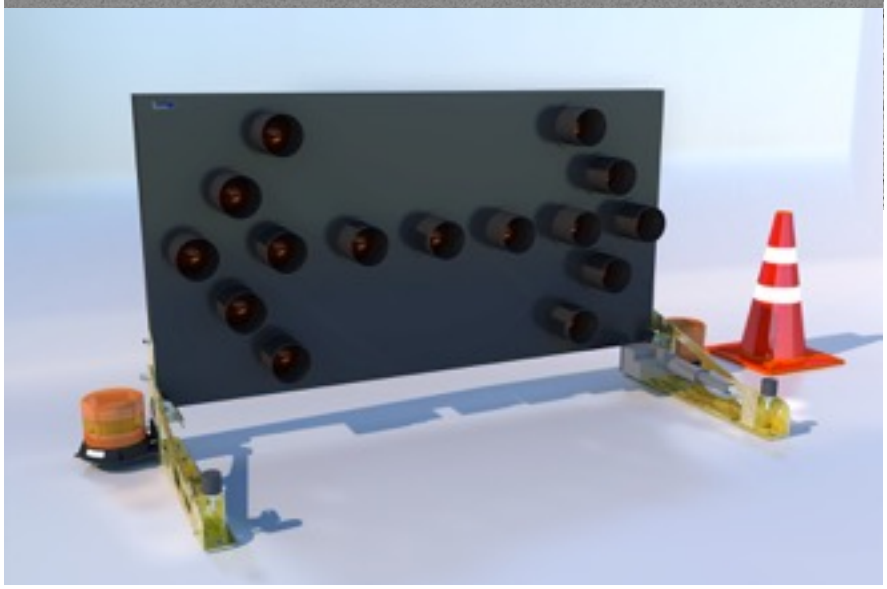
INSTALLATION & SERVICE GUIDE



The Base6 Platinum series of arrow board have been designed with simplified installation and reliable service in mind. These arrow boards, as is the case with all arrow board, should only be installed by a qualified auto-electrician. For Guidance beyond the scope of this manual, please call (07) 3889 6237.

INSTALLATION

Regardless of specific model, all Base6 arrow boards are supplied fully assembled, programmed and tested. After un-packing your arrow board, please examine the item for any signs of transit damage prior to installation. When handling the arrow board, please ensure you have a coworker assist in lifting it. Depending on configuration, the arrow board assembly will weigh anywhere between **24 - 30Kg** and should always be a 2 person lift.

There are numerous methods of attaching the arrow board to the host vehicle. Base6 have a number of optional items to assist in mounting such as roof bar systems, cab roof mounts and tray signage racks. Please call your nearest Base6 retailer for further details.

Exact physical mounting will always be at the discretion of the fleet operator and no specific guidance will be given. Other than the following general advice.

- The arrow board should be securely anchored to the vehicle in a manner compliant with all local and national legislation.
- A minimum of 4 M8 high tensile fixings should be used, in combination with Nylock nuts and thread locking compound.
- Provision is made in the base mounting plate is made for hundreds of fixing location combinations. To avoid negatively impacting the arrow boards corrosion protection, the drilling of additional mounting holes should be avoided.
- A dimensioned drawing of the mounting footprint of the arrow board is supplied at the rear of this document.
- A CAD model of our arrow board is available, please call for details.
- Consideration of the weight of the arrow board as well as the braking, cornering and acceleration should be given.
- Be aware of minimum height clearance for the location the vehicle is likely to operate in.
- If in doubt, please call and ask us for advice, it’s free!

With the arrow board mounted to the vehicle in an appropriate manner, the cable should be run from the arrow board into the vehicle. The wiring harness may be unplugged from the arrow board by turning the 31 pin connector shroud anti-clockwise. Although this connector is keyed to avoid incorrect insertion, some care must be taken to avoid any damage if the connector is forced.

When routing the arrowboard harness, consideration should be given to the articulation of the arrowboard. The harness should be oriented so that the rubber boot points points toward the passenger side of the vehicle. The cable should then be folded back towards the drivers' side and securely fastened to the vehicle or mount system. The bend in the cable should be of a radius no more than 150mm. The cable should be run in through a suitably waterproof opening into the vehicle cab.

The arrow board ECU should be mounted inside the environmentally protected vehicle interior. If the nature of the installation precludes this, the ECU enclosure MUST be mounted with the cable entries at the bottom, in as clean, dry area as possible. Steps should be taken to avoid high temperatures and moving parts.

The arrow board harness should not be cut or extended, for special lengths please contact your retailer that can offer an exchange part, custom built to suit.

