

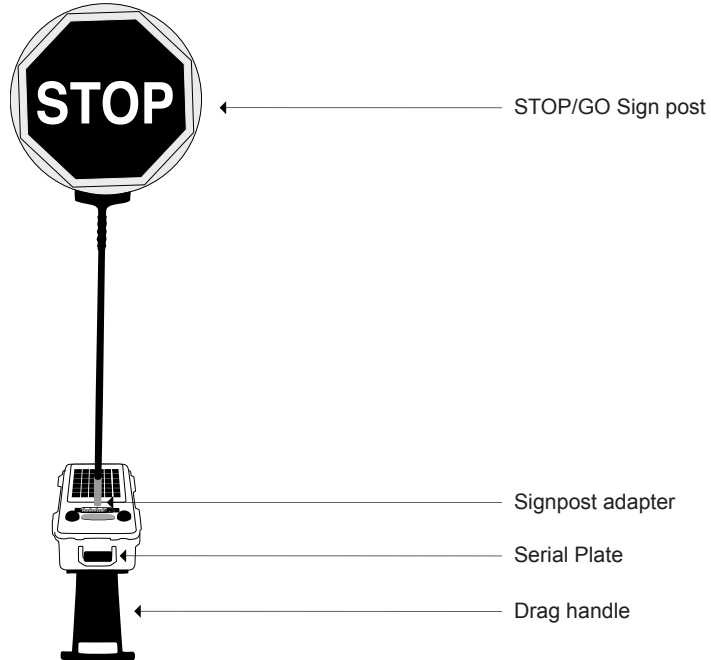
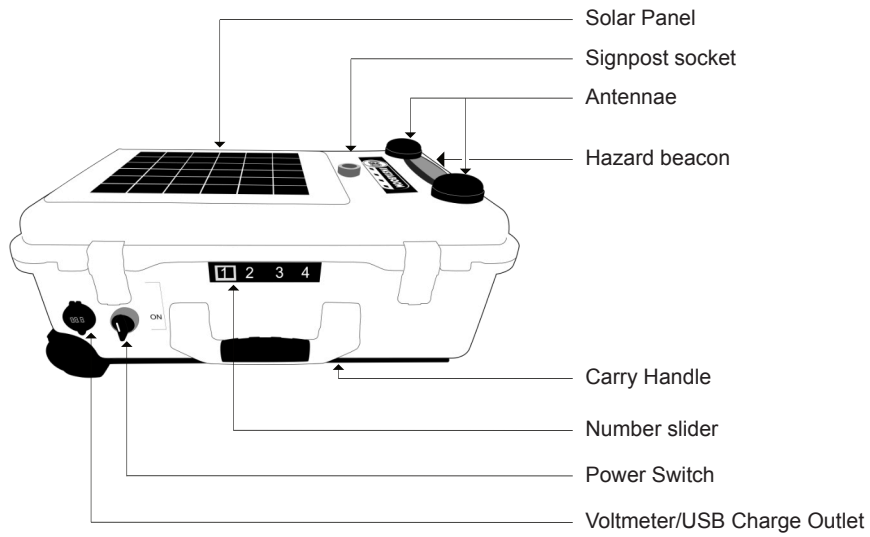


GO INSTABOOM
USER MANUAL

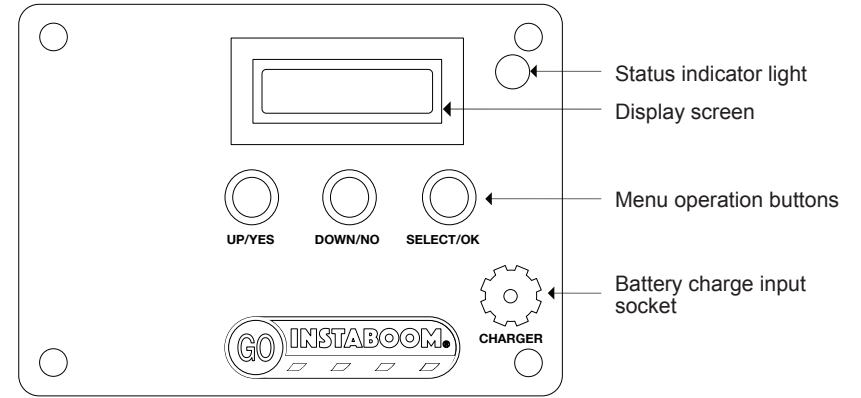
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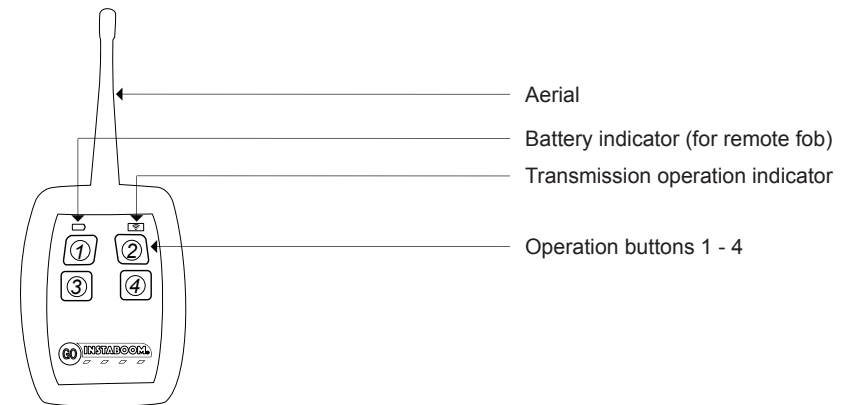
Component Parts



