

3-of-5 Field Remote Pre-amp Installation Kit
AID P/N 705429 Rev. --

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Note: When working with the pre-amplifier assembly it is important that electrostatic discharge (ESD) prevention techniques be observed. Before touching the pre-amp assembly, attach an ESD wrist strap to yourself. Be sure to ground yourself and the ion chamber frame to dissipate static charges.

Note: The pre-amp assembly is a very delicate and sensitive device. It is important to keep it as clean as possible. Wash and dry your hands thoroughly before working with it and, when possible, use unpowdered latex or cotton gloves. Take care to touch the pre-amp board as little as possible. Take extra care to avoid touching the three air-mounted field inputs. Oils from your fingers on the air-mounts or their components can cause performance degradation.

Installation Procedure

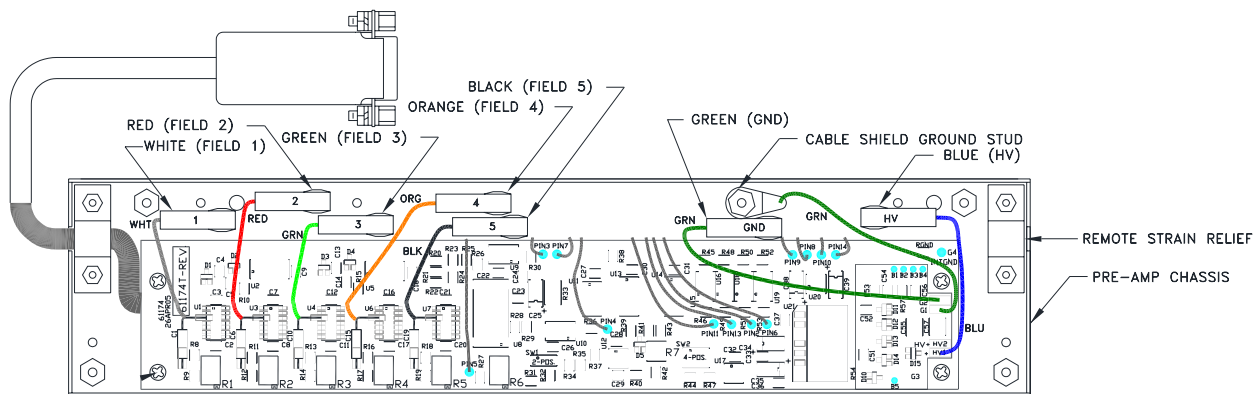
1. Install the ICX series ion chamber as required and route the remote pre-amp cables to the pre-amp chassis mounting location.
2. Remove the cover from the remote pre-amp chassis by removing the four (4) 4-40 X 3/16 screws.
3. Route the remote pre-amp cables through the strain relief in the remote pre-amp chassis and secure the strain relief using the two (2) 2-56 hex nuts. Refer to Figure 1.
4. Connect the coaxial shield ground of the remote pre-amp cables to the 4-40 stud on the remote pre-amp chassis using the 4-40 hex nut provided.
5. Note that the conductor wires from the ion chamber are marked with tags that match the mating wires inside the pre-amp assembly. Connect the wires as follows.

Tag	Remote Cable Wire Color	Pre-amp Assembly Wire Color	Description
1	White	White	Field 1 Output
2	Red	Red	Field 2 Output
3	Green	Green	Field 3 Output
4	Orange	Orange	Field 4 Output
5	Black	Black	Field 5 Output
HV	White Coaxial	Blue	Bias Voltage

6. Mount the remote pre-amp assembly as required. Refer to Figures 2 through 6.
7. Reinstall the cover to the remote pre-amp chassis using the four (4) 4-40 X 3/16 screws removed in Step 2.
8. Calibrate the pre-amp according to the calibration instructions included with the ion chamber.

