

Product:

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PB3000 and PB3000L

Document:

User Manual

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Product Owner:

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1. Document overview

1.1. Overview

This user manual has been developed to provide users with the required information to safely assemble, utilise, maintain and care for the product. The product refers to PORTABOOM® PB3000 and PB3000L.

The document includes the following information:

- Introduction of the product.
- Information on the product, components and safety recommendations.
- Instruction on the product assembly, operation and warning information.
- Accessories.
- Repair and maintenance processes.
- Technical specifications.

1.2. Document Control

Version	Date	Author	Details
1	9/10/2021	Traffic & Access Solutions	User manual developed for PB3000 and PB3000L.
2	26/03/2024	Traffic & Access Solutions	User manual developed for PB3000 and PB3000L.



2. Introduction

2.1. Product overview

PORTABOOM® (the product) is a ground-breaking traffic management system that has set a new standard in traffic management. The product itself is a portable boom gate that can be easily moved and operated by specially trained operators to provide the safest work environment currently available.

The product is a multifunctional device:

- Traffic control device PORTABOOM is nationally approved to control traffic in leu of traffic controlled when the stop sign is attached. This removes traffic controllers from 'live lanes' and into 'safe zones'.
- Access control PORTABOOM is the most compact portable boom gate and barrier device. Fitted with wheels and an independent battery source provides the product with unmatched mobility and operability.

Designed for applications such as:

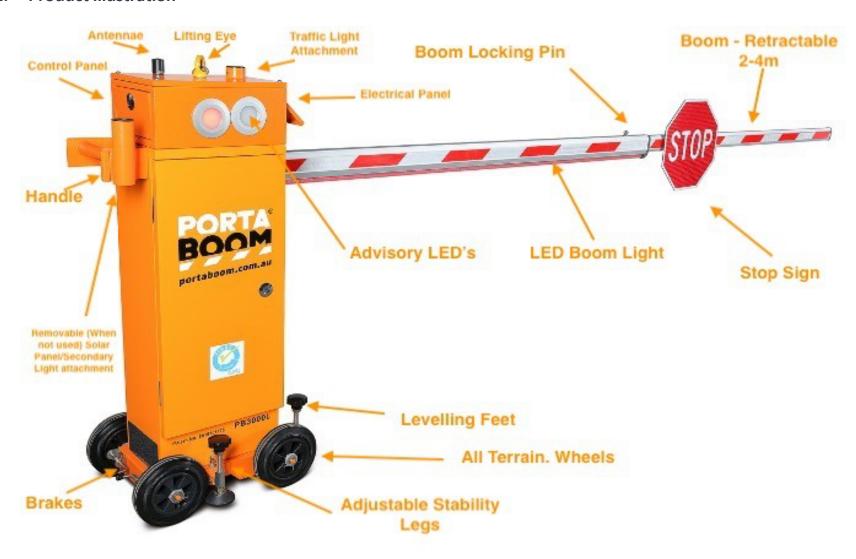
- Temporary traffic control.
- Work site gate access.
- Event management.
- Temporary car park access.
- School zone pedestrian access.

Product benefits include:

- It is easily moved and operated.
- Operators are less likely to be abused (physically or verbally) because of their separation from the tower at which drivers may become aggressive.
- Operators are positioned outside the path of vehicles, heavy vehicles and plant, significantly improving safety.
- The product is assembled on-site without the need for any tools.
- The boom arm may be quickly and safely released or attached, facilitating ease of transport.
- The one button remote control has billions of combinations to make tampering unlikely.
- Longevity of operation with 7552 up/down movements from a fully charged battery (13.2V).
- Ability to connect an auxiliary battery into the 12V electrical connector to extend operations.
- Drivers are prevented from disobeying traffic controllers or running red lights in view of the physical barrier.
- The battery enables operation at places without power with the ability to use solar power.
- The stabilisers provide stability in all weather conditions and on uneven ground.



2.2. Product illustration





2.3. Product warning and warranty

Warning:

It is strongly recommended that users of this product familiarise themselves with this manual, operating instructions, guidelines, warnings, safety information and operate the product and relevant accessories in accordance with these parameters.

It is further recommended that users of this product conduct their own respective risk assessments and seek the advice of relevant subject matters experts and regulatory agencies.

Failure to adhere to the user manual and subsequent recommendations may result in harm to people and or property. Misuse of the product may void any warranties.

Traffic & Access Solutions Pty Ltd accepts no liability for any accidents, errors or omission or any losses incurred by anyone who fails to operate the product safely and in accordance with this manual.