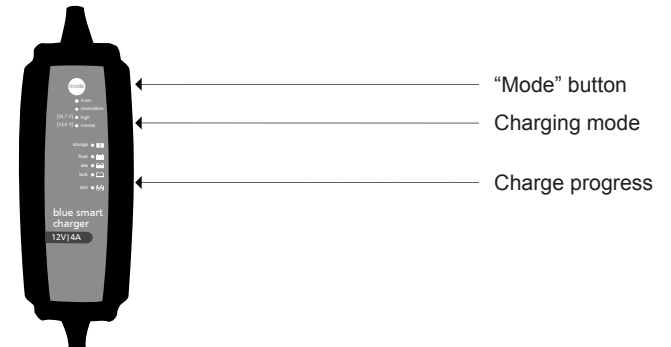
Control Board



Remote fob transmitter (Tx)

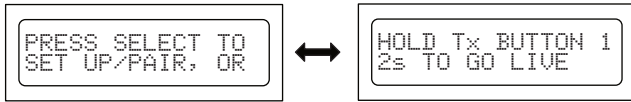


Mains Charger



Set up and initiation of operation

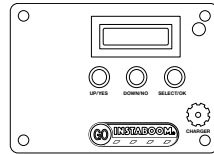
Once booted, the system will cycle through the following displays:



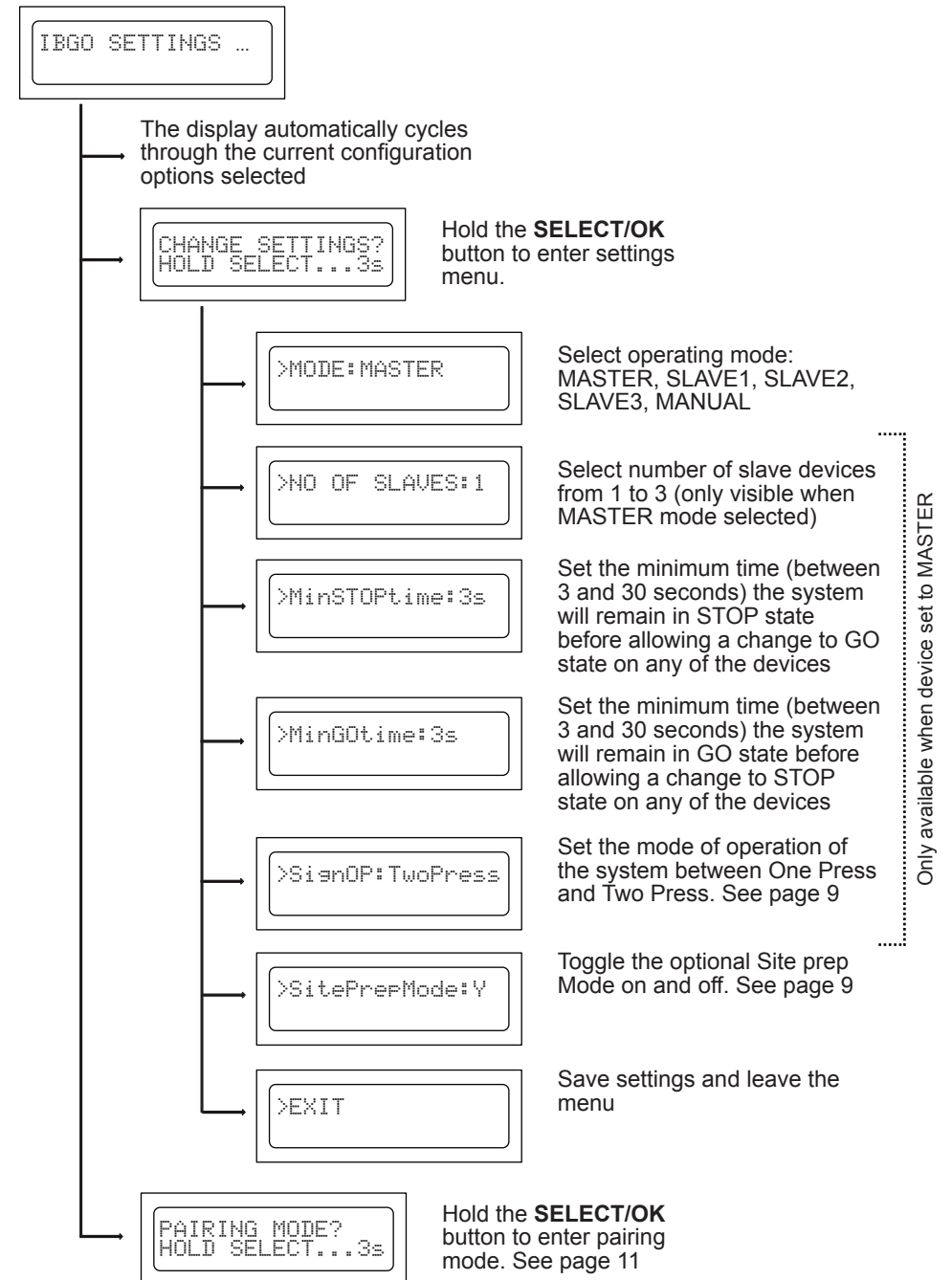
To access the settings menu press **SELECT/OK** button on control board. See page 7 for the menu map.

