QSTECH

LED Arrow Board

——User's manual

Distributed in New Zealand by:

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Model Identification

All arrowboards have been manufactured to comply with AS/NZS 4192: 1994 and Transit New Zealand COPTTM to Level 3.

On the rear of each Arrowboard you will find a metal build plate. Embossed on this plate will be:-

- Model Number
- Serial Number
- Manufactured Date
- Maximum Recommended Visibility

This information will assist you throughout this manual, please ensure that you have these numbers close by when ordering parts or calling our service line

Main features

Luminous Intensity: ≥150cd/head（100% Brightness）

Working Voltage: 10.5 V - 30 V DC

LED configuration and approximate power consumption:

MODEL	LEDs/head	Power Consumption	Remarks
COPTTM L3	28	25	12V/24V
Optional LED	96	80	12V ONLY

Please note Ultra Bright LED heads are optional - Please contact us if you require further information

Construction and Installation

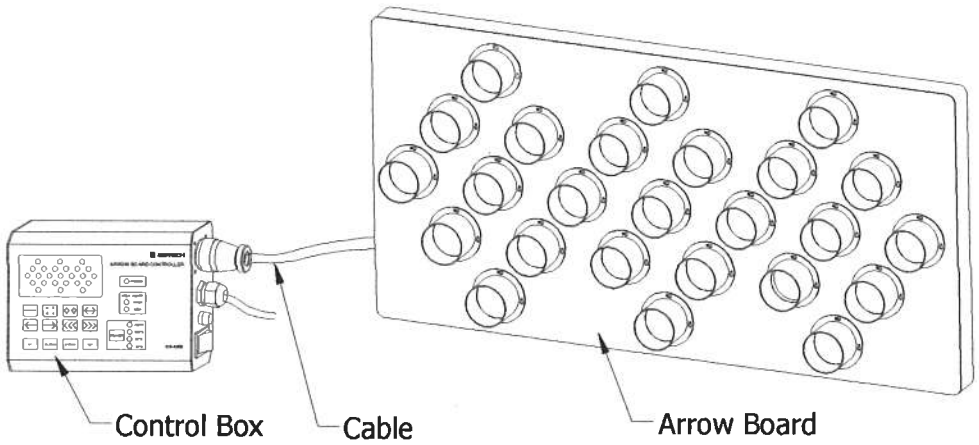
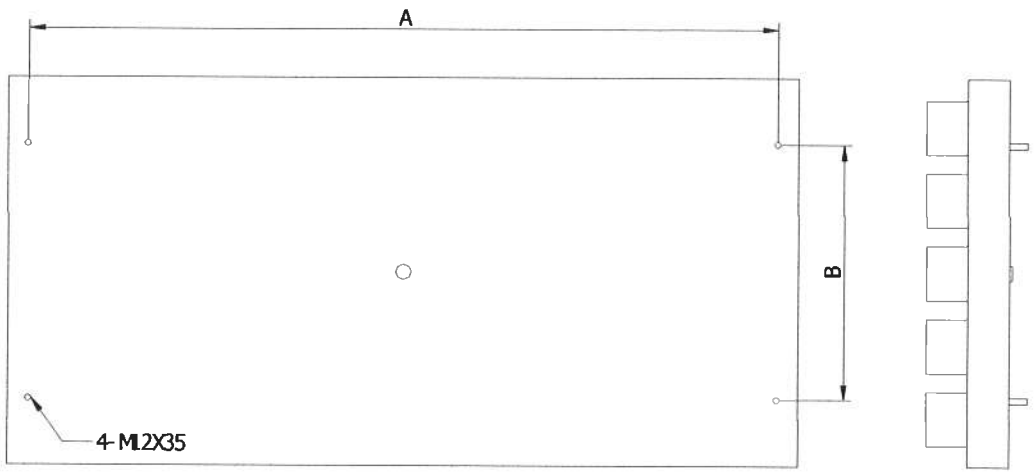


Fig 1

Installation of the Arrow Board:

When mounting the arrow board, please note the type and the positions of the 4 studs on back of the board. (See Fig 2)



