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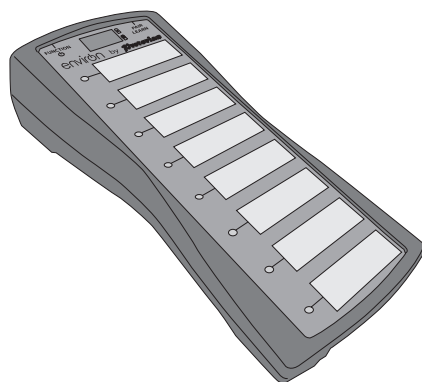
INSTRUCTIONS

enviRON Scanning Remote Control

Pack Contents

Carefully check the contents of the box, which are:

EnvirON Remote
Universal wall adapter
Configuration chart
These instructions



Product Description

EnvirON Remote is a handheld or mountable remote control which forms part of the innovative EnvirON range of Environmental Controls. The unit may be used with any combination of EnvirON receivers, typically EnvirON Hub, iClick or EnvirON Connect, to control the user's surroundings.

Because EnvirON Remote is a wireless device it does not suffer from the directional behaviour of infra-red based systems, allowing the user the freedom to place the remote in any position and at any angle to achieve the most comfortable and practical configuration. EnvirON Hub then converts the wireless signals from EnvirON Remote to infra-red.

Each of the eight touch sensitive buttons may be configured to work with any receiver to achieve any combination of wireless and infra-red functions. Multiple buttons may also be grouped together for use with a single receiver, making programming very straightforward. The function of each button may be configured using the built-in display.

For users who may have difficulty using the touch buttons, two 3.5mm sockets on the rear of the unit allow one or two-switch scanning to be used instead.

The unit has a built in rechargeable lithium-ion battery to provide several days of use between charges, or it may be permanently powered from a supplied wall adapter or from a wheelchair auxiliary power port.

Each of the eight buttons may be marked with a pen or with suitable self-adhesive labels to indicate their functions.

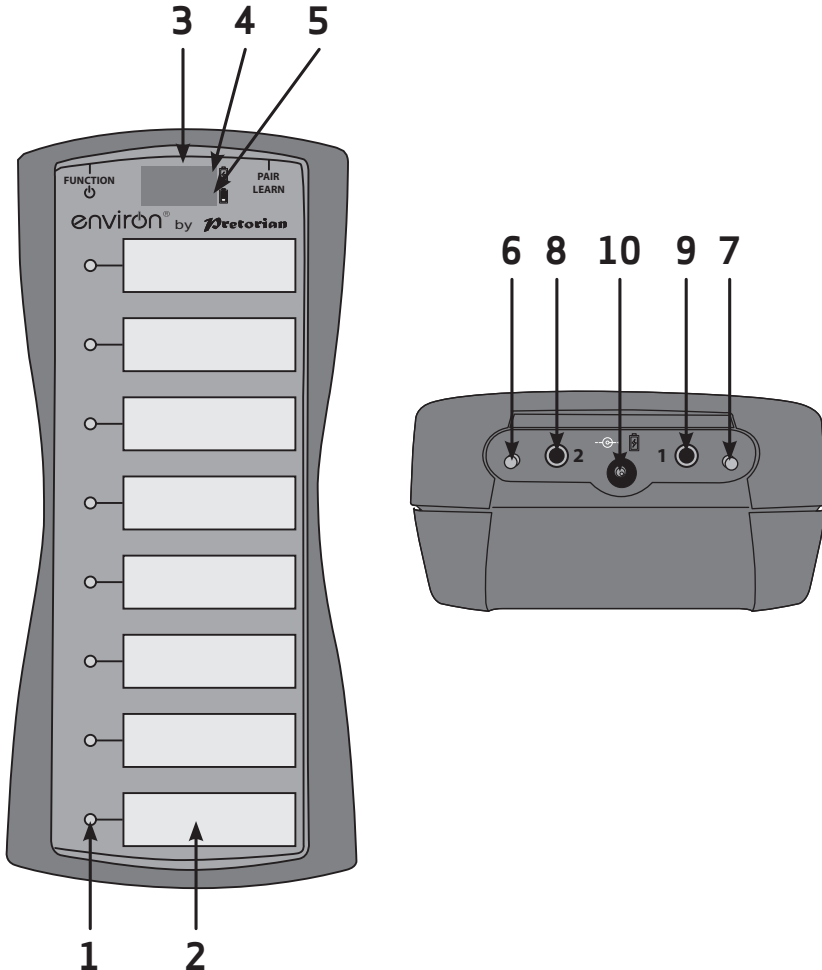
When used in conjunction with the EnvirON App for iPhone and iPad, the EnvirON range of products can be used to control almost any electrical appliance including TVs, audio equipment, lamps, kitchen appliances, door, window and curtain openers and electrical locks.