The menu can be navigated by moving up and down the pages using the buttons on the Control Board **UP/YES** and **DOWN/NO**. Each menu item can be adjusted by pressing the **SELECT/OK** button. The variable option will flash. Then use the **UP/YES** and **DOWN/NO** options to cycle through the parameter settings. Click the **SELECT/OK** button to confirm the change.

If your system is already paired and ready to use and you are ready to go to live operation, hold down **button 1** on the remote fob for two seconds, until the hazard light on the lid of the INSTABOOM Go stops flashing. The INSTABOOM Go will then be in live operation mode.



Settings menu map

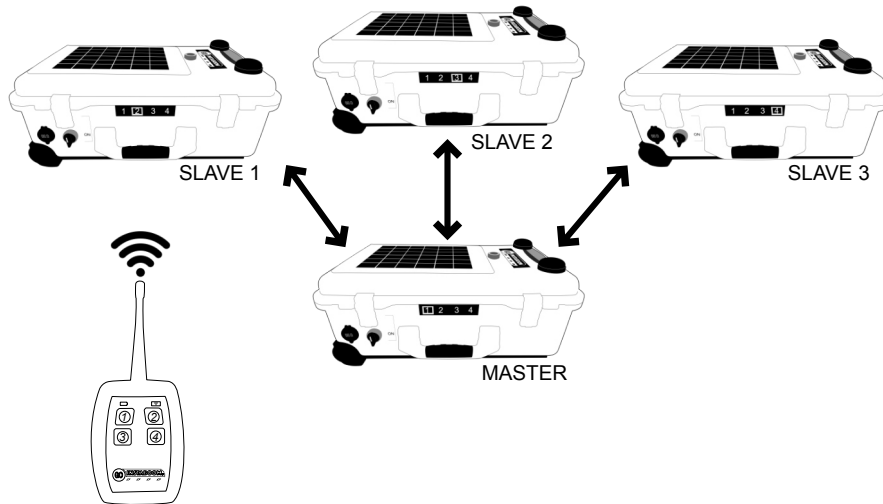


Explanation of options

MODE

INSTABOOM Go is designed to run with all devices interconnected wirelessly. In this mode, each of the devices is connected to the others with a two-way radio communication link. This ensures that having more than one sign set to GO is avoided and, if one of the devices loses radio contact with the others, the entire system fails safe to the STOP status.

For the radio link to work, one device has to be in control of the others. This is the MASTER device and the other devices are set as SLAVES to be controlled by the MASTER. Up to three SLAVES are able to be configured from one MASTER device providing for a maximum number of four devices able used in a single operation setup. For a setup using only two devices you will need to setup one MASTER and one SLAVE.



