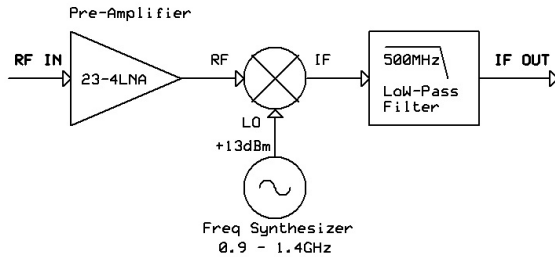




Model 23-7 23 cm DOWN - CONVERTER



The KH6HTV VIDEO Model 23-7 is a high performance, 23cm Down-Converter with 18 dB of conversion gain. The front end pre-amp is the same circuit as used in the model 23-LNA. It has a flat frequency response across the 23cm band (1240-1300MHz) with a 1.2dB noise figure. The double balanced Schottky diode mixer features a high level +14dBm LO drive. The LO is provided by an easily re-programmable, frequency synthesizer. A three position, front panel toggle switch allows the selection of three pre-programmed LO frequencies.

The 23-7 was designed to be a companion unit for use with the model 23-5 IF Amplifier and FM-TV Demodulator to make a complete 23cm, FM-TV Receiver. The 23-7 is ideal for down converting all types of signals, such as CW, AM, FM, SSB, analog FM-TV or VUSB-TV or Digital TV signals.

PARAMETER	Typical Performance	Notes
RF Input Frequency Range	1240 - 1300 MHz	23cm amateur radio band
Noise Figure	1.2 dB, typical	see 23-LNA specs.
Conversion Gain	18 dB, nominal	RF in to IF out
RF Pre-Amp Bandwidth	100 MHz	-3 dB
IF Output Bandwidth	5 to 500 MHz	-3 dB
Max. IF Output Power	-3 dBm	at -1 dB gain compression
LO range	0.95 to 1.4 GHz optional: 0.65 to 1.1 GHz	frequency synthesized
LO Frequencies	3 selectable by front panel switch	Specify desired LO frequencies when ordering
DC Supply Voltage	+12 Vdc, nominal at 335 mA	+10 to +15 V range
RF & IF Connectors	SMA (f)	optional: N for RF Input BNC or F for IF Output
Dimensions & Weight	4.2" x 1.8" x 7.4" (w x h x d)	1.1 lbs

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