EnvirON Remote is packed with features to make life easier and more rewarding for users. To get the most from this range of products, please take the time to read this manual. Pretorian also recommends that the instructional videos on its website be accessed and the EnvirON Configuration Guide be read prior to configuring an EnvirON system.

Features

- Eight programmable, touch-sensitive buttons.
- Can be paired with multiple EnvirON receivers to control multiple appliances.
- Can control wireless and infra-red* devices.
- Does not need to be in line of sight of infra-red devices.
- Single or two-switch scanning option.
- Built-in rechargeable battery.
- Free standing or mountable.
- Works simultaneously with other EnvirON devices and the EnvirON App.

* Requires EnvirON Hub



Setting up Your EnvirON Remote

Step 1. Powering Up.

Clip the correct arrangement of pins for your location onto the wall adapter and then plug it into a convenient wall socket. The adapter is designed to work with all supply voltages and frequencies. Plug the connector on the end of the lead into the charging socket on the rear of EnvirON Remote [10] and the charging LED [4] will light. The charging LED is extinguished once the battery is fully charged after which you can disconnect the power cable. You don't need to wait for the unit to fully charge before beginning to use it. Alternatively, if you intend to permanently power the unit from the wall power, don't remove the power cable once the charging LED is extinguished. If you wish to power the unit from the auxiliary power of your wheelchair, please contact either Pretorian or your wheelchair vendor.

Step 2. Pair each button.

First of all, decide which buttons you wish to use with which appliances. For example, you may want to use the first five buttons to control a TV (via EnvirON Hub), two to control two electrical devices (via iClick) and one to open a door (via Environ Connect). It will make setting up your EnvirON Remote easier if you write your choices on the provided Configuration Chart using a dry-wipe pen- for example:

Configuration Chart				
Button	Appliance	Via	Function	Code
1	Lamp 1	iClick Socket 1		
2	Lamp 2	iClick Socket 2		
3	TV	Hub		
4	TV	Hub		
5	TV	Hub		
6	TV	Hub		
7	TV	Hub		
8	Door	Environ Connect		

Note that all infra-red functions must go through EnvirON Hub since this is the device which converts wireless signals to infra-red. Mains electrical devices are always controlled via iClick and Door/ Window/ Curtain/ Lock controls are always controlled via Environ Connect. By writing these in the 'Via' column, you are compiling a list of which buttons need to be paired with which receiver.

The next step is to pair each touch button with its respective receiver. This applies whether or not you will use the touch buttons, i.e. you must still carry out this step even if you will be using switch scanning.

To pair touch button 1 with iClick Socket 1, first make sure iClick is in EnvirON mode by pressing the Mode button until the EnvirON LED lights. Then press the PAIR 1 button on iClick and observe the adjacent LED flashing. Now press and hold the Pair button [6] on EnvirON Remote and then touch button 1. Once pairing has taken place (usually no more than 1 second), the flashing LED on iClick lights steadily for a few seconds. EnvirON Remote displays 'P' on its display [3] and button 1 LED also lights. You may now release both PAIR and the touch button.

