



CleanRF Systems

450 Circle Drive
Fort Collins, CO 80524
Phone: 970-412-3456
e-mail: Tyler@CleanRF.com

Splatter View 5K (RF Demodulator & RF-S5K) (4,000 Watts)

Models RF-D and RF-S5K combo, for precise station monitoring of:

- Oscilloscope Horizontal "X" In Pre-Amplifier Reference Signal (RF-D)
- AM Audio Modulation via 1/4" TRS jack with volume control (RF-D)
- RF Envelope Source Trigger Synchronization (RF-D)
- Pre-Distortion Sampling for use with Anan Pure Signal® (RF-S5K)
- Oscilloscope Vertical "Y" In Post-Amplifier Reference Signal (RF-S5K)
- RF Modulation Envelope (RF-S5K)
- Peak Envelope Power (RF-S5K)
- Trapezoidal X/Y pre/post Amplifier Signal Linearity (RF-D, RF-S5K)



The **Splatter View 5K** (model **RF-D/RF-S5K**) is made up of two independent plug-and-play passive solutions for exact monitoring of your stations RF performance, ensuring a low IMD splatter-free signal with maximum in-band talk-power. Achieving a true pre/post RF comparison has never been easier than plugging in the two BNC cables provided to your existing oscilloscope!

The idea behind the **Splatter View** series is simple. What goes into your amplifier, must be the same coming out -with the only added benefit of gain -period. Nothing else added to or taken away from your signal.

When you are truly linear, you will see crisp lines making up the sides of the trapezoid with no curves as shown in the images provided on our Applications page and movie demo near the bottom of our Applications page, showing a true trapezoidal pattern and those that are non-linear.

Our Product Info Sheet PDF below is a great reference for understanding the trapezoidal pattern as well. In addition, the system may be used in RF envelope monitoring mode with the benefit of the internal trigger. The trigger, is a wonderful signal that will lock the waveform as your speak.

Now monitoring in envelope mode is made much easier thanks to the filtered signal provided by our system into your oscilloscope.

RF-D Specifications

- Frequency Response: 500 kHz ~ 60 MHz – Audio: 10 Hz ~ 16 kHz
- Rated Input: 1.5w ~ 200w PEP
- AM Dynamic Range: 60dBu
- Connectors In: SO-239
- Connectors Out: SO-239, BNC and ¼" TRS Audio Out
- Controls: Variable AF Output
- VSWR: < 1:1.1
- Insertion Loss: < 0.1 dB
- Cable and Adapter: 6 Ft. BNC Male-to-BNC Male and UHF Male-to-Male Adapter
- Applications:
 - Oscilloscope Horizontal "X" In (Pre-Amplifier Reference Signal)
 - AM Audio Modulation Monitor
 - RF Envelope Source Trigger Synchronization
- Dimensions: W 2 1/8" x L 3 ¼" x H 1 5/8"

