

INSTRUCTIONS

environ Hub



Pack Contents

Carefully check the contents of the box, which are:

EnvirON Hub
Universal wall adapter
Infra-Red Chart
These instructions

Product Description

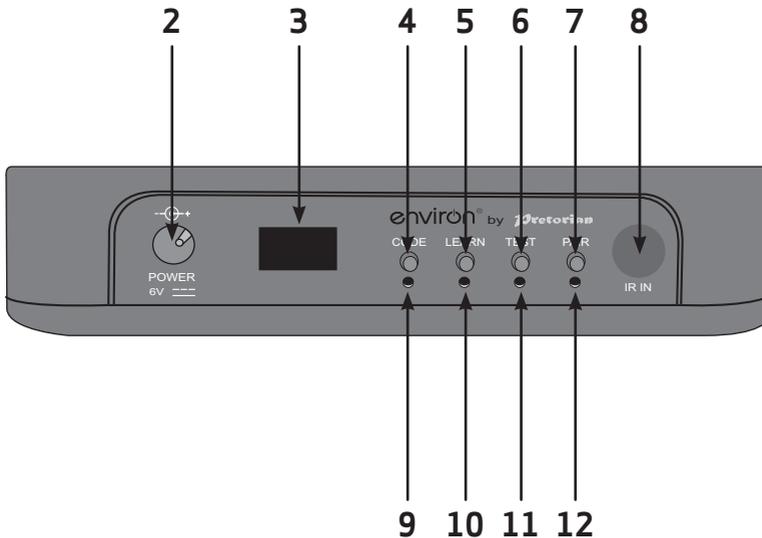
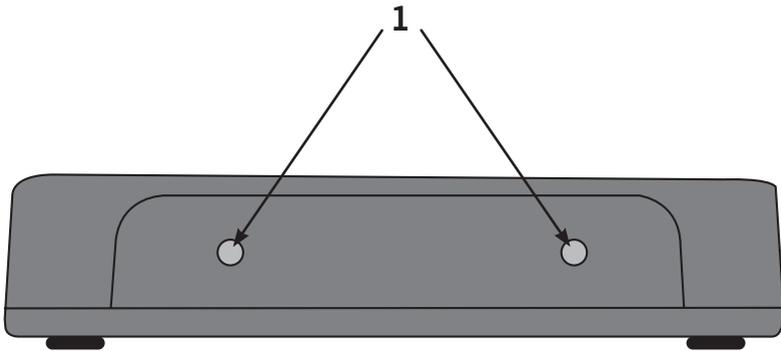
EnvirON Hub forms part of Pretorian Technologies' EnvirON range of products to allow users with disabilities to control their environments. The Hub forms the interface between all of the other members of the range and most EnvirON configurations will require a Hub to be present. It seamlessly converts wireless signals received either from other EnvirON products or from the EnvirON App running on iPhone/iPad into infra-red data to control a TV or other entertainment products.

It also forms a 'bridge' between the EnvirON App and other EnvirON products, allowing any device to be controlled from any product.

EnvirON Hub 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 you watch the instructional videos at www.pretorianuk.com/EnvirON and read the EnvirON Configuration Guide prior to configuring an EnvirON system.

Features

- 'Learning' infra-red remote control can learn up to 16 codes from almost any TV.
- Can also learn up to 8 'macro' codes comprising up to 4 individual infra-red codes, allowing the user to access higher channel numbers by pressing a single button.
- Forms a 'bridge' between **EnvirON** App and other **EnvirON** products.
- Can be paired with up to 6 **EnvirON** transmitters such as Scanning Remote and Wireless Switch.
- Permanently powered from supplied wall adapter.



Setting up Your EnvirON Hub

Step 1. Applying power and positioning.

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 power socket on the rear of EnvirON Hub [2] and the power LED [10] will light.

If you are using Hub with infra-red devices such as TVs, position it in such a way that the infra-red LEDs [1] point directly towards the TV. Try to locate Hub in such a way that it is permanently positioned so that it is in direct line-of-sight with the TV. Infra-red behaves just like daylight, i.e. it only travels in straight lines.

Infra-Red Chart						
Code	Type	Appliance	Function	Function	Function	Function
1	Single	TV	power			
2	Single	TV	channel up			
3	Single	TV	channel down			
4	Single	TV	volume up			
5	Single	TV	volume down			
6	Single					
7	Single					
8	Single					
9	Single					
10	Single					
11	Single					
12	Single					
13	Single					
14	Single					
15	Single					
16	Single					
17	Macro	TV (BBC1 HD)	1	0	1	-
18	Macro	TV (BBC2 HD)	1	0	2	-
19	Macro	TV (ITV HD)	1	0	3	-
20	Macro					
21	Macro					
22	Macro					
23	Macro					
24	Macro					

Step 2- Learning your TV remote codes.

