Pretorian TECHNOLOGIES

INSTRUCTIONS

BLUELINE Joystick

Pack Contents

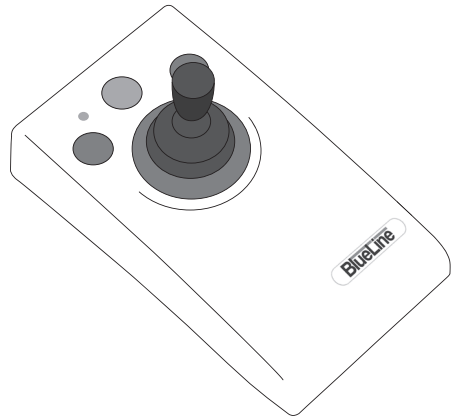Carefully check the contents of the box, which are:

BLUELINE Joystick
T-Bar knob
Sponge ball knob
USB Charging Cable
These instructions

Product Description

BLUELINE is a compact desktop Bluetooth Joystick allowing direct wireless connection to any computer or tablet that has built-in Bluetooth and supports mouse connectivity. Ideal for connection to iPad or iPhone using iOS Assistive Touch to give precise cursor movement without the need for fine motor skills, **BLUELINE** also allows easy connection to Android devices and desktop computers that either have Bluetooth or may be fitted with a Bluetooth dongle.

BLUELINE includes three recessed buttons and two sockets for external switches, all of which can be individually configured according to the user's precise needs. The unit also supports four cursor speed settings which may be changed by the user. Other button options include swipe left and swipe right, which are ideal for page turning, in addition to drag-lock and dwell-click features.
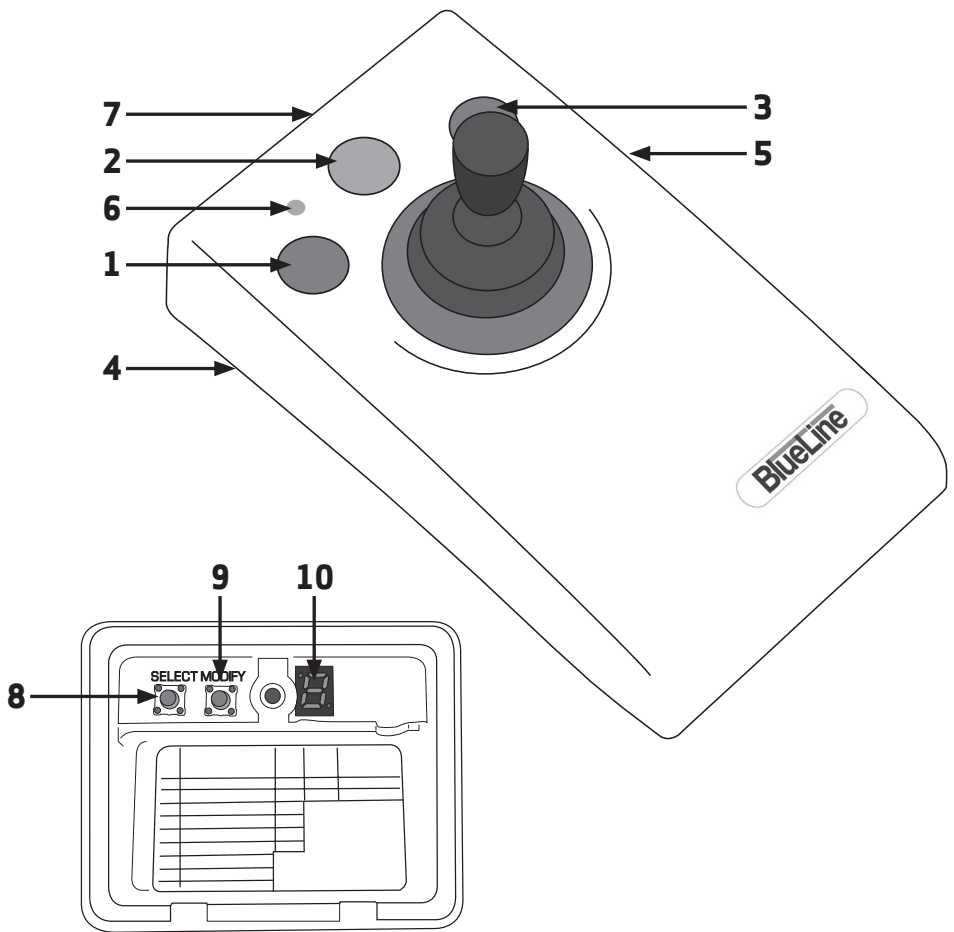
All programmable features are stored in non-volatile memory and are automatically recalled each time the unit is used, irrespective of the device it is used on. This allows the joystick to be configured for a particular user without needing access to their device, which is of particular value to OT Centres with remote clients.

