

 **SHORT / CUTS**

# sprint gate solar

**Install Manual**

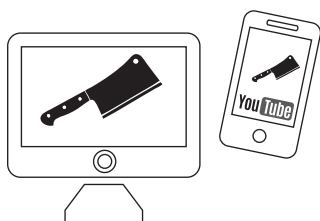
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## trouble shooting

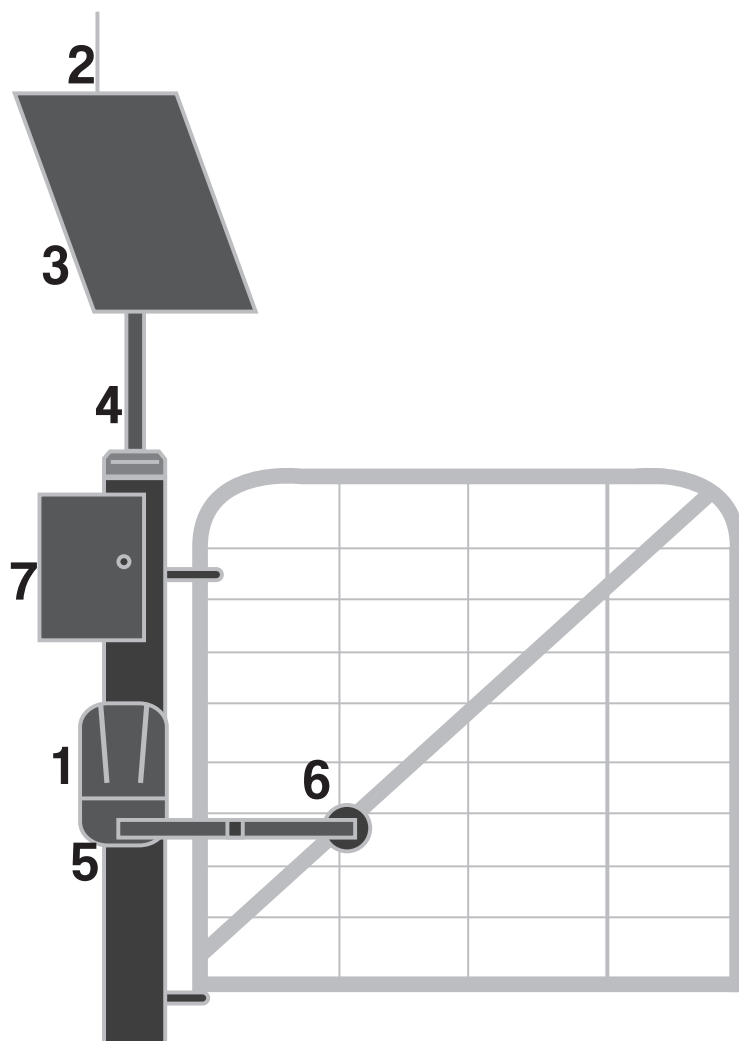
Call our Tech Team

**1800 241 733**



Video instructions are on [downee.com.au](http://downee.com.au).

## kit parts



# kit parts



**1** 24V  
MOTOR  
& KEY  
(pre-wired)

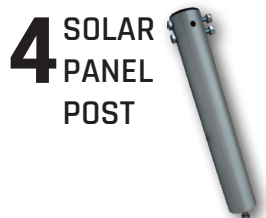


REMOTES

**2** BOOSTER  
AERIAL

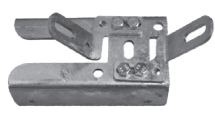


**3** SOLAR  
PANEL  
(pre-wired)



**4** SOLAR  
PANEL  
POST

**5** MOTOR-TO-POST  
BRACKET



**6** ARM-TO-GATE  
ROTATING BRACKET



**7** BATTERY BOX  
& KEY  
(pre-wired)



SOLAR  
CONTROLLER  
(pre-wired)



12V  
BATTERIES  
(pre-wired)

## purchase separately



Post Cap not supplied. Grab one to match the gate post Solar Panel is mounted on.



Battery Box mounts not supplied. Two pieces of 25mm steel angle will work.



Bugs and insects in gate motors will cause problems. Use silicone to seal where cables enter the base of motor.



S8-AT

G7-BBAT

**HIGHLY RECOMMENDED**  
Automatic gates need hinges able to handle the motor's forces. Made in Australia for Sprint Gate.

