Frequently Asked Questions

LED-WW2-KIT-V1 to LED-WW2-KIT-V5S

1. **What is the solar panel wattage for the Emergency flashing beacon kit?**
    80 Watts.

2. **What is the solar panel wattage for the 24/7 flashing beacon kit?**
    160 Watts (utilising 2 x 80 Watt solar panels and brackets).

3. **How is the solar panel mounted to the sign?**
    The solar panel(s) are mounted on the top of one or two of the sign posts and not attached to the back of the sign. For an 80 Watt solar panel it is attached to one post. For 160 Watt solar panels an 80 watt panel is attached to each post.

4. **What voltage do the solar panels produce?**
    12 volts DC.

5. **How much does an 80 Watt solar panel weight?**
    8.8 Kg (solar panel only).

6. **What are the dimensions of an 80 Watt solar panel?**
    980mm long x 678mm wide x 45mm high.

7. **What direction should the solar panel face?**
    North.

8. **What angle should the solar panel be mounted at?**
    For Brisbane it should be at 27 degrees, Townsville 19 degrees and Cairns 16 degrees.

9. **Do I need to drill holes in the posts to mount the solar panels?**
    No, the solar panel mounting brackets clamp around the outside of the post.

10. **What post sizes do solar panel brackets fit?**
    Approx. 70mm, 100mm and 160mm outside diameter. Diameter needs to be specified at time of order.

11. **How much extra post length needs to protrude above the top of the sign to be able to mount the solar panel bracket?**
    500mm is a good addition post length. Don't forget 500mm above the Flashing Beacon target board panel, not the actual main road sign.

12. **Does the solar powered system use any batteries?**
    Yes, it uses 2 x 12 volt 100 amp hour deep cycle gel batteries.

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13. **How long will the batteries last when the sign is on?**
    That depends on whether it is the Emergency or 24/7 kit. The Emergency kit is designed to operate the amber beacons for 48 hours in the case of little to no sunlight. If the solar panel receives good sun during the days when the amber beacons are operating the amber beacons will continue to operate longer than 48 hours. It is all dependent on the sunlight hours. The 24/7 kit is designed to operate 24 hours a day 7 days a week. The combined total of 160 watts of solar panel and the 2 batteries allows the sign to operate continuously if required.

14. **Do the batteries need to be topped up with water as part of ongoing maintenance?**
    No, they are sealed gel batteries designed for use in solar applications.

15. **Are batteries still used for the 240v mains powered option?**
    No, no batteries are required for this option. It relies on mains power being available when the amber beacons need to operate.

16. **What diameter are the Amber Beacons?**
    The diameter of the light output portion of the beacons is 200mm.

17. **What produces the light in the Amber Beacons?**
    LED's.

18. **Are the Amber Beacons compliant?**
    Yes, the 200mm diameter Amber Beacons are compliant to AS 2144.

19. **What voltage are the Amber beacons?**
    There are two voltage options available. 12v DC for the solar powered system or mains applications or straight 240v AC for the mains powered system.

20. **What is the main specification the Amber Beacons and Target Board are derived from?**
    Queensland Government - Road Safety and Systems Management Division, Road Safety Unit – Specification TC-1784_1 to 4.

21. **Can the Amber Beacons and Target Board be added to other signs?**
    Yes, any sign can be enhanced with the Amber Beacons and Target Board but please refer to the actual TC specification and drawing for the specific sign.

22. **Are the control cabinets lockable?**
    Yes, each cabinet is fitted with key lockable door latches.

23. **What is the Transport Main Roads compliant cabinet made from?**
    Stainless Steel.

24. **How is the internal control cabinet temperature kept to a minimum, especially for the solar powered cabinets that contain batteries?**
    Each cabinet is fitted with two air vents, one in and one out vent. The out vent it fitted with a fan to draw in cool air in and expel hot air.

Frequently Asked Questions

LED-WW2-KIT-V3 and LED-WW2-KIT-V4

1. **The LED-WW2-KIT-V3 and V4 kits are quite a bit cheaper, what do I get in the Kit?**
   You receive 2 x 200mm Amber AS-2144 compliant LED beacons c/w their factory manufactured housings and 1 x 12 or 240 volt flasher circuit fitted inside one of the beacon housings. The power source and control cabinet is not supplied.

2. **Who are the LED-WW2-KIT-V3 and V4 kits aimed at then if they have no controller or power source?**
   Customers who want to provide their own power source because they have their own standard design or exiting solation and want to add to it or they want to add the beacon kit to other equipment that they are operating as well as the beacons that will require a customised power source of their own.

LED-E10-185

1. **What is the difference between the LED-E10-185 and the LED-WW2-KIT-V1 – V5S?**
   The LED-E10-185 is a general road sign enhancement product and utilises 4 x 100mm diameter LED beacons instead of the larger heavier AS-2144 compliant 200mm amber beacons. It is a simple and cost effective way to enhance road work signage or any other signage that does not have a local or national specification or standard. It is primarily designed for use on small signage to add extra target value to the sign so that motorists will pay more attention to them.

2. **What do I get in a LED-E10-185 kit?**
   4 x 100mm diameter LED amber beacons, 1 x 20 watt solar panel and a control box with and on off switch, containing the battery and solar battery charger.

LED-TRGSWTCH and LED-FACILSWTCH

1. **What is an LED-TRGSWTCH and why would I need it?**
   This is a trigger switch. The trigger switch is required when you have a hinged sign and want to have flashing amber beacons on it in an emergency. When the sign is closed or hinged in the normal daily position for a non-emergency, the trigger switch is used to deactivate the amber flashing beacons. When the sign is hinged open for an emergency, the act of opening the sign releases the trigger switch and the amber beacons will start to flash.

Frequently Asked Questions

LED-TRGSWTCH and LED-FACILSWTCH

3. **What is an LED-FACILSWTCH?**

   This is a standard industry traffic controller facility switch mechanism that we can install on the amber beacon control box. This switch is the same type used as a facility switch on traffic light control cabinets you see on the side of the road at intersections. We chose to use this common switch because contractors have the special facility switch key on them most of the time and when out in the field can use that key to arm the amber beacon sign, or test it as part of their routine maintenance runs.

4. **When do I need a LED-FACILSWTCH?**

   Any time that you want to be able to easily arm the sign, disarm the sign or test the sign in no emergency situations. If a facility switch is not installed, the sign is always armed and the only way to disarm the sign is to open the locked cabinet with the door lock keys and disconnect the batteries. The only way to test the sign, assuming the batteries are connected is to unlock the hinged sign face and open the sign or to artificially activate the trigger mechanism that is installed to activate the amber flashing beacons in emergency situations. This trigger mechanism might be a flood gauge which is installed far away from the sign and can be hard to trigger.

5. **When do I need a LED-PEDMNT1?**

   The pedestal mount is required when the sign of the enhanced signs and the posts support it are too small to hide the control cabinet behind the sign or the post are not structurally that strong enough to bare the weight of the control cabinet. The pedestal mount is a ground mounted pedestal that the control cabinet is bolted to. The pedestal is then bolted to a concrete pad/foundation that the customer will need to provide. Any cabling that connects the control cabinet to the sign to operate the Led light and other sign components must be trenched in conduit underground to the sign.