BLUELINE has a built-in rechargeable lithium battery which typically gives 15 hours of constant use between charges. In practice the time between charges is likely to be several days, depending on use. The unit is supplied with a charger cable which works via any USB socket and can continue to be used while charging.

Dimensions 18 x 10 x 12cm. Supplied with three interchangeable knobs (acorn, T-Bar and soft-ball).

Features

- Bluetooth wireless connection direct to computer or tablet. Perfect for iOS Assistive Touch and Android.
- Built-in lithium rechargeable battery.
  Typically gives 15 hours of constant use between charges.
- Automatically sleeps when not in use to conserve battery.
- Four cursor speed settings.
- Three recessed buttons and two sockets, all individually programmable to include:
  - o   Left, Middle and Right click.
  - o   Drag, Delayed Drag and Double-Click.
  - o   Swipe Left and Swipe Right (ideal for page turning).
  - o   Cursor speed setting.
- Dwell click feature.
- T-Bar and Soft-ball handles also included.
- Robust construction.
- Light touch movement.

Compatibility

BLUELINE Joystick works with any computing device which has built-in Bluetooth, or that may be fitted with a Bluetooth dongle, and supports mouse connectivity. In the case of Apple tablets and phones, the device must have iOS13, iPadOS13 or later installed to make use of its AssistiveTouch mouse support. These versions of iOS cannot be installed on some older devices.

Charging Your BLUELINE

BLUELINE may be charged from any USB socket, whether on a computer or a plug-in charger. Simply plug the supplied charging cable into the socket on the rear of **BLUELINE** [7] and then into the charging port. The LED [6] will light green to indicate the unit is charging and will turn off when charging is complete.

Charging a completely flat battery takes around 3 hours and the Joystick may be used while it is charging. A fully charged battery will give approximately 15 hours of constant use. When the LED [6] flashes red once every few seconds, it's time to recharge.

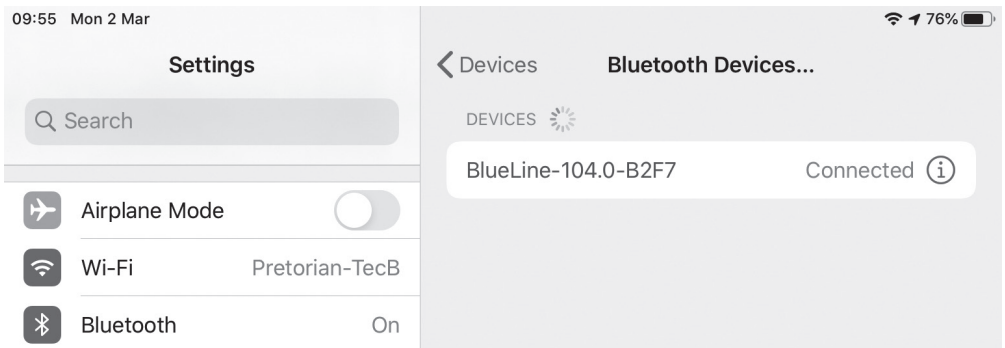# Connecting to Apple Devices (iOS13.4.1 onwards)

Before you can begin using **BLUELINE** Joystick, you must first connect it to your Apple device over Bluetooth. Make sure **BLUELINE** is awake and available for connection by pressing any of its buttons and observing the red flashing LED. Navigate to Settings ➡ Accessibility ➡ Touch ➡ Assistive Touch ➡ Devices ➡ Bluetooth Devices and look for **BLUELINE** in the list of available devices. It will appear as something like this:

BlueLine-104.0-ABC1

You may be asked to confirm that you wish to connect to the device. Please don't navigate away until the connection is made.

The four letters and numbers at the end are also written on the underside of your **BLUELINE** to help identify which unit you are connecting. This is useful where there are multiple similar devices in one room. When you see your **BLUELINE** appear in the list of available devices, tap on it and it will connect in approximately 15 seconds.

Videos showing how to connect **BLUELINE** to an Apple Device can be found at www.pretorianuk.com/blueline.

