

Hall C HV Test Stand Project Status Report

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1. Hall C HV Teststand

- 1.1. Completed parts list to design a new 36 channel distribution system for the CAEN A7030TN for the new Hall C HV modules.
 - 1.1.1. The CAEN OEM component will cost \$1900. However, the module to breakout cable will be short. A DSG design could improve cable management in the hall.
- 1.2. Documented contact issues with the A7030TN modules. The information was forwarded to the Hall C controls mailing list:

CAEN A7030TN Connector

During a preliminary inspection of the Hall C modules, DSG noticed that some of the contacts appeared not to be inserted fully. (Fig. 1).

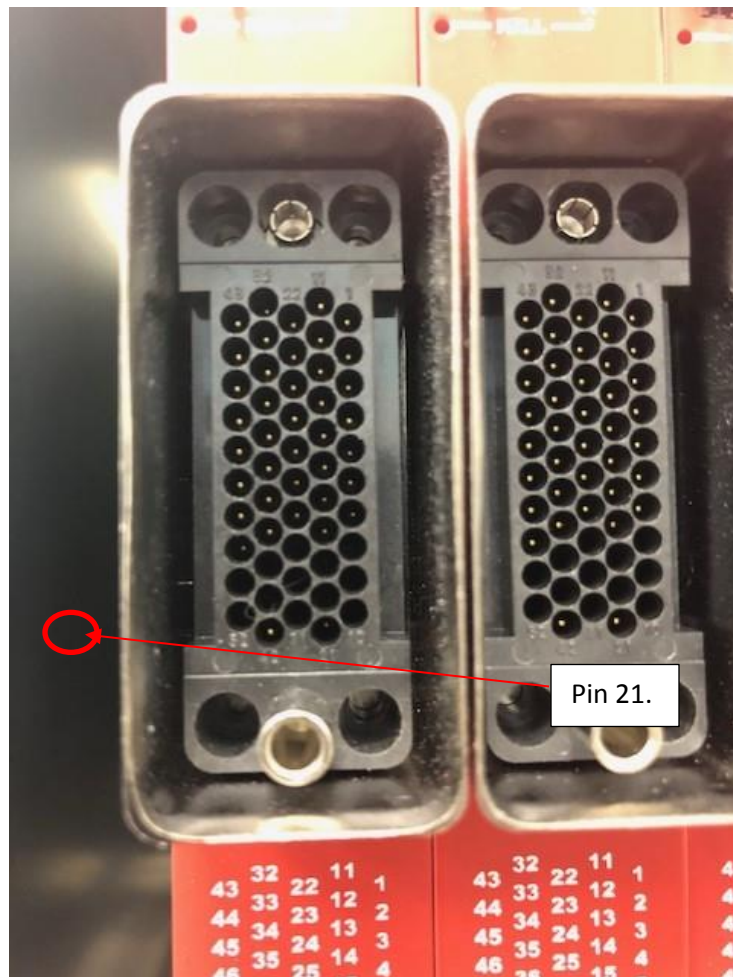


Figure 1. Pin 21 is not inserted to the depth of Pin 42.

After reviewing the assembly procedure for the mating plug, it is noted that CAEN gives instruction on step 17 to pot. Presumably, to keep the pins from backing up the channel tube (see Fig. 2)

CAEN <i>Tools for Discovery</i>		Application Note AN6224 Mount A996 (52 pin cable connector) on a high voltage cable	
Step 17		Fix Plug connector (2) The figure shows the plug connector [A1] with high voltage single cables glued and blocked	
Step 18		Fix Plug connector (3) The figure shows the plug connector [A1] with high voltage single cables glued and blocked	

Figure 2. Page 11 from CAEN Application Note AN6224

Below is a photo of the back side of the connector on the slot 0 module. No potting is applied, and it is unclear if there is a procedure to pot the socket during assembly.



Figure 3. Slot 0 module back side of Radiall connector.

CAEN will be contacted to address this issue.