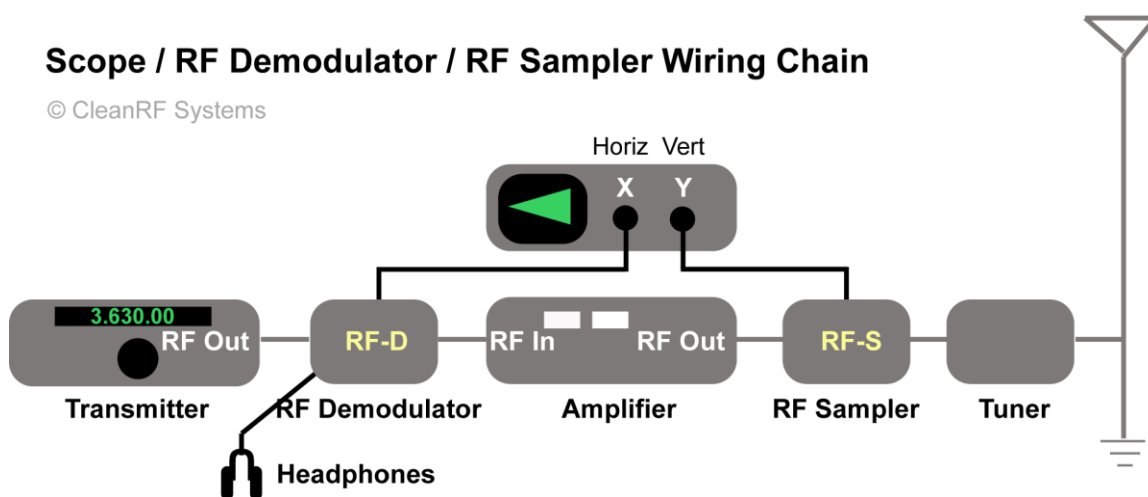
RF-S5K Specifications

- Frequency Response: 3 ~ 30 MHz
- Rated Input: 0w ~ 4,000w PEP
- Sampler Output: -60dBm @ 15MHz
- Connectors In: SO-239
- Connectors Out: SO-239 and BNC
- Controls: Variable RF Output 6dB
- VSWR: < 1:1.1
- Insertion Loss: < 0.1 dB
- Cable and Adapter: 6 Ft. BNC Male-to-BNC Male and UHF Male-to-Male Adapter
- Applications:
 - Oscilloscope Vertical "Y" In (Post-Amplifier Reference Signal)
 - Pre-Distortion Sampling for use with Anan Pure Signal®
 - RF Modulation Envelope Monitor
 - Peak Envelope Power Monitor
- Dimensions: W 2 1/8" x L 3 ¼" x H 1 5/8"



