

LVTMM Grounding Scheme

- The LVTMM Control module sits in the Service Cavern and gets its ground from the AC power ground in the rack. Both the +5 volt supply for the LVTMM Control board and +12 volt supply for SeaLevel and the USB Hub are referenced to this ground.
- The LVTMM gets its ground from the LVTMM Control Board. The ground is carried through the CAT5 control cable connecting the two modules.
- The sensors at the RBX's are all floating. The 12 volt supply in the Service Cavern that powers the LVTMM is also floating.
- The default for the shields of the control cable and power cable is to tie the shields to the AC power grounds in the Service Cavern. The shields will have no connection to LVTMM ground.
- The shield for the control cable can be broken before it attaches to the LVTMM array of RJ45 jacks. If the shield is not broken it will be connected to the shields of all the front panel RJ45 jacks which are common including those for the sensor cables.