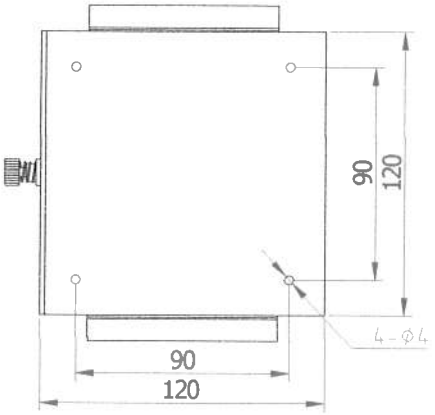
MODEL	Dimensions		Weight
	A	B	Kg
COPTTM L3	1440mm	500mm	26

Fig 2

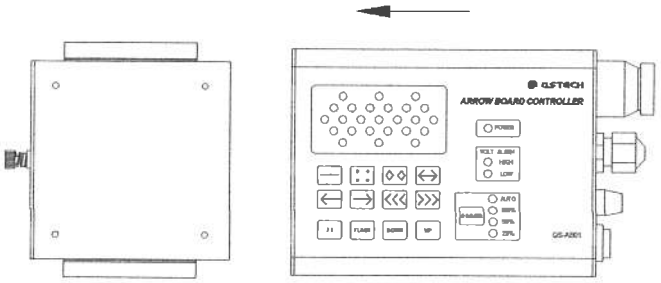
Installation of Controller.

The controller is usually mounted inside drivers' cab. A proper location should be selected so that it is ergonomic for use and in the line of sight for the operator so that they can readily alter the display and monitor the operational status of the Arrowboard

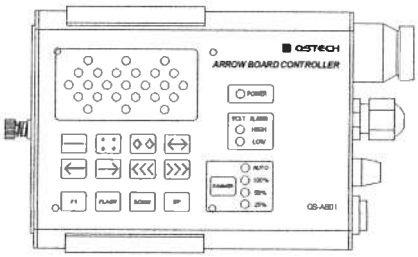
Mounting of Controller:



1. Slide into the bracket from right



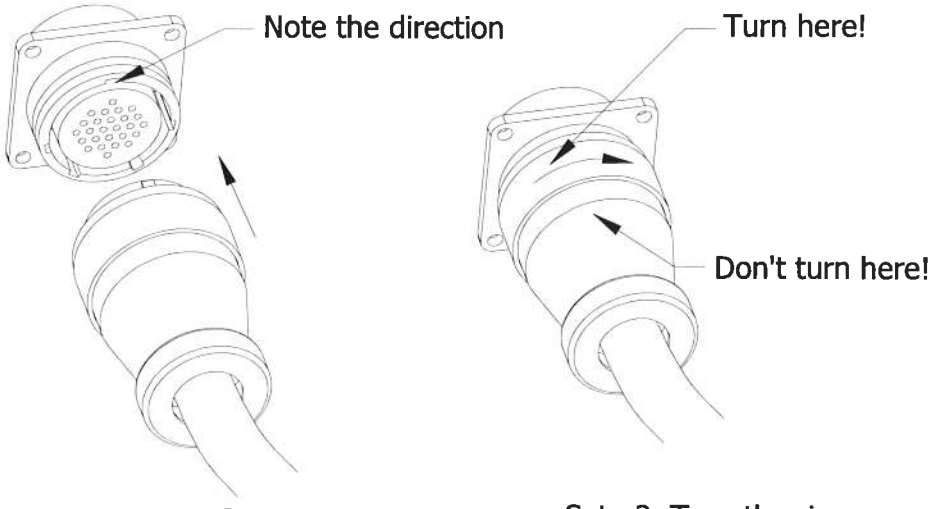
2. Fasten the retaining screw on the left side



Cabling:

When routing the Arrowboard cables we recommend following the vehicles existing wiring loom and retaining the cables by use of zip ties or similar every 30cm. Take particular care when routing the cables in close proximity to heat sources, exhaust, engine and driveline parts.

