

**New**

## WIRELESS REMOTE MONITOR KIT



The Remote Monitor is a wireless alarm that can be positioned up to 164 feet (50m) from a UV Pure Upstream or Hallett unit. The handheld device has an LCD display to provide status messages and an audible alarm which sounds in the event of a system fault – these messages are similar to the ones on the main unit. The remote device is battery powered (9V) and can be conveniently located near the kitchen tap for a home or in the office for a school. Pressing the button on the remote will silence the beeping when an alarm occurs and it will cause any message to be redisplayed. If several warnings or alarm conditions exist at one time, pressing the button repeatedly will cycle through all messages.

Having multiple UV Pure units in the same location is not a problem for the wireless devices. The Remote Monitors, once setup on different channels, work independent from any neighboring unit.

In addition, several handheld Remote Monitors can be used with a single main UV Pure purifier. To order extra monitors, use part number R400030.

The radio frequency used by the remote is 2.4GHz and has FCC modular approval grant to meet FCC Part15, EN300 328-1, EN301 489-1, Industry Canada RSS-211.

### Parts Included in the kit:

- handheld Remote Monitor – **Program Version 2.0 or higher**
- Plug in Transmitter for main unit (located within battery compartment of handheld)
- 9V Battery
- Instructions

### Installation

The installation of the plug in module requires access to the circuit board of the UV Pure unit. This will require momentary shutdown of the unit.

**Caution: Do not open ballast enclosure unless the unit has been unplugged.**

### Procedure

1. Unplug the UV Pure unit and ensure no power is present.
2. Open the door of the ballast enclosure using a flat bladed screwdriver to undo the screw securing the door to the base. The door may now be open by pulling on the flap located on the right side of the door.
3. Plug radio transmitter module into circuit board – see Figure 1. Be sure not to bend any pins
4. Fully close ballast enclosure door and turn in screw fully until door is fully closed.
5. Plug in main UV Pure unit.

Installation process is complete. The Remote Monitor needs to be configured or “bound” to the main unit.

