



Model 70-12C 70 cm, 53 dB, 15 Watt RF LINEAR AMPLIFIER

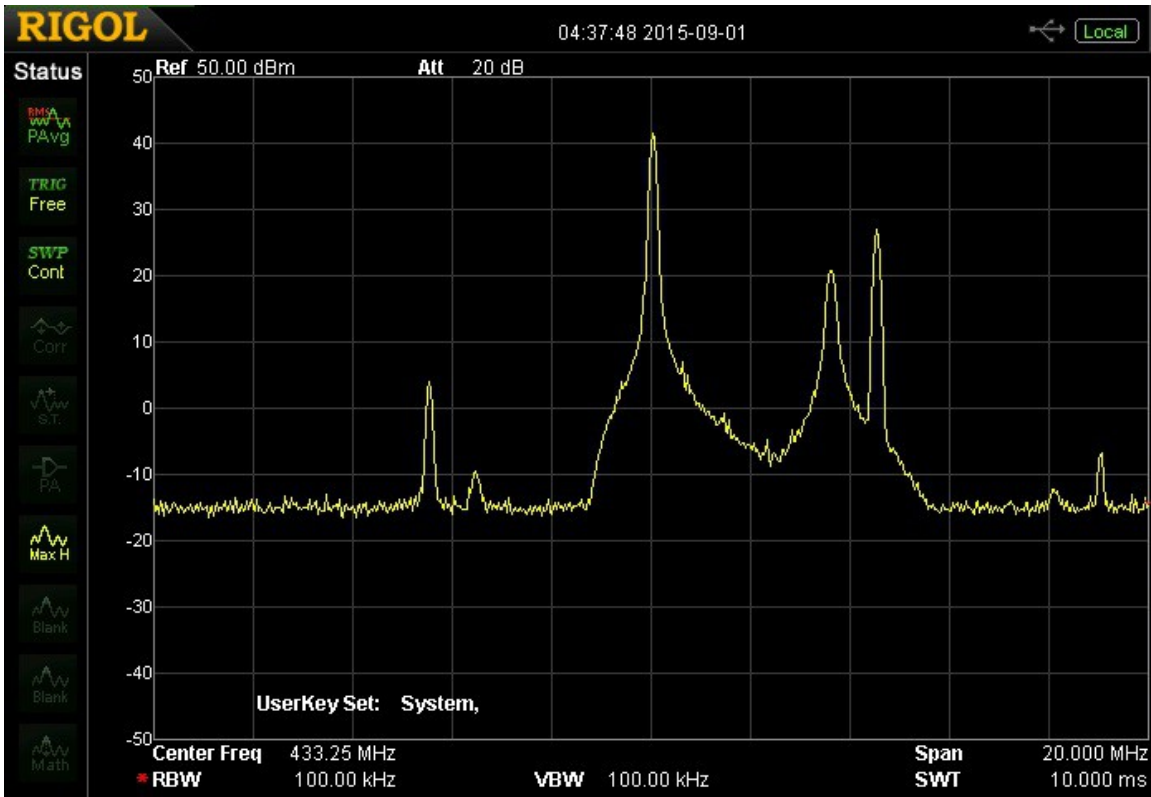


The KH6HTV-VIDEO Model 70-12C, RF Linear Amplifier is for use in the amateur radio 70cm band. It can be used to produce a 40 Watt FM signal or 15 Watt (pep), analog, TV signal. It can also produce a 6 Watt (avg), high-definition (1080p), digital TV signal. The rf power output can be lowered -5dB or -10dB for reduced DC current draw with the front panel rotary switch

