

## Engineering Note

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Title:	Wall-mounted Hydro-View (HV03) fails to start up
Document reference (DRC):	EN0020 issue 1
Last updated:	5/9/97
Products affected:	Hydro-View model HV03, revision letter A or earlier
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Summary:	The unit fails to start when power is applied. This is identified by a blank display and no keypad operation.

### **Introduction**

A wall mounted Hydro-View (model HV03) may intermittently fail to start when power is applied. This can be identified by a complete absence of functionality except for the display backlight. This situation should not be confused with (for example) a blank display which may simply require a contrast adjustment. This note describes a simple internal modification which may be carried out locally by a reasonably competent electronic technician.

This modification is only required on Hydro View HV03 wall mounted versions which fail to start when the unit is first switched on - panel mounted models (HV02) are not affected.

The modification involves the addition of a ferrite core around an internal cable. No special tools are required and the task should be completed within 10 - 15 minutes.

### ***Tools & materials required***

Philips screwdriver.

Small sharp pointed tool, e.g. the point of a pair of tweezers.

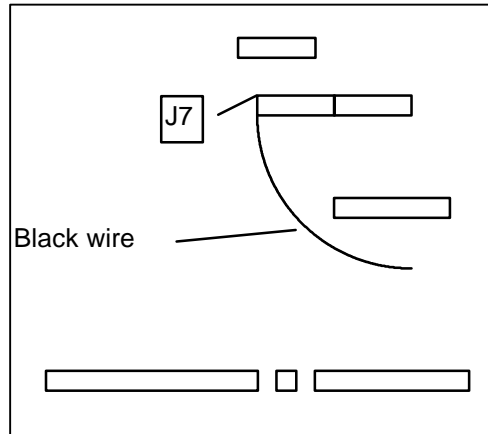
Small cutters.

1 off Ferrite core - suitable parts are Farnell part number 898-351 or clip-on type 553-001. These are available from Hydronix on request.

1 off small Ty-wrap.

### ***Method***

1. Disconnect power from the HV03
2. Loosen the cable glands and remove the cable gland cover plate by unscrewing the two silver screws.
3. Disconnect the two green connectors from the Printed Circuit Board.
4. Remove the HV03 from the wall and place on a suitable work surface.
5. Remove the four Philips screws securing the front and rear panels and carefully lift off the front panel. This will expose the PCB. Care should be taken as there are cables connecting the PCB to the display.
6. If the clip on type of ferrite is used, you can simply clip the device around the black wire indicated and proceed to step 10. Otherwise locate the connector J7 and disconnect it from the PCB..



7. Using the sharp pointed tool, carefully remove pin 1 of J7 with the black wire connected to it. Remove the pin by gently pressing the lock tab on the side of the pin while gently pulling the wire.
8. Thread the wire through the ferrite core and insert the pin back into the connector.
9. Reconnect J7.
10. Place a suitable Ty-wrap through the ferrite core and around the cables of J7.
11. Position the ferrite core approximately 3 centimetres from J7 and pull tight the Ty-wrap. Do not over-tighten as the ferrite core is fragile. Trim the Ty-wrap.
12. Reassemble the unit in the reverse order above.

### ***Testing after modification***

1. Apply power to the unit and ensure that the self test cycle completes and the correct moisture level is displayed.
2. Press any of the soft keys and ensure the unit "Beeps".
3. Enter the Main menu and ensure the keypad has full functionality by selecting different displays and entering numbers (such as an access code).
4. Exit to the moisture display.

The unit is now ready for normal operation.

If the unit fails to operate normally check that no cables have become disconnected inside the unit during the modification process.