

FP-2002

**TUNING INSTRUCTIONS
FP-SERIES
COMPACT PRESELECTORS
CM-1002**

“FP” Series

The “FP” series preselectors are compact units which are suitable for most standard multicoupling requirements. Their size permits them to be mounted directly on the 1 3/4 in. (44.5 mm) high receiver multicoupler trays.

CI-1015

COMPACT PRESELECTORS

DESCRIPTION

- The preselectors are helical resonator type band pass filters utilizing 1 inch square aluminum extruded cavities with aperture coupling.
- They are designed primarily for use in receiver multicoupler systems where high density environments exist.
- The FP-40615-CL and FP-40815-CL for the 800 MHz band are of one piece construction in a combine filter configuration.

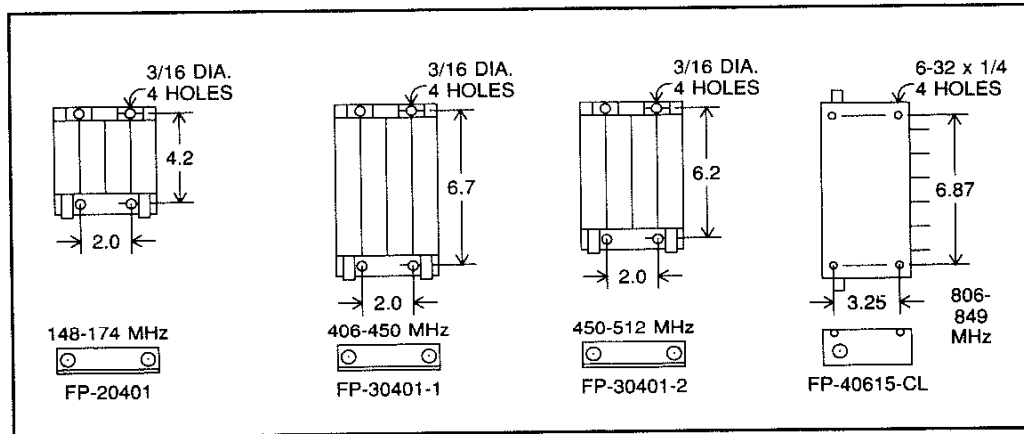
Electrical Specifications

		FP-20401*3	FP-30401*1	FP-30401*2	FP-30502-CL	FP-40615-CL	FP-40815-CL
Frequency Range:	MHz	148-174	406-450	450-512	450-470	806-849	824-849
Pass Band:	Approx. Bandwidth	1	5		12	14.5	22.5
	Typical Ins. Loss		2.0		1.0		1.5
Off Channel:	Approx. Bandwidth	9.5	20		40		50
	Attenuation	40			50		
Termination:		Type "BNC" Female					
Input		Type "BNC" Female					
Output		Type "BNC" Female					

Mechanical Specifications

		FP-20401	FP-30401*1	FP-30401*2	FP-30502-CL	FP-40615-CL	FP-40815-CL
Height:	in. (mm)		1.3 (33)		2.0 (50.8)	1.5 (38.1)	
Width:	in. (mm)		4.2 (107)		6.8 (172.7)	4.8 (121.9)	
Length:	- in. (mm)	-4.9 (125)	7.5 (191)	7.0 (178)	10.8 (274.3)	8.6 (218.4)	10.9 (276.9)

COMPACT PRESELECTORS

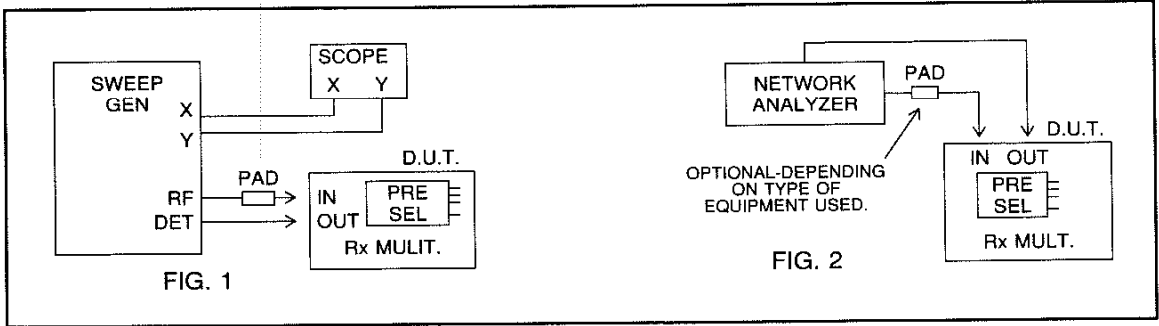


CI-1016

RETUNING INSTRUCTIONS

The preselectors have 4 to 8 tuning screws depending upon the model and may be retuned to other frequencies and electrical specifications within the specified bands of the model being used.

Typical test, equipment set up:



The preselector is tuned using either test setup as shown in figures 1 or 2. It is recommended to use a 6-10 db, 50 ohm pad in the input lines, in order to reduce VSWR reflections which may be introduced in the test equipment being used. The pad is optional depending upon the type of analyzer used.

Adjust all tuning screws beginning with the center screws first for maximum response (minimum insertion loss) at the desired center frequency (f_0). Repeat adjustments on all screws until the desired response is obtained for (bandpass, insertion loss or gain, and VSWR)

The final response curves should be approximately as shown depending upon the model receiver multicoupler being tuned.

After final tuning all tuning rod lock nuts must be tightend securely.

