



## FEATURES

- ▶ 21.4 MHz IF Input
- High Sensitivity
- Four IF Bandwidths  
From 10 kHz To 8 MHz

## DESCRIPTION

The Model 702 AM/FM Demodulator is a general purpose demodulator for IF signals centered at 21.4 MHz. The input signals are filtered, amplified and demodulated in high performance AM/FM demodulators. Front panel controls allow selection of gain, bandwidth, AGC/MGC, and AM/FM demodulation. Four bandwidths are available with bandwidths ranging from approximately 10 kHz to 8 MHz. Switched AM or FM video from a single output port is standard; simultaneous AM and FM video outputs are optionally available. A front panel audio phone jack output is provided in addition to the rear panel signal input/outputs.

The Model 702 AM/FM Demodulator is housed in a 1-3/4 inches high half-rack chassis. Exceptional EMI/RFI integrity is provided.

## SPECIFICATIONS

<b>Center Frequency</b>	21.4 MHz
<b>IF Bandwidths</b>	10, 20, 50, 100, 300, 500 kHz,
-User Specified (4 maximum)	1, 2, 4, 6, 8 MHz
<b>Input Impedance</b>	50 ohms
<b>Input Vswr</b>	2.5, maximum
<b>Input Level</b>	-80 dBm to -15 dBm (Satisfactory performance to -95 dBm)
<b>Narrowband IF</b>	-20 dBm (AGC), nominal
<b>Audio Distortion</b>	3% maximum
<b>Test Conditions</b>	AM: 50% at 1 kHz FM: 30% deviation at 1 kHz rate
<b>Video AM or FM</b>	Selectable (single connector) -
<b>Outputs</b>	Standard Simultaneous (two connectors) - Optional
<b>Level (50 ohms)</b>	2 Vp-p (with pk dev. = 1/2 IF BW)
<b>Frequency Response</b>	20 Hz to 1/2 BW <sub>IF</sub>
<b>Audio Output</b>	
<b>Level (600 ohms) -</b>	
<b>rear panel</b>	1.7 Vrms, nominal (with pk dev. = 1/2 IF BW)

<b>front panel</b>	
<b>headphone</b>	0-1.0 Vrms, nominal
<b>Frequency</b>	300 Hz to 10 kHz, minimum
<b>Response</b>	
<b>Connectors</b>	
<b>rear panel BNC</b>	IF Input, Audio Out AM/FM Video Out: One - Standard AM & FM Video Out: Two - Optional NB IF Out - Optional Remote IF Bandwidth Select - Optional
<b>rear panel</b>	Power
<b>(25 pin "D")</b>	
<b>front panel (J-K)</b>	Audio Output
<b>Controls -</b>	IF Bandwidth Select, AGC/MGC, Gain,
<b>front panel</b>	Audio Volume
<b>Power</b>	115/230 Vac, 47-62 Hz, 10 W
<b>Temperature -</b>	0° to 50° C
<b>Operating</b>	
<b>Style</b>	Half-rack chassis, 1-3/4 inches high by 20 inches deep, Rack Adapter available

Specifications may vary depending upon selected bandwidths and are subject to change without notice

## ORDERING INFORMATION

A standard Model 702 AM/FM Demodulator accepts an input center frequency of 21.4 MHz, provides four customer specified IF bandwidths, and is manually controlled. Simultaneous AM/FM outputs and remote IF selection are available as options. When ordering, please specify:

<b>702</b>	AM/FM Demodulator	<b>Option B35</b>	300 kHz IF Bandwidth
<b>Option H0</b>	Remote IF Selection	<b>Option B55</b>	500 kHz IF Bandwidth
<b>Option G03</b>	Simultaneous AM/FM Video Outputs	<b>Option B16</b>	1 MHz IF Bandwidth
<b>Option B14</b>	10 kHz IF Bandwidths	<b>Option B26</b>	2 MHz IF Bandwidth
<b>Option B24</b>	20 kHz IF Bandwidths	<b>Option B46</b>	4 MHz IF Bandwidth
<b>Option B54</b>	50 kHz IF Bandwidths	<b>Option B66</b>	6 MHz IF Bandwidth
<b>Option B15</b>	100 kHz IF Bandwidths	<b>Option B86</b>	8 MHz IF Bandwidth

**Rack Mounting:** The Model 702 AM/FM Demodulator requires a Model 697-1 Rack Adapter for installation of single units. For side-by-side installation, two units may be fastened together and mounted as a full-rack unit.

<b>697-1</b>	Rack Adapter for single units	<b>Option H04</b>	Perforated Covers
<b>Option H03</b>	Solid Covers		

## 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.

**Adams Russell**

**REACTION INSTRUMENTS, INC.**

475 Springpark Place, Herndon, VA 22070  
(703) 471-6060 FAX (703) 471-4847

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