

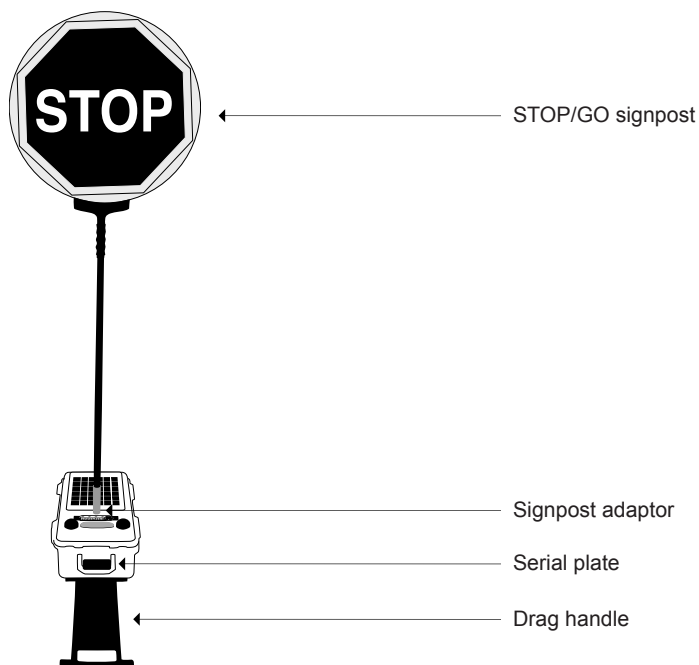
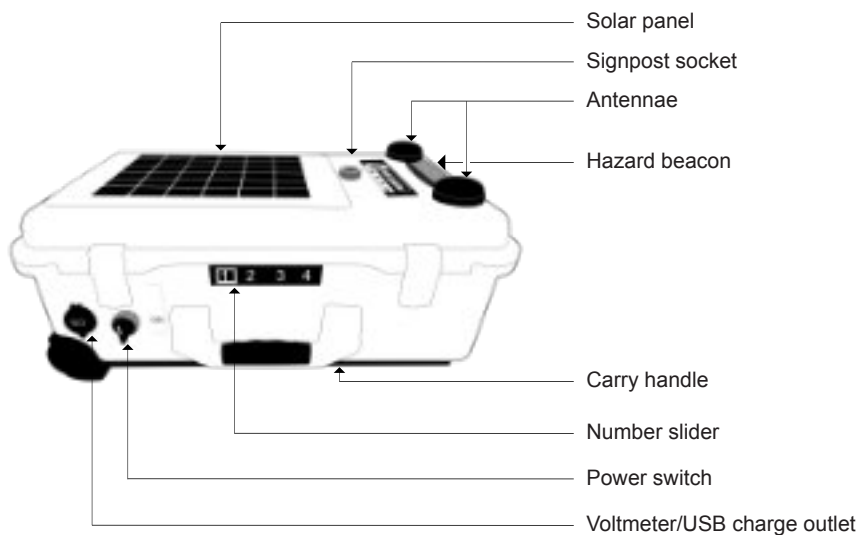


