

3-Field Isolated Remote Pre-amp Installation Kit
AID P/N 705322 Rev. B

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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. 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
A	White	White	Field A Output
B	Black	Black	Field B Output
C	Red	Red	Field C Output
HV	White Coaxial	Blue	Bias Voltage
GND	Cable Shields	Green	Ground

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

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Additional cabling will be required to run from the pre-amp to the x-ray generator AEC. Please refer to our website " <http://www.aidxray.com/ioncables.htm> " for a complete list of our ion chamber cables.

The following table lists the pin-out details of our Toshiba compatible ion chamber cable. These cables are available in stock lengths of 45, 65 and 85 feet. Custom lengths are also available. Specify cable length as a suffix to the cable part number (-XX). For example, "75068-45" is a 45-foot length of the Toshiba compatible cable, whereas, "75068M04" would be a 4-meter length of the same cable.

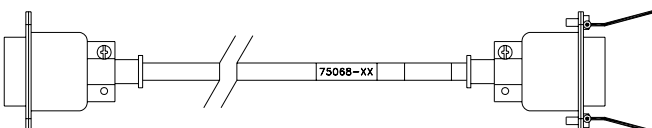
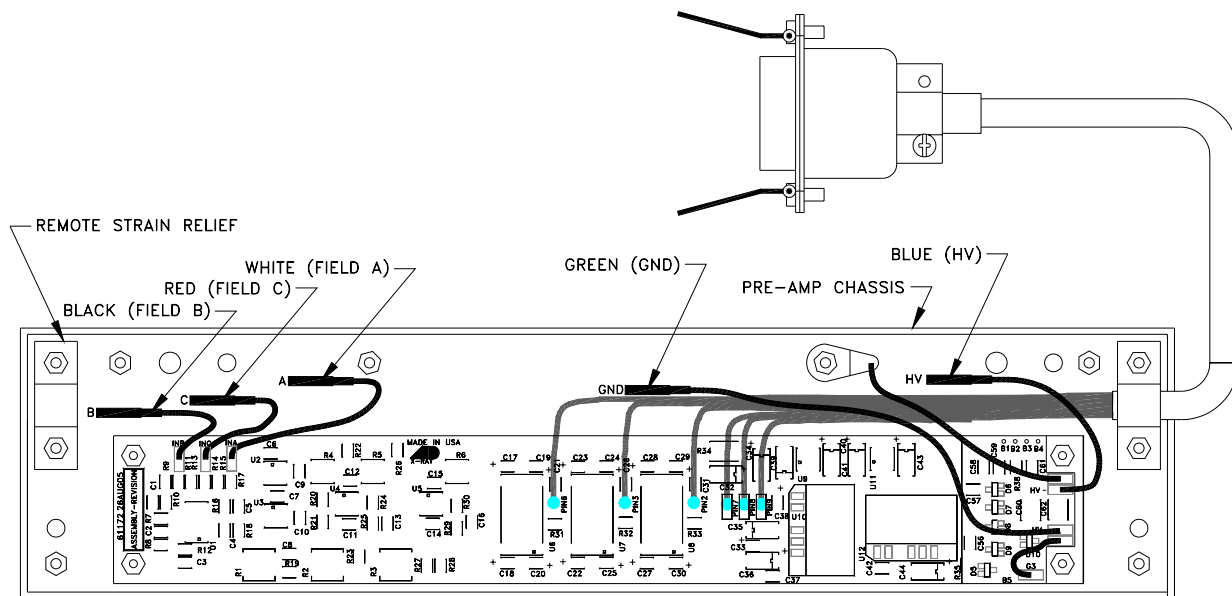
75068-XX			
ION CHAMBER CONNECTOR	ION CHAMBER CABLE TOSHIBA COMPATIBLE		AEC CONNECTOR
MALE 14-PIN CENTRONICS PARALLEL			FEMALE 14-PIN CENTRONICS PARALLEL
PIN NUMBER	WIRE COLOR	FUNCTION	PIN NUMBER
1,3,5,7,8,9,11&13	NONE	NO CONNECTION	1,3,5,7,8,9,11&13
2	BROWN	-15VDC	2
4	BLACK	GROUND	4
4	CLEAR	SHIELD	N/C
6	RED	+15VDC	6
10	VIOLET	FIELD 3 SIGNAL	10
12	WHITE	FIELD 2 SIGNAL	12
14	ORANGE	FIELD 1 SIGNAL	14

Figure 1



The pre-amp chassis offers four (4) 0.156-inch (3.9mm) diameter mounting holes and two (2) 0.188-inch (4.8mm) diameter mounting holes as shown in Figure 2.

Figure 2