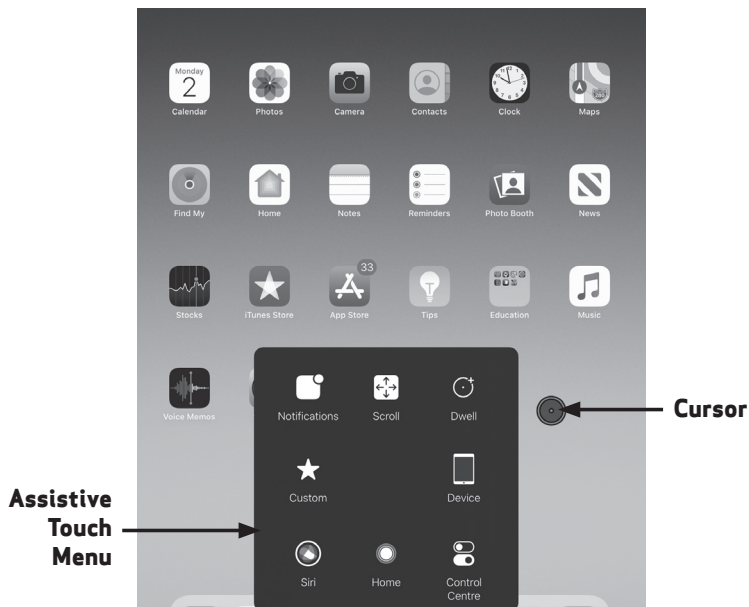| 09:55 Mon 2 Mar	🛜 ⬈ 76% 🔋
Settings	**‹** Devices **Bluetooth Devices...**
🔍 Search	DEVICES ⟳
	BlueLine-104.0-B2F7 Connected ⓘ
✈️ Airplane Mode ⬜	
🛜 Wi-Fi Pretorian-TecB	
✳️ Bluetooth On	

If you do not observe the flashing red LED [6] when waking the Joystick, please ensure its battery is charged and that it is not already connected to another device. Depending on the settings, moving the Joystick may not wake the unit. It is always best to press one of the three buttons for wakeup.

Once the Bluetooth connection has been made, a cursor will appear on screen. By default the left button will function as select item, the middle button has no function and the right button gives an additional menu when clicked on an app (assuming default setting of your **BLUELINE**).

You only need to navigate to the Assistive Touch menus if you wish to customise the buttons on **BLUELINE** to include settings not available in the **BLUELINE** itself (for example Home). If you wish to make the middle button Home, for example, then you must navigate to Settings ➡ Accessibility ➡ Touch ➡ Assistive Touch ➡ Devices and then click on the arrow adjacent to the **BLUELINE** device, tap on Customise Mouse Buttons and follow the on-screen instructions. Once this is complete, to make the customisation effective you must turn on Assistive Touch in the Assistive Touch menu.

A further button customisation which may be beneficial for some users is assigning one of the **BLUELINE** buttons to be the Assistive Touch menu. If you wish to make the right button give this function, proceed as above and choose Open Menu, again remembering that Assistive Touch must be turned on for the change to be effective.

Settings ➤ Accessibility ➤ Pointer Control allows you to make changes to the size and colour of the cursor and whether it auto-hides. The 'Pointer Animations' setting, which defaults to on, is the function that makes the cursor auto-hide when over an app. This can be disconcerting for some users; in which case the slider can be used to turn the feature off. Visually impaired users may also benefit from the Increase Contrast setting.

Cursor

Assistive Touch Menu

Connecting to Other Devices

Before you can begin using your **BLUELINE** Joystick, you must first connect it to your device. The exact method may differ slightly from device to device, but the following basic steps will always be necessary:

1. Turn on Bluetooth on your device, or if your device does not have Bluetooth, purchase and plug in a Bluetooth dongle and configure it as indicated in its instructions.

2. Ensure your **BLUELINE**'s battery is charged and wake it by pressing any of its three buttons. Observe the flashing red LED to indicate that it is available for connection.

3. Look for the **BLUELINE** in the list of available Bluetooth devices and either click or tap on yours, using the 4 letter/digit number written on the base of **BLUELINE** to help identify it. Observe that it connects after a few seconds. The device will appear in the list of available devices as something like this:

   BlueLine-104.0-ABC1.

4. Check that the cursor moves as the joystick is moved and, where necessary, configure the buttons on **BLUELINE** by reference to the following sections of these instructions.

5. If you are unable to connect **BLUELINE** to your device, please refer to the troubleshooting guide at the end of these instructions before referring to your supplier or to Pretorian.