The arrow board harness may be connected following the diagram below. Please note that each cable is labelled with a number or word, the writing may be hard to spot, but we assure it

PCB CONNECTOR	WIRE COLOUR	FUNCTION
MOT	**BLUE/RED (4MM)**	LINEAR ACTUATOR
MOT	**BLUE/BLACK (4MM)**	LINEAR ACTUATOR
A1	**YELLOW/WHITE**	LAMP 11 (PWM NEGATIVE)
A2	**PINK/WHITE**	LAMP 15 (PWM NEGATIVE)
A3	**BLACK**	LAMPS 12 & 14 (PWM NEGATIVE)
A4	**BLACK/VIOLET**	LAMP 10 (PWM NEGATIVE)
A5	**BLACK/WHITE**	LAMPS 3, 7, 8, 9 & 13 (PWM NEGATIVE)
A6	**YELLOW/BLACK**	LAMP 6 (PWM NEGATIVE)
A7	**BLUE/BLACK**	LAMP 2 & 4 (PWM NEGATIVE)
A8	**WHITE/BLACK**	LAMP 1 (PWM NEGATIVE)
A9	**BROWN/BLACK**	LAMP 5 (PWM NEGATIVE)
BCON-	**RED/BLACK**	LED BEACONS (PWM NEGATIVE)
BCON PWR	**RED**	LED BEACON POWER (5AMPS MAX)
LED PWR	**BLUE/WHITE (4MM)**	ALL LAMPS POWER
LDR	**GREEN**	LIGHT SENSOR
LDR	**GREEN/WHITE**	LIGHT SENSOR

Additional connections have been made at the factory, but are listed for general information.

PCB CONNECTOR	WIRE COLOUR	FUNCTION
+12V IN	**RED (4MM)**	BATTERY POWER (+)
+12V IN	**RED (4MM)**	BATTERY POWER (+)
NEG	**BLACK (4MM)**	CHASSIS EARTH
NEG	**BLACK (4MM)**	CHASSIS EARTH
P/BUTTON	**N/A**	NOT USED
P/BUTTON	**N/A**	NOT USED
SPEED	**N/A**	OPTIONAL SPEED SENSOR INPUT

With all the arrowboard harness connections restated, and the ECU enclosure securely mounted INSIDE the vehicle, the power and earth connections may be made to the battery. It is not recommended that the device be switched by either an override or ignition switch, to ensure correct operation of the actuator.

The earth connection should be made to an OEM chassis earth node by means of a ring terminal. A suitable waterproof fuse holder or circuit breaker should be installed in the power wire, as close as possible to the battery positive. The fuse,breaker should be 15Amps quick blow.

With all power connections made, the dash control panel should be securely mounted on the dash board in a suitable location away from airbag deployment zones, controls etc. With the control panel mounted, the dash control harness may be run to the ECU, avoiding sharp edges and potential crush points. Route the dash control connector through the cable gland on the ECU enclosure and insert it carefully into the connector into the socket labelled HMI (human man interface).

PLEASE NOTE THAT ONLY 2 X LED BEACONS SHOULD BE USED WITH PLATINUM SERIES ARROW BOARDS

An halogen beacon fitting kit is available as an optional extra, please contact your retailer for details.

Please observe the diagnostic LEDs on the ECU PCB.

D6	ONBOARD +5V SUPPLY
D7	LED/BEACON FUSE BLOWN
D8	ACTUATOR FUSE BLOWN
D9	ONBOARD BREAKER TRIPPED
D10	FLASH (SYSTEM HEARTBEAT)
D11	FLASH (COMMS WITH CONTROLLER)
D12	FLASH (GPS DATA)

With all connections made and the fuse inserted, LED D6 should illuminate green steady, D10 and D11 should flash orange at steady but different rates. If any of the red LEDs should be on, please check all connections and cable runs and then replace the blown fuse on the PCB for an item with the same value. In addition to the onboard fuses, all outputs have solid state current protection, in the event a lamp wire is shorted directly to ground, the lamp will simply illuminate.

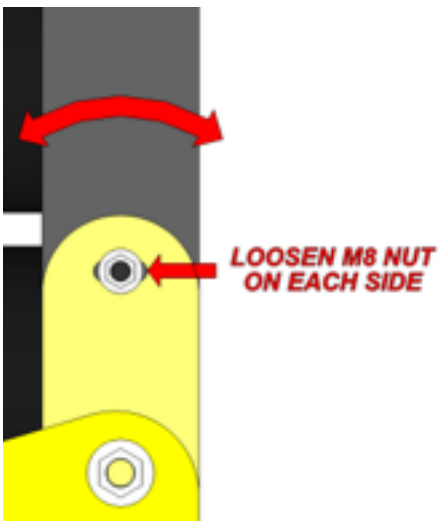
If the diagnostic LEDs are behaving, please test the operation of the arrow board. But turning the rotary switch, the board will automatically raise to the upright position. Check you have height clearance before you turn the switch!