Warranty:

The product is subject to a 12 month, return to base warranty. The warranty covers the product in its entirety excluding batteries and general wear and tear.

Please be aware that tampering with any internal componentry including circuits, cables, boards or use of the product contrary to the recommendations and training resources provided in this user manual may void any existing warranty.

2.4. Product safety

Product safety features:

- ARRB TIPES approved;
- AS/NZS 2144:2002, NSW RTA QA specification R3452, VicRoads TCS 038-3-2004 compliant;
- Self-testing diagnostics for software, lights, ports and additional sensors;

•

- Fitted with a rotational lifting lug rated to 0.75T, handle and wheels for moveability;
- Fitted with bounce back safety feature;
- Durable and waterproof casing;
- Secure casing with lockable control panel;
- Hand installation and tightening of accessories, no tools required;
- Rechargeable sealed gel battery.

Additional safety attachments are available as accessories, refer to section 7 of this manual.



It is strongly recommended that all users of this product conduct their own risk assessment and refer to the training videos for additional guidance. The following information is provided as a guide to consider in the risk assessment process.

Safety recommendations:

- Complete a risk assessment and train users in assembly and operational procedures;
- Ensure the product is used in accordance with the parameters identified in this manual;
- Wear appropriate personal protective equipment when assembling the product;
- Complete daily inspections of the product, do not use if damaged or not fit for purpose;
- Maintain the security of the product by keeping panels closed, locked and keys removed;
- Do not exceed the lifting capacity of the lifting lug; and
- Apply manual handling controls or manual aid when moving the product.

Safety and training resources:

Guidance material has been developed to support the utilisation of the product including its setup, positioning and use on worksites and roads. Please refer to the Best Practice Guide.

Instruction	Link
Best practice guide	https://www.youtube.com/watch?v=uvg1r1omjtE&feature=youtu.be



3. Standard assembly

3.1. Product components

The product is supplied with key componentry including circuit board, internal cabling, motor, battery, lifting lug and connection billet pre-installed.



Additional standalone components are supplied as part of the standard issue. Please check the package to ensure the following are available:

- Extendable boom arm and carry bag (2-4meters)
- Stop sign (applicable to relevant country, state or region)
- 2x remote controls
- 2x keys for the access panel
- 1x charging lead
- 1x magnet

If any of the supporting components are missing, please contact the distributor or us directly.

*IMPORTANT NOTE: Ensure battery is fully charged prior to use (this is particularly important for the effective operation of solar accessories.

3.2. Assembly guide

It is important to note that specific hand tools or tightening devices are not required for standard assembly of components. To avoid damage, apply a general hand tightening force to secure components















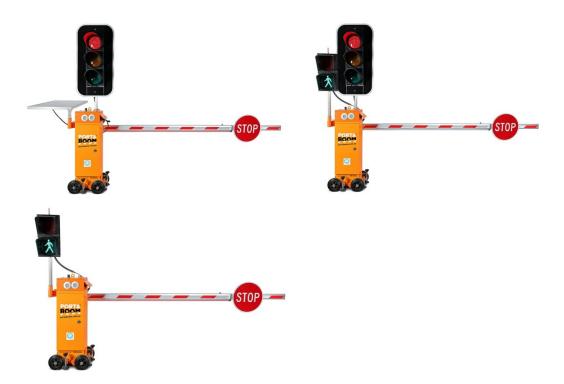












STEP 1 – Unpack product and check components:

- Unpack in a safe location, complete a risk assessment of the work area as required.
- Check the package to ensure all components have been supplied.
- Ensure product is vertical and on a level and stable surface prior to fitting components.

STEP 2 – Move product into position and secure:

- Ensure wheels are unlocked, use handle and foothold to tilt product back.
- Move into designated position ensuring personal and public safety at all times.
- Secure wheels using locking mechanism.
- Ensure product is switched off prior to fitting any components.

STEP 3 – Attach boom arm to product:

- Check for overhead and surrounding obstructions prior to fitting the boom arm.
- Position the boom vertical and place into the boom arm holder
- Connect the latch on the boom arm holder to the clip on the boom (Do not use force)

STEP 4 – Extending the boom arm:

- Ensure the Boom Arm is the horizontal position and NOT in the live lane
- Lift and hold plunge pin and extend the boom arm to the desired length.
- Let go off plunge pin to secure the extension position.

STEP 5 – Attach stop sign to boom arm:

- While the Boom Arm is still in the horizontal position:
- Position the stop sign at the end of the fixed boom arm.
- If using the LED boom light, ensure the stop sign doesn't obstruct the LED light.