Scope / RF Demodulator / RF Sampler Wiring Chain

© CleanRF Systems

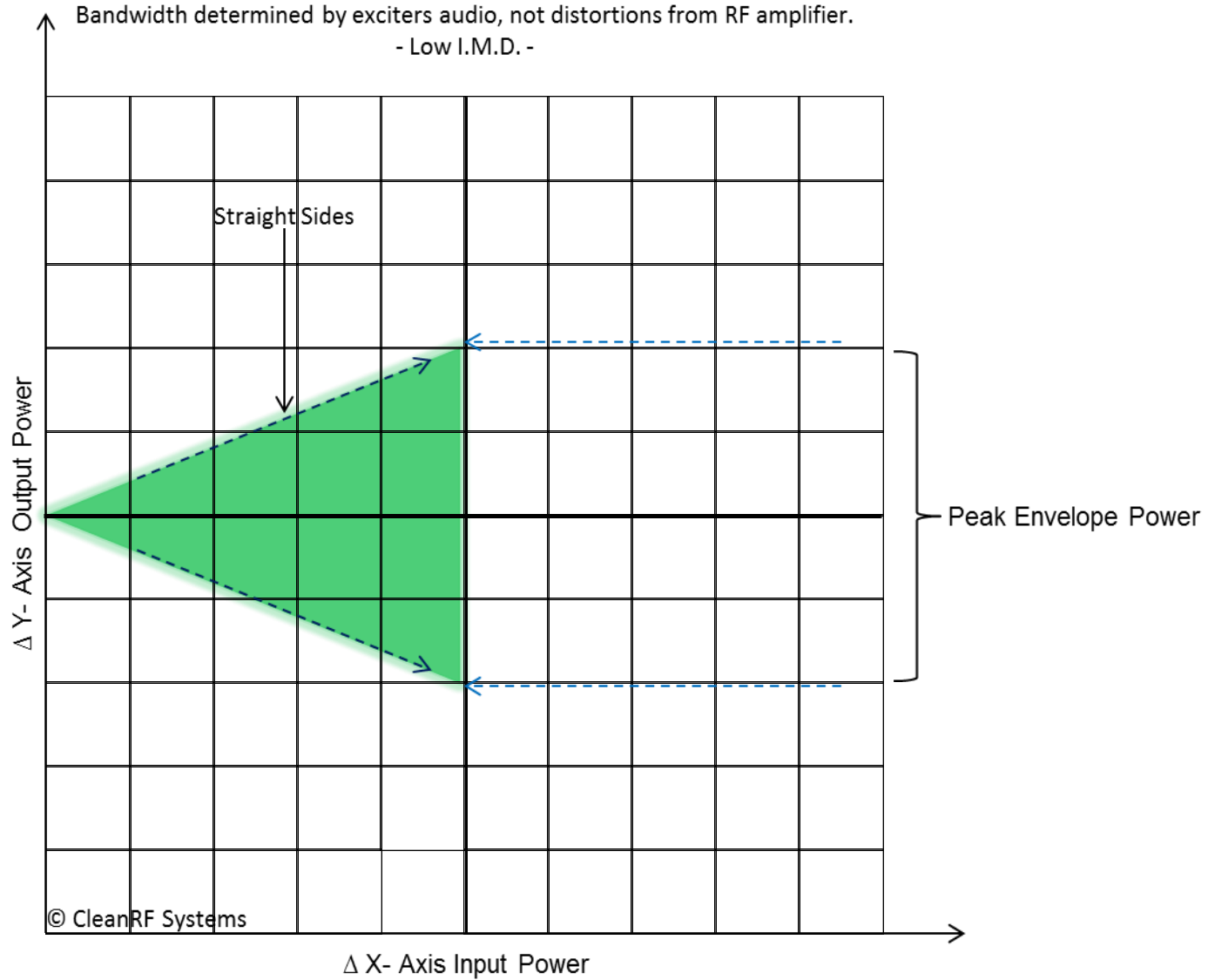


Trapezoidal Linear RF Pattern Provided by CleanRF Systems Splatter View.

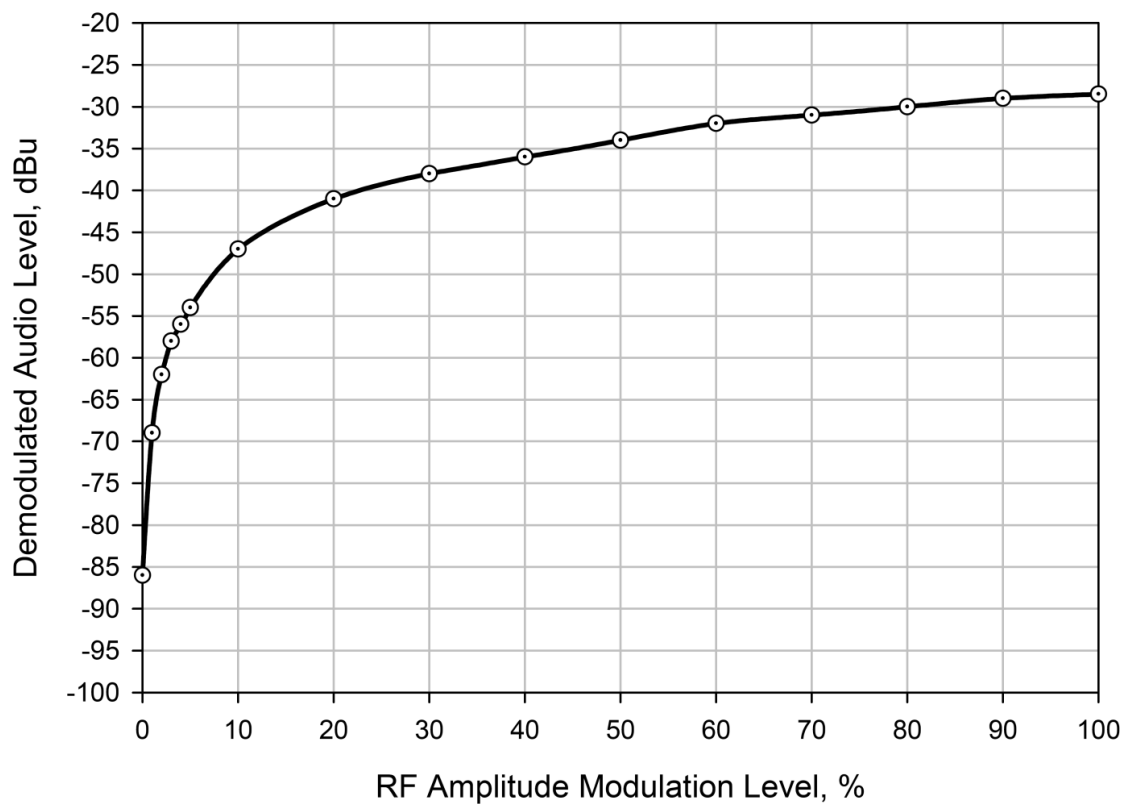
Note sides of Trapezoid are straight with distinct angles.

