



Wireless Interface Operation & Installation Guide



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.
- **WiTi** automatically pairs when in range but it is always good practice to check the lights before towing to ensure they are all operating.
- The condition of the battery in the caravan or trailer must be maintained and checked and the battery must have sufficient charge before towing.
- It is recommended to remove power from the Vehicle Unit if it is going to be in storage or unused for a period longer than 2 weeks. Whilst the Vehicle Unit only draws 80 milliAmps it will eventually flatten the tow vehicle battery if left powered for a long period without the battery receiving a charge.

WITI WIRELESS INTERFACE

WiTi 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 from the tow vehicle to the caravan or trailer wirelessly.

LOW VOLTAGE ALARM

WiTi features a low voltage alarm. If voltage drops below 11.5V on the battery in the trailer or caravan, an alarm will sound in the vehicle unit to alert the driver. **WiTi** must be connected to a charging source immediately in order to suspend the low voltage alarm.

WITI ANTI-THEFT SYSTEM

WiTi detects movement via a highly sensitive Gyroscope and in the event an attempt is made to steal the caravan or trailer the Anti-Theft system will be activated. All the lights flash, the alarm sounds and the brakes are applied immobilising the caravan or trailer. This continues as long as movement is detected. When active, the alarm sounds and the lights flash for 30 seconds. The brakes are applied for 5 seconds and then released if there is no movement to prevent the battery from discharging unnecessarily.

To activate **WiTi** Anti-Theft, press and hold the button on the remote control for ½ a second, the side and front markers and indicators will flash once followed by a 3 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 for ½ a second and the lights will flash once.

WiTi incorporates an advanced safety system to ensure the system cannot be accidentally activated whilst the caravan or trailer is moving. After activating the system, if movement is detected during the 3 second safety pause the system will not arm. The lights will not flash twice and the system must be deactivated again before another activation sequence is attempted.

On initial power up **WiTi** Anti-Theft needs to be initialised. To do this, press the button on the remote control for ½ a second and the lights will flash once. The system is now initialised. This only needs to be done on power up. If power is removed from **WiTi** Anti-Theft then the system will need to be initialised again.

WiTi GPS TRACKING

WiTi features an optional GPS Tracker. If supplied, connect the GPS Tracker to the corresponding plugs on the wiring loom. Refer to the **WiTi** GPS Guide for activation and operating instructions.

BREAK AWAY

WiTi includes a Break Away system that activates the brakes in the caravan or trailer in the event the tow vehicle and trailer are separated during towing. Installation of the Break Away is optional. Connect a Break Away switch (not supplied) as per the wiring instructions. In the event the switch is pulled out then the brakes will activate and the stop lights will illuminate. The Break Away function will remain active until the pin is re-inserted into the switch. The condition of the battery in the caravan or trailer must be maintained and checked and the battery must have sufficient charge before towing.

SPECIFICATIONS

	Vehicle Unit	Trailer Unit
Nominal System Voltage	12V - 24V	12V
Operating Voltage	9V - 25V	9V-14V
Standby Current	<10mA	<10mA
Operating Temperature	-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

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1. Trailer Unit
2. Vehicle Unit
3. Alarm Horn
4. 2 Remote Controls



INSTALLATION INSTRUCTIONS

Vehicle Unit Installation

Install the vehicle unit into an area where it will be out of harms way and not subject to impact or excessive vibration. Typical installation areas would be behind a panel in the rear of a vehicle, or behind the passenger seat or inside the canopy of a Ute. The Vehicle Unit can be installed in any orientation and can be fixed using the mounting tabs, double sided tape or zip ties.

It is recommended that **WiTi** is installed in parallel with the existing vehicle wiring harness to allow towing of non-**WiTi** enabled trailers. Connect the wires on the **WiTi** wiring harness to the corresponding wires on the tow plug harness.

WiTi must be connected to a permanent power supply and the circuit protected with a 5 Amp fuse. It is recommended to remove power from the Vehicle Unit if it is going to be in storage or unused for a period longer than 2 weeks. Whilst the Vehicle Unit only draws 80 milliAmps it will eventually flatten the tow vehicle battery if left powered for a long period without the battery receiving a charge.