- If the arm is being extended, ensure the straps are fitted to the fixed and extension arm.
- Ensure straps are secure and the stop sign is displaying correctly.

STEP 6 – Stabilise the product and secure:

- Ensure the product is positioned on a level and stable surface.
- Lift plunge pin and fully slide out each of the stabilising leg into position then release pin to secure
- Once secure wind down each levelling foot until it is firmly on the ground. Do not lift rear wheels off ground

STEP 7 – Use of sandbags:

• If additional stability is required, insert sandbags of each of the stability

WARNING

- Never use excessive force or tools to fit and extend boom and installing the stability legs
 & levelling feet .
- Ensure product is switched off prior to fitting any component or making adjustments.
- Ensure control panels are locked and keys removed to prevent tampering or theft.
- Ensure boom is locked into place prior to use, if the product is going to in position for long term periods, period checks should be conducted.
- Product is wind rated, ensure sandbags are used to provide additional stability.
- Product is 75kg and is considered to be a crush hazard, ensure use on level surface.
- It is recommended that manual aid be used if lifting the product.
- Keep fingers clear of any moving parts and wear gloves when assembling.

4. Operation

4.1. Control panel and switch modes

The control panel contains the primary switches that control the product and accessories.

CONTROL UNIT:

CHARGING & CONNECTION PORTS:







The switches identify the different modes of operation available to the product.

The switch modes are captured in the below table:

Switch	Term	Details
AC	Auto Close	Automatic cycle starts with boom down.
AO	Auto Open	Automatic cycle starts with boom up.
SS	Safety Sensor	Sensor prevents boom from coming down if broken.
DL	Disable LEDs	Disables the LED warning lights on the front panel.
DB	Disable Boom	Disables the boom arm.

To turn ON a mode, switch upwards. To turn OFF a mode, switch downwards. Multiple modes may be activated simultaneously when using accessories, ensure they are switched on.

STEP 1 – Accessing the control panel.

Unlock the control panel using the key provided.

STEP 2 - Select the mode.

- Standard manual boom operation is enabled when all mode switches are off (down).
- Ensure the product is turned off prior to selecting the relevant mode(s).
- Identify the mode(s) relevant to the operation and press the switch up to turn on.
- Ensure the relevant accessories are plugged in and connected.
- If multiple modes are going to be in operation, ensure they are all switched on.

STEP 3 – Securing the control panel.

• Once the mode(s) have been selected switch the unit ON and lock the control panel and remove the key.

4.2. Connection sockets

The product has two connection sockets, one for charging and the other for the solar panel accessory. These sockets connect to the battery fitted internally.

STEP 1 – Connecting charging devices.

- Ensure the product is turned off prior to connecting a charging device.
- Slide the relevant socket cover open and connect the cable and plug.
- A blue light will illuminate on the control panel indicating that the battery is charging.

4.3. Connection ports

The product has five connection ports which have been designed to fit multiple accessories. These ports are wired to the respective switches.





The port functions are captured in the table below ('L' SERIES ONLY):

Port	Term	Details
SS	Safety Sensor	Sensor prevents boom from coming down if broken.
AS	Activation Sensor	Sensor activates boom (raises) if broken.
L2	Secondary Operation	Secondary accessory operation.
L1	Primary Operation	Primary accessory operation.
BL	Boom Light	Boom Arm LED Strip Light – CAN BE USED ON PB3000

STEP 1 – Connecting to the port.

- Ensure the product is turned off prior to connecting to a port.
- Remove the port cover, align the connection pins and connect to the socket.
- Ensure plug is pushed in and fully connected (do not force plugs).
- Fit dust caps when port is not in use.

4.4. Testing prior to operation

The product will run a self-testing cycle each time it is turned on. The self-test will run diagnostics for the software, lights, ports and additional sensors. This process will also recognise any attachments connected to the product.



STEP 1 – Turn on the product.

 Turn product on and press the manual UP/DOWN button (can press remote if already paired) - wait for the self-testing cycle to complete which includes the boom lowering to



60 degrees then raising back to the open position

- Once complete, the 2 x round LED lights will illuminate green indicating the product is ready.
- This will also indicate that any connected accessories have been recognised.
- If charging the product, a blue light will illuminate.

STEP 2 – Testing the product.

- Test the product operation and relevant accessories in manual mode and with remotes.
- Test the product operation and relevant accessories in automatic mode.

If the light does not turn green, an issue has been identified. Refer to the trouble shooting section of this manual or contact your distributor.