Bandwidth determined by exciter's audio, not distortions from RF amplifier.

- Low I.M.D. -



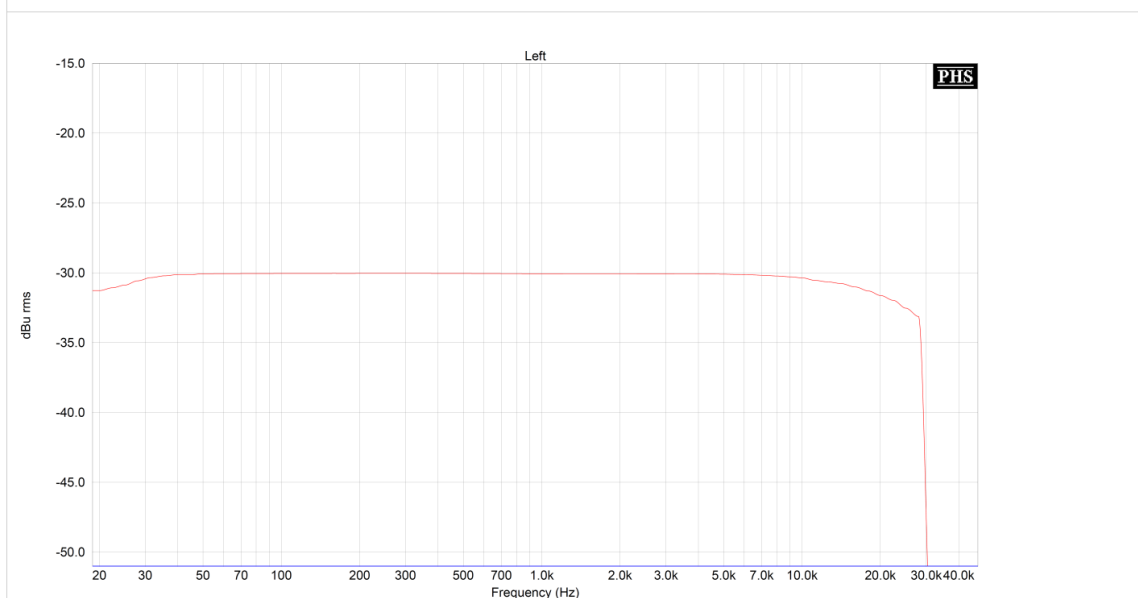
Amplitude Modulation Dynamic Range at 1 kHz



Sampling: 96000 Hz
 FFT size: 65536
 Averaging: 1
 Window: Hanning

CleanRF.com RF Demodulator
 RF at +7.1dBm, AM sweep 80% depth

Printed by: SpectraPLUS Professional Edition
 Licensed to: John Stuart
 Sun Jan 08 15:19:08 2012



RF signal generated by HP2920A Comm Test Set = 7 MHz at +7.1 dBm carrier and 80% AM level.
 RF Demodulator BNC output to M-Audio Delta 1010LT soundcard calibrated with Fluke 289 True RMS Meter at 1kHz.