GO INSTABOOM
USER MANUAL

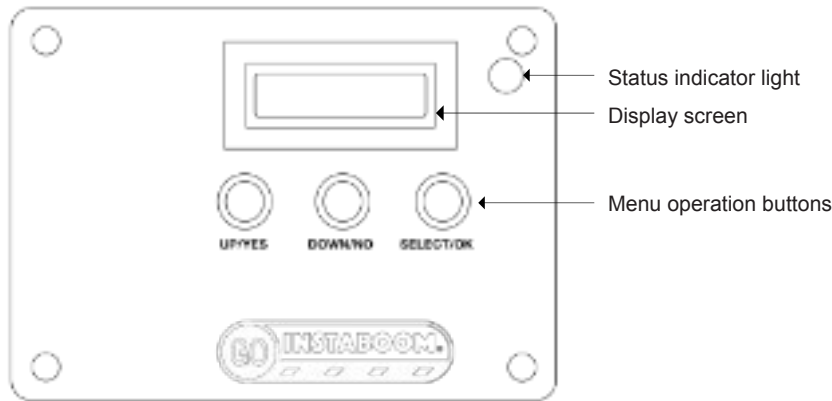
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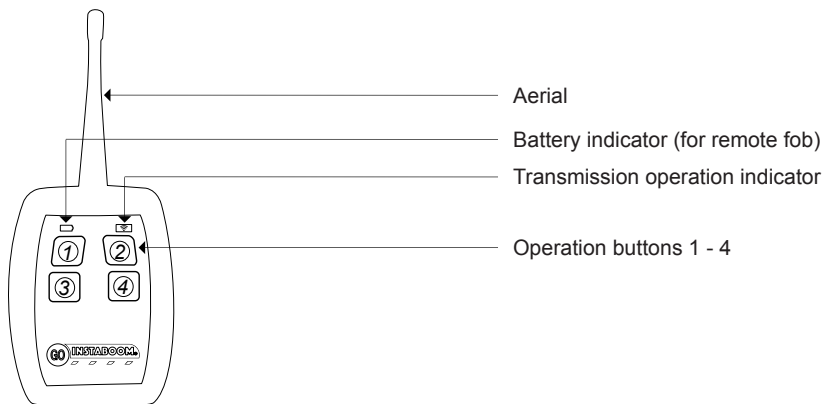
Component parts



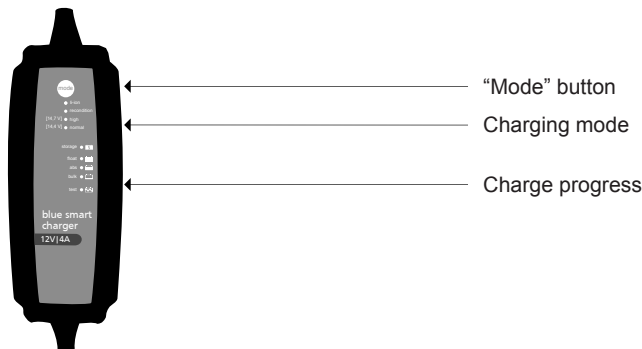
Control board



Remote fob transmitter

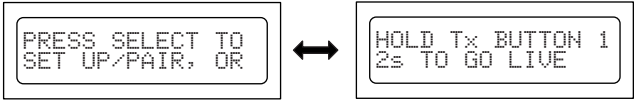


Mains charger



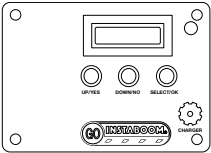
Set up and initiation of operation

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.

Navigate the menu using the **UP/YES** and **DOWN/NO** buttons. Menu items are adjusted by pressing the **SELECT/OK** button. The relevant changeable option will flash. Use **UP/YES** and **DOWN/NO** buttons to cycle through 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

Shown over the page is a map of the INSTABOOM Go menu tree. This allows you to see the options before they are presented to you with an explanation of the effect they have upon the device behaviour and your site setup.

IBGO SETTINGS ...

The display automatically cycles through the current configuration options selected.

CHANGE SETTINGS?
HOLD SELECT...3s

Hold the **SELECT/OK** button to enter settings menu.

>SIGN:STOP-GO

Select operating mode:
STOP-GO, FLAGGER.

>MODE:MASTER

Select behaviour mode:
MASTER, SLAVE1, SLAVE2,
SLAVE3, MANUAL.

>NO OF SLAVES:1

Select number of slave devices from 1 to 3 (only visible when MASTER mode selected).

>MinSTOPtime:3s

Set the minimum time (between 3 and 30 seconds) the system will remain in STOP state before allowing a change to GO state on any of the devices.

>MinGotime:3s

Set the minimum time (between 3 and 30 seconds) the system will remain in GO state before allowing a change to STOP state on any of the devices.

>SignOP:TwoPress

Set the mode of operation of the system between One Press and Two Press. See page 9.

>SitePrepMode:Y

Toggle the optional Site prep Mode on and off. See page 9.

>EXIT

Save settings and leave the menu.

PAIRING MODE?
HOLD SELECT...3s

Hold the **SELECT/OK** button to enter pairing mode. See page 11.