4.5. Manual operation, pairing and using remote controls

The product can be operated manually from the control panel and by using the remote controls. It is recommended that a manual test be conducted on a daily basis, prior to commissioning the product in the field.



STEP 1 - Manual operation.

- Push the UP/DOWN button located in the middle of the control panel.
- Push the button to run through each respective operation (up/down).

STEP 2 – Remote pairing instructions.

- Remote controls provided with the product will be paired with the product.
- The programme button can be used to pair additional remotes. Hold the programme button (located at the top right of the control panel) and the remote button both for 5 seconds then, then release and wait 5 seconds for pairing.
- If it fails on first attempt, try again and hold for longer period.
 - o Ensure only experienced fleet technicians utilise this function
 - Ensure that pairing is not conducted in the vicinity of any other operating PORTABOOM® as it may pair to those other units

STEP 3 – Remote operation.

- Push the button on the remote controller to operate the boom arm.
- Push the button each time to activate each respective operation (up/down).
- Ensure both remotes are tested on a daily basis.

4.6. Automatic operation

The product can be operated using an automatic cycle which is pre-programmed, this is generally used as the default for field operations.

Warning: Care required here and seek advice from Distributor/Manufacturer if required





STEP 1 – Automatic operation.

- Ensure the product is turned off prior to selecting the relevant mode(s).
- Switch AO (auto open) to commence the automatic operation with the boom up/open.
- Switch AC (auto close) to commence the automatic operation with the boom down/closed.
- For simultaneous operations, ensure the relevant switches are pushed up.

4.7. Activating switch functions and accessories

In order for any of switch functions and subsequent attachments to work, the product must be turned off, the relevant switch activated and the product turned on. The self-testing cycle will register the switch and connected accessory during this process.

4.8. Overriding cycles

Cycles can be overridden using the manual switch or remote. Press the UP/DOWN button on the control panel or the button on the remote control to override the current cycle.

4.9. Product security

To ensure that the product is not tampered with while in operation, ensure:

- All access panels are secured/locked and keys removed.
- Keep keys and remote controls on your person.
- Regularly monitor the product, check for tampering and report any damage.

WARNING

- Check for overhead hazards and ensure the area under the boom is clear prior to testing.
- Ensure the product is turn off prior to engaging different modes and switches.
- If any of the checks or cycles fail, do not use the product.
- Refer to the trouble shooting section, if that fails contact your distributor for assistance.
- It is recommended that safety sensors are used for all automatic boom operations.

5. Charging

The product is supplied with a build in rechargeable sealed gel battery and connection socket for charging. It is recommended that the battery is charged on a regular basis to ensure optimal performance.





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STEP 1 – Connecting to the charging socket.

- Ensure the product is turned off prior to connecting a charging device.
- Slide the socket cover open and connect the cable and plug.
- Ensure plug is pushed in and fully connected.
- Plug into power source and turn on, a full charge will take approximately (8-12 hours).
- A blue LED light will illuminate indicating the product is fully charged.
- A red LED light will come on when the battery requires charging.
- A red LED light will commence flashing prior to the product to shutting down.

WARNING

- It is recommended that the battery is fully charged prior to use.
- Ensure charging area is away from flammable hazards or other sources of ignition.
- Ensure external electrical cables are regularly inspected for damage.
- Ensure power is off prior to connecting any charging devices.
- Primary charging is via 240V with Solar Charging as secondary

6. Accessories

6.1. Traffic light

The traffic light accessory provides an additional visual feature to enhance safety by providing further advanced warning for a motorist to prepare to stop.









STEP 1 – Unpack the accessory and check components:

- Check the condition of the accessory to ensure all components have been supplied.
- Position the accessory in close proximity to the product.

STEP 2 – Attach accessory to product:

- Use the fitted handles to lift the accessory.
- Insert accessory into adapter located on top of the PORTABOOM unit, position light to face the direction of traffic.
- Align connection points and secure with pin

STEP 3 – Connect accessory cable to port:

- Ensure the product is turned off prior to connecting cable.
- Line up pins and connect cable plug to the L1 port (primary).
- The L2 port is secondary and operated opposite to the boom function.
- Ensure plug is pushed in and fully connected.

STEP 4 – Test operational sequence:

- Access the control panel using the key and turn the product on.
- The product will run a self-test, once complete the 2 x Round LED lights will illuminate solid green.
- Test attachment in manual mode by pressing the UP/DOWN button and using the remote control
- Ensure the product is turned off prior to changing the mode.