Next, begin pairing touch button 2 with iClick socket 2 by pressing PAIR 2 on iClick. Now press and hold the Pair button [6] on EnvirON Remote and then touch button 2. Again, the flashing LED on iClick lights steadily for a few seconds. EnvirON Remote displays 'P' on its display [3] and button 2 LED also lights.

Next, pair touch buttons 3 to 7 (inclusive) with Hub. Press the PAIR button on Hub and observe its pairing LED flashing. Now press and hold the Pair button [6] on EnvirON Remote and then touch button 3 only. Once pairing has taken place, the flashing LED on Hub lights steadily for a few seconds. EnvirON Remote displays 'P' on its display [3] and button 3 LED also lights. While the 'P' is displayed, also touch buttons 4, 5, 6 and 7. Their respective LEDs also light to indicate that each of the five buttons has been paired with Hub as a group. Note that groups of buttons don't necessarily need to be consecutive. You could, for example, have a group comprising buttons 1, 3, 5 and 7.

Lastly, pair touch button 8 with Environ Connect. Press the PAIR button on Environ Connect and observe the pair LED flashing. Now press and hold the Pair button [6] on EnviroN Remote and then touch button 8. Once pairing has taken place, the flashing LED on Environ Connect lights steadily for a few seconds. EnviroN Remote displays 'P' on its display [3] and button 8 LED also lights.

Now is also a great time to write on the touch pads what function you have chosen for each one. You can either write on the surface with a marker pen (which can later be wiped off using an alcohol wipe), or you can apply printed labels such as from a 'Dymo' printer. Alternatively you may wish to print your own labels and apply with tape.

Note that it is not necessary to pair all the touch buttons if some are unused.

Once the unit has been paired, it shouldn't be necessary to pair it again unless you change the button configuration. Pairing information is retained in the unit's memory even if the battery runs flat.

Step 3. Decide on the Function of buttons for wireless devices.

(You can skip this step if you only have infra-red devices).

The Function of each button tells the receiver with which it is paired what to do when it receives some information from EnviroN Remote. The way in which the Function is chosen differs slightly for wireless and infra-red. This section deals with wireless and the next section with infra-red.

In our example we chose to have buttons 1 and 2 control iClick and button 8 to control Environ Connect. All of these are wireless devices. When choosing the Function of each touch button, you can decide whether the device is on only for the time you touch the button (Momentary), whether it changes from on to off and vice versa each time the button is touched (Latched) or whether it turns on for a certain period of time (Timed). Which of these you choose depends to a large extent on the type of device you are controlling.

Because we are using both channels of iClick to control lamps, we will probably want to choose Latched- i.e. we touch the button once for the lamp to come on and again for it to go off. Referring to Table 1, latched is function 2.

Channel 8 is connected to an electrically operated door in our example. In this instance we will probably want to energise the door motor for a short period of time only while it opens. In this case Timed 10 seconds may be appropriate, which is Function 6 using the table given in the EnviroN Connect instructions. (Note that the Functions for EnviroN Connect are not the same as iClick - please refer to the user manual).



Only a qualified electrician should install EnviroN Connect. Attempting any kind of installation yourself will expose you to potentially lethal voltages.

Setting	Function
1	Direct
2	Latched
3	Timed 5 seconds
4	Timed 10 seconds
5	Timed 15 seconds
6	Timed 20 seconds
7	Timed 25 seconds
8	Timed 30 seconds
9	Timed 35 seconds
10	Timed 40 seconds
11	Timed 50 seconds
12	Timed 1 minutes
13	Timed 2 minutes
14	Timed 3 minutes
15	Timed 4 minutes
16	Timed 5 minutes
17	Timed 10 minutes
18	Timed 15 minutes
19	Timed 20 minutes
20	Timed 30 minutes
21	Timed 1 hour
22	Timed 2 hours
23	On only
24	Off Only

Table 1- Settings for use with other iClick

We can now fill in some more of the Configuration Chart, as follows:

