

Revised 04/04/08

Attention Solar enthusiasts;

Below please find an application note that we included in past Emails. This is a Reminder that in today's SERIOUSLY CONGESTED AIR WAVES you should take all recommended precautions to protect your SOLAR INSTALLATIONS !!! Radio interference is now present every were you go in the form of YFIY networks, Cell phones, wireless telephones and other types of transivers. The attached recommendations will minimize their effect in SOLAR INSTALLATIONS. We hope that you follow the recommendations we have outlined in the attached PDF wiring application Notes.

Best Regards Louis Frias IMC Instruments

## <u>NOTICE</u>

The manufacturer of the Eagle line of controllers strongly recommends that sensor wiring be done with proper shielding. Sensor wiring should be shielded so that the signal quality remains high while also protecting the microcircuits from damage by low energy electrical disturbances.

The "screw-less" terminal style for the sensor wiring has been carefully selected for use with <u>stranded</u> wire that is commonly available with shielding. The terminal clamp makes a reliable connection without tools and without damaging the fine wire strands. Conventional "barrier" terminal screws often pinch-cut fine wire strands and "euro" style terminals require small screwdrivers that are not always on hand.

Installers that don't adhere to this recommendation and install <u>unshielded</u> <u>wire with solid conductors</u> are required to splice <u>stranded wire</u> before terminating the connections. The splice can be made inside or outside the controller enclosure with any reliable means such as wire nuts, IDC or crimp connectors. The portion of the wire that enters the board mounted terminals **must be 22 to 18 gage with 7 or more strands (unsoldered)**. If the wire inserted in the terminal is solid or too rigid, the terminal lever will pop out before proper engagement without causing damage. When this happens, the lever can be reinserted and the terminal will continue working properly.

All spliced connections exposed to the weather must be made with waterproof "outdoor" rated connectors.

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
- 2) "Control" Belden # 8761 (22ga) or 8762 (20ga) Bet
- 3) "Audio" Belden # 9451-10 Black (22ga)

Better Pass

Check for availability from your control supplier or any of these sources: Anixter, Graybar Electric or Newark Electronics.

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\* Manufactured in U.S.A by -