STEP 5 – Operating the traffic light:

- Ensure the product is turned off prior to switching between modes.
- Refer to section 4.1 for information on the modes and select.
- If the boom is not required, switch deactivate boom (DB) 'ON' and detach it from the product.
- If intending to use the automatic cycle, switch auto open (AO) on.
- If other accessories are being used simultaneously, connect them and switch on.
- Turn the product on, self-testing will identify modes and attachments.
- A flashing amber light will activate on the back of the traffic light when the light is red.
- Automatic cycles can be overridden by the manual button or remote controls.

6.2. Pedestrian light

The pedestrian light accessory improves the instruction given to pedestrians, this may include around construction sites. Both the traffic and pedestrian light may be used together or independently.





STEP 1 – Unpack the accessory and check components:

- Check the condition of the accessory to ensure all components have been supplied.
- Position the accessory in close proximity to the product.

STEP 2 – Attach accessory to product:

- Insert accessory into adapter located on handle or on top of unit if utilised soley, position light to face the direction of pedestrians.
- Align connection points and secure with pin

STEP 3 – Connect accessory cable to port:

- Ensure the product is turned off prior to connecting cable.
- If using this as the primary accessory, line up pins and connect cable plug to the L1 port.
- If using this as a secondary accessory, connect cable and plug to the L2 port.
- Ensure plug is pushed in and fully connected.

STEP 4 – Test operational sequence:

- Access the control panel using the key and turn the product on.
- The product will run a self-test, once complete the 2 x Round LED lights will illuminate solid green.
- Test attachment in manual mode by pressing the UP/DOWN button and using the remote control.
- Ensure the product is turned off prior to changing the mode.

STEP 5 – Operating the pedestrian light:

- Ensure the product is turned off prior to switching between modes.
- Refer to section 4.1 for information on the modes and select.
- If the boom is not required, switch deactivate boom (DB) 'ON' and detach it from the product.
- If intending to use the automatic cycle, switch auto open (AO) on.
- If other accessories are being used simultaneously, connect them and switch on.
- Turn the product on, self-testing will identify modes and attachments.
- Automatic cycles can be overridden by the manual button or remote controls.

6.3. Solar panel

The 120W solar panel provides power to the product and eliminates the need for interval recharging of the product (depending on sun exposure). It is recommended for optimal performance that primary charging from 240v source is applied weekly. The panel may be fitted to the product or the traffic light accessory.





STEP 1 – Unpack the accessory and check components:

- Check the condition of the accessory to ensure all components have been supplied.
- Position the accessory in close proximity to the product.

STEP 2 – Attach accessory to product:

- Insert accessory into adapter, position panel to face the direction of the sun.
- Align connection points and secure with pin
- Apply the same process if fitting to the traffic light accessory.

STEP 3 – Connect accessory cable to port:

- Ensure the product is turned off prior to connecting a charging device.
- Slide the socket cover open and connect the cable and plug.
- Ensure plug is pushed in and fully connected.
- A blue LED light will illuminate indicating the product is fully charged.
- A red LED light will come on when the battery requires charging.
- A red LED light will commence flashing prior to the product shutting down.

STEP 4 – Test operation:

- Access the control panel using the key and turn the product on.
- The product will run a self-test, once complete the 2 x Round LED lights will illuminate solid green.

6.4. LED boom light

The LED boom lights provide enhanced visibility of the product and boom arm to attract motorists attention, this is appropriate in both day and night settings.





STEP 1 – Unpack the accessory and check components:

Check the condition of the accessory to ensure all components have been supplied.

STEP 2 – Attach accessory to boom:

Slide LED Strip Lightinto the channel at the base of the boom, push all the way along.

STEP 3 – Connect accessory cable to connection socket:

- Ensure the product is turned off prior to connecting cable.
- The connection socket is positioned on the face of the product next to the advisory lights.
- Connect cable and plug into the connection socket.



• Ensure plug is pushed in and fully connected.

STEP 4 – Test operational sequence:

- Access the control panel using the key and turn the product on.
- The product will run a self-test, once complete the 2 x Round LED lights will illuminate solid green.
- The accessory will illuminate red if the boom is down and green if the boom is up.

6.5. Pedestrian button

The pedestrian button is a compatible, wireless pedestrian push button that can operate multiple product units (and light accessories).









STEP 1 – Unpack the accessory and check components:

Check the condition of the accessory to ensure all components have been supplied.

STEP 2 – Pairing instructions.

- Pedestrian button accessories provided <u>will not</u> be paired with the product (unless requested).
- Pairing is required prior to operation, the same process applies as per the remote controls.

