



APPLICATION NOTE

MAGNUM KEYPAD CHANGES



**Keypad REV 10.0 and greater requires
MCS-Magnum firmware 17.62I or greater**



Download from MCS-WEBSITE

MAGNUM KEYPADS Version 10.0 and greater are shipped with the jumper pins preset for +12VDC for MAGNUMS Revision 7 and higher (must change if lower Revision number)*

If you have a MCS-MAGNUM lower than revision 7, you will need to change the location of two jumpers located on the Keypad board as shown. Revision numbers are printed on the board or have a label showing the REV number.

FIGURE 1- MAGNUM

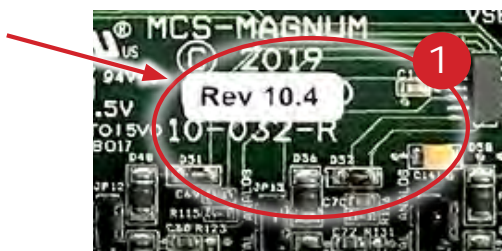


FIGURE 2- KEYPAD

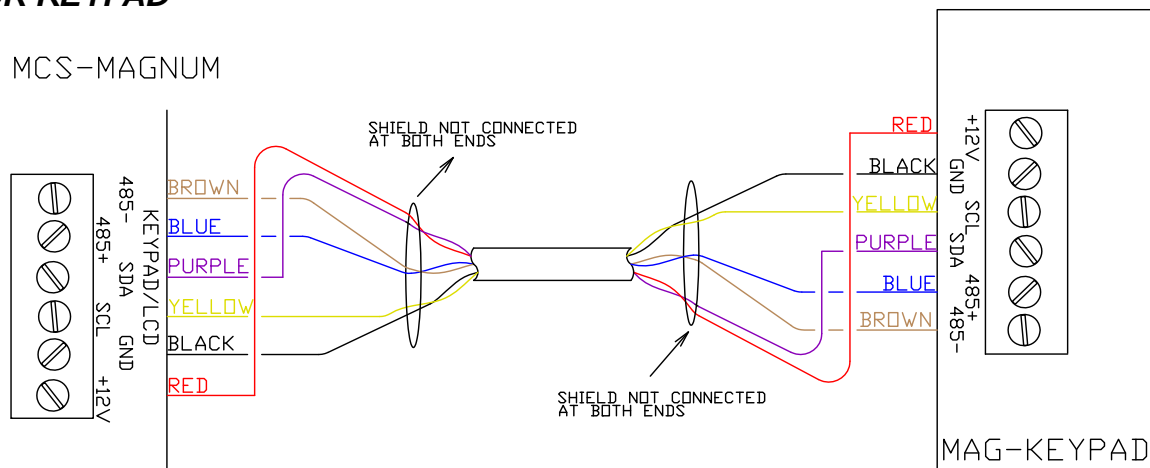
(Pins factory set for
Magnum REV 7 or higher,
+12 VDC)

***NOTE: REV 5.5 IS OKAY
WITH PINS SET FOR
+12VDC**

MCS-Magnum REV number 6 AND LOWER, except REV 5.5*

1. Turn the keypad over to the board side.
2. Remove the lexan cover, locate the four white plastic nuts, remove these and the lexan cover can be removed by lifting up on all sides.
3. There are two jumper pins (figure 2), move to +5VDC, covering the bottom pins,
If MCS-MAGNUM REV NUMBER IS less THAN 7, EXCEPT AS NOTED FOR REV 5.5.
4. Replace the lexan cover, and you can now install your keypad.

WIRING FOR KEYPAD



PROPER INSTALLATION ON REVERSE SIDE OF THIS SHEET



CAUTION!

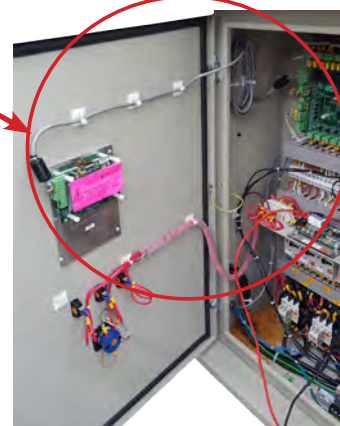
Remove all power before making any connections. Failure to do so might result in personal injury and/or equipment damage.

ROUTING THE CABLE FOR MAG-KEYPAD

MAG-Keypad/LCD cable should run through your enclosure as far away from any power cables as possible. Follow the steps below to avoid any interference.

1. Run your Keypad wiring from the MCS-MAGNUM at 90 degree angles from high amp cabling coming from relays, etc. **AVOID RUNNING PARALLEL NEXT TO THESE TYPE CABLES.**
2. Keep high amp wiring away from the Keypad cable if you can, **see photo below:**

OEM Enclosure being rewired in the field- Photo shows how the Magnum Keypad/LCD cable is being run away from high amp wiring.



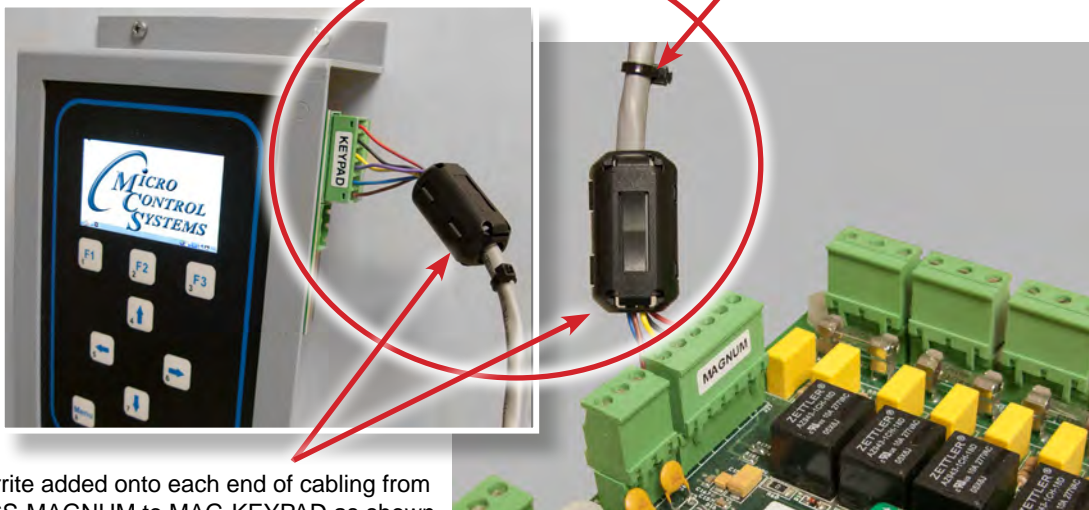
IT IS IMPORTANT NOT TO HAVE ANY HIGH AMP WIRING RUNNING NEAR THE KEYPAD CABLE.

When mounting the MAG-KEYPAD-OEM-232, fold over the black ground tab on the right side of the Keypad, and place the washer over the black tab. Fasten the nut on the Keypad.



3. Keep your Keypad wiring as short as possible in the enclosure. Avoid bundling up of the cable. If necessary cut and shorten cable. Make sure to keep the same wiring and Ferrite.
4. **MAKE SURE THERE IS A FERRITE ON EACH END OF YOUR KEYPAD WIRING TO SUPPRESS NOISE INTERFERENCE.**

Small Wire Tie added to avoid Ferrite from moving down the cable



Ferrite added onto each end of cabling from MCS-MAGNUM to MAG-KEYPAD as shown in photo