Each SLAVE needs to be unique and identified, and so this menu allows you to select from the following options:

- MASTER
- SLAVE 1
- SLAVE 2
- SLAVE 3
- MANUAL

Operation in the MASTER/SLAVE mode is discussed in detail on page 17

MANUAL mode allows the INSTABOOM Go devices to be operated unsynchronised, without the safety feature of fail-safe logic. In this mode, the user

can control the state of each of the devices independently using the remote fob. See page 19 for guidance on operating devices in the mode.

NUMBER OF SLAVES

When setting up the MASTER device for an interconnected system, a number of other options are available. The MASTER device settings define the overall operation of the whole system.

The first option available is the number of slaves in the system. Set this number between 1 and 3 to tell the master how many other devices it is required to pair with for operation.

Minimum STOP Time, Minimum GO Time

As a safety feature, there is a minimum time the system will remain in either a STOP or GO state. This is to prevent accidental double presses of the remote fob controller as well as being adjustable to ensure smooth traffic flow on your site. Both time options can be adjusted from 3 seconds to 30 seconds and will take effect when you go into live operation mode. *You do not have to repeat the pairing process each time this is adjusted.*

These minimum times are necessary to allow sufficient time for the two-way communication between the Slaves and Master devices to confirm their respective positions.

The default STOP and GO times for two button operation are three seconds.

One Press or Two Press Operation

The default operating mode when setting up a MASTER/SLAVE system is the Two Press mode. In this mode any of the signs is moved to GO by pressing the corresponding button on the remote control fob. This sign is returned to STOP by pressing any of the buttons on the remote, at which point the next sign can be moved to GO by pressing the appropriate button.

In One Press mode, when all signs are on STOP, a sign can be moved to GO by pressing the corresponding button on the remote control fob. If the same button is pressed again, this sign will move to STOP. Otherwise, if one of the other buttons is pressed, the system will move the first sign to STOP and then move the newly selected sign to GO.

Please note:

In this mode, the minimum stop and minimum go times are over-riden to 8s unless they were previously set higher.

Pressing ANY remote button in the above wait period will cancel the operation. *This is crucial since the effect will be no movement of any signs.*

Site Prep Mode

This optional mode puts the INSTABOOM Go sign at 90 degrees from traffic until the operator is ready to go live. After the initial boot sequence, the motor moves to a position half way between STOP and GO, with the result that the sign is not facing oncoming traffic.

When ready to go live, the Operator simply has to push **button 1** on the remote control for two seconds, until the beacon on the MASTER device stops flashing, and all connected signs will rotate to the STOP position.

At the end of the shift the Operator can push **button 2** for two seconds and the signs will all move to the same position away from oncoming traffic, to allow the shift to come to an end and release traffic flow.

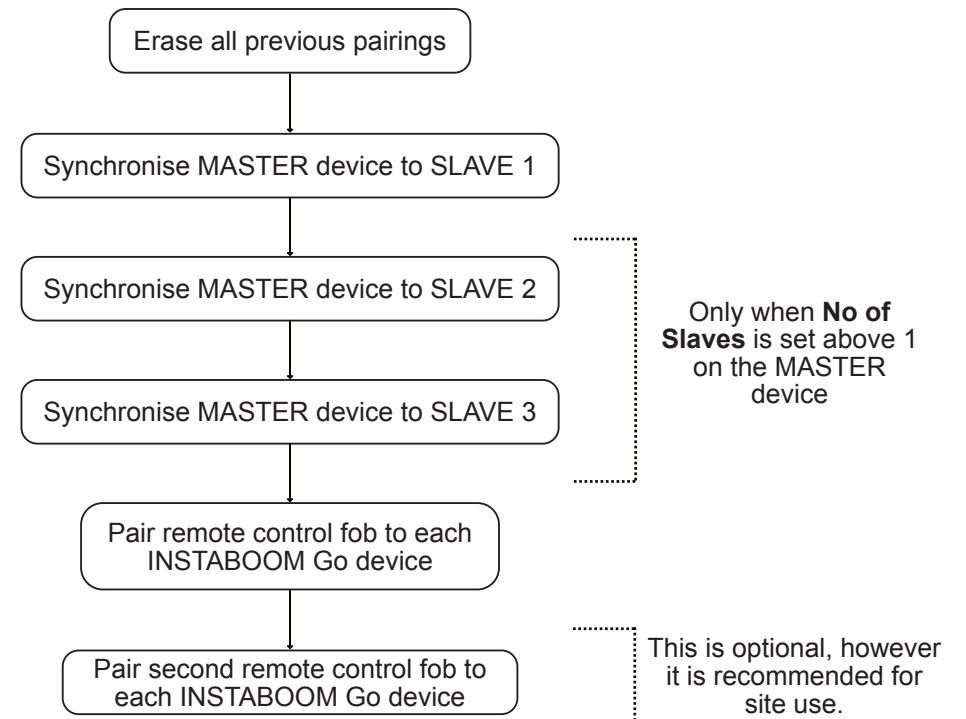
This mode is optional and can be enable or disabled as required. The default setting is ON.