## TIPS

- Can be mounted on left or right post.
- Best motor position is half-way up gate post.

## NOTE

### EXISTING GATES

Check gates are in excellent operating condition. Gates & hinges in poor condition will give you trouble and prematurely wear the motor.

1

Pin all arms sections together.



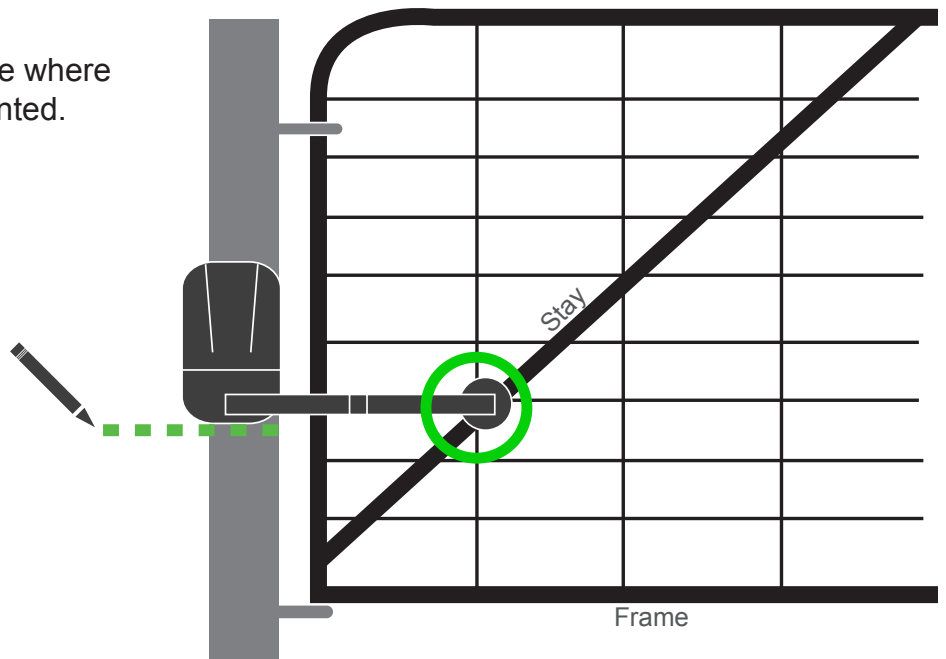
2

Fit arm to motor.  
Extend arm.



3

Close gates.  
Mark posts at base where  
motor will be mounted.

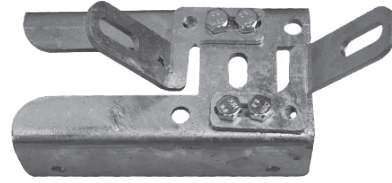


## NOTE

Mount the motor where the arm meets the gate stay. Next best option is the gate frame.

4

Adjust post bracket to fit gate post.



5

Mount post bracket as shown, with bottom edge on mark. (See previous page)



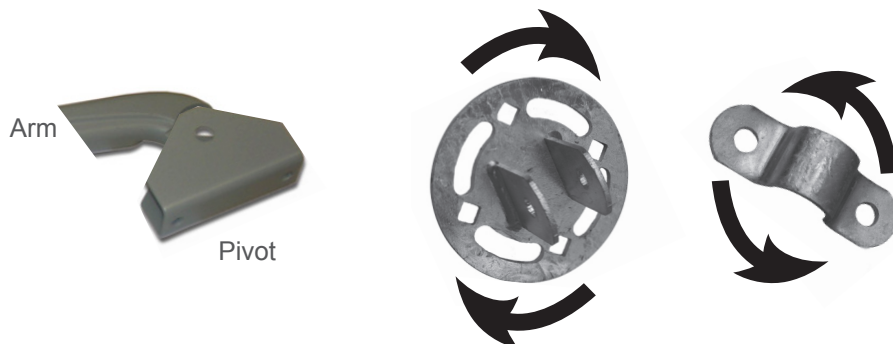
6

Bolt motor to post bracket. Tighten arm on motor.

7

Play around to set the rotating bracket to the gate stay/frame.

Then attach it to arm pivot.