Colour	Function
	Left Indicator
	Right Indicator
	Brake Light
	Park Lights and Markers
	Reverse Lights
	Electric Brake Input
	Earth Return
	Ignition feed - this provides 12V to the Trailer Unit when the tow vehicle ignition is on. Use this to switch DCDC chargers, fridges, wireless rearview camera's or any appliance that requires a 12V ignition source in the caravan or trailer.
	Alarm Pos output. Connect to low voltage alarm.
	12V+ connect to a permanent positive supply and protect with a 5A fuse.
	NEG connect to negative terminal on the battery.

INSTALLATION INSTRUCTIONS

Trailer Unit Installation

The Trailer Unit must be installed vertically and facing either the front or rear of the caravan or trailer with the wiring harness protruding from the bottom of the unit. **WiTi** uses gravity to initialise the gyroscope and detects acceleration in the direction of travel. If not installed correctly functionality will be compromised.

The unit must be installed inside the caravan or trailer and it is recommended the unit is installed onto an exterior body panel and towards the front of the caravan or trailer. This will make the unit more sensitive to attempts to hitch up or knocks onto the tow hitch. The unit can be screwed onto a panel through the mounting lugs and using appropriate sized screws (not supplied).

The horn must be installed at least 1 metre away from the **WiTi** unit and on a different mounting surface to prevent interference. The horn is weather proof so it can be installed externally.

The Alarm Status LED outputs can be connected to a standard 3V LED as per the wiring instructions below. The LED will light when the alarm is armed and switch off when the alarm is disarmed. Install the LED in an area which is visible to the user. Please note this is a 3V output.

If no existing Break Away system is installed and if required, connect a Break Away switch (not supplied) as per the wiring instructions. In the event the switch is pulled out then the brakes will activate and the stop lights will illuminate. The Break Away function will remain active until the pin is re-inserted into the switch.

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

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	Left Indicator
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	Brake Light
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	Ignition feed - this provides 12V to the Trailer Unit when the tow vehicle ignition is on. Use this to switch DCDC chargers, fridges, wireless rearview camera's or any appliance that requires a 12V ignition source in the caravan or trailer.
	Alarm Pos output. Connect to horn.
	Alarm Neg return. Connect to horn.
	Alarm Status LED 3.3V+. Connect to positive on LED
	Alarm Status LED 3.3V-. Connect to negative on LED
	Optional Break Away switch connection. Connect both wires to the break away switch on the A-frame of the caravan or trailer.
	12V+ connect to positive terminal on house battery and protect with a 15A fuse. These are a thicker 4mm wire and are in position A1 and A8. Both red wires must connect to positive.
	NEG connect to negative terminal on house battery.

LIMITED WARRANTY

If Leisure Technologies determines that you are covered by a warranty as set in the Australian consumer law the company shall at its expense: (a) repair the product, or replace the product with a new unit (which may have used refurbished parts of similar quality); (b) ship the repaired or replaced unit back to you; (c) warrant the repaired or replaced product for a reasonable period; and/or (d) refund money paid for the product. The Company has the discretion as to which remedy applies.

Warranty period

The warranty period starts on the date of purchase and ends 24 months later. For the purpose of this limited warranty, the date of purchase is the date indicated on the original bill of sale or receipted invoice for the product from the vendor from which you acquired this product.

How to get warranty service

During the warranty period, if you wish to return a defective product you may contact us via www.witi.com.au. You may then return the defective product to the address given accompanied by an acceptable proof of purchase (a bill of sale or receipted invoice).

What is not covered

The limited warranty does not cover a product:

- for which you are not the original purchaser;
- that is damaged by using in a way that was unreasonable or unintended;
- that is returned after the applicable warranty period set out above has expired;
- that has been installed other than per the product installation guidelines;
- that has been maintained, altered or modified, opened or repaired, other than by the company or by a company authorised service centre;
- that has been physically damaged, other than by the company or a company authorised service centre.

To the extent permitted by law, Leisure Technologies, its directors, officers, employees, suppliers and agents, shall not be liable for injury to persons or property, or for any indirect, special, incidental or consequential, punitive or exemplary damages and liability and shall be limited to the amount you paid for the product.

Other important notices

To the extent permitted by law, this limited warranty constitutes the entire agreement on the subject matter and supersedes any prior agreement or understanding, written or oral. Where used herein, the company shall mean Leisure Technologies Pty Ltd and its subsidiaries and associates.

Our goods come with guarantees that cannot be excluded under the Australian consumer law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits under your warranty are in addition to other rights and remedies under the law in relation to the product.

Leisure Technologies Pty Ltd
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