PORTABLE BOOM GATE™

Operations and Maintenance Manual

Contents

Boom Gate Setup

1. Main Housing setup

The Portable Boom gate normally comes supplied in a shipping crate; the optional parts and accessories are shipped separately.

To assemble the boom gate, refer to the following sections.

2. Fitting the Batteries

(if not fitted when boom gate is supplied)

Open the back panel using the T Security Tool.
This T Tool is stored in the BOOM ARM storage box.



Fit 1st then 2nd Battery and lock in place with clamp as shown.

The boom gate is powered by 2 x 40AH 12V Maintenance-free AGM batteries.

These are configured and wired in series to provide the 24Volts that the Boom Gate requires.

Once installed, the batteries are plugged into the power panel using the connected cable and 2 pin connectors. These connectors are polarized to fit correctly by aligning the mating connector and then fixing it in place using the screw fixing nuts.

Ensure the Power Switch is in the OFF position before making the connection, once both connectors are secured, the switch can be set to the ON position.

To power up the Boom Gate use the Panel on the side with the LCD screen and press the ON button.
Do this when all items have been installed.

3. Fitting the Ballast

The Portable Boom Gate is optionally supplied with 4 x 20KG Ballast to provide required stability when installed and set up.

Fold out the 2 side panels, use the spring clip to release and fix the flap in place.

Once they are folded out place a ballast on each one.

The Larger Fold out section on the front of the Boom gate is used to hold the 3rd Ballast.

Use the Spring clip and removable pin to extend this section, reinserting the pin and using spring clip to lock it into position.

4. Semi-Permanent Setup (fixing points)

If the boom gate is to be placed on a semi-permanent basis or if Ballast are not fitted, the Boom gate can be held in position to the ground using the 4 fixing points shown below. Use concrete bolts or similar. *(These are not provided, see Bunnings product code as an example supplier.)*

Hobson M12 x 100 XBolt Couplers - Box of 25

I/N: 2260692

$133

5. Fitting the Boom Arm

Once the Portable boom gate has been positioned and stabilized, the boom Gate Arm can then be fitted.

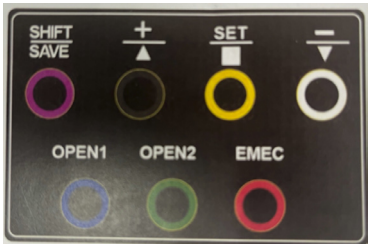
Do not fit beforehand!

The Boom gate arm is supplied in its own protective case.

Remove this and fit it into the Swivel Arm on the Boom Gate as per steps shown below.

Normally, the Boom Arm is shipped in the Upright position, if this is not the case, use the Internal Boom Gate Controller to set the BOOM to the RAISED position. See Below.

Step 1.
Fit the BOOM onto the Boom Arm using the Steel Pin as shown.

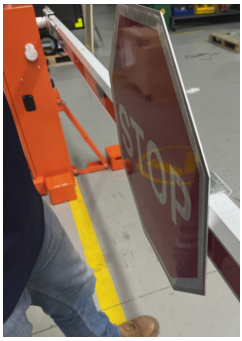


Once the BOOM is secured with the PIN, Lift it to the upright position, doing this will 'lock' it into the Boom Arm. Secure the locking pin with the Clip *(tied to steel cable)*

See Boom Gate Control Panel to Manually Raise the Boom if required.

Step 2.
Once installed, plug in the 2 LED light bar connectors that supply power to the LED Bar Lights that are fitted to the Boom Arms.

Make sure the connectors are correctly aligned before screwing the 2 parts together



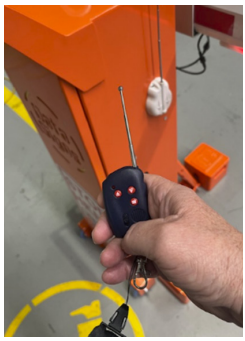
Step 3.
Fit the STOP sign to the Boom Arm as shown.

The Boom Arm is 2.5M long and can be extended to 4.0M length if required.

Basic Boom gate Operation using Mini Remote FOB's

Once the Boom Gate has been set up with the Boom Arm, it is ready to be switched on from the Front Control panel as per previous instructions.

The panel is located on the Curb Side of the Boom gate and has an LCD screen to show the current Voltage Level of the Batteries. *If the Solar panel option is fitted, it also shows charging information for that. You can scroll though the menu using the 'I' button.*



To power the Boom gate, press the **ON** button briefly, to switch it **OFF**, press briefly again.

The Boom Gate is now ready to operate using the Mini Remote FOB's supplied.

Note: the Boom Gate will first go through a Start-up cycle. After this it is ready.

Press the **Up** or **Down** arrows to move the Boom Arm respectively.

NOTE: The FOB Remotes are uniquely 'Paired' to the BOOM Gate. Keep it with the Actual BOOM Gate when transporting.

Vehicle 'Under Boom' Sensor and function

The Boom Gate is fitted with a 'Vehicle Under Boom' sensor.

This is to prevent the Boom Arm from lowering while a vehicle (or object) is sensed under the Boom Arm.