Configuring Buttons and Sockets

BLUELINE is fitted with three buttons [1,2,3] and two 3.5mm sockets [4,5] for the connection of external switches, all five of which may be individually programmed for function using the display [10] and keypad [8,9] inside the flap on the underside of the unit. The following is a summary of each setting:

- **Left Click.** On Apple devices this function works as Select.

- **Middle Click.** On Apple devices this function works as Home.

- **Right Click.** On Apple devices this function brings up the AssistiveTouch menu.

- **Drag.** Equivalent to holding down Left Click. Convenient when moving items around on screen on all types of device. May be cancelled by pressing any button or switch. Unit beeps whenever Drag is engaged or disengaged, if the buzzer is enabled.

- **Delayed Drag.** A short press is equivalent to Left Click but if a button or switch configured to Delayed Drag is pressed for more than a second, it is latched on (and the unit beeps, if the buzzer is enabled). Press any button or switch to cancel. Button 3 cannot be configured as Delayed Drag. Note that Apple devices have this feature built in, so it may be selected in the AssistiveTouch menu instead if preferred. Do not engage this feature in both places.

- **Double Click.** Gives two short clicks of Left Click (and the unit beeps twice, if the buzzer is enabled). Generally, not useful in Apple devices, although used extensively on PCs to open apps and files. Provided to allow users with low dexterity to double click by pressing one button or switch.

- **Move Right.** Provided to allow users to effect Page Back in apps such as iBooks and Kindle, especially on tablet devices.

- **Move Left.** Provided to allow users to effect Page Forward in apps such as iBooks and Kindle, especially on tablet devices.

- **Cursor Speed.** Allows any button or switch to be configured to change the cursor speed. Alternatively, this may be achieved by pressing and holding Button 3- see later section. When a button or switch is set to Cursor Speed, each successive press increases the speed up to maximum and then a further press changes it to minimum. Each time the speed is changed, the unit emits several beeps with one beep indicating the slowest speed and four the fastest.

To make changes to any of the settings, remove the flap using a screwdriver, then follow these steps:

1. First choose the setting you would like to change using Table 1. For example, if you would like to change the setting of Button 2 (the middle button), you need to choose function 2 whereas for the right socket, it's 5.

2. Press the button marked Select [8] repeatedly until the required number appears on the display [10], then wait. After a short period the unit beeps and the display shows the current setting without making any changes. Note that settings are always letters.

3. If you would like to change that particular setting, press the Modify button [9] repeatedly until you see the correct letter. For example, to set it to Double Click, make sure the display shows 'F'.

4. If you would like to change more settings, repeat from step 2 until you have made all the changes.

5. Once all your changes have been made, allow the display to clear and they will be saved in non-volatile memory so they will be retained even if you move **BLUELINE** to another device or the battery becomes flat.

	Button 1	Button 2	Button 3	Left Socket	Right Socket
	1	2	3	4	5
A	**Left Click**	Left Click	Left Click	Left Click	Left Click
B	Middle Click	**Middle Click**	Middle Click	Middle Click	Middle Click
C	Right Click	Right Click	**Right Click**	Right Click	Right Click
D	Drag	Drag	Drag	Drag	Drag
E	Delayed Drag	Delayed Drag	-*	Delayed Drag	Delayed Drag
F	Double Click	Double Click	Double Click	Double Click	Double Click
G	Swipe Right	Swipe Right	Swipe Right	**Swipe Right**	Swipe Right
H	Swipe Left	Swipe Left	Swipe Left	Swipe Left	**Swipe Left**
J	Cursor Speed	Cursor Speed	Cursor Speed	Cursor Speed	Cursor Speed

Table 1: Button and Socket Settings

Bold = Default

* Delayed Drag may not be selected on Button 3.

Configuring Dwell Click Feature

BLUELINE has a Dwell Click feature which may be used to effect a Left Click whenever the cursor remains still for a selected period of time. It is useful when users have difficulty in clicking any button or switch. By default this feature is off. Note that Apple devices have a similar feature built in, so it may be selected in the AssistiveTouch menu instead if preferred. Do not engage this feature in both places.

To make changes to this setting, follow these steps:

1. Press the button marked Select [8] repeatedly until '6' appears on the display [10]. After a short period the unit beeps and the display shows the current setting without making any changes.

2. If you would like to change the setting, press the Modify button [9] repeatedly until you see the required letter. For example, to set it to 3 seconds dwell time, make sure the display shows 'D'. Table 2 shows the settings for the Dwell feature.