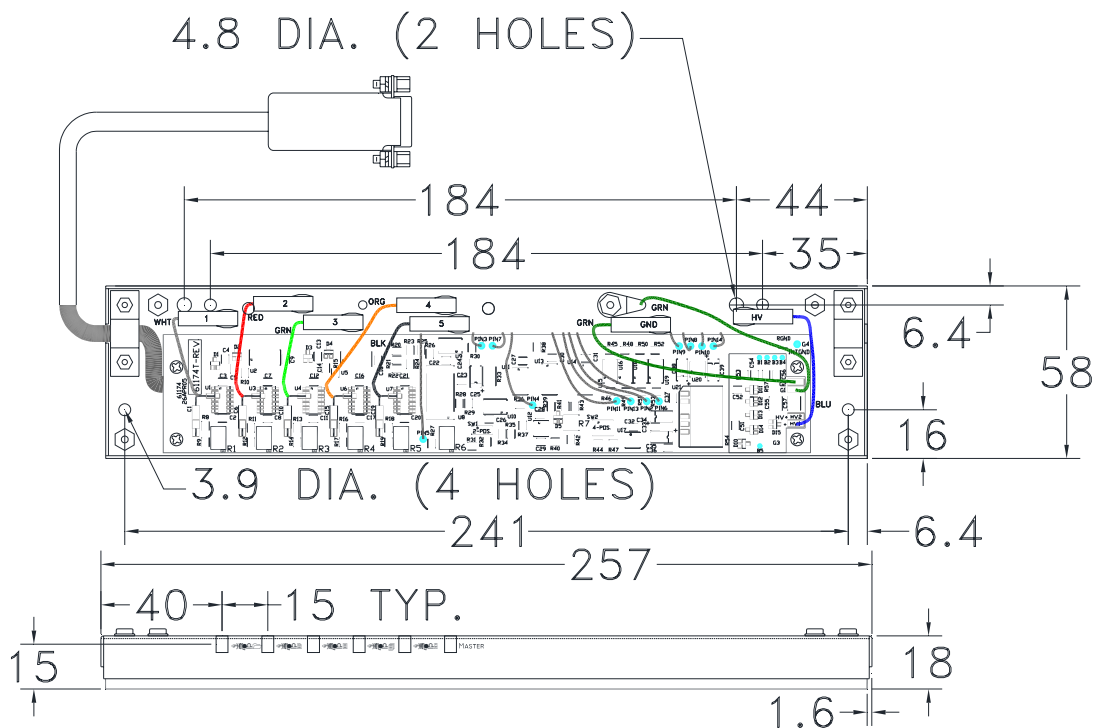
Note: Additional cabling will be required to run from the pre-amp to the x-ray generator AEC. See the calibration instructions for the pre-amplifier for the connector pin-out details.

Figure 1



The pre-amp chassis offers four (4) 3.9mm diameter mounting holes and two (2) 4.8mm diameter mounting holes as shown in Figure 2.

Figure 2



Optional mounting plates, as shown in Figures 3, 4, 5 and 6, may be used to provide mounting holes that can be accessed without having to remove the pre-amp chassis cover.