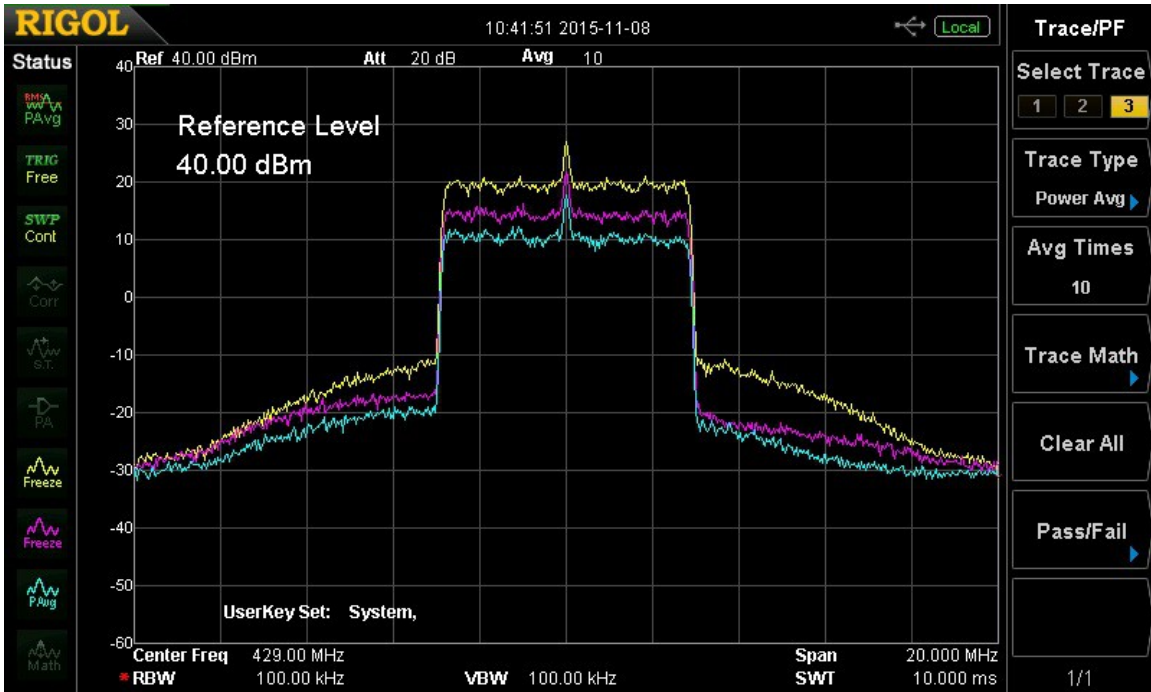
PARAMETER	Typical Performance	Notes
Output Power (analog TV)	15 Watts PEP (+42 dBm) also 5 Watt or 1.5 Watt	peak power on sync tips adjustable in 5dB steps
Output Power (Digital TV)	+38dBm, +33dBm or +28dBm	avg. power
Output Power (FM, CW)	40 Watts, typical	saturated output
Output Power vs. Supply Voltage	+42 dBm @ 12 - 13.8 Vdc +41 dBm @ 10 Vdc	analog VUSB-TV
RF Power Amplifier Gain	53 dB, nominal	
Amplifier Gain Flatness	± 1 dB	420 - 450 MHz
Amplifier Max Input Power	50 mW, +17 dBm	
LSB Rejection (analog VUSB)	better than -20dB	LSB/USB ratio - see photo
Spectrum Regrowth (Digital TV)	-30 dB at +38dBm avg	see photo
Harmonics	> -60 dBc typical	
Duty Cycle	100 %	heat sink & cooling fan included
DC Supply Voltage	13.8 Vdc	10 to 15 Vdc
DC Current @ 13.8 Vdc	4.8, 1.3 or 0.75 Amps	6 W / 2 W / 600mW (DTV)
Control - Rotary Switch	OFF - HI - MED - LOW	rf power adjustable in 5 dB steps
RF Connectors	SMA input & N output	
Dimensions & Weight	5.5" x 4.5" x 5.0"	2 lbs
Accessories Included	instruction manual & test report	

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NOTICE: *This linear amplifier is not FCC type accepted. Therefore, the use of this amplifier is only legal in the USA, amateur radio, 70 cm band (420 - 450 MHz). Owners and operators of this amplifier must be licensed amateur radio operators.*



+42 dBm (15Wpep) VUSB-TV Spectrum, 10dB/div & 2 MHz/div



DVB-T Spectrum, 10dB/div & 2 MHz/div
HIGH (+38dBm, yellow), MED (+33dBm, magenta) & LOW (+28dBm, blue)
Measured with Rigol DSA-815 Spectrum Analyzer