape.

The caravan or trailer battery must be connected to an acceptable charging circuit - either solar panels, anderson plug or DCDC charger.

The 12V+ and NEG wires are of a thicker gauge than the rest of the harness and are on a separate 2 pin connector. These must be connected to the caravan / trailer battery and the circuit protected with a 30A fuse.

Note: If a break away option is installed there will be two additional blue wires on a separate 2 pin connector. These must be connected to the break away switch on the caravan.

Wire Colour	Function
Yellow	Left Indicator
Green	Right Indicator
Red	Brake Light
Brown	Driving Lights
Black	Reverse Lights
Blue	Electric Brake Output
White	Earth Return
Green / White	Alarm output. Connect to the horn. The horn can be earthed to the chassis or any earth point. It is not polarity sensitive.

Wire Colour	Function
Red 12V+	Connect to the positive terminal of the battery.
Black NEG	Connect to negative terminal of the battery.

Wire Colour	Function
Blue X 2	Break away Switch