Hub can store up to 24 infra-red codes. Codes 1-16 are single functions such as channel up, volume down, power etc. Codes 17-24 are 'macros' which can be up to four codes in length. For example, if you frequently watch channel 39, you could record 3 and 9 into code 17 so that you can have the TV go straight to channel 39 when you want to watch it.

Many high definition (HD) services are arranged at higher channel numbers. For example, in the UK, HD services are on channels over 100 with BBC1 being on channel 101. You can easily set Hub to access channel 101 by setting a macro channel to 1-0-1.

Refer to the supplied Infra-Red chart. You will see that there's just a single space for codes 1-16 to indicate that those codes will only accept a single function, whereas codes 17-24 each have four spaces.

Before programming Hub with the various codes you would like, first take a few moments to complete the Infra-Red Chart. Let us suppose that you would like to program 8 codes- power, channel up, channel down, volume up, volume down (all of which are single functions) and then 101, 102 and 103 as macros. Using a marker pen, you can now complete the Infra-Red Chart as shown on the left. (Your configuration will be different so you may not wish to mark your chart until you have decided on the specific codes that you require).

Learning Single Codes

Having filled in the Infra-Red Chart you can now begin learning the codes. Position the TV's remote control 20cm (8") from Hub and pointing directly at Hub's infra-red window [8]. Make sure there are good batteries in the remote control and keep both Hub and the TV remote out of direct sunlight while learning infra-red codes. In order to prevent the TV responding to the infra-red codes while learning them, you may find it advantageous to turn the TV off at the wall until completed.

Referring to the example Infra-Red Chart, code 1 is to be Power on/off. First of all, set Hub to code 1. Press the Code button [4] and the display [3] will come on and show the current Code number. If it's not already 1, press Code repeatedly until you see '1' in the display. Now press Learn [5] and the Learn LED [9] lights green.

The Hub is now ready to receive the code, so firmly press Power on the TV remote and KEEP IT PRESSED until the Learn LED [9] goes out, then release. It is very important that the Hub sees the transmission for the TV remote without any breaks.

On most TVs, the code has now been accepted by Hub and you can move onto the next code. On certain TVs however, special alternating codes are used. If Hub detects this, it will ask you to press the SAME remote button again by lighting the Learn LED [9] in RED. If this occurs, press Power again, KEEPING IT PRESSED until the red LED goes out. The Hub has now learned both alternating codes. Whenever you see the Learn LED light red, this is a request to repeat the last press.

By reference to the example Infra-Red Chart, the second code to learn is Code 2- Channel Up. Press the Code button [4] until the display shows '2'. Now press the Learn button [5] and this time press Channel Up on the TV remote until the green Learn LED goes out, then release. If your TV uses alternating codes, repeat until the red Learn LED goes out.

Continue this method for the remaining single codes, i.e. Channel Down, Volume Up and Volume Down on Codes 3, 4 and 5 respectively.

Note that the Codes are stored in the Hub's memory and remain intact even if the power is removed due to unplugging or a power cut.

Learning Macro Codes

We now need to program Codes 17, 18 and 19 to give infra-red codes 101, 102 and 103. In the UK this will give access to BBC1 HD, BBC2 HD and ITV HD respectively.

Press the Code button [4] until the display [3] shows '17'. This is the first Macro. Now press the Learn button [5] and the Learn LED [9] lights green.

Press '1' on the TV remote firmly and keep it pressed until the green LED goes out, then release. After a couple of seconds, the green LED lights again*, prompting you to enter the second code in the Macro. Press '0' this time, again keeping it firmly pressed until the green LED goes out, then release. After a few seconds the green LED lights again as a prompt to enter the third code in the Macro. This time press '1' until the green LED goes out, then release. After a few seconds the green LED lights again as a prompt to enter the fourth code in the Macro. In our example, there is no fourth code, so in this case simply press the Learn button [5] and the Macro will be stored as three digits only.

**Note that when learning Macros from TVs which use alternating codes, Hub still expects to see a second press of each code. Therefore to enter code 123, you will need to press 1-1-2-2-3-3 on the TV remote. The table to the right shows this in more detail:*

Learn LED	Press
Green	1
Red	1
Green	2
Red	2
Green	3
Red	4

Finally, repeat this process for codes 18 (1-0-2) and 19 (1-0-3). Programming the codes is now complete.

Step 3- Test the Codes

Hub possesses a useful feature to allow you to test each of your programmed Codes before starting to use it in the normal way. The Test button [6] allows you to transmit the Code currently shown on the display [3] for as long as you keep the button pressed.

