

## Trouble Shooting the Room Valet System

### SHOULD THE SYSTEM MALFUNCTION LIGHT APPEAR AND NOT CLEAR

- 1) If this happens, completely power down the system by removing both the battery connector and the power supply. Allow the system to sit in this powered down state for a half a minute or so. A Room Valet System sometimes shows a malfunction light when first fired up. Powering the system down and back up often times will clear that glitch.
- 2) However, if the malfunction light continues after powering the system down and back and allowing a brief reset period, the next most likely problem is that there is a broken wire on a switch input or other wire such as the bed shaker or a display.
- 3) First visually inspect the switch inputs at the circuit board blocks as they are the most likely to have had a wire break or a **blue block** that has been removed leaving an un-terminated input (no end-of-line resistor) or a end-of-line resistor has broken, shorted or otherwise been loosen from its mounting position.
- 4) If a missing block or resistor seems not to be the problem then in the maintenance kit there should be a small supply of resistors that can be used to “jump” across the terminals of each switch leg. Doing this procedure works best with two people, having one person watch the display while the other goes one by one through the inputs jumping them, looking for an open switch leg. When and if the malfunction light goes out when a particular switches input wiring is jumped, that wiring circuit needs to be looked at and more than likely be stripped and reinstalled in the block.
- 5) If, after this quick check of the switch inputs yield no results, examine the bed shaker connection and unplug the bed shaker at the wall.
- 6) If the malfunction remains, continue trouble shooting the room until the problem is found.
- 7) Before checking displays, but after checking the switch inputs with the jumper, remove all power from the system including the battery.

With no power to the system, use a volt/ohm meter (multi-meter) to check for resistances on the switch legs and bed shaker. If the meter shows an “open” circuit then the wiring for a break or missing resistor. If a direct short is indicated, then the wiring needs to be checked for that.

- 8) If the switch inputs check out fine with the meter, check the resistance on the bed shaker output and if the meter shows an open or a direct short the shaker circuit needs further checking.

If the bed shaker is plugged in at the wall and the meter indicates the circuit is in an “open” condition, it could be that the shaker motor is simply in temporary dead spot.

Unplugging the shaker, at the wall, (not at the circuit board), should allow the end-of-line resistor at the shaker wall jack to close across the circuit, simulating the resistance of the motor winding that the supervision monitoring is looking for there.

9) With the shaker unplugged, resistance should be seen on the meter. If that seems to be the problem leave the shaker unplugged. Then reconnect the power. Allow the system to cycle and see if the System Malfunction light goes off. If it does then plug the bed shaker back in at the wall. If the Malfunction light appears again, ignore it and cycle the system in an armed state (push the door button). If the strobe fires and the bed shakes, then more than likely the malfunction light will go out when the bed shaker finishes its activation cycle.

10) If it is determined that it is not the switch inputs or the bed shaker circuit then it might be a display.

Before doing anything else again verify the wiring blocks are correctly positioned on the output ports. **DISPLAYS WILL BE DAMAGED** if they are connected incorrectly. That is why it is important that connectors and wiring be replaced and reconnected properly.

11) To isolate a defective display, simply remove one display connector and then allow the system to cycle for a minute. If the light goes out, the problem has been isolated.

If the System Malfunction light continues to be lit and if there are only two displays on the system, reconnect the first display and disconnect the other. If that clears the light then the trouble is associated to the second display. If the malfunction light doesn't clear, then remove both displays and reconnect a known good display from the maintenance kit. Once the known good display is connected the light should go after a minute or so. Then attach one of the other displays. If the light remains off, disconnect and try the other display. If the light comes back on the bad display would be the last one reconnected. And if the reverse happens, then the first display was the culprit. In some cases both displays could have been damaged if they had been reconnected incorrectly.

12) If the system being trouble shot or checked have more than two displays. Remove one display at a time allowing a minute to pass before removing the next. Before removing the next panel and after allowing a minute to pass check to see if the malfunction light cleared. Leave each display unplugged until there is only one left on the system. If the malfunction light continues after removing all of the other displays, disconnect the last display and replace it with a known good display from the maintenance kit. If all of the switch inputs have checked out as "good", and the bed shaker circuit is good and a known good main is in place and a known good display is in place, the system malfunction should be cleared.

Then begin reconnecting one display at a time and remove the last. If the system remains clear then continue adding one display back at a time

13) If no trouble source is determined, replace the main control board with a KNOWN GOOD main control board from the maintenance kit.

If the system malfunction light continues to remain lighted after a minute or two continue trouble shooting the room with that known good board repeating the above procedures until the trouble is found

14) If the problem is found to be the main board, return it.

Call for a return authorization and for cost of repair and shipping & handling charges.

Note: HARC Room Valet System Mains that were purchased before 1996 are no longer supported. They can not be upgraded or repaired. These systems had a main control circuit board with a separate bed shake and ring detect board. The main would have to be replaced and the bed shake/ring detection board would have to be removed. An in the field wiring modification done as the newer generations of main control boards have the bed shake and ring detect circuitry incorporated into the main. It would be recommended to change out all mains at one time for these installations. Contact HARC technical support for more information and pricing.

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# Room Valet Alerting System

## **LIMITED WARRANTY**

All HARC ROOM VALET parts and components are warranted for two years from the date on installation. **WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT** of the defective part or component **ONLY** and does not include consequential damages or any labor or shipping. Repair or replacement of a component is at the sole discretion of HARC. Damage due to misuse, abuse, act of God, etc., or improper or incorrect installation is not covered by this warranty.

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