This Sensor can be adjusted for sensitivity using the app that is *preloaded in the ST-1 Remote Controller.*

Battery Charging, or continuous 240V Operation

Once the batteries are installed, they can remain in place even when the Boom Gate is transported to a new location. *(They can be easily removed if required to make it easier to move and place in a vehicle for relocation, but it is not a requirement.)*

To charge the batteries the Boom Gate has an internal Mains Powered 24V 10A battery charger built in.

Using an extension cord, plug this into the Mains-Power-Inlet-Point to begin charging the batteries.

The state of charge can be monitored by the LCD Screen of the Control panel. Also the Battery charger has Battery charge State indicators.

Typically, an overnight charge is required to fully charge the batteries for the next day's work.

Optionally you can keep the Battery Charger plugged in for continuous operation, once the batteries are fully charged the charger will continue to power the Boom Gate.

Boom Gate Options

1. PTL-Trailer and Compact Lights interface

When fitted with the optional Portable Traffic Light Interface, the Boom Gate can be controlled to operate from either the Portable Traffic Trailer Lights or from the Compact Tri Stand Traffic Lights.

There are 2 methods for controlling the boom gate:

2. Via Direct Link (hardwired).

There are 2 connectors available for IN/ OUT applications

Using a data cable (provided on a 300M reels as an option from Data Signs), the Boom gate is connected to the Traffic light that will control the Boom to Lower or Raise.

The Boom will Lower upon a Red Light and Raise upon a Green Light condition.

3. Via RF Radio Link.

The Boom gate can also be controlled wirelessly via Radio Link. It can then also be controller using the 2 Remote controllers, ST-1 or PTL RF Remote.

Additional Remote Controls

ST-1 RF Remote

The ST-1 Remote is a Bluetooth remote controller and has a range of 50 to 100M, this remote also comes preloaded with Apps such as the Vehicle Under Boom Detector and other Apps, it is the preferred remote for the Portable Boom Gate.

RF Remote

The RF Remote uses a RF (radio Frequency) that the actual Traffic lights communicate on, the Remote operates the same way as the ST-1 but has a greater operating range.

It is not the preferred remote for this product, but if a Portable Traffic light is used that has this remote, it can be utilized.

See Manuals supplied with the respective remotes for operation.

Fixed Traffic Light Option

You can fit a traffic light onto the actual boom gate for greater control and visibility. Also, the Yellow Light provides a warning that the Boom Gate is about to Lower.

The Traffic Light will operate via one of the 2 optional remote controls described above.

Note: The Mini FOB does NOT control the Traffic Light.

When using the Remote Controller to control the Traffic light, the operation is as follows;

Pressing the Red-Light button on the Remote will Cause the Yellow light to come on for a preset time, the Traffic light then transitions to the Red Light, and the Boom Gate is then lowered.

Pressing the Green-Light button on the remote will cause the Traffic light to transition to Green and the Boom gate begins to Raise.

See below on how to fit the Traffic light and optional Target board to the Boom Gate Housing.

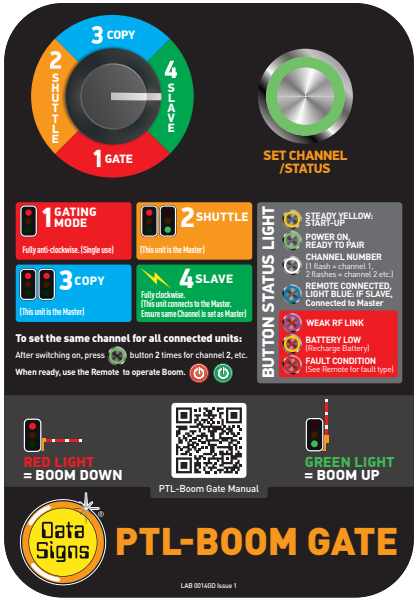
NOTE: The Use of the Traffic light will reduce the overall time the boom gate can operate on the batteries.

Traffic Light fitted to Portable BOOM Gate.

Shown without Target Board fitted.

Shown with Target Board Fitted.
The Target board enhances visibility.

Using the Boom gate as a Traffic Control device



You can use 2 x Portable Boom Gates as a Set to control Traffic.

(The Traffic Lights may or may not be used, if they are not used, the Lights connector is fitted with a 'Dummy Plug', which is required by the controller.)

The control panel on the left shows the different Modes of operation possible.

For greater illustration on using the PTL-BOOM Gate, download the PTL-Stop-n-Go manual from the Data Signs Website:

Solar Powered Option

You can extend the operation of the Batteries by adding an optional 'Data Signs 200W portable solar panel' to the Boom Gate.

Provided the panel is placed in a position where it can capture at least 6 Hours of Sunlight during the day, the Boom gate can be powered to operate the Boom Gate continuously. *Assuming a certain number of boom gate operations per Day/ Night period. Or one operation every 30 Seconds for example.*

The Solar panel is supplied with a 10M cable and an Anderson plug.

This plug is connected to the Boom gate as shown.

Suggestions & Improvements
Data Signs develops its products with the end users in mind. As such, we are always open to suggestions for product improvement. Contact Data Signs, Head Office in Australia at: datasigns.com.au/help

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