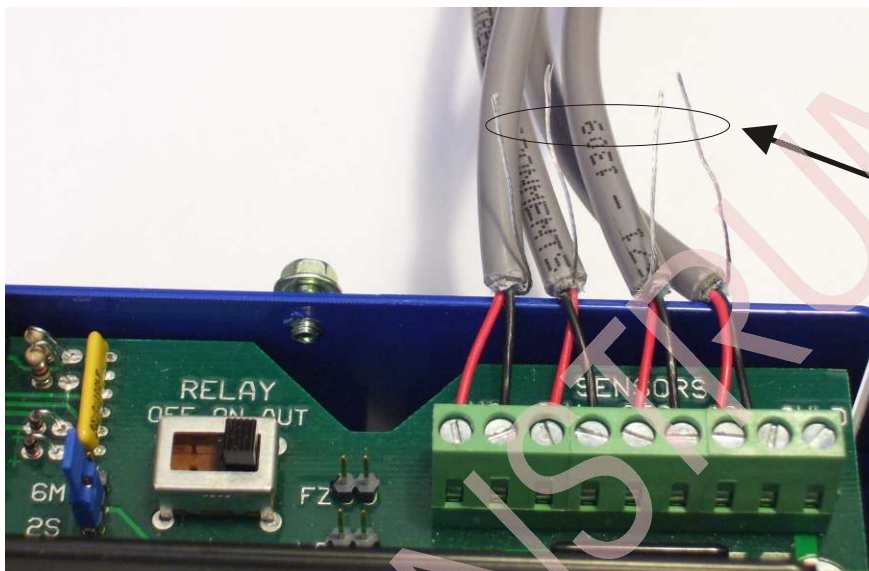


CABLE SHIELD and Proper GROUNDING

It is recommended in today's Radio interference "RICH" environment that all sensor wiring be shielded. Listed below are a few suggested wire part numbers. Wire selected must also meet local codes and be rated for indoor/outdoor use by its manufacturer.

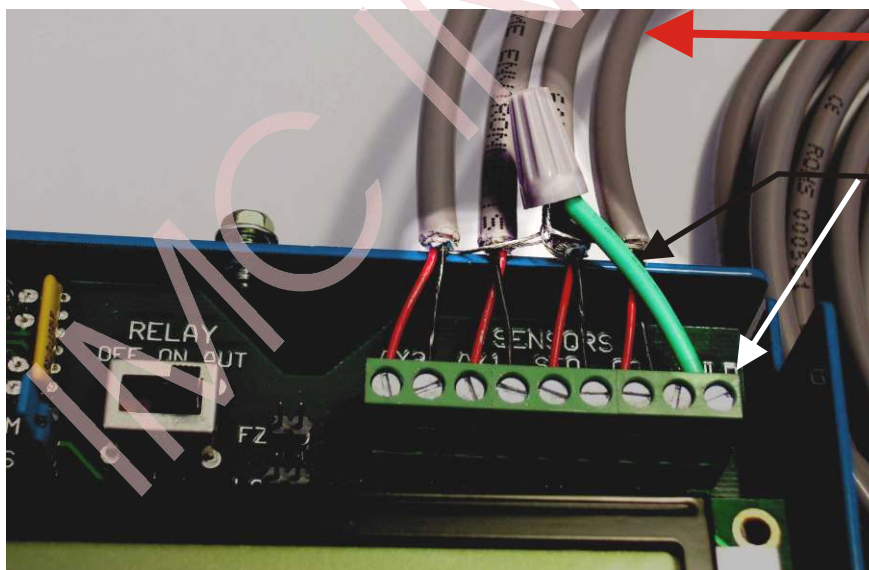
- | | | |
|----|---|---------------------------|
| 1) | "PLTC" Belden # 9322 (22ga) or 9320 (20ga) | Best specifications |
| 2) | "Control" Belden # 8761 (22ga) or 8762 (20ga) | Better specifications |
| 3) | "Audio" Belden # 9451-10 Black (22ga) | Acceptable specifications |

The cable SHIELDS must be brought to the shield grounding terminal that is the rightmost position on the SENSOR terminal block. See photo below. For ease of shield installation, insert one short wire in the shield terminal labeled "SHLD" and connect all the shields together with a "wire-nut" or other reliable means. Ungrounded shields may result in very noisy readings and possible damage to the Solar controller circuits. **The connecting cable SHIELDS must be grounded at the controller side ONLY. DO NOT ground the sensor cable SHIELDS to the COLLECTOR or any other object other than at the CONTROLLER SHIELD TERMINAL.** ----- SEE PHOTOS BELOW ----



4 SHIELD DRAIN WIRES

DO NOT ground the sensor cable SHIELDS to the COLLECTOR or any other object other than at the CONTROLLER SHIELD TERMINAL



COMMON SHIELD TERMINAL

For technical assistance please contact :
 Installation Technical department at
 IMC Instruments
 468 Liberty Dr.
 Wittenberg , WI 54499
 715 253 2801

IMC INSTRUMENTS INC	
SHIELD AND GROUNDING LAYOUT	
DRAWN BY L.F.	1-28-2011
NO SCALE	WITTENBERG, WI

SHIELDED WIRE SOURCES

Subject: Sensor wire Newark links

Best suited for outdoor installation exposed or protected

**PLTC AND ITC — UL SUBJECT
13 AND 2250 CABLE**



BELDEN
SENDING ALL THE RIGHT SIGNALS



9407

Stranded tinned copper conductors, PVC insulated, chrome PVC jacket. All are single pair or single triad. Cable can be used in race ways, supported by messenger wire, outdoor applications and direct burial. Industrial, automotive and process control cable. Can be installed in wet or dry locations. Shielded cable is recommended for RF applications requiring crosstalk-free, balanced operation. Tri-rated cable meets UL subject 13 and 2250, 300V, 150°C, 300V 80°C article 725 NEC, Class 2 and 3 req. Passes UL 1581 vertical wire flame test. All NEC type CMG.

500 ft of Belden 9322 (22ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=03F6052>

1000 ft of Belden 9322 (22ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=03F6053>

500 ft of Belden 9320 (20ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=03F6055>

1000 ft of Belden 9320 (20ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=03F6056>

Best suited for outdoor when protected or for indoor installation

**SINGLE PAIR BELDFOIL®
SHIELDED AUDIO, CONTROL AND
INSTRUMENTATION CABLE**



BELDEN
SENDING ALL THE RIGHT SIGNALS



8450



9154

All feature tinned copper conductors, overall Beldfoil® shield, PVC outer jacket and tinned copper drain wire except mfg. part no. 8840 which is tinned copper over steel. Mfg. part nos. 9451, 9461, 9464, 9460 feature jacket and shield bonded together for automatic stripping. Mfg. part nos. 8450, 8451 have paper wraps. Sold in 500' and 1000' spools. Also available in 100' spools; go online or call.

500 ft of Belden 8761 (22ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=02F4247>

1000 ft of Belden 8761 (22ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=87K7272>

500 ft of Belden 8762 (20ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=87K6339>

1000 ft of Belden 8762 (20ga)

<http://www.newark.com/jsp/search/productdetail.jsp?SKU=87K7273>

IMC INSTRUMENTS INC

SHIELD AND GROUNDING LAYOUT

DRAWN BY L.F.

1-28-2011

NO SCALE

WITTENBERG, WI