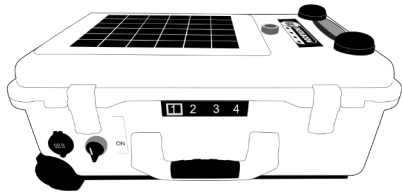
Pairing Process

Before use on site, your INSTABOOM Go devices need to be paired. It is advised that this process is completed indoors, before taking the devices to site as it will take some time.

This only has to be done once, before the devices are used together in a setup on your site. If you use the same devices in the same way the next day, you do NOT have to re-pair the system the following day.

The process works through the following steps:





Lay out within reach the chosen INSTABOOM Go devices to be used for your site setup.

Use the number slider to help you to identify each unit as you programme it. This should be used to correspond with the buttons on the remote control fob so you know which button controls which device.

Setting	Slider
MASTER	1
SLAVE 1	2
SLAVE 2	3
SLAVE 3	4

Open each case so that you can access the buttons on the Control Board.

```

PRESS SELECT TO
SET UP/PAIR, OR
  
```

```

CHANGE SETTINGS?
HOLD SELECT...3s
  
```

```

>MODE:MASTER
  
```

```

>MODE:SLAVE 1
  
```

```

PAIRING MODE?
HOLD SELECT...3s
  
```

Turn on the first INSTABOOM Go and wait for it to boot. Press the **SELECT** button to enter the settings menu, as described on page 6.

Configure the first INSTABOOM Go as the MASTER device. Dial in the settings to suit your desired setup as described on pages 8 and 9. Ensure the correct number of slave devices is programmed.

Turn on the remaining INSTABOOM Go devices and, following the same process, set them as SLAVE devices, each with different identity numbers, as shown in the table above.

Once all the settings are made and you have selected EXIT from the settings menu, the screen will show this screen. Hold down the **SELECT/OK** button for three seconds to enter the Pairing Mode.

The screen will count the three seconds down for you.

Put the SLAVE devices into Pairing Mode first.

Once ready to proceed, each of the SLAVE devices will advise you to refer to the MASTER device.

```

IBGO SLAVE 1
PAIRING MODE
  
```

```

NO NOT PRESS
ANY BUTTONS YET
  
```

```

SLAVE 1 - FOLLOW
MASTER DISPLAY
  
```

```

IBGO MASTER
PAIRING MODE
  
```

```

PUT ALL SLAVES
IN PAIRING MODE
  
```

```

THEN TO START
HOLD SELECT...3s
  
```

```

ERASING ALL
PAIRS.....8s
  
```

```

PRESS SELECT TO
CONTINUE PAIRING
  
```

Returning to the MASTER device, now enter Pairing Mode and follow the on screen prompts.

Note: The pairing process is controlled by the MASTER device and takes several minutes requiring user interaction throughout. Follow the on screen instructions.

When it is ready to proceed it will ask you to confirm all the SLAVE devices are also ready. Then hold the **SELECT/OK** button down for three seconds.

The MASTER will first erase all pre-existing pairings and show remaining time on screen.

When advised, press **SELECT/OK** to move on to the next step.

SYNCHRONISING
SLAVE 1.....8s

PRESS SELECT ON
SLAVE 1 NOW..24s

SLAVE 1 - FOLLOW
MASTER DISPLAY

PAIRING SLAVE 1
TIME LEFT: 80s

SLAVE 1
PAIRING COMPLETE

PAIRING COMPLETE
FOR ALL SLAVES

NOW PAIR HANDSET
HOLD SELECT...3s

WAIT TO PRESS
BUTTON 1.....16s

ON HANDSET PRESS
BUTTON 1 NOW:2s

PRESS BUTTON 1
AGAIN NOW....6s

The MASTER will begin the process of synchronising the first SLAVE device.

When both machines are ready, you will be requested to press **SELECT/OK** on the SLAVE device in order to proceed. The software will give you a period of time to undertake this.

