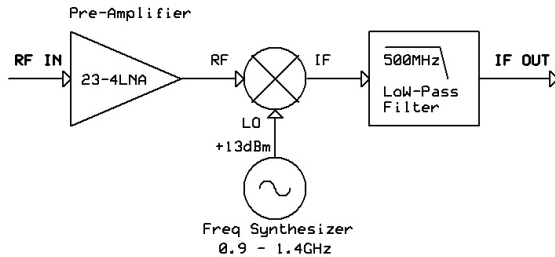




Model 23-7 23 cm DOWN - CONVERTER



The KH6HTV VIDEO Model 23-7 is a high performance, 23cm Down-Converter with 22 dB of conversion gain. The front end pre-amp is the same circuit as used in the model 23-4LNA. It has a flat frequency response across the 23cm band (1240-1300MHz) with a 0.9dB noise figure. The Schotky diode mixer features a high level 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. Note: The 23-7 is NOT recommended for use with DVB-T signals which require an ultra low phase noise, local oscillator. The 23-7 is however ideal for down converting analog FM-TV or VUSB-TV signals.

PARAMETER	Typical Performance	Notes
RF Input Frequency Range	1240 - 1300 MHz	23cm amateur radio band
Noise Figure	0.9 dB, typical	see 23-4LNA specs.
Conversion Gain	22 dB, nominal	RF in to IF out
IF Output Bandwidth	5 to 500 MHz	-3 dB
Max. IF Output Power	0 dBm	at -1 dB gain compression
LO range	0.9 to 1.4 GHz	frequency synthesized
LO Frequencies	3 selectable by front panel switch	Specify desired LO frequencies when ordering
DC Supply Voltage	+12 Vdc, nominal at 240 mA	+9 to +15 V range
RF & IF Connectors	SMA	optional: 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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