

- General-purpose generator for white, pink, triangular and audio-spectrum noise
- Output level 1 V into 75 Ω
- Easy to operate; remote-control option



IEC 625 Bus

The basic version of the Noise Generator SUF 2 delivers a noise spectrum with a constant mean energy content which is uniformly distributed over all frequencies (white noise). A variety of options permits the SUF 2 to be adapted without difficulty for virtually all applications in audio and video noisevoltage and distortion measurements (including digital systems); it can be remote-controlled for use in automatic test systems.

Output signals, weighting filters, options

- White noise 20 Hz to 110 kHz/6 MHz/50 MHz (switchselected)
- Pink noise 20 Hz to 16 kHz (option); spectral components decreasing by 3 dB/octave
- Triangular noise 20 Hz to 6 MHz (option)
- Weighting filter in accordance with CCITT Rec. G.227 (option for simulating telephony signal)
- Weighting filter in accordance with CCIR Rec. 559 (option for simulating an LF/MF/HF signal)
- Weighting filter in accordance with CCIR Rec. 571 (option for simulating a 15-kHz program sígnal). Other filters are available on request
- Program option in accordance with CCIR Rec. 571
- Bus interface (optional) in accordance with IEC 625-1 (IEEE 488)

Uses (see examples)

Radio engineering: Measurement of crosstalk due to nonlinearity, and intermodulation, using the noise to mimic a sound-program signal.

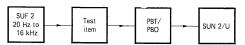
Video engineering: Measurement of interference effects on all the components of transmission systems.

Architectural acoustics: Using a noise signal - because it is similar to speech/music - for the measurement offers advantages over the fixed-frequency test methods.

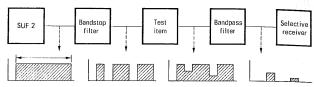
Frequency response measurement: Pink noise permits rapid and repeatable measurements.

Control engineering: Simulation of noise sources in system control and general control circuits.

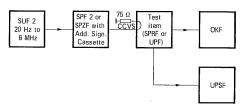
Research: Analysis of stochastic processes.



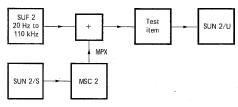
Rapid AF frequency response measurement with pink noise using one-thirdoctave or octave filter and level meter



Harmonic distortion measurement in a crowded frequency band with simulated gaps



Measurement of noise rejection in video circuitry (amplifiers, sync separators, clamping circuits, test equipment)



Measurements on stereo systems and analog frequency-multiplex and telephony transmission systems (60 to 108 kHz, international)

## Specifications

Frequency range	
Output level (white noise)	$\leq 1 \text{ V}_{rms}$ into 75 $\Omega$ (BNC);
	0.775/0.7 V, link-selected
Frequency response flatness	≤±0.5 dB
Bandwidths, options	
Level setting and accuracy	
with 20 Hz to 50 MHz bandwidth	
with other bandwidths	0 to −100 dB ±0.5 dB
Remote control	
	bandwidths and filter options:
	2-bit binary code
AC supply	110/115/220/235 V ±10% (20 VA)
Dimensions (without stand), weight.	

## Ordering information

Order designation	<ul><li>Noise Generator SUF 2 282.8819.03</li></ul>
Plug-in options	
Controllers (one only):	
IEC-625-bus Interface	. SUF 2-Z1 282.9915.00
CCIR Rec. 571 Program	. SUF 2-Z6 282.9673.00
Filters (one only):	
Triangular Noise	. SUF 2-Z2 282.9715.00
Pink Noise	. SUF 2-Z3 282.9815.00
CCIR Rec. 559 – Filter	. SUF 2-Z4 282.9615.00
CCIR Rec. 571 Filter	. SUF 2-Z5 282.9644.00
CCIR Rec. 571 Program	. SUF 2-Z6 282.9673.00
CCITT Rec. G. 227 Filter	SUF 2-77 282 8860.00