Begin by making sure the TV power is on. Then use the Code button [4] to set the display to show the Code you'd like to test. For example, let's suppose we would like to test Macro Code 17, which we set to 101 in the previous example. Once the display shows '17' simply press the Test button with the Hub correctly positioned and the TV should accept the macro and switch to channel 101.

If this does not occur, you may need to reprogram the Macro Code as described in Step 2. Pretorian recommends testing all the programmed Codes in this way before beginning to use them.

Step 4- Pair your EnvirON devices with Hub

(You may skip this step if you are only using Hub with the EnvirON App)

Each EnvirON transmitting device needs to be paired with Hub before it can be used to send infra-red codes. Up to six EnvirON devices such as EnvirON Remote and EnvirON Wireless Switch may be paired simultaneously with Hub.

To pair each device, first press the Pair button [7] on Hub. Whilst the Pairing LED [12] is flashing, press the Pair button on the device you are pairing it with. Pairing usually takes no more than a second, after which the Pairing LED lights steadily to indicate that pairing was successful.

EnvirON Remote is a special case since it is necessary to tell it which of the eight touch buttons you would like to pair with Hub. This may be anything from one to all eight. Please refer to the instructions supplied with EnvirON Remote for full details.

As well as pairing each EnvirON transmitting device you must also set the Code that each switch/button will send. For example, if you are using a single EnvirON Wireless Switch to send Macro Code 17, use the display on the wireless switch to set up function 17. A similar process is also necessary for each button on EnvirON Remote, if you are using one.

Step 5- Pair your EnvirON App with Hub

(You may skip this step if you are not using Hub with the EnvirON App)

Begin by launching the EnvirON app on your iPhone or iPad. Click the Settings icon in the top right corner and then on the first item under the Connection heading (probably 'No Connected Devices'). This will take you to a new screen which shows the available devices. Your Hub should appear as something similar to Hub-82.1-ABC1 although if the iPhone/iPad has not seen it before, it may appear as 'unknown'.

Tap on it and it will connect immediately. The Power LED [10] on Hub will change from red to green to indicate that it's connected to an iDevice.

As well as pairing the EnvirON App with Hub you must also set the Code that each button will send. Please refer to the EnvirON App help files for more information on this.

Step 6- Begin using your EnvirON System

Your Hub is now fully configured and ready for use. Please remember to keep it in direct line-of-sight with the TV at all times and place its wall adapter in a position where it will not inadvertently get unplugged. Of course your configuration will differ from the one used in this example. However, provided you follow the method and fill in both the Infra-Red Chart and Configuration Chart (if you are using the EnvirON Remote), configuration should always be straightforward.

If you run into difficulties during set-up, please re-read this manual and refer to the on-line videos. If you still experience problems, please contact your local dealer or Pretorian for assistance.

Erasing all infra-red codes

All 24 infra-red codes can be erased using the Erase All function. Press and hold the Code button [4] for 8 seconds, after which the display [3] will flash several times and all the infra-red codes will be erased in one operation, allowing you to start again.

Erasing Pairing information

The Hub can be made to 'forget' all of the pairing information with transmitting devices in one operation. Simply press and hold the Pair button [7] for 4 seconds and the pairing LED [12] will flash rapidly to indicate that it has now erased all the pairing information. This operation does not erase any of the infra-red codes.

Power Supply

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.

Warranty

EnvirON Hub 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 Hub 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 visit www.pretorianuk.com/environ.

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.

Troubleshooting

Symptom	Possible Cause	Remedy
<ul style="list-style-type: none">• No lights are illuminated on Hub.	<ul style="list-style-type: none">• No power	<ul style="list-style-type: none">• Check that wall adapter is plugged into wall and also into Hub power port
<ul style="list-style-type: none">• EnvirON Remote or Switch 125 do not work with TV.	<ul style="list-style-type: none">• Not paired with Hub.• Set to access an empty infra-red Code	<ul style="list-style-type: none">• Pair with Hub• Review the Infra-Red Chart and select a used Code for the relevant switch or button
<ul style="list-style-type: none">• EnvirON App does not work with TV.	<ul style="list-style-type: none">• Hub not paired with App.• App buttons not set to Infra-Red mode• App button functions not set correctly.	<ul style="list-style-type: none">• Pair together in Settings• Set buttons appropriately in Settings.• Review the Infra-Red Chart and select a used Code for the relevant button in Settings.
<ul style="list-style-type: none">• EnvirON App does not work with iClick or EnvirON Connect.	<ul style="list-style-type: none">• Hub not present or not powered up.• App button not paired with iClick.	<ul style="list-style-type: none">• Hub must be present and have power applied to translate App data to send to iClick.• Pair button with iClick in Settings (after first ensuring button is set to Wireless)