# battery box

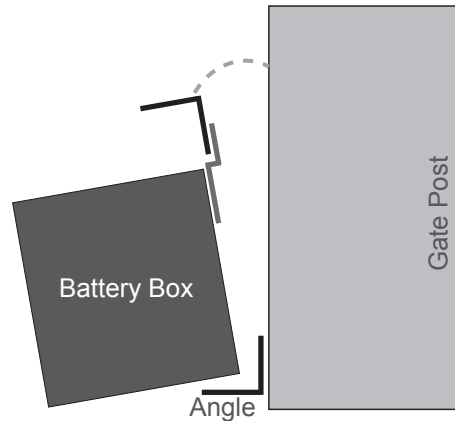
## NOTE

*Mount brackets not supplied. Good old steel angle does the job.*



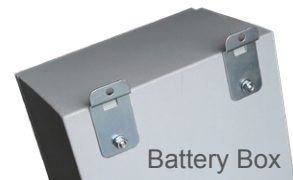
1

Mount an angle bracket to gate post, with the solar panel.



2

Attach other angle bracket to battery box brackets (above). Sit box on bottom bracket and attach top bracket to post.



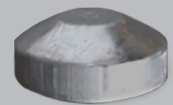
3

Open battery box to remove foam packing. Fit fuse into fuse holder.

# solar panel post

## NOTE

*Steel post cap not supplied in kit. Measure diameter of post to match cap. Downee caps avail. to 150mm.*



1

Drill a hole in centre of post cap and bolt it onto the panel post.

2

Position bolt holes east-west for the solar panel to face north.

3

Place cap & panel post on gate post. It may be tight and need some encouragement with a rubber mallet. A couple of self tappers will hold cap in place.

East-West



## TIPS

- *Keep the solar panel box. You'll need it a bit later.*
- *Not sure which direction north sits? Download a free compass app onto your smart phone.*

# solar panel

## TIP

*If tree shade covers the solar panel between 9am – 3pm it can seriously reduce the battery charge. Even if just for a short time.*

*Solar panel shouldn't be covered by tree shade.*

*Panel can be placed in a full-sun position up to 30m\* away from the gate.*

*\*use low voltage cable (2-core + earth 2.5mm<sup>2</sup>).*

1

Tek screw aerial to top of solar panel frame.

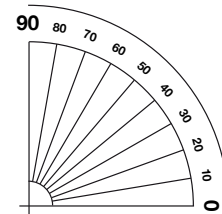


2

Leave box on the panel. Bolt solar panel (facing north) to the panel post.

## PANEL ANGLE

Set solar panel angle for maximum charge. More locations on page 13.



# gate stops

1

Unlock motor arm.

Close gate.



2

Place a stop where arm will sit against it when closed.



3

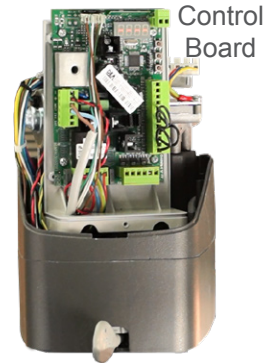
Adjust stops as needed, then tighten.

## TIP

*We strongly recommend physical stops in open & closed positions. They remove a lot of stresses from the motor. A piece of angle works just fine as a ground-stop.*

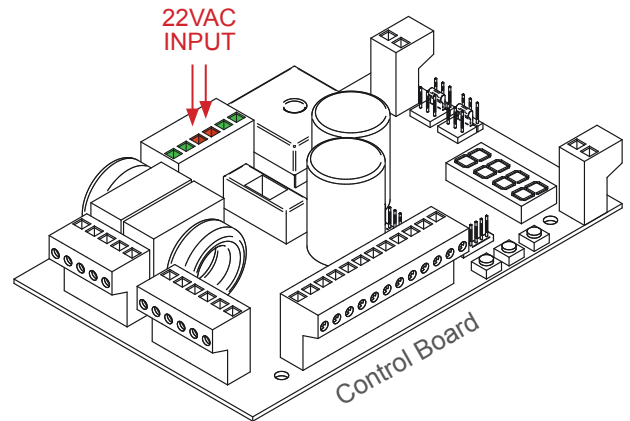
*We strongly recommend the use of a physical stop on both the open & close.*

- 1** Remove motor cover, and control board cover.

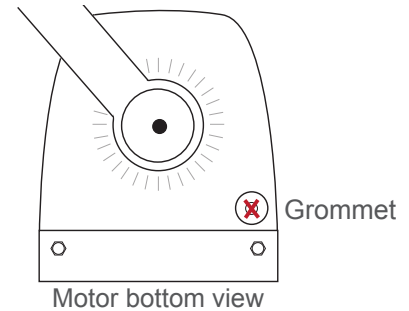


- 2** Remove existing black wires from 22VAC INPUT terminals. Pull them through, out of the way.