Control Cable connection (See Fig 4)



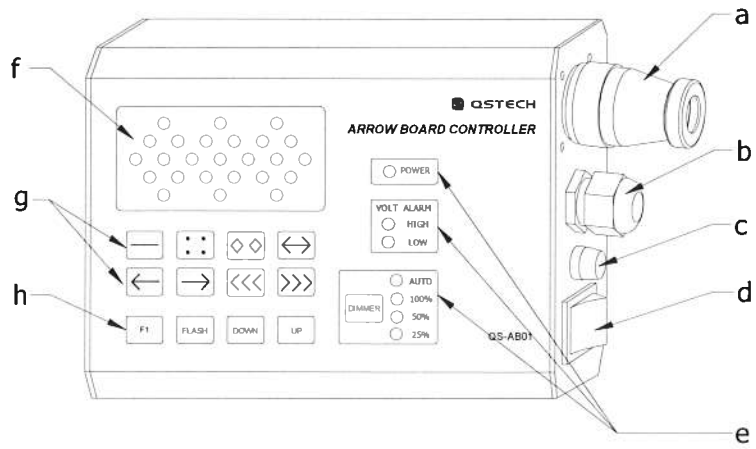
Step 1. Insert

Setp 2. Turn the ring

Fig 4

Functions of the Controller

Model: QS-AB01



QS-AB01

A——Output for Control Cable

Connect to the arrow board

B——Power Input Cable

There are four wires. Connect the pair with a red wire to a directly to the battery positive. Connect the pair with a black wire to the negative.

C——Fuse This is a standard 10A Automotive Globe Fuse

D——Power switch

E——Status indicators :-

POWER: Power Indicator

VOLT ALARM: When the voltage drops beyond 10.5V, the indicator LOW blinks and the arrow board is switched off in order to protect the battery from a full discharge. When the voltage is higher than 28V the indicator HIGH blinks and the arrow board is switched off in order to protect the circuitry.

DIMMER: You can set the brightness of the arrow board by pressing this button

AUTO: Auto dimming

100%: Full brightness

50%: half brightness

25%: Quarter brightness

The auto dimming function is carried out by photo sensor mounted on the front face of the board mounted below lamp # 7 on Type A boards and below lamp #8 on Type B and C boards.

In dusty conditions this may require periodic wiping with a cotton cloth in order to maintain accuracy.

F-- Operational Display

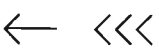
Displays the real time status of the arrow board.

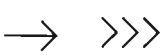
If an LED head on the boards is malfunctioning, the corresponding LED on the controller will start blinks rapidly. When this situation occurs please follow the instructions in section XX "LED Replacement"

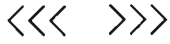
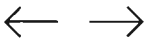
G--Display modes:

Hazard : 

Turn left or right: 

Turn left: 

Turn right: 

On Type A and B Arrowboards, there are no  . If you select them by mistake the default settings are 

Also, if you select  the default display is

H-- Function selections

F1 : Cycles the flash rate between 30 , 45 or 60 flashes per minute

FLASH : Switch between flashing display or moving display

DOWN: Arrow board fold-down, not available in the current delivery.

UP: Arrow board stretch-up, not available in the current delivery.

Power Draw

Input voltage	DC12V or DC 24V
Maximum average current	2.9 A
Display mode with maximum average current	Double arrow
Current per lamp, 100% Brightness	0.18A
Flash rate, cycles per minute	30, 45 or 60
Working Voltage	10.5V —30V DC, with reverse polarity protection

Flashing Mode	Max. Power Consumption W	Ave. Power Consumption W
—	19.2	9.8
: :	10.8	5.6
↔	38.8	19.8
←	26.6	13.6
→	26.6	13.6
Moving Mode	**Max. Power Consumption W**	**Ave. Power Consumption W**
←	26.6	21.6
→	26.6	21.6

SPECIAL NOTICE

Never unplug the cables while connected to power source.

Don't try to open the cabinets. Consult authorized personnel for servicing.

The arrow board and control box are subject to changes without prior notice.