3. Once any changes have been made, allow the display to clear and they will be saved in non-volatile memory so they will be retained even if you move **BLUELINE** to another device or the battery becomes flat.

	Dwell	Buzzer	Joystick Wakeup
	6	7	8
A	**Off**	**On**	**Off**
B	1 sec	Off	On
C	2 sec		
D	3 sec		
E	4 sec		
F	5 sec		

Table 2: Button and Socket Settings
Bold = Default

Configuring the Buzzer

BLUELINE contains a buzzer to allow it to announce when certain features are engaged or disengaged. For example, the unit beeps once whenever Drag is engaged and again when it is disengaged. Similarly, double-click is announced by two short beeps. The unit also beeps whenever a Dwell Click is effected. The number of beeps emitted when changing the cursor speed indicates the current setting, with increasing numbers of beeps indicating increasing speed. By default the buzzer is on.

Although useful in many circumstances, the buzzer can be distracting for some users and it can therefore be turned off. To change its setting, follow these steps:

1. Press the button marked Select [8] repeatedly until '7' appears on the display [10]. After a short period the unit beeps and the display shows the current setting without making any changes.

2. If you would like to change the setting, press the Modify button [9] repeatedly until you see the required letter – either 'A' for On or 'B' for Off. Table 2 also shows these settings.

3. Once any changes have been made, allow the display to clear and they will be saved in non-volatile memory so they will be retained even if you move **BLUELINE** to another device or the battery becomes flat.

Note that even when the buzzer is disabled, it is still used occasionally to help with making changes to the settings and to inform the user when the unit is being manually powered off. In addition, a Dwell Click always results in a beep.

Configuring Joystick Wakeup

BLUELINE is designed to go to sleep automatically after approximately 20 minutes of inactivity to conserve the battery and can also be put to sleep manually (see next section), which is especially useful if you are going to be transporting it. Once asleep, the unit monitors for new activity and automatically wakes up so that you can carry on working. The Bluetooth connection is lost while asleep although re-connection is both automatic and quick- usually a matter of about 5 seconds.

By default, only button and external switch activity will wake up the unit. However, it is possible to program the unit to also wake up on joystick movement. This may be beneficial for some users as any activity can then wake the unit. On the other hand, it may be a disadvantage to therapists who frequently transport the unit since it could result in the unit waking due to joystick movement while in transit.

If you set **BLUELINE** to wake up on joystick movement as well as button/switch activity, it will consume more power when asleep and will require charging more frequently.

To change the Joystick Wakeup setting, follow these steps:

1. Press the button marked Select [8] repeatedly until '8' appears on the display [10]. After a short period the unit beeps and the display shows the current setting without making any changes.

2. If you would like to change the setting, press the Modify button [9] repeatedly until you see the required letter – either 'A' for Off (wakeup on buttons/switches only) or 'B' for On (wakeup on buttons, switches and joystick movement). Table 2 also shows these settings.

3. Once any changes have been made, allow the display to clear and they will be saved in non-volatile memory so they will be retained even if you move BLUELINE to another device or the battery becomes flat.

Manual Sleep

BLUELINE is designed to go to sleep automatically after approximately 20 minutes of inactivity to conserve the battery, although it can also be put to sleep manually by pressing and holding both buttons [1] and [3] for 5 seconds. At the end of the 5 second period, a high to low beep is emitted, the Bluetooth connection is disabled and the unit goes into a low power mode where the battery will last many weeks.

It may be woken up by pressing any button or external switch. Optionally it may also be awoken by joystick movement- see Configuring Joystick Wakeup section (above) for more details.

Alternative Method for Setting Cursor Speed

For users who would like control of the cursor speed, it is possible to set any button or external switch to work as Cursor Speed (see Configuring Buttons and Sockets section above). For many users such a facility is not necessary, in which case the speed is generally set by a therapist or carer in the first place and never changed. Such a setting can be made without configuring any of the buttons or switches as Cursor Speed.

Instead, press and hold Button [3] for 5 seconds until a warbling beep is heard. Then, to increase the cursor speed, press Button [2] or to decrease it, press Button [1]. The changes can be observed immediately when moving the cursor. Additionally, the unit emits several beeps according to the current speed setting, with one beep indicating the slowest speed and four beeps indicating the fastest.

When the best speed has been determined for the user, press and hold Button [3] for 5 seconds. The unit again emits a warbling beep and the new speed setting is saved in non-volatile memory.

