



**Model 70-7B
70 cm, 50 dB, 10 Watt
RF LINEAR
AMPLIFIER**

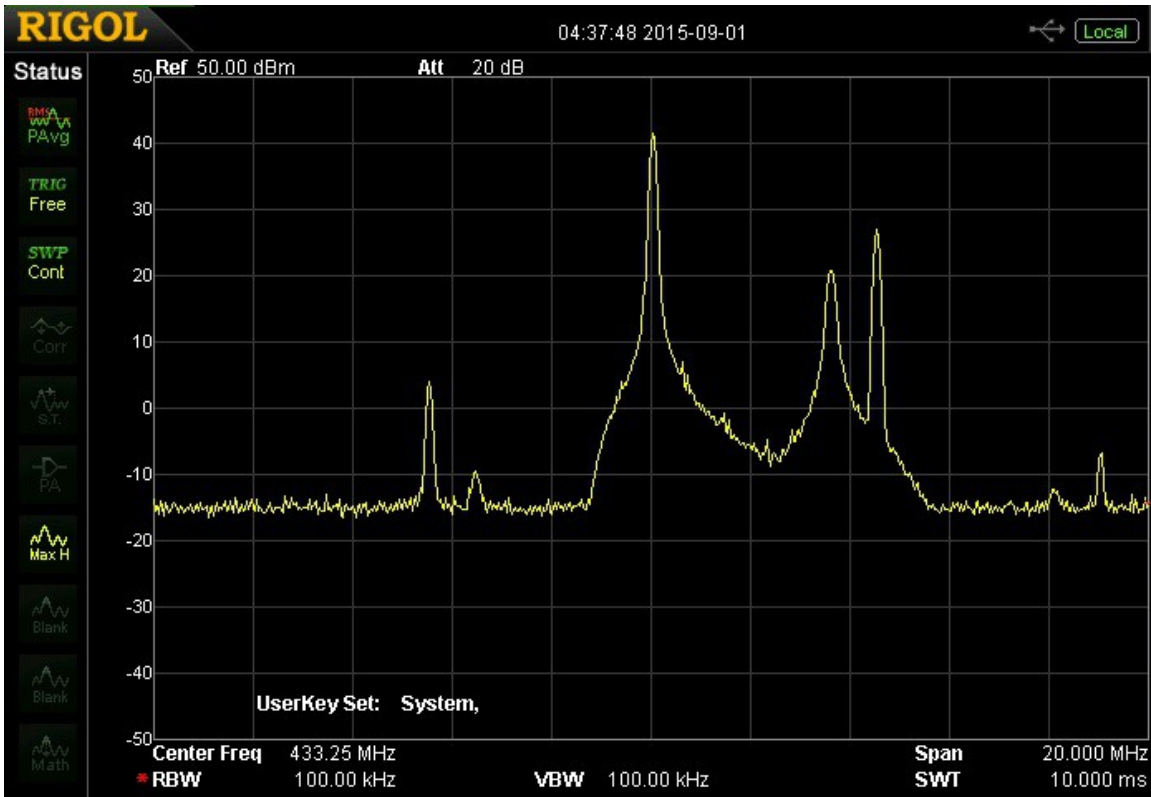


The KH6HTV-VIDEO Model 70-7B, RF Linear Amplifier is for use in the amateur radio 70cm band. It can be used to produce a 20 Watt FM signal or 10 Watt (pep), analog, TV signal. It can also produce a 3 Watt (avg), high-definition (1080p), digital TV signal. The rf power output can be lowered -5dB or -10dB for reduced DC current draw with the front panel rotary switch

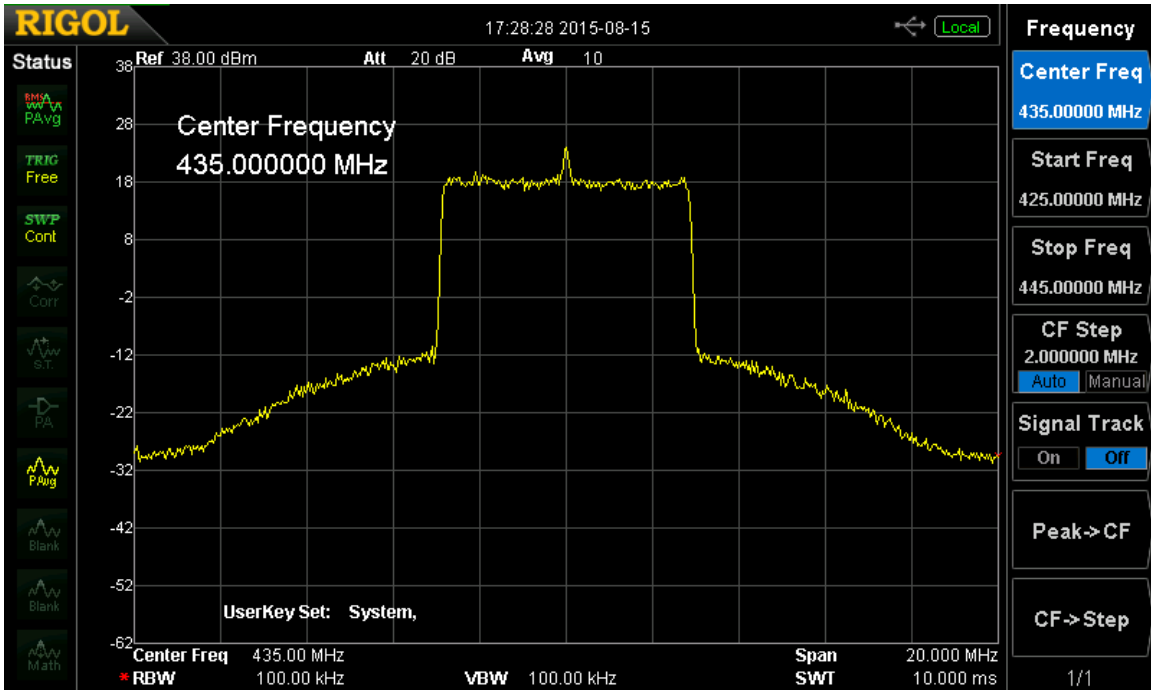
| PARAMETER | Typical Performance | Notes |
|------------------------------------|---|--|
| Output Power (analog TV) | 10 Watts PEP (+40 dBm) also 3 Watt or 1 Watt | peak power on sync tips adjustable in 5dB steps |
| Output Power (Digital TV) | +35dBm, +30dBm or +25dBm | avg. power |
| Output Power (FM, CW) | 20 Watts, typical | saturated output |
| Output Power vs. Supply Voltage | +40 dBm @ 12 - 13.8 Vdc +39 dBm @ 10 Vdc | analog VUSB-TV |
| RF Power Amplifier Gain | 50 dB, nominal | |
| Amplifier Gain Flatness | ± 1.5 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 +35dBm avg | see photo |
| Harmonics | -55 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 | 3, 1 or 0.75 Amps | 3 W / 1 W / 300mW (DTV) |
| Control - Rotary Switch | OFF - HI - MED - LOW | rf power adjustable in 5 dB steps |
| RF Connectors | SMA input & N output | |
| Dimensions & Weight | 4.2" x 3.5" x 7.4" | 1.5 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.



+40 dBm (10 Wpep) VUSB-TV Spectrum, 10dB/div & 2 MHz/div



+35dBm (3 Watt avg), DVB-T Spectrum, 10dB/div & 2 MHz/div
 Measured with Rigol DSA-815 Spectrum Analyzer