STEP 3 – Positioning the accessory:

- Position the accessory in close proximity to the product (radius no greater than 4m).
- Ensure the accessory is on a flat surface and secured to the ground to prevent it from falling.
- Ensure the accessory is visible and accessible to pedestrians.

STEP 4 – Test and operate accessory:

- Once paired, the pedestrian button will work with the pedestrian lights.
- Test the pedestrian light as a part of the operational testing sequence.
- Press the button and wait for the pedestrian light to go green.

STEP 5 – Changing the battery:

- It is recommended that batteries are replaced every 3-6 months (depending on use).
- Detach casing by removing the screw at the base of the casing.
- Replace the battery with 9V batteries.
- Place casing over the product and secure using the screw.



6.6. Key pad access controller

The key pad is a suitable solution for longer term access control points at locations such as worksites. Vehicles approaching the access control point enter a pin number that raises the boom.









STEP 1 – Unpack the accessory and check components:

Check the condition of the accessory to ensure all components have been supplied.

STEP 2 – Positioning the accessory:

- Position the accessory in close proximity to the product.
- Ensure the accessory is on a flat surface and secured to the ground to prevent it from falling.
- Ensure the accessory is visible and accessible.

STEP 3 – Test and operate the accessory:

- The key pad is pre-programmed to work with the boom
- The factory code is a 4 digit code which will be supplied with the accessory.
- Test the key pad as a part of the operational testing sequence.
- Enter the 4 digit code and wait for the boom to open.

STEP 4 - Programming instructions.

- Enter programming mode (one beep, green light flashes once, red light "On" to confirm you are in programming mode):
 - \circ * \rightarrow Master code \rightarrow #
 - o After 1min with no button pressed keypad will exit programming mode
- Add a user in programming mode:
 - 1 \rightarrow user ID number \rightarrow # \rightarrow PIN \rightarrow #
 - o ID number can be between 1- 2000. The PIN is any 4-8 digits with the exception of 1234 which is reserved.
 - Users can be added continuously without existing from programming mode as follows:
 - 1 \rightarrow User ID No \rightarrow # \rightarrow PIN \rightarrow # \rightarrow User ID No 2
 - \rightarrow # \rightarrow PIN \rightarrow # Press # * to Exit.
- Delete a user (orange light confirms you are in adding mode. Green light flash indicates a user has been added):
 - $2 \rightarrow User ID number \rightarrow #$
 - o Users can be deleted continuously without existing programming mode.
 - Press # * to Exit.



6.7. GSM mobile phone access control

The GSM mobile phone access control is another suitable solution for longer term access control points at locations such as worksites. Vehicles call or text the number that raises the boom.







It is recommended that the GSM controller be installed by an approved service technician, contact your distributor or us directly.

STEP 1 – Install access control program:

- A USB stick will be provided with the software.
- Install the software onto a computer and follow the instructions.

STEP 2 - Install sim card.

- Ensure the product is turned off prior to installing the sim card.
- Open the main compartment on the product.
- Disconnect both terminal blocks from the GSM Mobile Phone Access Controller.
- Detach the GSM Controller by removing the two cable ties.
- Open the back of the controller, insert the pre-paid 3G SIM card and turn the switch to ON.
- Secure back of the unit, refit GSM controller with cable ties and connect terminals blocks.
- Turn the product on Power "ON" LED will illuminate and the 3G LED will also illuminate.
- Close the main compartment on the product.

STEP 3 – Establishing a connection using the software:

- Refer to the GSM mobile phone access controller guide for programming and operation instructions.
- https://www.elsema.com/wp-content/uploads/2019/05/g-2000.pdf

STEP 4 – Establishing a connection using a text message:

- The accessory factory settings password is 1234.
- Establish a connection to the sim card via test message.
- Message 1234TEL and the sim card number followed by # (e.g. 1234TEL0406000000#).
- Ensure uppercase is used and press send.

STEP 5 – Setup authorised mobile numbers using a text message:

- To add an authorised number, a sequential text message must be sent for each number.
- This will require the addition of an A and 001 to the message in step 4.
- Message 1234TELA001# and the sim card number followed by #.
- For example, 1234TELA001#0406000000#.



• Repeat this process for additional numbers ensuing a sequential numbering sequence is adopted e.g. A002, A003, A004. Ensure uppercase is used and press send.

Note: It is recommended that you document the date, serial number, name and mobile number of the person you are given access to

STEP 6 – Operating the GSM mobile phone access controller:

- Phone or txt SIM card mobile number to "OPEN" Boom gate
- Once the vehicle has proceeded past the PORTABOOM, stop.
- Phone or txt SIM card mobile number to "CLOSE" Boom gate.