Only available when device set to MASTER

Explanation of options



If preferable, please scan the QR code or visit <https://youtu.be/MvFstlWxems> for a short video explaining these options.

SIGN

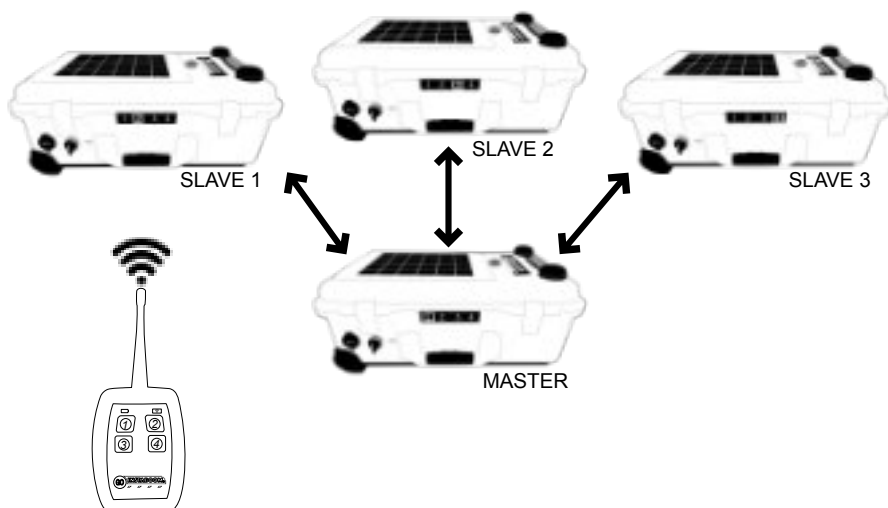
INSTABOOM Go can be used both to control traffic with a Stop/Go sign board and also to create a closure using a lightweight barrier or flagger device. As such, this menu option essentially switches between 180 degree rotation and 90 degree rotation.

When set to FLAGGER, radio synchronised operation is still possible. However, to use one device on its own, select MANUAL mode from the MODE setting and proceed to Pairing Mode to pair your remote.

MODE

INSTABOOM Go is designed to run with all devices interconnected wirelessly. In this mode, each device is connected to the others via 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 can be configured providing for a maximum of four devices able to be 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 fail-safe safety feature. In this mode, the user can control the state of each device independently using the supplied remote fob. *See page 19 for guidance on operating devices in this 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 lets you choose the number of SLAVES in the system. Set this number between 1 and 3 to tell the MASTER how many other devices it needs 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 between 3 seconds and 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 each.

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. The 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 it's 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 revert 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 halfway 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, allowing 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.



If preferable, please scan the code or visit <https://youtu.be/cw-TZLwv-mQ> to view a short video demonstrating this mode.