Configuration Chart				
Button	Appliance	Via	Function	Code
1	Lamp 1	iClick Socket 1	latching	2
2	Lamp 2	iClick Socket 2	latching	2
3	TV	Hub		
4	TV	Hub		
5	TV	Hub		
6	TV	Hub		
7	TV	Hub		
8	Door	Environ Connect	Timed 10s	6

Configuration Chart				
Button	Appliance	Via	Function	Code
1	Lamp 1	iClick Socket 1	latched	2
2	Lamp 2	iClick Socket 2	latched	2
3	TV	Hub	on/off	1
4	TV	Hub	channel up	2
5	TV	Hub	channel down	3
6	TV	Hub	volume up	4
7	TV	Hub	volume down	5
8	Door	Environ Connect	Timed 10s	6

Step 4. Decide on the function of buttons for infra-red devices.

(You can skip this step if you only have wireless devices).

All infra-red information is sent wirelessly from **EnvirON Remote** to Hub and then translated into infra-red codes. You should already have programmed the required infra-red codes into Hub and also written them onto the provided Infra-Red Chart. If not, please do this now, by reference to the EnvirON Hub instruction booklet, before proceeding.

In our example, we want touch buttons 3 to 7 to control the TV using infra-red. Let's suppose we would like buttons 3 to 7 to be on/off, channel up, channel down, volume up and volume down respectively. Let's also suppose we have these functions already programmed into Hub codes 1,2,3,4 and 5. If you have forgotten what infra-red codes you have programmed into Hub, the Infra-Red Chart should remind you.

We can now complete the remainder of the Configuration Chart, as follows:

We now have all the information we need to complete programming **EnvirON Remote**. Please proceed to the next section:

Step 5. Programming Functions

According to the Configuration Chart, we need to set touch button 1 to Function 2. To achieve this, press the Function button [7] on the rear of **EnvirON Remote** once. The green LED [2] adjacent to touch button 1 lights and the display [3] shows the current Function setting. To change the setting to the required value (2 in this case), repeatedly press the Pair/Learn button [6] until the display shows '2'.

Now press Function again to advance to touch button 2. Its adjacent [2] lights and again, it needs to be set to Function 2, so press Pair/Learn until the display shows '2'.

Repeat this process to set button three to '1', button 4 to '2' and so on until all eight have been programmed. After a few seconds of no changes being made the LEDs [2] and display [3] are extinguished to save power. Should this occur during programming, simply press Function repeatedly to get back to the touch button you wish to configure and continue as described above.

If you intend to use the unit's touch buttons, the unit is now fully configured and ready to use with your chosen devices. If you're a switch scanning user, or you would like to change any of the other settings, please refer to the Learn Mode section on the following pages:

Of course the above description is simply an example of a typical configuration and yours may differ. However, provided you follow these instructions and fill in the provided Configuration Chart and Infra-Red Chart (if you're using the Hub) as you go along, setting up should always be straightforward. If you run into any difficulties during set-up, please re-read this manual and if you still experience problems, please contact your local dealer or Pretorian for assistance.

Learn Mode

Learn Mode allows you to configure some additional settings on your **EnvirON Remote**. There are five settings in all and the default settings will be suitable for most users, meaning that you may not need to change any of the settings.

If you do need to make changes to the settings, enter Learn Mode by pressing and holding **Pair/Learn** [6] until a warbling tone is heard. The unit is now in Learn Mode and will display the first setting on the display [3] and the LED [2] adjacent to the first touch pad will light to indicate which setting is being viewed.

To make a change to any setting, press **Function** [7] until you see the correct setting on the display. Once you are happy with the setting, press **Pair/Learn** to advance to the next setting. The display will change to show the next setting and the next LED will light adjacent to the touch buttons.

If you don't wish to make a change to a particular setting, simply press **Pair/Learn** to advance to the next one. Once all five settings have been viewed, pressing the **Pair/Learn** button again will exit Learn Mode. A warbling tone will confirm that you are leaving Learn Mode and the settings will be saved in memory. They are retained even if the battery runs flat.

Learn Mode 1- Switch Scanning Mode.

