### Micro Control Systems APPLICATION NOTE APP-026

# **MCS I/O Network Setup**

### **Revision History**

Date	Author	Description
3/22/00	M Singer	How to properly set up the I/O network.

## Theory

For proper operation of the MCS I/O network, there are 3 items that must be considered. The network must be wired correctly, for protection against noise from outside sources the shield must be connected properly, and the berg jumpers must be set on the boards correctly. These notes will apply to the MCS-8, MCS-I/O, RO8, SI8, and SI16 boards.

## Purpose

This application note is written to show correct setup of the MCS I/O network. Use 2 conductor, 22 gauge shielded wire for the MCS I/O network bus. Connect all the PLUS (+) terminals to each other and connect all the MINUS (-) terminals to each other. Tie all of the shield wires together but only connect the end of the shield to the ground terminal on the MCS-8 master. Leave the other end unattached. Install termination berg jumpers at each end of the bus while removing all other termination berg jumpers in between the outer units. See diagram below.

The cable must be run serially from device to device, so there are only <u>**TWO**</u> <u>**ENDS**</u> to the communications bus. The total length of the cable must not exceed 6000 feet.