Pairing process

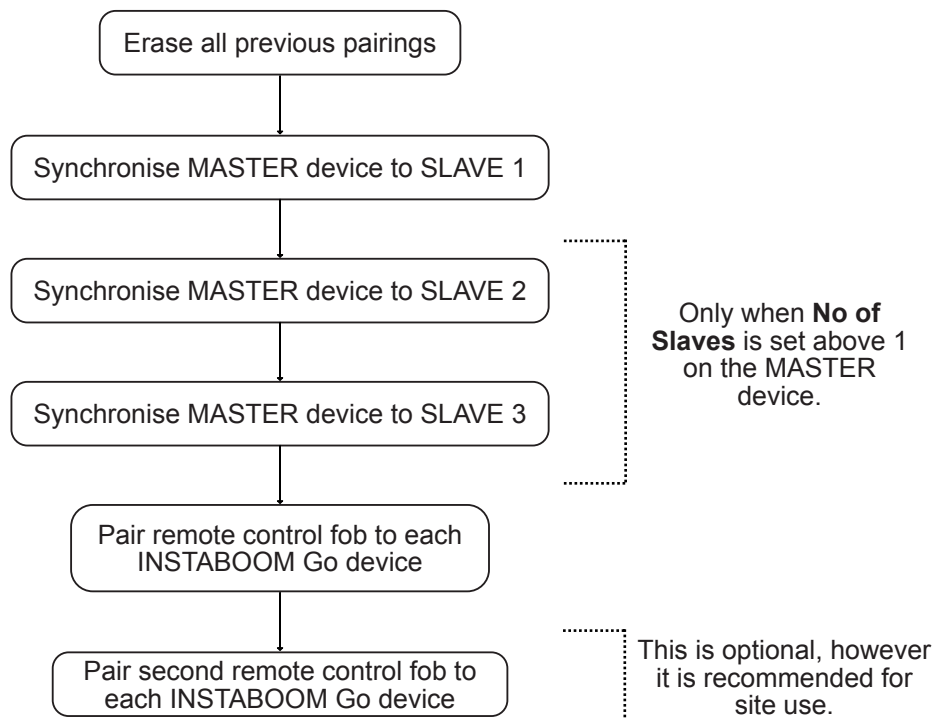


If preferable, please scan the QR code or visit https://youtu.be/82_OpbmJJ34 for a short video explaining these options.

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 typically 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:



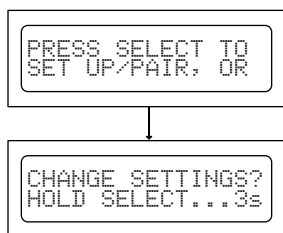


Lay out within reach the chosen INSTABOOM Go devices to be used for your site setup.

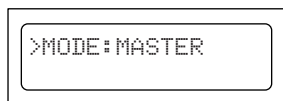
Use the number slider to help you to identify each unit as you programme it. This should be used to correspond with the buttons on the remote control fob so you know which button controls which device.

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

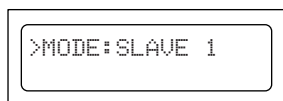
Open each case so that you can access the buttons on the Control Board.



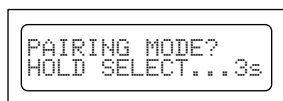
Switch on the first INSTABOOM Go and wait for it to boot. Press the **SELECT** button to enter the settings menu, as described on page 6.



Configure one INSTABOOM Go as the MASTER device. Change the settings to suit your desired setup as described on pages 8 and 9. Ensure the correct number of SLAVES are programmed.

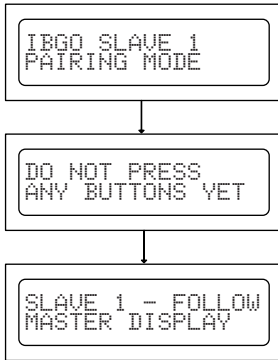


Turn on the remaining INSTABOOM Go devices and, following the same process, set them as SLAVE devices, each with different identity numbers, as shown in the table above.



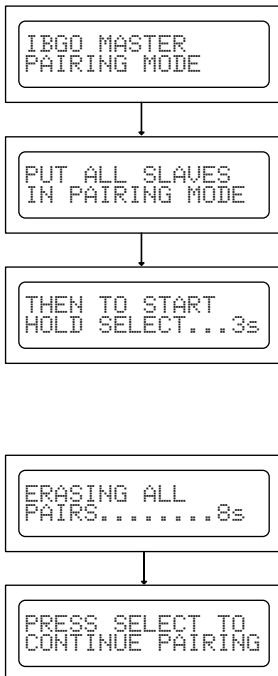
Once all the settings are made and you have selected EXIT from the settings menu, the screen will show this screen. Hold down the **SELECT/OK** button for three seconds to enter the Pairing Mode.

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 prompt you to refer to the MASTER device.