Once the button press has been registered, the SLAVE device will tell you to return to the MASTER.

The MASTER will undertake the pairing process on both devices. The time this takes will be indicated on a countdown display on the screen.

The display will indicate when pairing has completed between the MASTER and the first SLAVE.

The process will then repeat for any additional slaves as selected in the settings for your setup.

The display will advise once pairing has completed for all of the slaves.

The process will then move on to start pairing the buttons on the remote control fobs. The display will ask you to press **SELECT/OK** to confirm when you are ready to continue.

The display will tell you which button on the remote needs to be pressed, and when. The first instruction tells you to get ready to press button 1, with a countdown time. **Do not** press the button before instructed to do so.

Briefly press button 1 on the remote control fob when instructed. You will need to do this twice; once to programme and once to confirm the programming. One brief press is all that is required

WAIT TO PRESS
BUTTON 2.....16s

ON HANDSET PRESS
BUTTON 2 NOW:2s

PRESS BUTTON 2
AGAIN NOW....6s

PAIR SECOND
HANDSET?(YES/NO)

IBGOs & HANDSET
PAIRING COMPLETE

TO GO LIVE...

SWITCH ALL SIGNS
OFF AND BACK ON

FAILED TO PAIR!
START AGAIN

The same process will repeat for button 2 to control device number 2 and any further devices you have selected in your system.

If you have selected to use four devices linked together for your setup, you will undertake this process four times.

This pairs the remote fob with each of the devices individually. If you subsequently use them in Manual mode, these button radio pairings will persist, with button 1 controlling device 1, button 2 controlling device 2 and so on.

Once all of the required buttons have been programmed to the devices, the screen ask if you want to pair a second remote. This is advisable to ensure you have a working spare during operation on site.

On the Control Board, press the **UP/YES** button to start the process to pair the second remote fob.

Press the **DOWN/NO** button to conclude the synchronisation process.

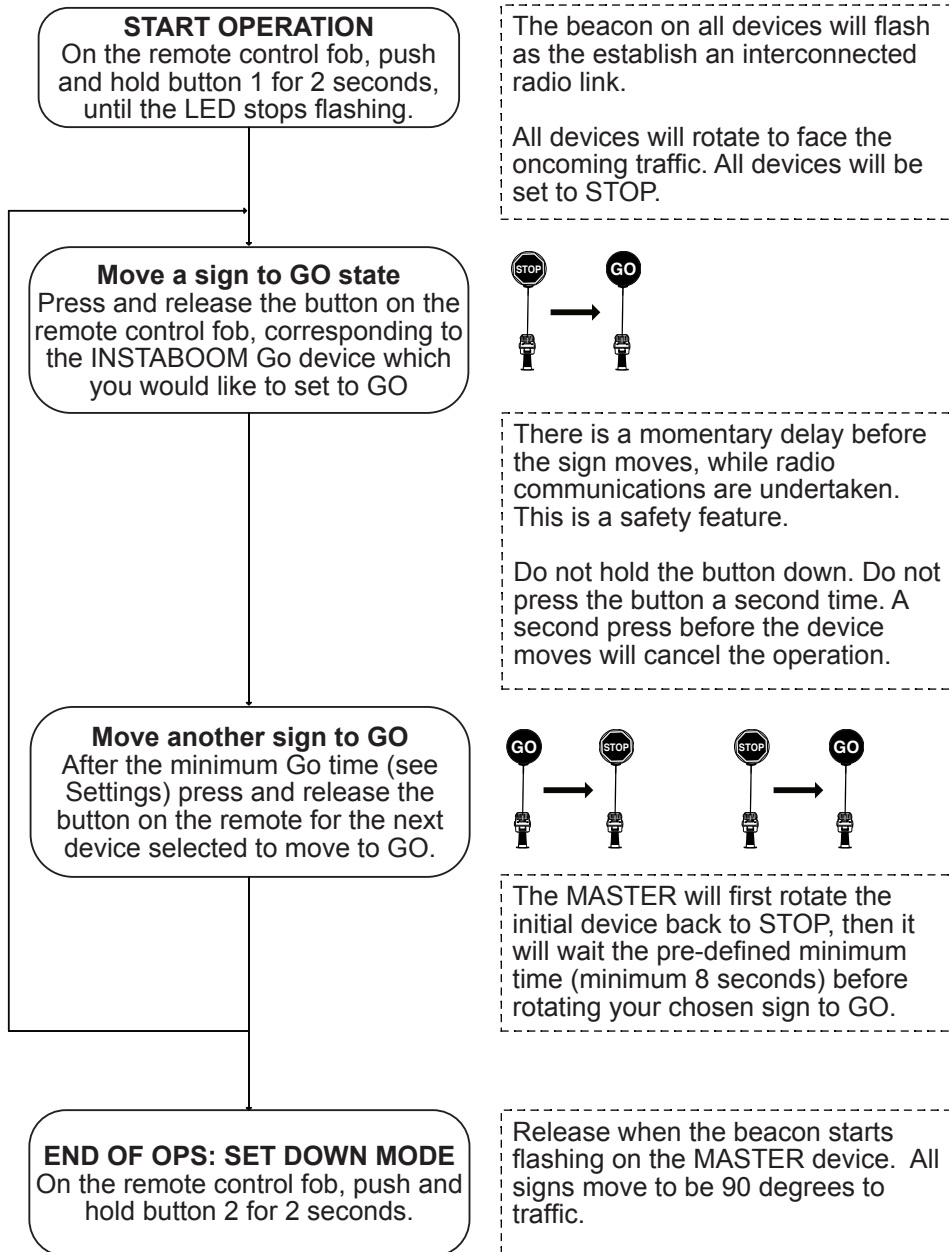
The screen will advise if the pairing was complete and successful.