Note: The GSM Mobile Phone Access Controller comes with a USB that allows you to control your device when plugged into a computer.



6.8. Safety sensor

The safety sensor is required when using product accessories such as the key pad, GSM phone access or activation sensor ensuring the boom does not lower when the beam is broken. The safety sensor is mounted to the product with the reflector mounted to a bollard which will be placed opposite the sensor.







STEP 1 – Unpack the accessory and check components:

• Check the condition of the accessory to ensure all components have been supplied.

STEP 2 – Attach accessory to the product:

- Attach the safety sensor to the side of the unit as indicated in the picture.
- The sensor it attached using a double sided adhesive tape.
- Ensure that the sensor is level with the reflector bollard.

STEP 3 – Connect accessory cable to connection port:

- Ensure the product is turned off prior to connecting cable.
- Connect cable and plug into the safety sensor (SS) connection socket.
- Ensure plug is pushed in and fully connected.

STEP 4 – Positioning the accessory:

- Position the reflector bollard in close proximity to the product (radius no greater than 4m).
- Ensure the reflector bollard is aligned opposite the sensor fitted to the product.
- Ensure the safety sensor light turns green, if it turns red, realignment is required.
- Ensure the bollard is on a flat surface and secured to the ground to prevent it from falling.

STEP 5 – Test and operate accessory:

- Access the control panel using the key.
- Turn the safety sensor (SS) switch on by pressing the switch up.
- Activate the product on by switching the power button on.
- The product will run a self-test, once complete the 2 x Round LED lights will illuminate solid green.
- Test attachment in manual mode by pressing the UP/DOWN button and using the remote control.
- Obstruct/break the beam as the boom is lowering to test the safety bounce-back feature.



6.9. Activation sensor

The activation sensor is an alternative to the GSM phone and key pad entry systems. It may be applied at sites where authorisation at the access point is not required or controlled.









STEP 1 – Unpack the accessory and check components:

Check the condition of the accessory to ensure all components have been supplied.

STEP 2 – Connect accessory cable to connection port:

- Ensure the product is turned off prior to connecting cable.
- Connect cable and plug into the activation sensor (AS) connection socket.
- Ensure plug is pushed in and fully connected.

STEP 3 – Positioning the accessory:

- Position the both bollards in close proximity to the product (radius no greater than 4m).
- Ensure the reflector bollard is aligned opposite the sensor fitted to the product.
- Ensure the activation sensor light turns green, if it turns red, realignment is required.
- Ensure the bollard is on a flat surface and secured to the ground to prevent it from falling.
- Position cable so that is cannot be damaged or create a tripping hazard.

STEP 4 – Test and operate accessory:

- Access the control panel using the key.
- Turn the safety sensor (SS) switch on by pressing the switch up.
- Activate the product on by switching the power button on.
- The product will run a self-test, once complete the 2 x Round LED lights will illuminate solid green.
- Test attachment in manual mode by pressing the UP/DOWN button and using the remote control.
- Obstruct/break the beam to activate the boom.



6.10. Accessories warning

WARNING

- Ensure product is turned off prior to fitting or adjusting any accessories.
- If using mobile phone for access, ensure road laws and site rules are complied with.
- Some of the accessories are considered heavy or awkward, it is recommended that manual aid or a two person lift be adopted.
- Wear gloves when handling and fitting any of the accessories.
- Ensure accessories are appropriately secured to prevent them from falling.
- If any of the accessories are not working or damaged, do not use them, refer to the trouble shooting section or contact your distributor.



7. Repair and maintenance

Regular maintenance of the product is strongly recommended to ensure that it remains in an optimal state and that maintenance or repair issues are addressed.

Always ensure that the product is turned off and charging cables unplugged prior to completing any inspection or maintenance activities.

7.1. Daily inspection

Step 1 - Product condition:

- Check the external casing, lifting lug, panels, and locks for damage.
- Check battery is secure must always be tight to ensure no movement
- Check that stabilising legs are free from damage and working.
- Ensure all locking pins, nuts and securing devices are in place and working.

Step 2 – Wheels and stopping mechanism:

- Check the wheel condition and tread for wear and tear and damage.
- Ensure stopping pins / mechanisms are free from damage and working.

Step 3 – Boom Holder:

• Ensure latch is in good condition and can secure the boom arm

Step 4 – Control switches and connection ports:

- Check the control panel for damage.
- Check port sockets for damage.
- Ensure controls and ports have functional covers and are labelled.