Connect the brown-blue wires from the battery into the 22VAC INPUT terminals.



- 3** Punch a hole in the grommet on motor base.



- 4** Thread battery cable and aerial coaxial cable through the hole. Strip the ends of cables.

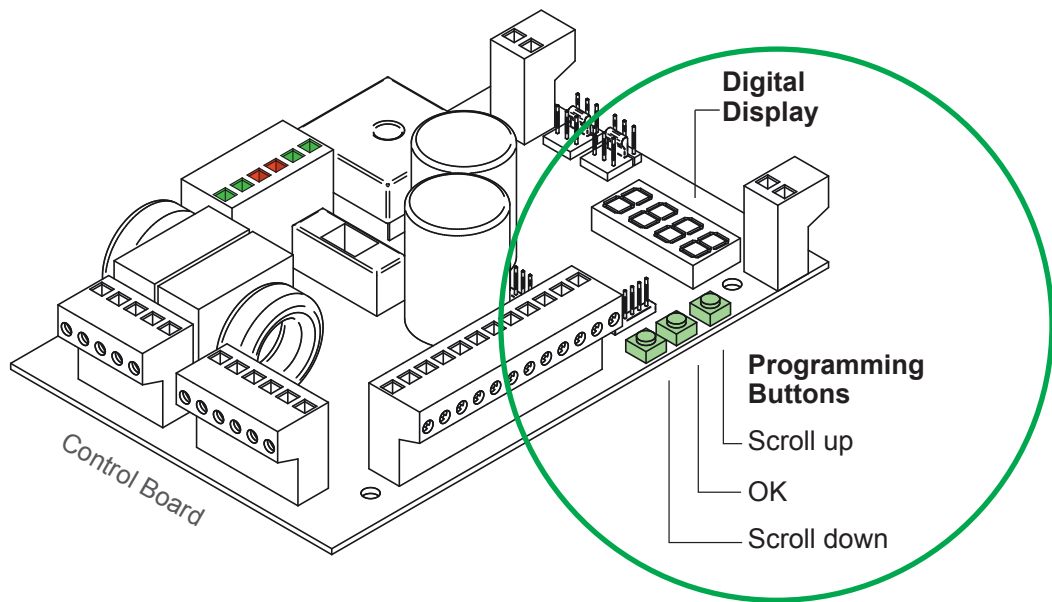
## TIP

*Seal hole with silicone sealer. This will avoid problems caused when insects nest in the motor.*

- 5** Cover solar panel, connect black-red power cables to Solar Panel and Batteries. Motor's control board plus solar controller are now active. Controller may need to be turned on. Cable tie the power cables against post.



# programming

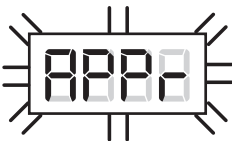



- 1 Position gate half-way between open closed. Lock arm with key (shown)




Arm lock key


- 2 Scroll to  shows on display.


- 3 Press middle button once.  flashes.

- 4 Press & hold the middle button till  stops flashing.

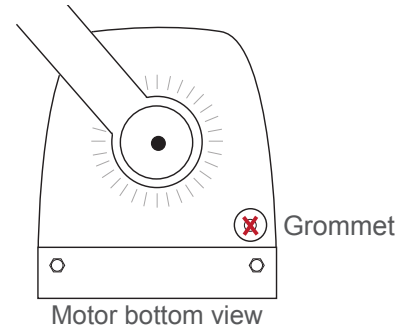
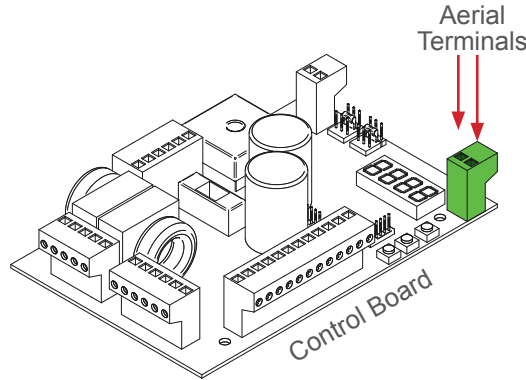
- 5 Gate will automatically open & close to search for gate stops. Gate should finish in closed position.