Figure 3

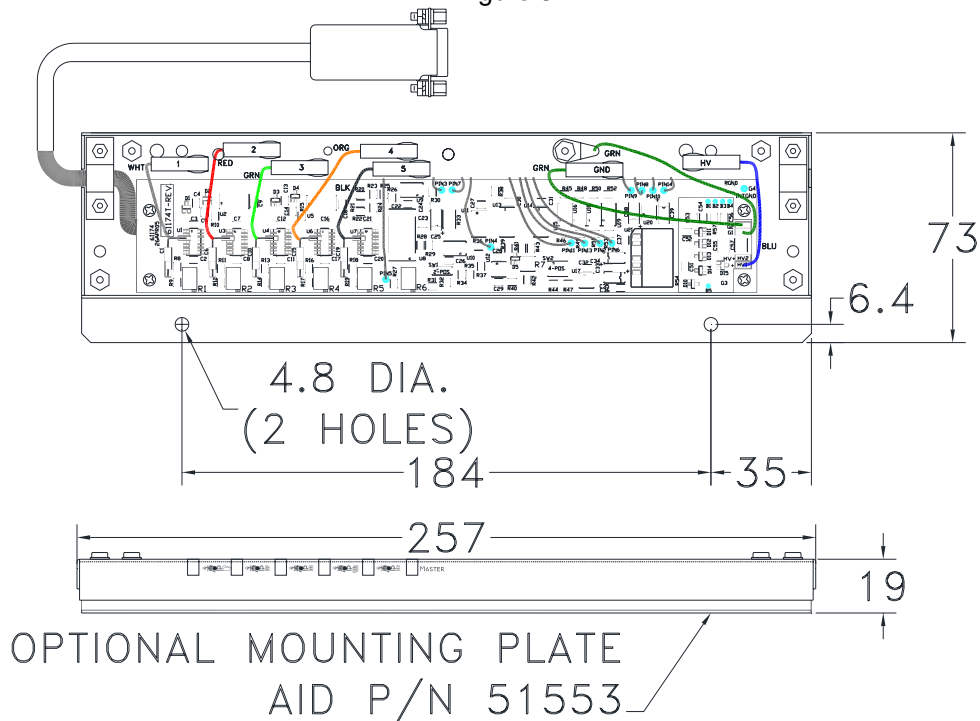


Figure 4

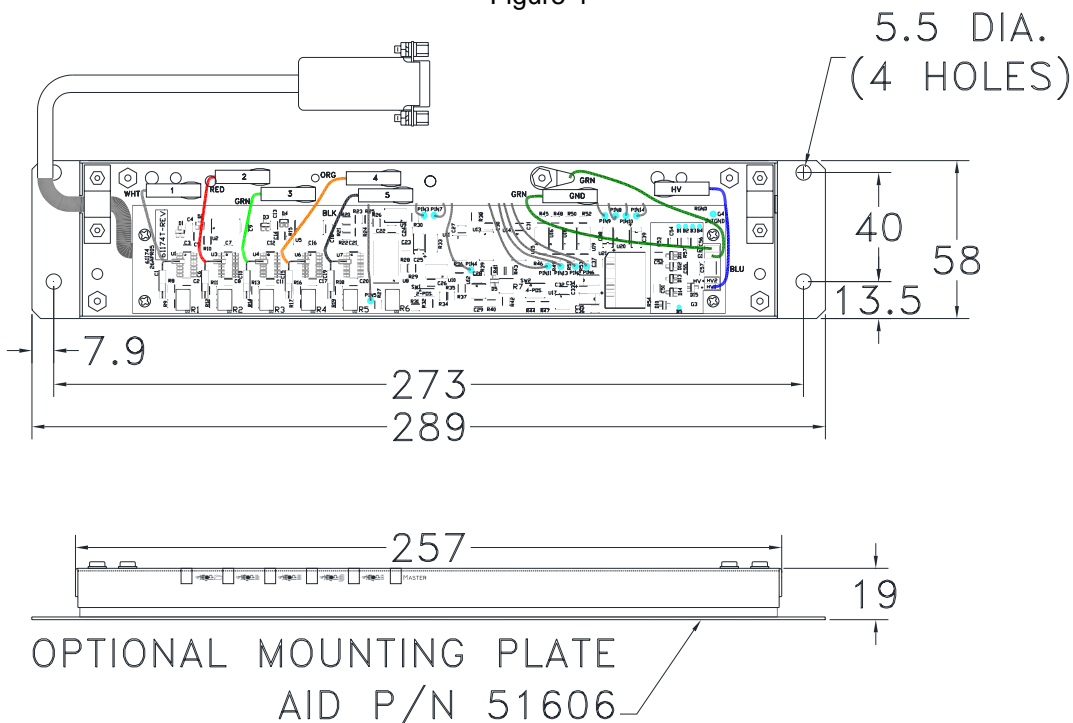


Figure 5

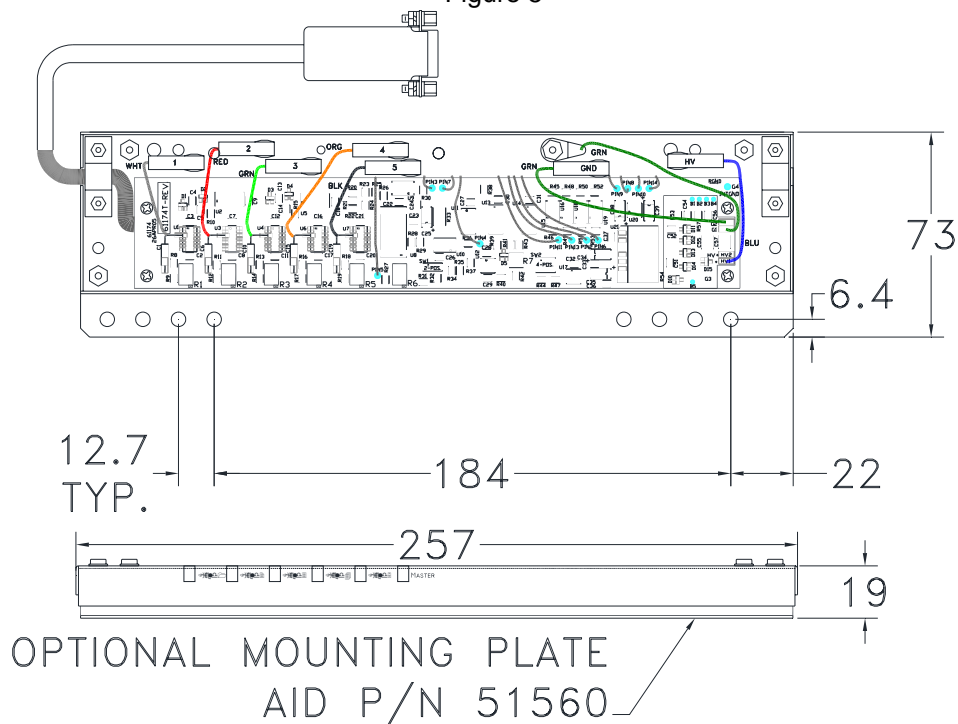


Figure 6