Your system is ready to use. At this point, all of the devices must be turned off and back on to re-boot.

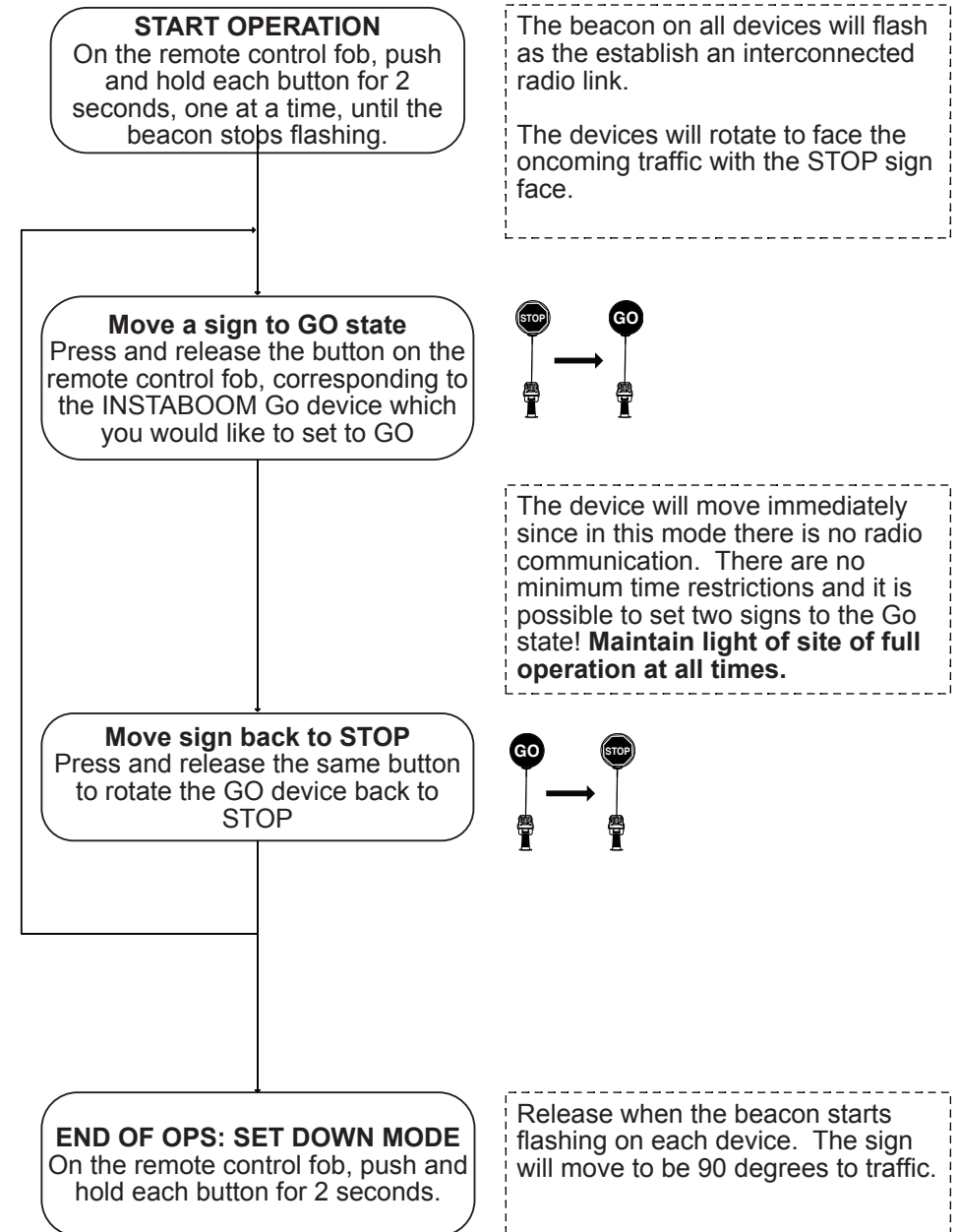
Once turned back on they are ready to use.