Raising of the board may be halted by simply turning the rotary switch to the off position. In addition to the fuse, the actuator motor wiring has a programmable current threshold and timer. This has been factory set. Please call for tech support if you wish to make further adjustments to these settings.

Please check operation of each flash pattern and the LED beacons. If when selecting any of the flash patterns, the only pattern displayed is the alternate flashing corners, please charge the vehicle battery. The device is programmed to switch to this pattern to alert the operator to a low battery situation.

If everything works, please replace the cover on the ECU enclosure and finalise your install.

If the mounts that the arrow board is secured are not entirely horizontal, the upright angle of the board may be adjusted by loosening the fixings shown and manually setting the vertical of the board with a spirit level. Be sure to fully tighten the adjusting nuts after you have set your desired angle.



Fault Finding;

Here is a list of possible issues, along with there solutions.

1. No operation, no lights on PCB

Check Earth connection
Check main 15amp fuse

2. No operation, LEDs glowing on PCB

Refer to diagnostic info on page 5
Replace blown fuses
Check all connections

3. Lights are flashing but board doesn't raise

Check polarity of actuator

4. Actuator doesn't go up/come down all the way

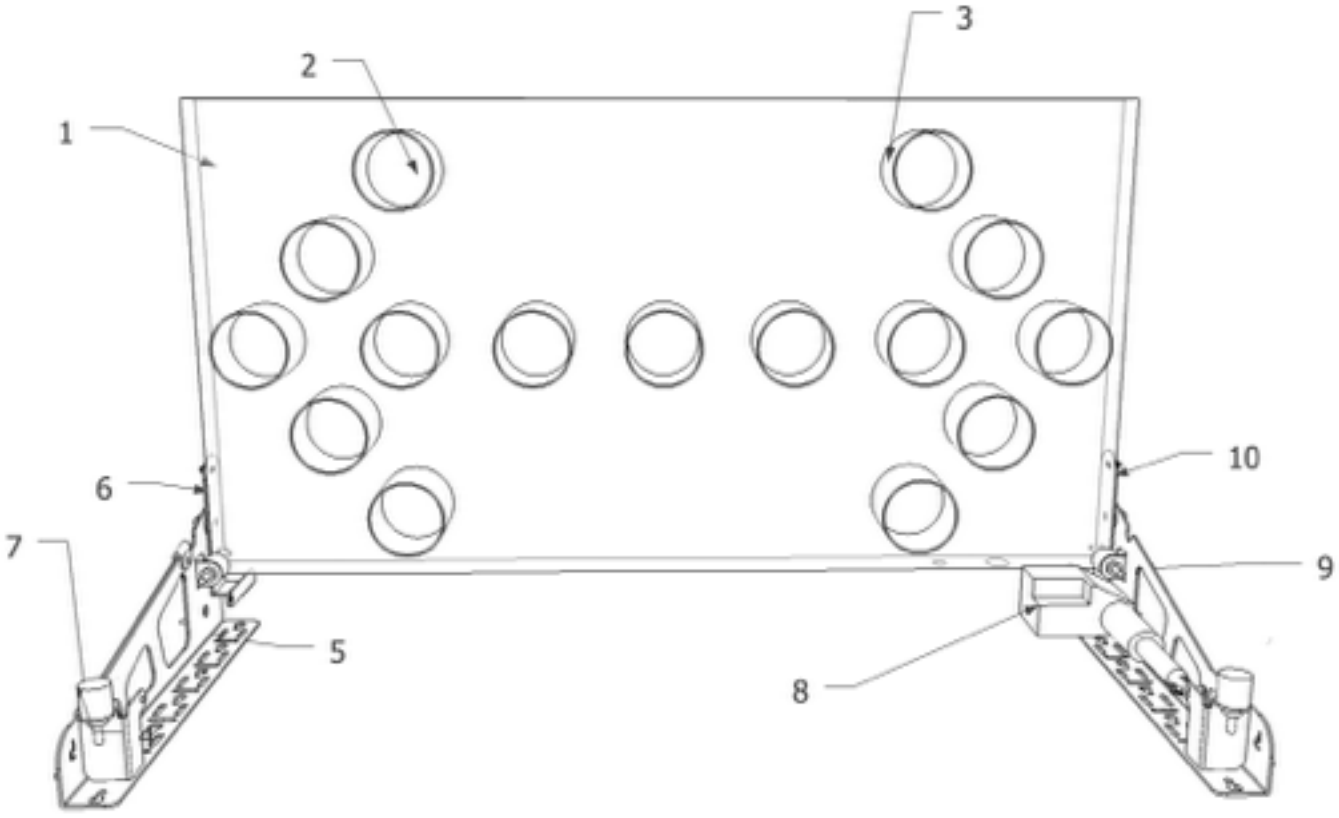
Call support for programming advice

5. Lights flashing incorrect patterns

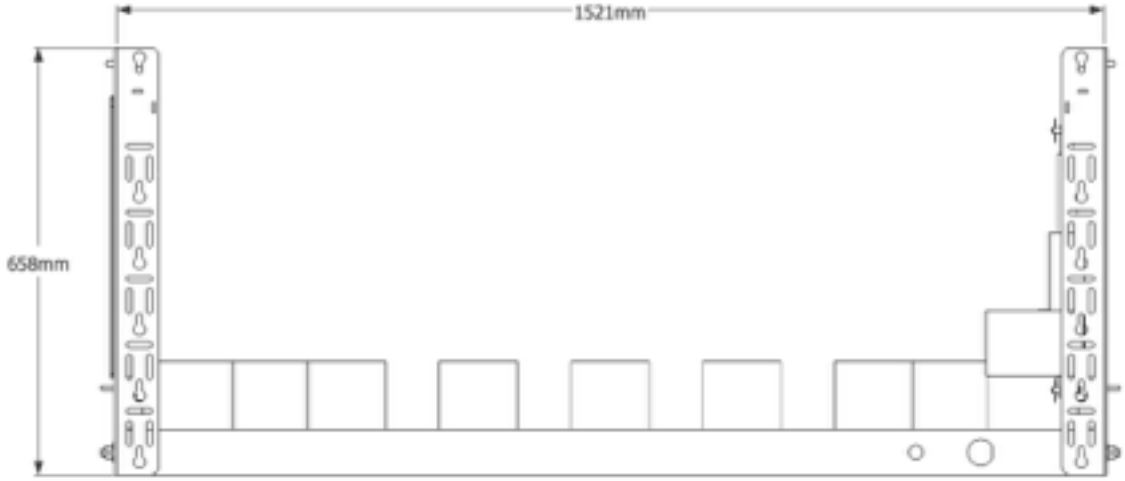
