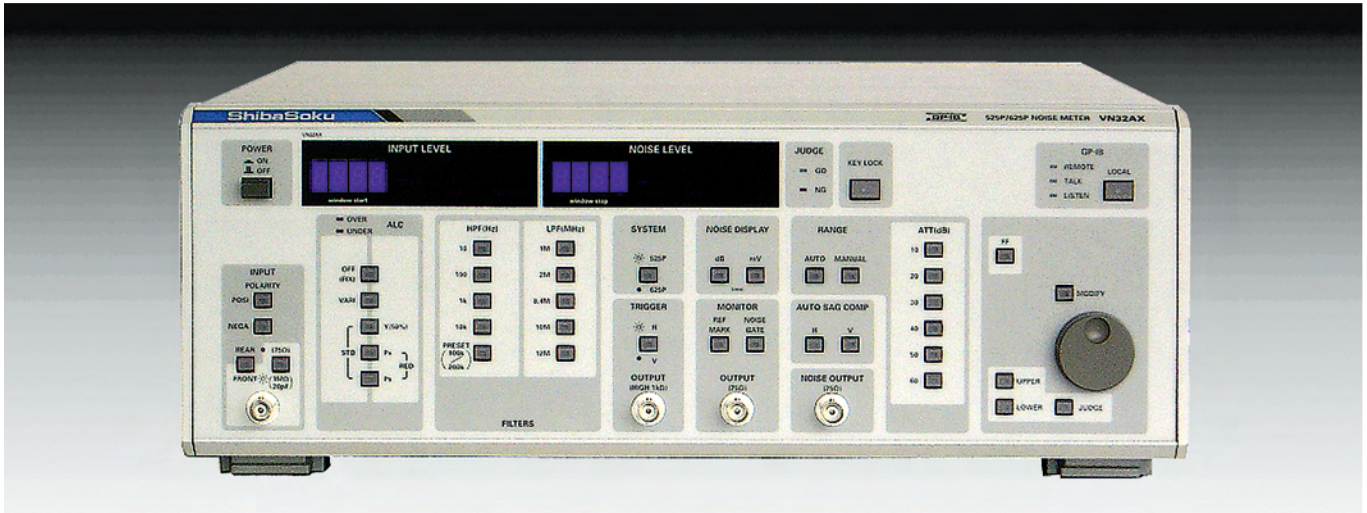


VN32AX

TELEVISION INSTRUMENTS

525P/625P NOISE METER



General

Used for measuring video noise occurring in 525P and 625P devices, the VN32AX is capable of measuring noise in luminance signals, color difference signals, and RGB and other component signals. The VN32AX measures video noise by replicating the actual operating conditions of the device being measured. The unit can also perform auto input level adjustment, auto sag correction, measurement value judgments and other operations to ensure that video noise is measured accurately and easily.

Features

- A switch is used to change to 525P or 625P measurement mode.
- HPF/LPF can be used to analyze frequency distribution of low- and high- range noise.
- Equipped with noise output terminal for observing full-range noise spectrum waveforms.
- Correction of horizontal and vertical sag is possible.
- External drive is possible.
- Includes convenient judgment feature for production lines.

Specifications

- Types of video noise measured
 - Color difference signal noise
 - Component signal noise
 - TV systems
 - 525P
 - 625P
 - Noise measurement frequency range
 - 10 Hz to 12 MHz
 - Noise measurement band switching
 - Low-range cut-off frequencies
 - 10, 100 Hz, 1, 10, 100, 200 kHz
 - High-range cut-off frequencies
 - 1, 2, 8.4, 10, 12 MHz
- Note: Frequencies can be changed 100 KHz into 200 kHz by an internal switch .

- Input waveform
 - Video duration level of 0 to 1 Vp-p that includes composite sync pulse and blanking signal is a uniform signal. Measurement of both positive and negative polarities is possible.
- Sag correction range
 - Amplitude direction
 - Correction is possible when sag amplitude on the input signal is within 200 mVp-p.
- Input impedance
 - Front input Switchable to 75 Ω or 1 MΩ
 - Rear input High-impedance bridge connection
- Connector type BNC, unbalanced
- Drive format
- Internal sync
 - Rated input voltage (for sync signal)
 - 300 mVp-p
 - Input current range (for sync signal)
 - 9 to +6 dB against rated voltage
- External sync
 - Rated input voltage
 - Switch on rear is used to switch to either one of the following:
 - VS composite signal input:
 - Sync signal portion 300 mVp-p
 - Sync signal input: 4 Vp-p
 - Input voltage range
 - 9 to +6 dB against rated voltage
- Noise level format
 - dB display
 - Noise level = 20 log (N/S) [dB]
 - S: 700 mVp-p
 - N: Root mean square value voltage of noise
 - Digital value and voltage display switching
 - Noise level display can be switched between dB (rms) and mV (rms). In mV (rms) display, however, ALC is turned off (fix) and the display shows absolute value for noise when it passes through HPF and LPF added to the unit's input connector.

Specifications

- Noise level measurement
 - Measurement range
 - 7 to -70 dB (rms/Vp-p)
 - Measurement accuracy
 - 7 to -60 dB; ± 0.25 dB
 - 60 to -70 dB; ≤ 0.5 dB

Note: Above values assume HPF 100 kHz and LPF 12 MHz.

 - Frequency response
 - ± 0.5 dB
- Automatic Input level control (ALC)
 - Types of functions
 - Fixed gain (FIX) Used for measuring at a designated input level.
 - 10% to 140% ALC (VARI)
 - For measuring at 10% to 140% level, variable using rotary dial.
 - 50% ALC (Y [50%])
 - For measuring at 50% grayscale level.
 - Red ALC (R-Y) Used when measuring R-Y of red signals.
 - Red ALC (B-Y) Used when measuring B-Y of red signals.
- Measurement width
 - Horizontal 1/4 H before and after center of horizontal effective duration (total 1/2 H width).
 - Vertical Vertical blanking and 20 H before and after, excluding vertical effective duration width.
- Output signals
 - Monitor output
 - Connector type BNC, 75 Ω
 - Output level Approx. 1 Vp-p
 - Noise output
 - Connector type BNC, 75 Ω
 - Output level Max. 0.5 Vp-p
 - Trigger output
 - Connector type BNC, 1 k Ω
 - Output level TTL level, negative logic
- External control interface
 - GP-IB
- Others function
 - Key lock function Keys on the panel can be locked by turning this key on.
 - Judge function Independent upper and lower limits can be set for noise judgment values. When a measured value is within this range, the GO LED illuminates; when the value is outside this range, the NG LED illuminates.

- General specifications
 - Power supply AC 100, 120, 220, 240 V, $\pm 10\%$, 50/60 Hz
 - Power consumption
 - Approx. 83 VA
 - Operating temperature range
 - 0°C to 40°C
 - Relative humidity 15% to 85%RH (non-dewing)
 - Dimensions 426(W) x 149(H) x 460(D) mm
 - Weight Approx. 20 kg
 - Accessories
 - AC 3P-2P conversion adapter x1
 - Power cable x1
 - User's manual x1

Note: Please specify required power voltage when ordering.

