



Model 693-D Display Unit

## FEATURES

- Remote Spectrum Display
- Conventional Front Panel
- Operator Friendly
- RS-232C or RS-422 Data Link
- 21.4 or 160 MHz IF

## DESCRIPTION

The Model 693 Remote IF Display provides a conventional IF spectrum display at a location remote from the receiver via a duplex RS-232C or RS-422 data link. The Model 693 consists of two sections: the Receiver Interface Unit located at the receiver, and the Display Unit located at the operator site.

The Display Unit operates as a conventional spectrum display with controls similar to those of Reaction Instruments' Model 695A IF Display; the operator can observe and tune the unit as if it were a conventional SDU colocated with the receiver.

The Receiver Interface Unit accepts an IF input of 21.4 or 160 MHz and provides a digital output to the data link. A data rate of approximately 16 kbaud is recommended, however the unit will function properly at 10 kbaud. Slower data rates are accommodated by data smoothing using a digitally refreshed display technique. As an option, a dual IF unit can be provided with remote IF selection.

Each unit of the Model 693 Remote IF Display is packaged in a 1-3/4 inches high, half-rack chassis. A rack adapter is available for mounting in a standard EIA 19 inch rack. Exceptional EMI/RFI integrity minimizes conducted and radiated signals.



Model 693-R Receiver Interface Unit

## SPECIFICATIONS

<b>Input Center Frequency</b>	Either 21.4 or 160 MHz - Standard 21.4 and 160 MHz - Switch selectable - Optional
<b>Input Impedance</b>	50 ohms
<b>Sweep Width</b>	> 8 MHz at 21.4 MHz IF > 30 MHz at 160 MHz IF
<b>Sweep Rate</b>	5 Hz to 20 Hz
<b>Sensitivity</b>	-90 dBm
<b>Gain Control</b>	50 dB
<b>Response</b>	Log or linear (switch selectable)
<b>Resolution</b>	40 kHz - Standard (others available on special order)
<b>Image Rejection</b>	> 60 dB at 21.4 MHz > 45 dB at 160 MHz
<b>IF Rejection</b>	> 60 dB
<b>Intercept Point</b>	0 dBm
<b>Connectors</b>	Rear Panel
<b>Receiver Interface Unit (693-R)</b>	IF Input - BNC female
<b>Display Unit (693-D)</b>	D-25 female

## Controls Front Panel

<b>Receiver</b>	Forward/Reverse
<b>Interface Unit</b>	Sweep, Power
<b>Display Unit</b>	Sweep Width, Sweep Rate, Gain Response, Marker, Focus, Intensity, Power
<b>CRT</b>	Electrostatic 1-1/8 inches x 3 inches
<b>Power</b>	115/230 Vac, 47-420 Hz
<b>Power Consumption</b>	
<b>Receiver</b>	25 watts
<b>Interface Unit</b>	
<b>Display Unit</b>	25 watts
<b>Temperature - Operating</b>	0° to 50°C
<b>Style, both units</b>	Half-rack chassis
<b>Receiver</b>	1-3/4 inches high by
<b>Interface Unit</b>	22 inches deep
<b>Display Unit</b>	1-3/4 inches high by
	20 inches deep, EIA Rack Adapters available
<b>Weight (each unit)</b>	15 lbs.

Specifications may vary depending on options selected and are subject to change.

## ORDERING INFORMATION

A Model 693 Remote IF Display consists of a Receiver Interface Unit and a Display Unit. A standard Receiver Interface Unit accepts an IF input at 21.4 or 160 MHz (specify), as well as synchronous or asynchronous RS-232C or RS-422 data interface (specify from options listed below). Dual IF inputs (21.4 and 160 MHz), switch selectable from the front panel, are available as an option. The Display Unit data interface is determined by the choice of data interface for the Receiver Interface Unit. When ordering, please specify:

<b>693-R</b>	Receiver Interface Unit	<b>Option I45</b>	RS-422 Synchronous Data Interface
<b>Option S07</b>	Two Switched IF Inputs	<b>Option I46</b>	RS-422 Asynchronous Data Interface
<b>Option I25</b>	RS-232C Synchronous Data Interface	<b>693-D</b>	Display Unit
<b>Option I26</b>	RS-232C Asynchronous Data Interface		

Rack Mounting: Single units of both the 693-R and 693-D must be mounted using a rack adapter. For side-by-side installation, two units may be fastened together and mounted as a single full-rack unit.

<b>697-1</b>	Rack Adapter, single units 693-D	<b>697A-1</b>	Rack Adapter, single units 693-R
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## WARRANTY

All of Reaction Instruments' equipment is warranted for one year, except for damage caused by accident or misuse, provided the equipment is returned for repair to the plant in Herndon, VA.

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