Check connections A1 - A9
Charge battery

Base6 Platinum series arrow boards come with a comprehensive warranty, as an Australian Manufacturer, we carry all replacement parts here in Queensland, available for same day despatch.

Please refer to the diagram for part numbers.



LABEL	PART NO#	DESCRIPTION
1	**B6-PAB-BSS**	ARROW BOARD BODY
2	**B6VMAB-L95**	LED LAMP ASSEMBLY
3	**B6VMAB-L95-SHR**	LAMP SHROUD
4	**F40X40-B3**	RUBBER END STOP
5	**B6-PAB-LL**	LEFT ARM BRACKET
6	**B6-PAB-LHP**	LEFT HINGE PLATE
7	**B6-PAB-CLAMP**	EMERGENCY BOARD STAY
8	**351OAO+00150A20**	LINEAR ACTUATOR
9	**B6-PAB-RL**	RIGHT ARM BRACKET
10	**B6-PAB-RHP**	RIGHT HINGE PLATE
NOT SHOWN	**B6PABHAREXT**	ARROW BOARD HARNESS
NOT SHOWN	**PL5EBL5**	DASH CONTROLLER HARNESS
NOT SHOWN	**B&RPJ221507**	ECU ENCLOSURE
NOT SHOWN	**B6-PAB-PCB-MB-SS**	ECU PCB
NOT SHOWN	**B6-PAB-PCB-DC-S**	DASH CONTROL PCB
NOT SHOWN	**281-6784**	DASH CONTROLLER ENCLOSURE
NOT SHOWN	**B6-PAB-LABEL**	DASH CONTROLLER LABEL
NOT SHOWN	**B6-PAB-FIX**	FIXINGS KIT
OPTIONAL ITEMS		
	ELB45BCL0AA	LED BEACON (WITH BRANCH GUARD)
	B6-BBCON-RA	BEACON MOUNTING PLATE
	B6-PAB-GPS-KIT	AUTO RAISE/LOWER KIT (GPS)
	BR-PAB-HALBEC	HALOGEN BEACON FITTING KIT
	MP3063	24V - 12V VOLTAGE REDUCER



Weight	@ 29KG
Operating Voltage	11.8 - 14.8 Vdc
Lamp Current	1.25A (max 5amp)
Motor Current	2A (max 8amp)
Lamp Warranty	2 Years
Actuator warranty	2 years
Electronics warranty	1 year
Mechanical warranty	3 years
Reverse polarity protection	Yes
Low Voltage Detection	Yes
Speed Sensing	Optional
Auto Raise/Lower	Yes
Onboard diagnostics	Yes