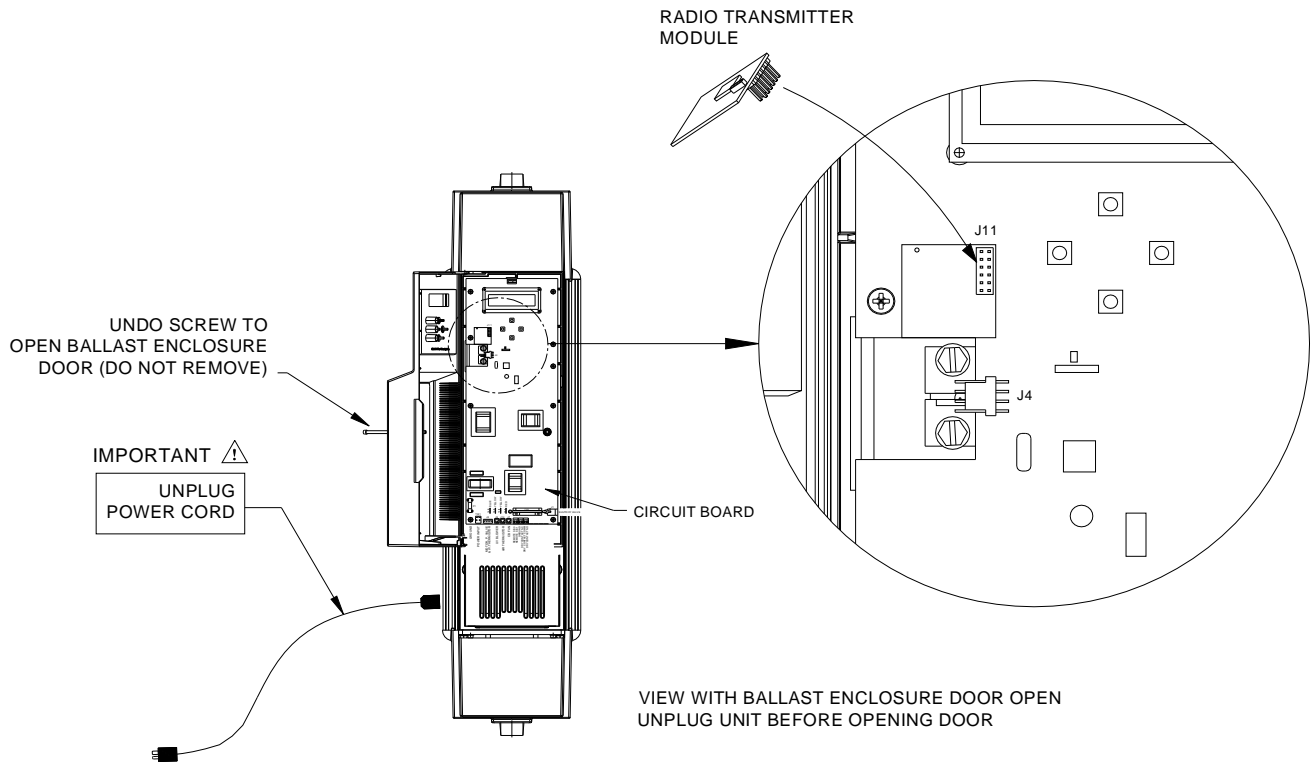


Figure 1

**Binding Procedure**

These instructions will explain how to configure or "bind" the Remote Monitor for the Upstream or Hallett unit. The diagram below will help in the navigation of the menu. Pressing the Enter or Right Arrow cause the cursor to flash and allows you to change selection of the variable.

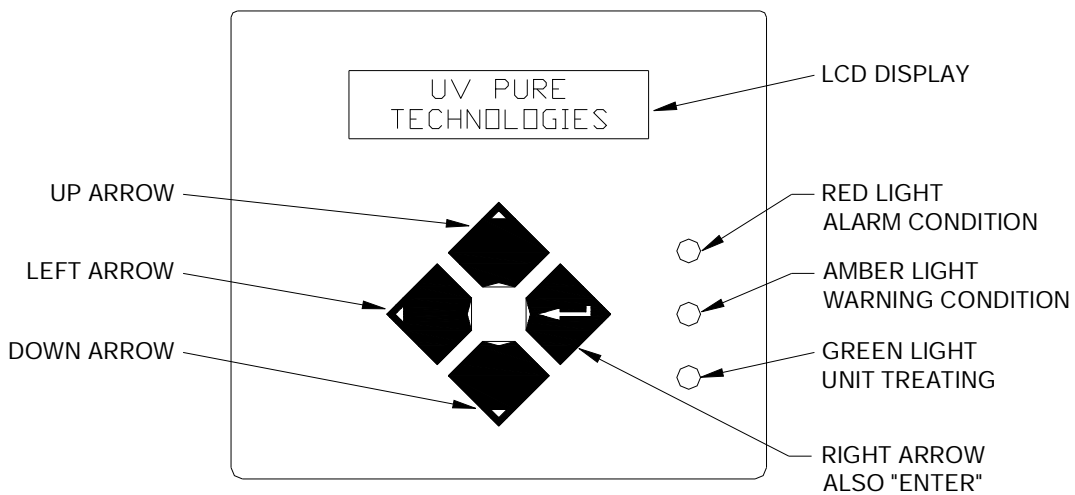
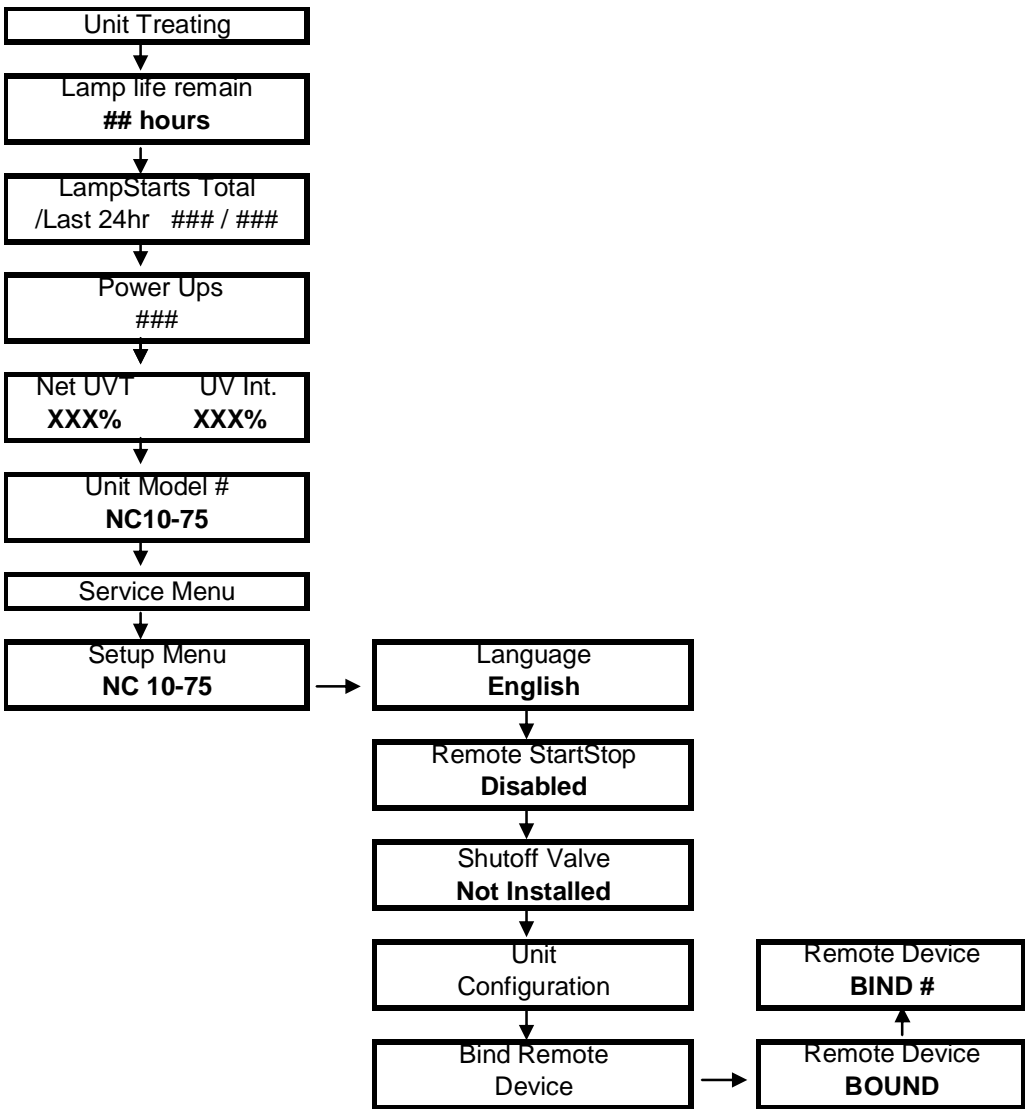


