

Neundorfer Voltage Controls

MVC-3 to MVC-4 Conversion

While conversion from Neundorfer MVC-3 to MVC-4 voltage controls is a straightforward process, the following tips will ensure a smooth conversion. **Bold face** type indicates particularly important points that the installer should be aware of before beginning this process.

- The MVC-4 control can be mounted where the MVC-3 interface board will be removed.
- Din rail mounted
 - Two holes drilled and tapped
- If the control is mounted in this location, the existing wiring may be long enough to reach the terminations on the MVC-4.
 - Less re-wiring needs to be done.
- **The MVC-4 senses the zero cross from the control power.**
 - **The control transformer must be fed from the same phase as the T/R set it controls** (this is typically the case).
 - This eliminates two wires.
- Most hard-wired inputs/outputs will work with the MVC-4.
 - Remote stop, start and trip inputs
 - Control trip output
- The MVC-4 display mounts exactly in place of the MVC-3 display.
 - No holes to drill or cut
- **The primary current CT will more than likely need to be replaced.**
 - The tolerance of the MVC-4 is tighter than the MVC-3.
 - If a new CT is needed it should mount directly in place of the existing CT.
- The contactor, SCRs and control transformer will be reused.
 - A new SCR snubber will be included in the retrofit and should mount directly in place of the existing snubber assembly.
- Safety is a big plus as there is no calibration required.
- **MVC-4 will not work with POS 6.0.**
- MVC-3 is compatible with POS 7.0.
- **MVC-4 communicates at a higher baud rate than MVC-3 and MicroRap, so the MicroRap will need its own communications cable.**
- **Electrical isolation is required at all room boundaries, preferably using fiber optic links.**
- MVC-4 units can be replaced one at a time if one fails.
- If an MVC-3 fails, it can be readily replaced with an MVC-4.
 - The new MVC-4 will not communicate with the POS 7.0 unless there is a separate communications cable.



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