LED adjacent to touch sensor 1 lights.

This sets the switch scanning mode and is used whenever the user elects to control **EnvirON Remote** using switch scanning. This setting is ignored if the user elects to make use of the touch pads. Please refer to the Section on Switch Scanning below for more details.

Display	Setting
1	Single-switch scanning (default)
2	Two-switch scanning

Once you see the correct setting on the display, press **Pair/Learn** to advance to the next Learn Mode:

Learn Mode 2- Single-Switch Scanning Period.

LED adjacent to touch sensor 2 lights.

When single-switch scanning is used, this setting defines the rate at which the scanning progresses, i.e. the time between each step.

Display	Setting
1	0.8 seconds
2	1 second
3	1.5 seconds (default)
4	2 seconds
5	2.5 seconds
6	3 seconds
7	3.5 seconds
8	4 seconds

Once you see the correct setting on the display, press **Pair/Learn** to advance to the next Learn Mode:

Learn Mode 3- Single-Switch Scanning Dwell Time.
LED adjacent to touch sensor 3 lights.

When single-switch scanning is used, this setting defines the dwell time after the last operation before scanning resumes.

Display	Setting
1	2 seconds
2	5 seconds
3	10 seconds (default)
4	15 seconds
5	20 seconds
6	30 seconds
7	45 seconds
8	60 seconds

Once you see the correct setting on the display, press Pair/Learn to advance to the next Learn Mode:

Learn Mode 4- Buzzer Enable/Disable.

LED adjacent to touch sensor 4 lights.

This setting defines whether the buzzer is enabled or disabled and is entirely a matter of personal choice.

Display	Setting
0	Buzzer disabled
1	Buzzer enabled (default)

Once you see the correct setting on the display, press Pair/Learn to advance to the next Learn Mode:

Learn Mode 5- Enable Low Power Mode.

LED adjacent to touch sensor 5 lights.

This setting determines whether the unit enters a low-power mode after a period of non-use, in order to conserve battery life. If the unit is permanently powered using the wall adapter, there is no need for the unit to enter low-power mode, so you may make this setting '2'.

Where the battery is used to supply power, it is generally best to keep the setting at '1'. Please note however that the touch sensors do not operate when the unit is in low power mode so it can only be woken by pressing the buttons on the rear of the unit or the scanning switches.

Low power mode may therefore prove difficult for touch pad users who lack the dexterity to press the buttons on the rear of the unit. In this event it may be beneficial to use a switch plugged into one of the sockets to wake up the unit.

Display	Setting
1	Sleep after 1 hour (default)
2	No sleep

Press Pair/Learn to exit Learn Mode and save all of the settings.

Operation using external Switches (Switch Scanning)

For users without the motor skills to allow operation via the touch pads, the unit may be operated in one of two switch scanning modes- Single-Switch Scanning and Two-Switch Scanning. The touch pads may still be used even when switch scanning is in use.

Single-Switch Scanning

To operate the unit in single-switch scanning mode, first ensure that Learn Mode 1 is set to '1' (this is the default setting) and then plug your choice of switch into socket 2 on the rear of the unit [8]. Any type of switch may be used- for example conventional switches such as the Smoothie from Pretorian or squeeze switches, pillow switches, sip/puff switches etc. Any switch which terminates in a 3.5mm jack plug will work.

To begin scanning, press the switch. The LED [2] adjacent to the first touch pad lights, then the second and so on until all the touch pads have been scanned, then returning to the first. This process repeats until all touch pads have been scanned four times. The unit emits a short beep each time the scanning advances. Note that the tone for the first touch pad is higher than the others to allow users with visual impairments to count the number of beeps to know the exact scanning position at any moment in time.

If no further switch activity is detected after scanning four times, scanning stops to conserve battery life. It may be re-started at any time by pressing the switch. The scanning rate may be changed at Learn Mode 2 to suit individual users.

To stop scanning at any point, simply press the switch. To then operate that particular touch pad, press the switch again. You may operate the touch pad any number of times while its adjacent LED [2] is lit.

