

Philips Adapter Kit
Installation Instruction
AID P/N 705206 Rev. --

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The Philips Adapter Kit, AID P/N 705206, conditions the input and output signals of up to two (2) standard AID compatible ion chambers to allow their interface with the various models of Philips 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.

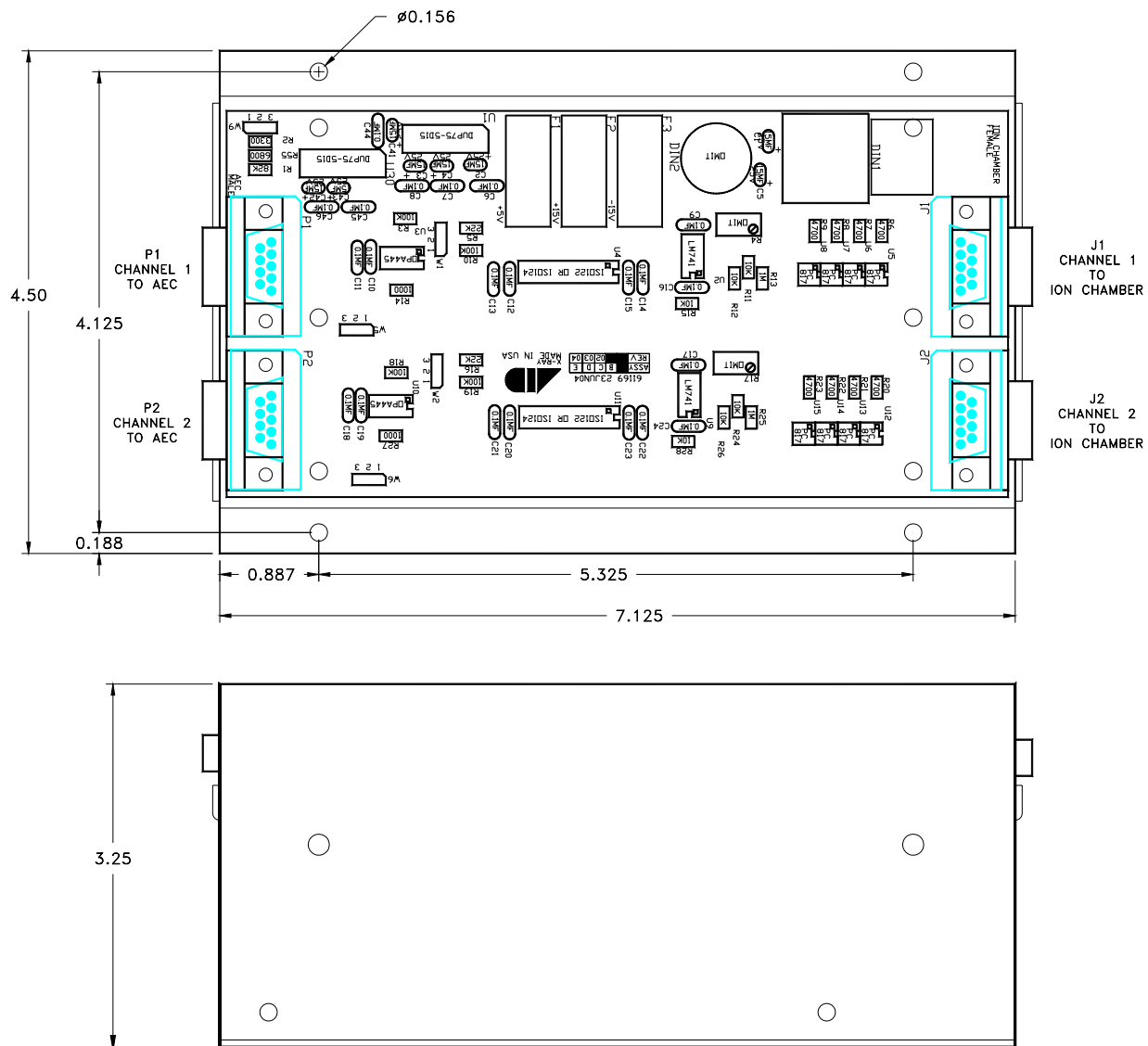
As can be seen in the drawing at the end of this document, the major components of the 705206 Philips Adapter Kit are:

AID P/N	Description
49084	POWER SUPPLY, 45W SWITCHING DESKTOP
51588	SUPPORT PAN, PHILIPS ADAPTER POWER SUPPLY
51589	BRACKET, PHILIPS ADAPTER PCB MOUNTING
51590	COVER, PHILIPS ADAPTER PCB
61169B	AID TO PHILIPS COMPATIBILITY ADAPTER (2-CHANNEL)
75015-04	CABLE, 4-FT 9-PIN SUB-D TO 14-PIN AMP PHILIPS
75085	PWR CORD IEC STRAIGHT-PWR PLUG

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Installation Procedure

1. Locate a suitable mounting location for the 705206 Philips 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.

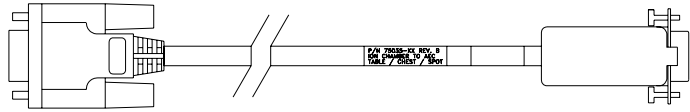


2. The jumpers on the 61169B board of the 705206 Philips Adapter Kit allow the ion chamber signals to be matched to the particular requirements of the Philips Automatic Exposure Control (AEC).

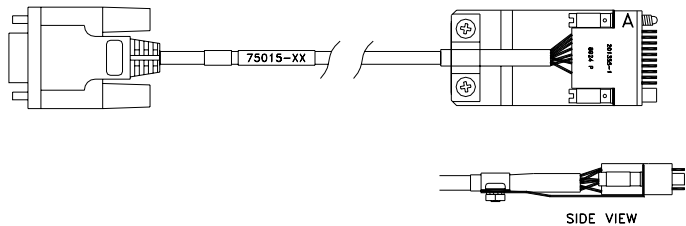
Jumper	Function	Setting	Factory Setting
W1	Channel 1 Low Gain	1-2	
W1	Channel 1 High Gain	2-3	●
W2	Channel 2 Low Gain	1-2	
W2	Channel 2 High Gain	2-3	●
W5	Channel 1 Internal 0V Return	1-2	●
W5	Channel 1 External 0V Return	2-3	
W6	Channel 2 Internal 0V Return	1-2	●
W6	Channel 2 External 0V Return	2-3	
W9	Low Gain Offset	1-2	
W9	High Gain Offset	2-3	●

NOTE: Jumper W9 must be set in conjunction with Jumpers W1 and W2. All three jumpers must either be set for the high gain settings or for the low gain settings.

3. Connect each ion chamber to the 705206 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

4. Connect each ion chamber from the 705206 kit at P1 (Channel 1) or P2 (Channel 2) to the Philips AEC using a 4-foot Philips Adapter Cable, AID P/N 75015-04.

75015-XX			
ION CHAMBER CONNECTOR	PHILIPS COMPATIBLE ION CHAMBER CABLE		AEC CONNECTOR
FEMALE 9-PIN SUB-D			MALE 14-PIN AMP M SERIES (201355-1)
PIN NUMBER	WIRE COLOR	FUNCTION	PHILIPS PIN NUMBER
1	BLACK	NONE	N/C
2	BROWN	FIELD 2 SELECT (FDLCH)	A
3	RED	FIELD 1 SELECT (FDCCH)	D
4	ORANGE	START (RELCH)	E
5	YELLOW	OUTPUT (SIGNCH)	R
6	GREEN	FIELD 3 SELECT (FDRCH)	H
7	BLUE	-15VDC (NOT USED)	P
8	VIOLET	0V RELAYS	N
9	WHITE	GROUND (0VXG/0VRF)	J
9	CLEAR	SHIELD	N/C

5. Connect the output cable of the switching power supply to 61169B DIN1 connector.
6. Connect the switching power supply to the mains using the 6-foot power cord that plugs into a standard 120VAC outlet.
7. Calibrate the pre-amp for each ion chamber according to the calibration instructions included with that ion chamber. Make certain that the jumpers on the 61169B adapter kit board are set in the appropriate positions for the Philips AEC (refer to Step 2 of this document).