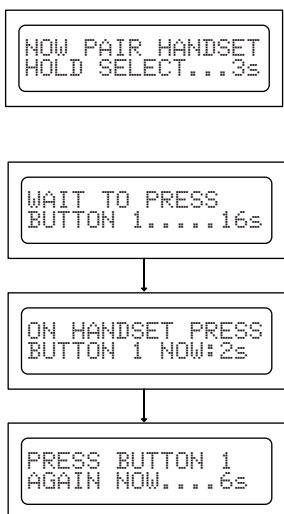
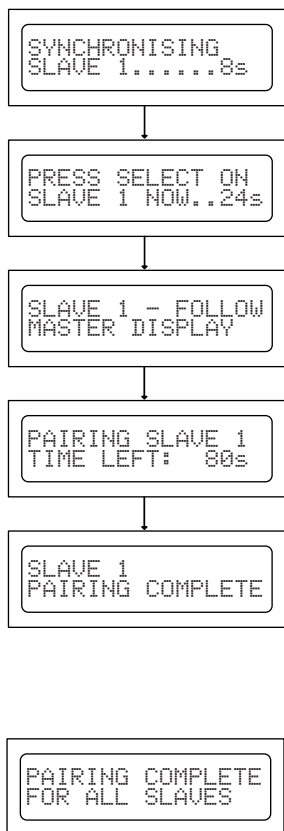
Returning to the MASTER device, now enter Pairing Mode and follow the on screen prompts.

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 that all the SLAVE devices are also ready. To continue 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.

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 until 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

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

is required

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.

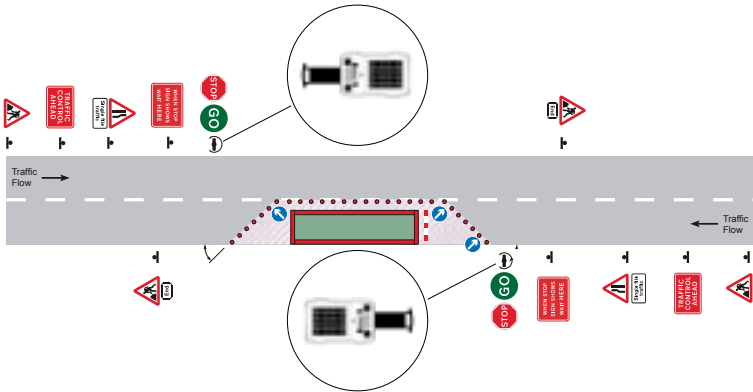
Once turned back on they will then be ready to use.

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.

How to use

In the United Kingdom, INSTABOOM Go Remote Operated Stop Go System should be used in conjunction with the guidelines issued by the UK Government. The document “Safety at street works and road works: A code of practice” is available from the government website at the following link.

<https://www.gov.uk/government/publications/safety-at-street-works-and-road-works>



When taking INSTABOOM Go to site, ensure first that the selected devices needed for the works to be undertaken have previously been paired. This process can take some time and it is easier to arrive to site with devices already paired and ready to run (see page 11). Once paired, the units may be safely switched off for transport and will not require to undergo pairing again.

When you arrive at site, switch on all of the INSTABOOM Go devices. They will follow their boot sequence moving to both the GO and STOP positions. If selected during setup, they will all then move to the halfway position and await the go live command.

Place an INSTABOOM Go device at each position according to the design of your works, such that it is laid down with the black handle and beacon facing foremost to the oncoming traffic flow. Note which machine number is placed in each position.

NOTE: Correct orientation of the case is critical to the safety of this product.

NOTE: Only operate INSTABOOM Go while maintaining line of site of entire set up at all times.

If supplied with a collapsible STOP/GO sign, assemble the pole being certain to click into place the popper spring clips. These ensure the correct orientation of the sign and prevent it being fitted the wrong way round. Insert the Stop/Go sign into the socket on the top of the INSTABOOM Go. It will only fit in one way. Follow usage instructions on the following pages as appropriate to your chosen mode of operation.

Two-button operation mode



If preferable, please scan the QR code or visit <https://youtu.be/BI9XuGTt2V4> for a short video explaining these options.

START OPERATION

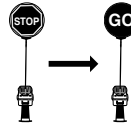
On the remote control fob, push and hold button 1 for 2 seconds, until the LED stops flashing.

The beacon on all devices will flash as the establish an interconnected radio link.

All devices will rotate to face the oncoming traffic. All devices will be set to STOP.

Move a sign to GO state

Press and release the button on the remote control fob, corresponding to the INSTABOOM Go device which you would like to set to GO

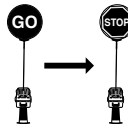


There is a momentary delay before the sign moves, while radio communications are undertaken. This is a safety feature.

Do not hold the button down. Do not press the button a second time. A second press before the device moves will cancel the operation.