Should the pairing process fail you will see this screen. You will need to start the pairing process again from the beginning. If the process fails more than once, contact support.

One-button Operation Mode



Manual Operation Mode

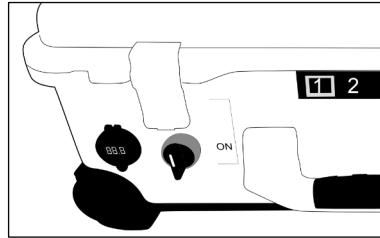


Battery Performance and Solar Power


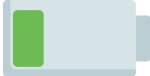
Your INSTABOOM Go is designed to provide long periods of use between charges. The solar panel will provide charging for the internal battery when used outside. However, when used out of direct sunlight and stored indoors, it is likely you will need to charge your INSTABOOM Go devices from the mains to provide continued operation.

Assuming use every 30 seconds during an eight hour shift, with the device switched off overnight, an INSTABOOM Go should provide reliable usage for two weeks. However, considering its use as a critical safety device, it is best to proactively manage the battery state.

The device features an easily accessible voltmeter next to the power switch. To see the voltage, switch the device on and press the button on the volt meter. You will see a numerical read out of the voltage.



Operational voltage guideline

	13.5	Fully charged
	11.5	Battery depleted. Charge immediately for continued operation

Behaviour and cutoff

When reaching a state of discharge, your INSTABOOM Go will provide a visual notification of this by illuminating the hazard beacon for 1 second in every 8 seconds. Once the battery reaches 11.5v the device will shut down and this will trigger a panic state with other interconnected devices. This requires human interaction by the operator to continue traffic management

Accessories

It is possible to use the battery inside your INSTABOOM Go to charge accessory devices you may have on site such as your mobile phone. This will affect the potential operating time of your device. **Please proactively manage the charge level in your INSTABOOM Go before deployment at the roadside.**

Charging

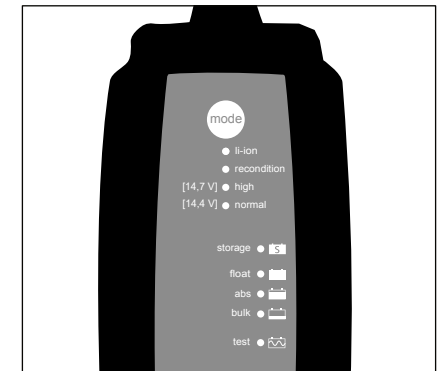
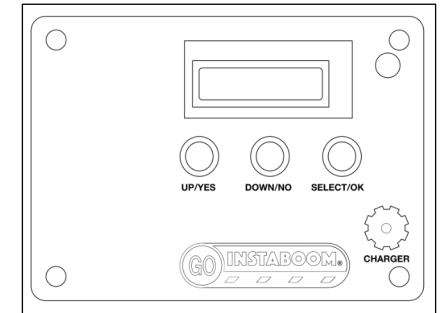
Your INSTABOOM Go is supplied with a Victron mains charger, adapted for use exclusively with INSTABOOM Go. Charging from the mains should only take place indoors.

Open the INSTABOOM Go case to reveal the control board. The charging socket is located on the control board case. Unscrew the blue cap to reveal the socket.

Plug the charger plug into the socket and screw the blue collar to secure the connection.

Connect the mains plug on the charger to a mains power supply and allow the charger to start up. It will assess the battery condition charge accordingly.

The INSTABOOM Go should be charged **ONLY** with the charger in **Normal** mode. If the charger is operating in any other mode, as shown by the status lights, press the **MODE** button repeatedly until **Normal** is illuminated.



Do not charge for more than 6 hours.

Charging should only take place with the lid open at all times.

