

Remote Antenna Switches for HAM RADIO



Remote Receive Antennas Switch "RS4-LBA-HPF": 4 Inputs, 1 Output, HighPassFilter (1,7Mhz cutoff) and Preamplifier +12 db.

General specifications:

50Ω or 75Ω design:	Part number: RS4LBAHPF50 or RS4LBAHPF75
RF Connectors:	SO-239 (UHF) for 50Ω or F for 75Ω design
4 inputs, 1 output:	BCD controlled relay switch <i>Multiplexer technology ready@</i>
Passive Lightning Protection:	Unselected ports terminated with 4W 50 or 75Ω carbon resistor, allows usage of reversible Beverage antennas and Multiplexers
Active Lightning Protection:	Gas Discharge Tube and 1MΩ bleeding resistor on selected antenna coax input
HighPassFilter:	7 pole Chebyshev family, 1.7Mhz cutoff
Insertion loss in the filter's pass band:	≤ 0,5 dB
VSWR:	≤ 1,5:1
Preamplifiers:	Gain 12db, typically NF ≤ 3.2db, 3 rd Order Intermodulation Intercept +50dBm Highpassfilter and PreAmplifiers can be bypassed
Operating power:	+13.8Vdc ÷ 20Vdc at 0.2A total, higher voltage can be required at control consoles with long runs of control cables
Control cable:	7 conductors, 0.35÷0.5mm ² (AWG#20÷#24), wire size depends on a control cable length, number of connectors depends on a usage of all the device features
Control cable connector:	7 pins, IP65 rated, round, metal connector, plug included <i>(can be substituted with Phoenix pluggable connector or termnals)</i>
Case:	Die-cast aluminum, rubber gaskets, IP65 rated for the enclosure excluding connectors
Operating Temperature:	-40 to +65 degrees C
Size:	205 x 125 x 80 mm / 8,1" x 4,9" x 3,1", mounting flanges with four-hole on-center spacing of 189 x 80 (7.44 in. by 3.15 in.)
Net weight:	≤0,8 kg / 1,8 lbs

