

Shimadzu Power Adapter Kit
 Installation Instruction
 AID P/N 705327 Rev. --

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The Shimadzu Power Adapter Kit, AID P/N 705327, conditions the input and output signals of up to two (2) ion chambers to allow their interface with the various models of Shimadzu x-ray generators.

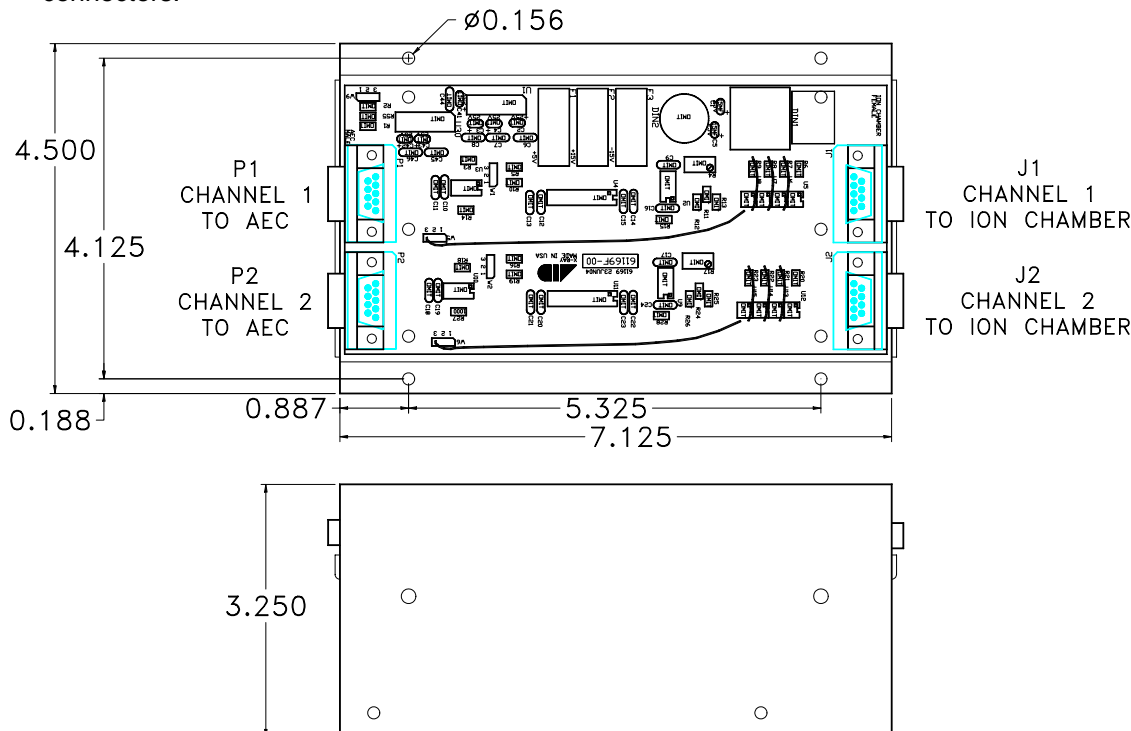
NOTE: When working with this assembly or the ion chamber pre-amplifier it is important that electrostatic discharge (ESD) prevention techniques be observed. Turn off power to the assemblies. Before touching either assembly, attach an ESD wrist strap to yourself. Be sure to ground yourself, the adapter kit chassis, the ion chamber frame and the pre-amp chassis to dissipate static charges.

The major components of the 705327 Shimadzu Power Adapter Kit are:

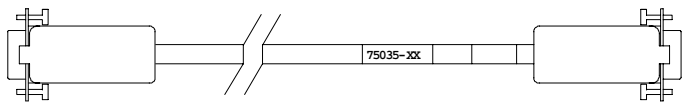
AID P/N	Description
49084	45W SWITCHING DESKTOP POWER SUPPLY
51588	ADAPTER POWER SUPPLY SUPPORT PAN
51589	ADAPTER PCB MOUNTING BRACKET
51590	ADAPTER PCB COVER
61169F	SHIMADZU POWER COMPATIBILITY ADAPTER (2-CHANNEL)
75092-04	4-FT CABLE 9-PIN SUB-D TO 9-PIN IN-LINE
75085	POWER CORD IEC STRAIGHT-POWER PLUG

Installation Procedure

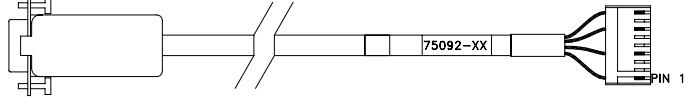
1. Locate a suitable mounting location for the 705327 Shimadzu Power Adapter Kit. The kit should be located within six (6) feet of the power mains and within four (4) feet of the AEC input connectors.



- Connect each ion chamber to the 705327 kit at J1 (Channel 1) or J2 (Channel 2) using AID P/N 75035-XX, where the suffix "-XX" denotes the cable length in feet. Standard cable lengths are 45, 65 and 85-feet.

75035-XX			
ION CHAMBER CONNECTOR	ION CHAMBER CABLE WITH STRAIGHT CONNECTOR SHELLS		AEC CONNECTOR
FEMALE 9-PIN SUB-D			MALE 9-PIN SUB-D
PIN NUMBER	WIRE COLOR	FUNCTION	PIN NUMBER
1	BLACK	NONE	1
2	BROWN	FIELD 2 SELECT	2
3	RED	FIELD 1 SELECT	3
4	ORANGE	RESET	4
5	YELLOW	OUTPUT	5
6	GREEN	FIELD 3 SELECT	6
7	BLUE	-15VDC	7
8	VIOLET	+15VDC	8
9	WHITE	GROUND	9
9	CLEAR	SHIELD	N/C

- Connect each ion chamber from the 705327 kit at P1 (Channel 1) or P2 (Channel 2) to the Shimadzu AEC using a 4-foot Shimadzu Adapter Cable, AID P/N 75092-04. On the Shimadzu AEC board PH CONT-2002 connect the 75092-04 cable to either the J9 & J10, J11 & J12 or J13 & J14 connector pairs.

75092-XX			
ION CHAMBER CONNECTOR	SHIMADZU COMPATIBLE		AEC CONNECTOR
FEMALE 9-PIN SUB-D			FEMALE 9-PIN IN-LINE
PIN NUMBER	WIRE COLOR	FUNCTION	PIN NUMBER
1	BLACK	NONE	N/C
2	BROWN	LEFT FIELD OUTPUT	9
3	RED	CENTER FIELD OUTPUT	4
4	ORANGE	NONE	N/C
5	YELLOW	NONE	N/C
6	GREEN	RIGHT FIELD OUTPUT	7
7	BLUE	NONE	N/C
8	VIOLET	NONE	N/C
9	WHITE	GROUND	1
9	CLEAR	SHIELD	N/C

- Connect the output cable of the switching power supply to 61169F DIN1 connector.
- Connect the switching power supply to the mains using the 6-foot power cord that plugs into a standard 120VAC outlet.
- Calibrate the pre-amp for each ion chamber according to the calibration instructions included with that ion chamber.

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