Figure 2

**Step 1:** Using the Setup Menu on the unit, select “Bind Remote” and choose any bind number by pressing Enter and then Up or Down Arrow buttons. The bind # is a number from 0 to 40 to differentiate each unit in parallel or series. Each UV Pure unit within an approximate 500 foot range should have a different bind number. Once you have chosen a bind number, **press Enter again** (the cursor will stop flashing). Leave menu display of main unit at “Bind #” for the next step.

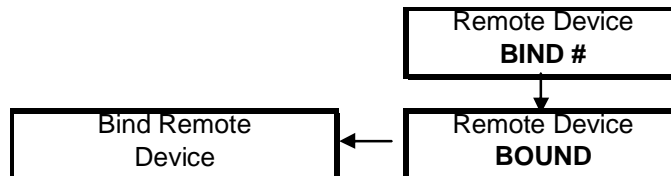


**Step 2:** Pick up the remote monitor and then connect the battery. The remote will display "Init....., Version # of program and then "UNBOUND" (if never initially bound). Press and hold the button and the display on the remote monitor will then show "BINDING". The button can be released at this point. When the display on the remote shows "BOUND", the process is complete. If the unit does not display "Bound", repeat the process with a different Bind # on the main unit (even if a message suddenly appears, repeat the process). It must say "BOUND" on the remote monitor.

**Note:** Pressing and holding the button of the remote monitor at any time will initiate another binding process.



**Step 3:** Synchronization is now complete, return to the main UV Pure unit. You must return the screen from Bind # to "Bound" by pressing Enter and then the Down Arrow button. This will cycle the bind numbers down until you get the "Bound" screen. Once at "Bound", press Enter and then press Left Arrow several times to return to main page.



**Step 4:** Disconnect the battery on the remote monitor and then reconnect. It will then sync up with main unit within a few moments.

### **Operation**

The remote monitor receives wireless updates from the main UV Pure unit. It displays the status of the main unit and alerts you to any change through a series of messages or an audible tone.

If the transmitter is not installed in the main unit, the display on the main unit will display “Radio Initialize Problem” or “Radio Device Not Installed” upon start up. Review the installation instructions for the transmitter. The remote monitor can be placed in a location of your choice. The remote will operate up to 164 feet (50m) from the main system location, (Please note that masonry walls decrease the distance the remote can communicate with the main system). The remote will run through a diagnostic and then sync with your system and display the same (or similar) message as your Upstream or Hallett system. If the remote loses communication with the main unit, it will display “NO SYNC”. Move the monitor to a different location until communication has been reestablished.

In the event a warning occurs on the main unit, the remote monitor will beep once and show the message “WARNING”. Pressing the button on the remote once (press and release, do not press and hold) will prompt the actual warning message to appear alerting you to the type of warning exists.