After a period of not operating the switch which is set by the Dwell Time (Learn Mode 3), the unit re-commences scanning.

Two-Switch Scanning.

To operate the unit in two-switch scanning mode, first ensure that Learn Mode 1 is set to '2' and then plug your choice of switches into sockets 1 and 2 on the rear of the unit. Any type of switch may be used- for example conventional switches such as the Smoothie from Pretorian or squeeze switches, pillow switches, sip/puff switches etc. Any switch which terminates in a 3.5mm jack plug will work.

The switch in socket 1 [9] is used to Scan from one touch pad to another while the switch in socket 2 [8] is used to Select a particular touch pad.

To scan to the required touch pad, press switch 1 successively, or alternatively press and hold it and the selected touch pad will advance automatically once per second. Once the LED [2] adjacent to the required touch pad is lit, press switch 2 to operate it.

After 30 seconds of non-use, the LEDs are extinguished to conserve battery life. They are re-lit as soon as either switch is pressed.

Battery Charging

The internal battery will give many hours of use between charges. It is impossible to say how often it will be necessary to charge the unit as this depends on the level of usage. When the battery is running low, the low-battery LED [5] will begin to flash. This is an indication that it is time to recharge unit using the supplied wall adapter.

To charge the battery, plug the wall adapter into the charging socket [10]. After a few moments the charging LED [4] lights to indicate that charging is in progress. Recharging a completely flat battery takes around 2.5 hours but the unit may continue to be used during this time (in which case charging may take a little longer). Once the battery is fully charged, the charging LED is extinguished.

Should the wall adapter ever become lost, it is extremely important to replace it with one of the same voltage and specification to prevent damage to the unit. Please contact your local distributor, or Pretorian Technologies directly, to purchase a replacement.

Manual Power Off

In certain circumstances it may be useful to manually power the unit off- for example when transporting it. To achieve this, press and hold the Function switch [7] for 5 seconds. As it powers off, all the segments of the display light momentarily to show that it is powering down.

To wake the unit again, press any button or any external switch.

Warranty

EnvirON Remote is warranted against defects in manufacturing and component failure. The unit is designed for use in domestic, educational, healthcare and commercial applications. Use outside of these areas will invalidate the warranty.

EnvirON Remote is not authorised for use with safety critical, mission critical or life/health sustaining apparatus of any kind.

Unauthorised repair or modification, the use of an incompatible power supply, mechanical abuse or immersion in any liquid will also invalidate the warranty.

Troubleshooting

The following table lists some common problems. In addition, there are a series of informative videos on how to set up the EnvirON product range on Pretorian Technologies' website. Please use the following QR code, or navigate to the EnvirON Remote product page.



If, once you have been through this table and reviewed the videos, you still experience difficulties, please contact your local distributor or Pretorian Technologies directly.

Symptom	Possible Cause	Remedy
<ul style="list-style-type: none">No power to EnvirON Remote.	<ul style="list-style-type: none">Battery flat.	<ul style="list-style-type: none">Plug wall adapter into unit and ensure the charging LED lights.
<ul style="list-style-type: none">Touch pads do not respond when touched.	<ul style="list-style-type: none">Battery flat.Unit gone into power saving mode.	<ul style="list-style-type: none">Recharge batteryWake unit up by pressing any button on rear or any switch. Also review power saving settings to ensure they are appropriate to the user.
<ul style="list-style-type: none">Scan switch (in socket 1) doesn't do anything.	<ul style="list-style-type: none">Unit is in single-switch scanning mode.	<ul style="list-style-type: none">Change to two-switch scanning mode.
<ul style="list-style-type: none">Nothing happens when I press a touch pad.	<ul style="list-style-type: none">Touch pad not paired with a receiver.Touch pad set to the wrong Function.	<ul style="list-style-type: none">Pair the touch pad with the required receiver.Set the touch pad to the correct Function.



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Refers to firmware version 82.0 onwards.

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