- 6 The symbol for 'Gate Closed' shows when it's finished. 

If 'Gate Open' symbol appears 

scroll to  & press **OK**. Change parameter to 

# connect aerial



**1** Thread coaxial cable through grommet in motor base.

**2** Strip black outer cable approx. 50mm.  
Separate inner & outer wires.  
Twist outer wire.  
Strip end off clear insulation.  
Trim inner and outer cable to same length.



**3** Connect both ends of coaxial in aerial terminals.

**4** Completely seal the grommet with silicone sealant.



# connect remotes

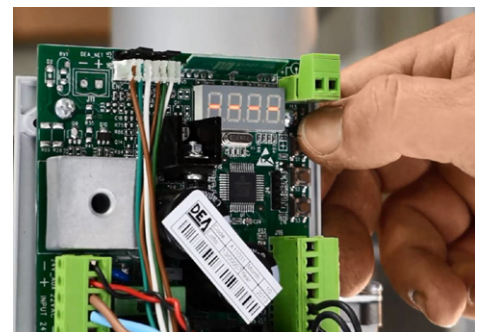
**1** Scroll to **8009** & press OK  
When **8888** shows, press any button on first remote.

**8000** = remote connected.

Within 8 seconds...




When **8888** shows, press second remote.

**8001** = second remote connected.



**2** Wait 10sec. for the **8888** symbol to confirm memory process is complete.

# set solar mode

- 1 Scroll to  & Press **OK**
- 2 Change parameter to 
- 3 Scroll back to 
- 4 Test remote control.  
If gate works replace the both covers 'cos you're done!

**NOTE** *In solar mode, screen will turn off and blink once every 10sec*

## accessories

The standard Sprint Gate is operated with remote controls. Other accessories can quickly and easily be added to automate its open/close function such as visitor control and improved security.

However, more accessories will drain the batteries, so also consider upgrading your solar system to a larger panel or bigger battery bank.

For more information see Access Control in the products menu on our website.

**extra  
remotes**  
ZIGGY-2B



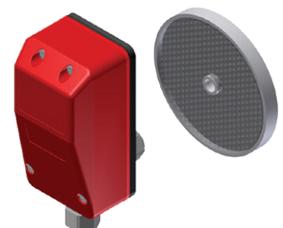
**open/close  
control**  
AAC-PUSHB



**wireless  
keypad\***  
AAC-DIGIRAD



**reflective  
sensors\***  
AAC-PHR10



\*Not supplied with SOLAR-LITE

# solar gates in winter

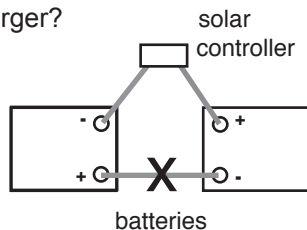
During colder months, solar gates in the southern parts of Australia may not get enough sun to fully charge batteries.

Homeowners may need to take simple steps to keep their solar powered gate working uninterrupted.

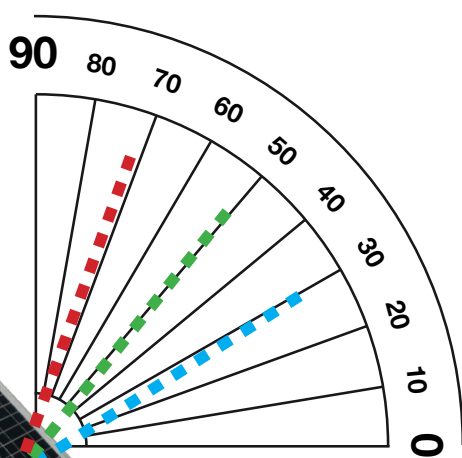
1. Adjust angle of the panel to maximise sun exposure.
2. At the start of autumn and winter, charge the batteries. This will stop batteries running flat, plus extend the life of the batteries.

Using a 12V car battery charger?

Disconnect cable between batteries before charging.



# solar angles



Tilt panel to suit seasons.

