

705100 Rev. A

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ICX118 Series  
Three-field Ionization Chamber Installation Kit  
P/N 705100

The ICX118 series of three-field ionization chambers are designed for use with the Fuji FCR 9501<sup>1</sup> Chest Stand. The model to be used is determined by the generator type (refer to the following table).

MODEL	AEC COMPATIBILITY
ICX118	AID Compatible <sup>2</sup>
ICX218	GE Compatible
ICX318	Philips Compatible
ICX418	Fischer, Varian Compatible
ICX518	Bennett Compatible
ICX618	Continental, Keithley Compatible
ICX718	Siemens Compatible
ICX818	Picker Compatible

### Equipment Required

Each ion chamber includes a 17 foot cable (AID P/N 75062-17) to run from the ion chamber pre-amplifier to the cable exit of the Fuji chest stand. In addition, this kit includes the following items.

PART NO.	DESCRIPTION	QUANTITY
54002	Cable Tie	4
54003	Adhesive Cable Tie Mount	2
59575	M3 x 6 Phillips Pan Head Screws	4
59708	No. 4 Flat Washer	4

<sup>1</sup> These ion chambers are **NOT** compatible with the Fuji FCR 9501-ES. Use the ICX123 series ion chambers and installation kit 705140 for the Fuji FCR 9501-ES.

<sup>2</sup> AID compatible ion chambers are designed for use with Advanced Instrument Development, Inc.'s Expos-AID automatic exposure controls as well as those produced by other manufacturers such as Acoma, Control-X, Electromed, Gendex, Innerscan, OEC, Summit Industries, etc.

Additional cabling will be required to run from the cable exit of the Fuji chest stand to the x-ray generator AEC. The following table lists cables that are available from AID. These cables are available in 45, 65 and 85 foot lengths. Specify cable length as a suffix to the cable part number (-XX). For example, "75035-45" is a 45-foot length of the standard 9-pin sub-d cable.

AID Part Number	Description	Ion Chamber Connector	AEC Connector
75015-XX	Philips compatible	Female 9-pin sub-d	Male 14-pin AMP M Series (201355-1)
75030-XX	GE compatible (MSI, MST & DXS generators)	Female 9-pin sub-d	Male 15-pin AMP Mate-N-Lock (1-480324-0)
75035-XX	Standard ICX cable	Female 9-pin sub-d	Male 9-pin sub-d
75043-XX	RMS/Fischer compatible	Female 9-pin sub-d	Male 14-pin AMP M Series (201355-1)
75045-XX	GE compatible	Female 9-pin sub-d	Male 14-pin AMP M Series (201355-1)
75047-XX	Picker compatible	Female 9-pin sub-d	Female 15-pin Molex (1625-15P)
75048-XX	GE Compatible (MPX generators)	Female 9-pin sub-d	Female 15-pin AMP M Series (205606-3)
75049-XX	ICX cable with flying leads	Female 9-pin sub-d	Supplied by installer
75054-XX	Picker Compatible	Female 9-pin sub-d	Male 3-pin Molex (03-06-1032) And Male 9-pin AMP (1-640511-0)
75059-45	Bennett Compatible (45 foot length only)	Female 9-pin sub-d	Female 11-pin in-line
75061-XX	ICX cable with fork lugs	Female 9-pin sub-d	#6 fork lugs
75062-XX	ICX interconnection cable	Female 9-pin sub-d	Male 9-pin sub-d with fixed mounting hardware

## Installation Procedure

1. Remove the outer cover from the Fuji FCR 9501 Chest Stand.
2. Remove the grid assembly.
3. Remove the three (3) existing M4 screws as shown in Figure 1. Two of the three screws will be used to mount the ion chamber.
4. Mount the ion chamber using the two (2) M4 screws (from step 3) and the four (4) M3 x 6 screws and four (4) No. 4 flat washers provided. Make certain the ion chamber sits flush against the IP positioning unit.
5. Mount the pre-amplifier assembly as shown using the two (2) existing M5 screws.
6. Route the 17 foot ion chamber cable (p/n 75062-17) through the cable clip at the bottom center of the chest stand. Dress the cable along existing cable routes through the chest stand avoiding sharp edges and moving parts.
7. Reinstall the grid assembly. Make certain that the grid moves freely back and forth before turning on the system power.
8. Calibrate the pre-amplifier as detailed in the calibration instructions included with the ion chamber.
9. After calibration reinstall the outer cover to the Fuji FCR 9501 Chest Stand.

FIGURE 1  
ICX118 INSTALLATION