Step 5 – Attachments:

- Check the condition of attachments for damage.
- Check any cabling or connections for damage.
- Ensure all locking pins, nuts and securing devices are in place and working.

Step 6 – Periodic checks when in operation:

- Periodically check that the product and accessories are working.
- This should be conducted at regular intervals throughout the day.

If the product or accessories are damaged, identified as unsafe or not working, it is recommended that you do not use the product, refer to the trouble shooting section and or contact your distributor or Traffic & Access Solutions directly.

Please be aware that tampering with any internal componentry including circuits, cables, boards or use of the product contrary to the recommendations and training resources provided in this user manual may void any existing warranty and increase the risk of harm or property damage.



7.2. Servicing

Servicing should only be carried out by an approved service technician, directly by the distributor or factory. It is recommended that servicing be arranged on an annual basis. Annual servicing will include:

- Comprehensive product check including seals and internal structure;
- System diagnostic and cabling; and
- General parts replacement and internal clean.

7.3. Records

A standard inspection checklist has been developed as a guide to assist you with your daily inspection process. It is recommended that you review the inspection checklist and tailor this appropriately whilst not impeding on warranty conditions.

WARNING

- Ensure product is off and charging cable disconnected prior to inspection/maintenance.
- Keep fingers clear of any moving parts and when conducting repairs and maintenance.
- Avoid using water or other liquids to clean the product externally.
- Do not use water or liquids to clean the product internally, this will cause damage.
- Warning DO NOT tamper with any of the circuitry both internally or externally or any
 of the mechanical components, this may void the warranty and may increase risk of
 harm
- Boom shaft and billet is hydraulic and considered a crush and entanglement zone, keep clear of moving parts and ensure hands, loose items of clothing, jewellery and hair is clear when in operation.



8. Technical specifications

Component	Details
Product dimensions	Height 1200mm, width 295mm, Depth 390mm.
Colour	Standard orange.
Material	Sheet metal 1.5mm thickness, anti-corrosion, anti-rust, UV exposure.
Water proofing	Tower has water proofing to protect internal electrical components.
Motor	DC, 7.5 AMP maximum, power supply 12V-90W maximum.
Weight	75kg.
Boom arm length	2.2m long.
Boom arm extension	Additional 1.8m, totaling 4m.
Speed	4.5 seconds (up/down).
Safety kick back	Boom arm will kick back (raise) if it contacts an object when coming down.
Battery	12V 40AH rechargeable gel battery, 8-10hours charging time.
Battery charging	240V internal charging unit, audible and visual low battery capacity alert (40% and less than 10%), 8-10hours charging time.
Up/down cycles	Up to 4000 up and down movements with on a fully charged battery without accessories. Note: TAS recommends upgrading to a 90Ah battery when intending to operate the PORTABOOM Unit with accessories (Traffic Lights and/or Pedestrian Lights, Safety & Activation Sensors).
Wheel type	Solid
Lifting lug	0.75T.
Remote	The remote is waterproof and has a range is 100m (max) with clear line of site.
Traffic light	Supplied in line with AS4191:2015.
Accessory radius from product	Position accessories no greater than 4m away from the product.



Appendix A – Example inspection checklist

MODEL No:	UNIT No:	DATE INSPECTED:	
Checklist Items			(Y/N)
Check that the chassis	is free from damage.		
Check battery secure –	Battery terminal facing back pa	nel	
Check brakes are in go	od working order and free of sa	nd and dust that may impact functionality.	
Check all wheels in in g	good working order and free of	sand and dust that may impact functionality.	
Check control unit acce	ss panels are free of damage ar	nd locks securely.	
Check boom arm and e	extension including pins		
Check Boom Arm LED	Strip Light is free of damage		
Check and ensure all pe	orts and connectors are secure	and free from damage.	
Check and ensure ante	nna free from damage.		
Check and ensure liftin	g lug (eye bolt) and swivel is se	cure and free from damage.	
Check all external fitting	gs, nuts and bolts are secure ar	nd free from damage.	
Check the on/off switc	h for operation ensuring green	LED is illuminated when the product is turned on.	
Check the manual push	n button operation up/down/sto	ор.	
Check remotes operati	on up/down/stop ensuring gre	en and red LEDs illuminate as required.	
Check that the blue LEI	O illuminates when charging usi	ing the 240V connection.	
Check bounce back ope	eration ensuring the boom arm	returns to OPEN position when striking an object.	
Ensure remotes are wo	orking and free from damage.		
Check that remotes are	e clearly labelled with unit num	ber.	
Comments:			1