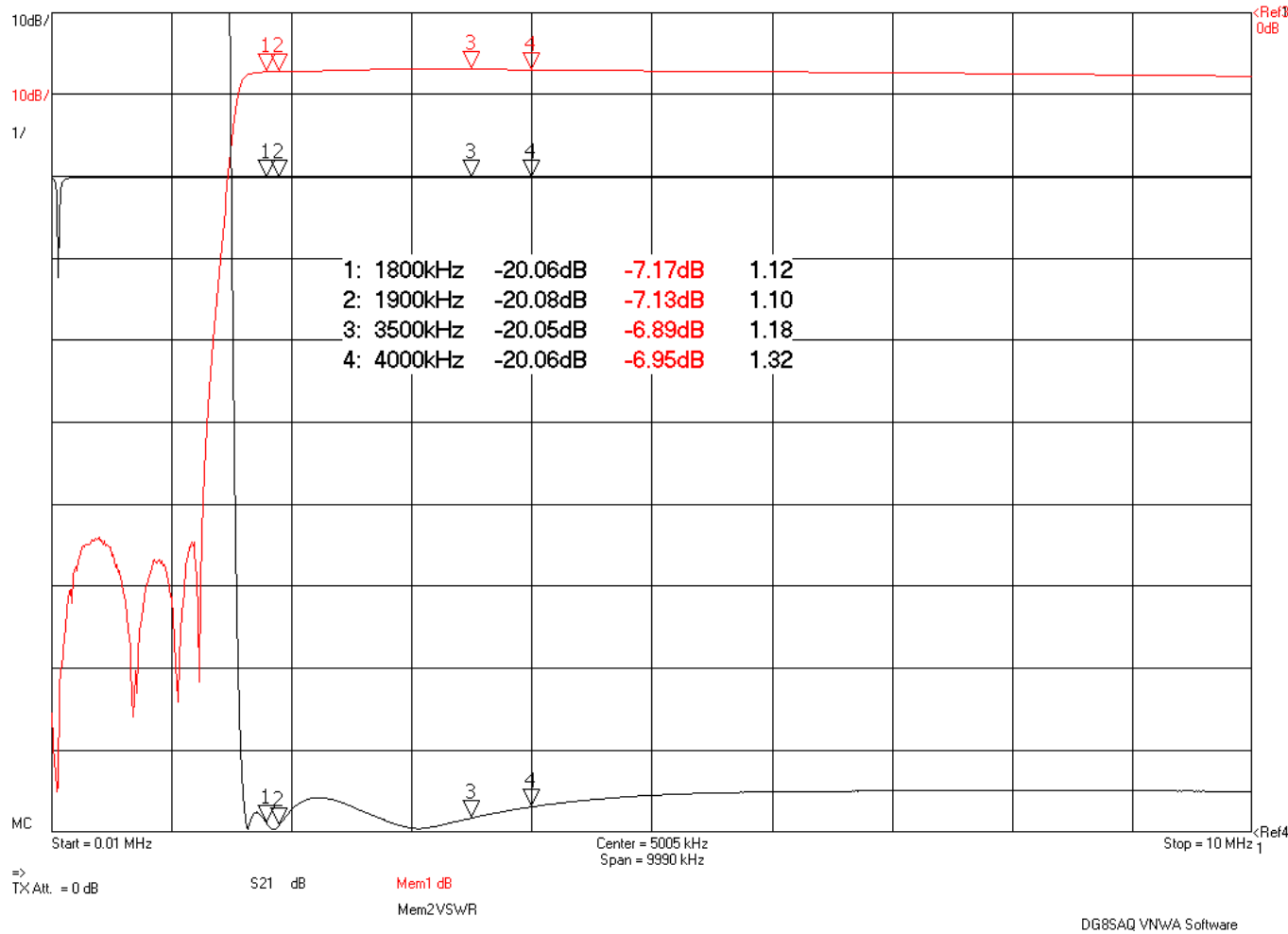


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Serial number #1219-0612 BandPassFilter Adjustments:

Receive Preamplifier "RS4-LBAHPF" HPF 1.7 MHz, Gain: (+12db), ser. #1219-0612



Bypass measurements done with -20db attenuator in line
 PreAmp ON measurements reflects HighPassFilter and
 Amplifier response.

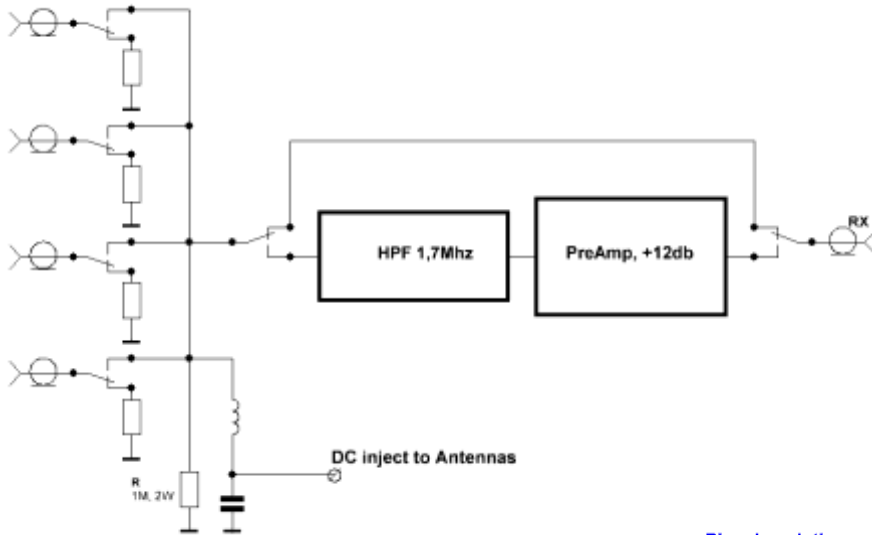
Amplifier gain is slightly more than +12db.

QC:



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RF block diagram



Pins description :

- #1-#4 : Control of 4 input relay switch
- #5 : DC inject to Antennas
- #6 : HPF and PreAmplifier ON
- #7 : Common

Notes on control voltages:

Each PreAmp has its own voltage regulator to guarantee its features.

Minimum of +13.8VDC required at the pins #1-#11

Depending on the control cable length you may higher outputs from your Power Supply

RS4 LBA HPF remote relay switch