Restoring Default Settings

It is possible to restore factory defaults settings, as indicated by the bold entries in Tables 1 and 2, by pressing and holding the Modify button [9] for 10 seconds. The unit will emit four short beeps and all settings will return to their factory defaults.

Accessories

Your **BLUELINE** is supplied with three knobs (acorn knob fitted and both T-bar and sponge ball knobs supplied loose) and a charging cable. Replacement knobs are available from Pretorian as well as alternative knobs for special requirements. While it is possible to purchase a replacement charging cable from Pretorian, they are also widely available from electrical hardware retailers, including online retailers. Please request a cable with a USB type 'A' plug and USB-mini plug. These are often referred to simply as camera cables.

Notes about Bluetooth Connections

When you connect Bluetooth devices, both the device and the host (your tablet, phone or computer) agree a unique address and that is what allows the device to reconnect to the host when you bring it into the vicinity of the host or when you wake up the device. The address is held in both the device and the host.

If you take the device out of the vicinity of the host to which it is connected and the connection is lost due to distance, it will reconnect when you bring the device back into range, unless it has been connected elsewhere in the meantime. If, for example a therapist has a **BLUELINE** connected to their own iPad in the office, but then takes it off site to carry out an evaluation of a client, a new address will be created when the therapist connects the **BLUELINE** to the client's iPad.

Then, when the therapist returns to their office, although the **BLUELINE** appears still to have a connection with their iPad, that connection can't be re-made because the address held in the **BLUELINE** has now changed. All Bluetooth devices work in this way.

To rectify this situation on an Apple tablet or phone, use the 'Forget this Device' feature in Settings ➔ Accessibility ➔ Touch ➔ AssistiveTouch ➔ Devices ➔ Bluetooth Devices and re-connect it as described at the beginning of these instructions. On other computers, navigate to the Bluetooth device menu and forget or remove the device.

Maintenance

Your **BLUELINE** Joystick has no user serviceable parts. If repair becomes necessary, the unit should be returned to Pretorian Technologies or an authorised distributor.

Warranty

Your **BLUELINE** Joystick is warranted for 24 months from the date of purchase against defects in manufacture or component failure. The unit is designed for domestic, educational and commercial applications. Use outside these areas will invalidate the warranty. Unauthorised repair or modification, mechanical abuse, immersion in any liquid or connection to any charging equipment other than a working USB socket will invalidate the warranty.

Troubleshooting

If your **BLUELINE** Joystick does not operate correctly, please use the following guide to determine the cause. If, after following this guide, your unit still does not operate, please contact your supplier before returning it.

Symptom	Possible Cause/Remedy
BLUELINE does not appear in the list of available devices on my Apple tablet/phone.	Ensure **BLUELINE** is fully charged and turned on (press any button). **BLUELINE** will NOT appear in Settings ➝ Bluetooth. Instead, look in Settings ➝ Accessibility ➝ Touch ➝ AssistiveTouch ➝ Devices ➝ Bluetooth Devices.
When **BLUELINE** is woken up the LED stops flashing almost immediately and it doesn't appear in the list of available devices.	**BLUELINE** has reconnected to a previous device which is in range. If the previous device is an Apple tablet or phone, go to Settings ➝ Accessibility ➝ Touch ➝ AssistiveTouch ➝ Devices ➝ Bluetooth Devices, select the device and then 'Forget this Device'. On other computers, navigate to the Bluetooth device menu and forget or remove the device.
BLUELINE appears in the list of devices on my tablet/ computer but will not reconnect.	You may have connected the **BLUELINE** to a different host tablet/computer in the meantime. If your device is an Apple tablet or phone, you will need to navigate to Settings ➝ Accessibility ➝ Touch ➝ AssistiveTouch ➝ Devices ➝ Bluetooth Devices, select the device and then 'Forget this Device'. On other hosts, navigate to the Bluetooth device menu and forget or remove the device.
BLUELINE doesn't wake up when I move the joystick.	Please refer to the Configuring Joystick Wakeup section.
Pressing a particular button or socket on **BLUELINE** does not do what I expected.	Review the settings using the display and keypad inside the compartment on the rear of the unit and change if necessary.
Shortly after I stop moving the joystick **BLUELINE** beeps and things get selected.	You have Dwell Click turned on. Please refer to the Configuring Dwell Click Feature section.
I find the beeps that **BLUELINE** emits distracting	Please refer to the Configuring the Buzzer section.

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For use with firmware 104.0 and iOS/iPadOS 13.4.1

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