Move sign back to STOP

After the minimum Go time (see Settings) press and release any button on the remote.



END OF OPS: SET DOWN MODE

On the remote control fob, push and hold button 2 for 2 seconds.

Release when the beacon starts flashing on the MASTER device. All signs move to be 90 degrees to traffic.

One-button operation mode



If preferable, please scan the QR code or visit <https://youtu.be/BI9XuGTt2V4> for a short video explaining these options.

START OPERATION

On the remote control fob, push and hold button 1 for 2 seconds, until the LED stops flashing.

The beacon on all devices will flash as the establish an interconnected radio link.

All devices will rotate to face the oncoming traffic. All devices will be set to STOP.

Move a sign to GO state

Press and release the button on the remote control fob, corresponding to the INSTABOOM Go device which you would like to set to GO



There is a momentary delay before the sign moves, while radio communications are undertaken. This is a safety feature.

Do not hold the button down. Do not press the button a second time. A second press before the device moves will cancel the operation.

Move another sign to GO

After the minimum Go time (see Settings) press and release the button on the remote for the next device selected to move to GO.



The MASTER will first rotate the initial device back to STOP, then it will wait the pre-defined minimum time (minimum 8 seconds) before rotating your chosen sign to GO.

END OF OPS: SET DOWN MODE

On the remote control fob, push and hold button 2 for 2 seconds.

Release when the beacon starts flashing on the MASTER device. All signs move to be 90 degrees to traffic.

Manual operation mode

START OPERATION

On the remote control fob, push and hold each button for 2 seconds, one at a time, until the beacon stops flashing.

The beacon on all devices will flash as the establish an interconnected radio link.

The devices will rotate to face the oncoming traffic with the STOP sign face.

Move a sign to GO state

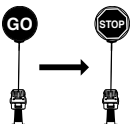
Press and release the button on the remote control fob, corresponding to the INSTABOOM Go device which you would like to set to GO



The device will move immediately since in this mode there is no radio communication. There are no minimum time restrictions and it is possible to set two signs to the Go state! **Maintain light of site of full operation at all times.**

Move sign back to STOP

Press and release the same button to rotate the GO device back to STOP



END OF OPS: SET DOWN MODE

On the remote control fob, push and hold each button for 2 seconds.

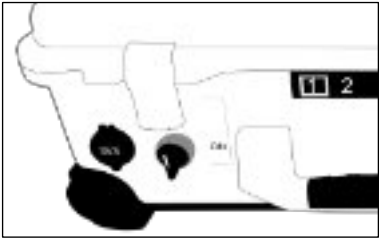
Release when the beacon starts flashing on each device. The sign will move to be 90 degrees to traffic.

Battery performance and solar power


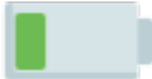
Your INSTABOOM Go is designed to provide long periods of use between charges. The solar panel provides charging for the internal battery when used outside. However, when used out of direct sunlight and stored indoors, it is likely you will need to charge your INSTABOOM Go devices from the mains to provide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

Assuming a use rate of 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.**

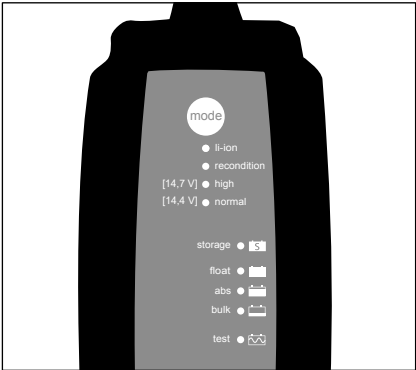
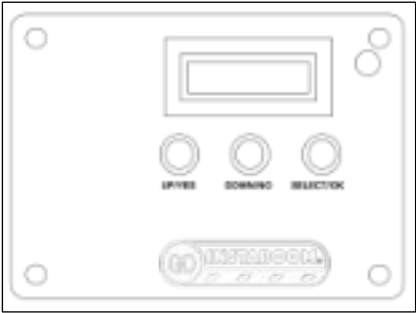
Charging

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 a fly lead inside the case. Plug the charger plug into the socket on the fly lead.

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.

When charging, ensure that lid is open at all times