**Summer**  
**Spring/Autumn**  
**Winter**

City	Winter	Spring/ Autumn	Summer
Adelaide	32°	55°	78°
Albany	32°	55°	78°
Albury	30°	54°	78°
Alice Springs	42°	66°	90°
Armidale	36°	60°	84°
Ballarat	28°	52°	76°
Banora Point	38°	62°	86°
Bendigo	30°	53°	76°
Blacktown	32°	56°	80°
Brisbane	38°	62°	86°
Broken Hill	34°	58°	82°
Brunswick	28°	52°	76°
Buderim	40°	63°	86°
Bunbury	34°	57°	80°
Bundaberg	42°	65°	88°
Burnie	26°	49°	72°
Caboolture	40°	63°	86°
Carins	50°	73°	96°
Caloundra	40°	63°	86°
Canberra	32°	55°	78°
Canning Vale	34°	58°	82°
Carindale	38°	62°	86°
Caringbah	32°	56°	80°
Carlingford	32°	56°	80°
Castle Hill	32°	56°	80°
Cessnock	34°	57°	80°
City of Parramatta	32°	56°	80°
Coffs Harbour	36°	60°	84°
Craigieburn	28°	52°	76°
Cranbourne	28°	52°	76°
Cronulla	32°	56°	80°
Darwin	54°	78°	102°
Deception Bay	40°	63°	86°
Dee Why	32°	56°	80°
Devonport	26°	49°	72°
Dubbo	34°	58°	82°
Earlwood	32°	56°	80°
Echuca	30°	54°	78°
Engadine	32°	56°	80°

City	Winter	Spring/ Autumn	Summer
Epping	32°	56°	80°
Ferntree Gully	28°	52°	76°
Forster	34°	58°	82°
Frankston East	28°	52°	76°
Gawler	32°	55°	78°
Geelong	28°	52°	76°
Geraldton	38°	61°	84°
Gladstone	42°	66°	90°
Glenmore Park	32°	56°	80°
Gold Coast	38°	62°	86°
Gosnells	34°	58°	82°
Goulburn	32°	55°	78°
Granville	32°	56°	80°
Greensborough	28°	52°	76°
Griffith	32°	56°	80°
Hobart	24°	47°	70°
Hoppers Crossing	28°	52°	76°
Hornsby	32°	56°	80°
Jervis Bay Village	32°	55°	78°
Kalgoorlie	36°	59°	82°
Katoomba	32°	56°	80°
Kwinana	34°	58°	82°
Launceston	26°	49°	72°
Lismore	38°	61°	84°
Liverpool	32°	56°	80°
Logan City	38°	62°	86°
Mackay	46°	69°	92°
Mandurah	34°	57°	80°
Maroubra	32°	56°	80°
Marrickville	32°	56°	80°
Maryborough	40°	64°	88°
Melbourne	28°	52°	76°
Melton	28°	52°	76°
Mildura	32°	56°	80°
Mooloolaba	40°	63°	86°
Mornington	28°	52°	76°
Morphett Vale	32°	55°	78°
Mosman	32°	56°	80°
Mount Gambier	28°	52°	76°

City	Winter	Spring/ Autumn	Summer
Mount Isa	46°	69°	92°
Murray Bridge	32°	55°	78°
Nerang	38°	62°	86°
Newcastle	34°	57°	80°
North Shore	36°	59°	82°
Nowra	32°	55°	78°
Orange	34°	57°	80°
Palmerston	54°	78°	102°
Paramatta	32°	56°	80°
Perth	34°	58°	82°
Port Macquarie	36°	59°	82°
Port Stephens	34°	57°	80°
Quakers Hill	32°	56°	80°
Queanbeyan	32°	55°	78°
Rainbow Beach	40°	64°	88°
Randwick	32°	56°	80°
Rockhampton	44°	67°	90°
Roebourne	46°	69°	92°
Shepparton	30°	54°	78°
South Brisbane	38°	62°	86°
South Grafton	36°	60°	84°
Southport	38°	62°	86°
Sunbury	28°	52°	76°
Sunnybank	38°	62°	86°
Surfers Paradise	38°	62°	86°
Sydney	32°	56°	80°
Tamworth	36°	59°	82°
Taree	34°	58°	82°
Toowoomba	38°	62°	86°
Torquay	42°	65°	88°
Townsville	48°	71°	94°
Traralgon	28°	52°	76°
Wagga Wagga	32°	55°	78°
Warrnambool	28°	52°	76°
Whyalla	34°	57°	80°
Wodonga	30°	54°	78°
Wollongong	32°	56°	80°

# **trouble shooting**

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**[downee.com.au](http://downee.com.au)**