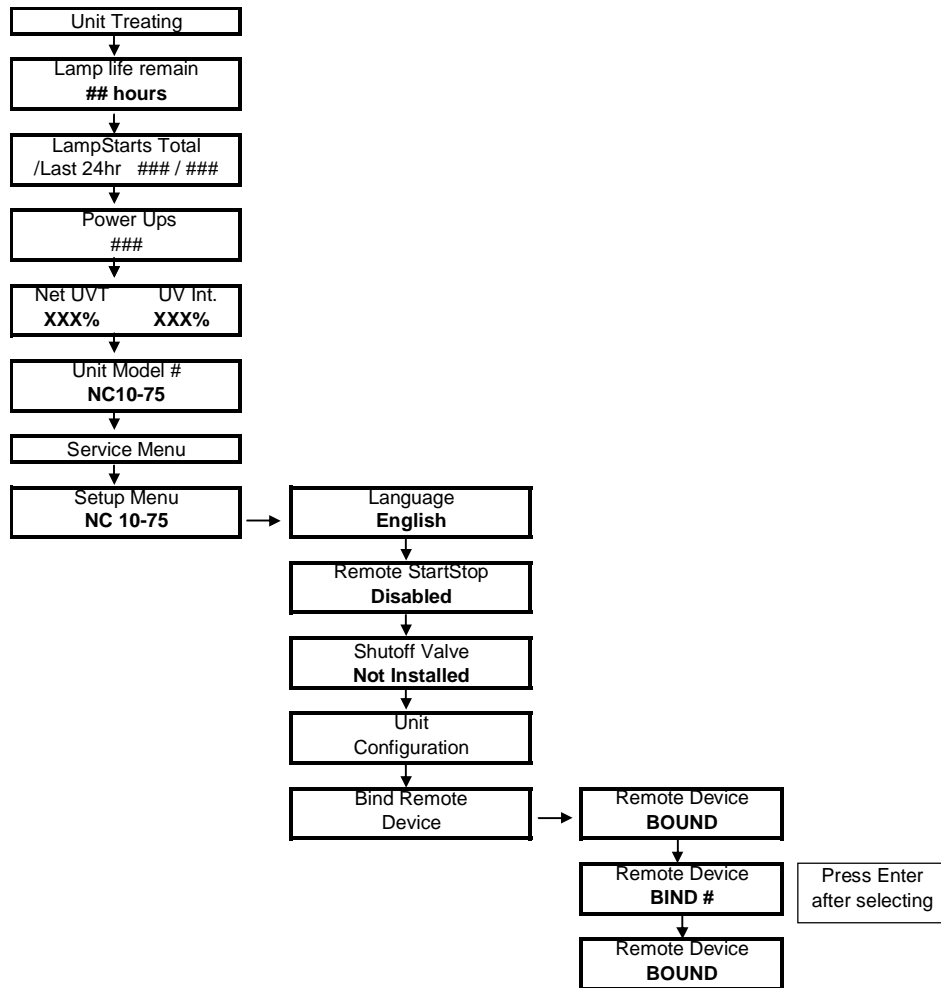
In the event an alarm occurs on the main unit, the remote monitor will beep continuously and show the message “ALARM”. Pressing the button on the remote once (press and release, do not press and hold) will silence the beeping and prompt the actual alarm message to appear alerting you to the type of warning exists.

If several warnings or alarms conditions exist at one time, pressing the button repeatedly will cycle through all messages. It is recommended to return to the area of the main unit to get more information about the fault and to correct it as soon as possible.

## Troubleshooting

In the event that the remote monitor fails to maintain communication with the main unit, there is some diagnostic software built in the remote monitor to evaluate signal strength and if there is any interference on the channel selected for binding.

The main unit should be transmitting on a specific channel and it would be this channel that the remote should be evaluated on. To set up the main unit to transmit on a specific channel the steps are to select a Bind #, press Enter to accept and then press Enter again to return down to Bound screen and then press Enter again. It is important to press Enter after the selection is made to accept values. See below.



To initiate the diagnostic software on the remote monitor, **press and hold** the button on the remote while connecting the battery terminal. The display will show “Init.....”, Version # of program and then Chan 1 and then G## B##. See pictures below. Pressing the button will cycle through the channels indicating the number of “packets” of information being received on that channel. Unplugging the unit and restarting will return you to channel 1 or you can cycle through the 40 channels and then return to 1.

The G## represents the good packets and the B## represents the bad packets. Good packets are desirable as it indicates proper data being received by the remote monitor. Bad packets are data that the remote monitor cannot process and may be a result of interference from another source. Having neither good nor bad packets indicates that the remote monitor is out of range of the main unit.

Up to a maximum of 5 good packets of data can be received at any one time. A value of 3 or above is sufficient for good communication. The information is updated every 5-7 seconds when in this mode.



Once a channel is found with good packets being consistently available, the remote can be returned to normal operating mode (by disconnecting battery and re-connecting battery).