

UG51 Series

TELEVISION INSTRUMENTS

TEST SIGNAL GENERATOR



General

These two units are test signal generators designed as an integrated signal source for use in the production of televisions, VCRs, CRTs and other equipment in NTSC-M format (UG511) or PAL-B, G, D, I/K format (UG512).

Features

- Since these units have been designed as devices for integrated signals, each unit outputs only 1 signal. Each series comprises 16 models to choose from according to the type of output signal required: The UG511 series consists of the UG511A through the UG511Q, and the UG512 series consists of the UG512A through the UG512Q.
- Equipped with Genlock function.

Specifications

- Output signals
 - Number of outputs 2
 - Connector type BNC, 75 Ω
 - Output signal level (UG511) (UG512)
 - Video signal 714.3 mVp-p, ±2% 700 mVp-p, ±2%
 - Sync signal 285.7 mVp-p, ±2% 300 mVp-p, ±2%
 - Color burst signal 285.7 mVp-p, ±2% 300 mVp-p, ±2%
 - Sync signal
 - Line frequency 15.734 kHz 15.625 kHz
 - Field frequency 59.94 Hz 50.0 Hz
 - H front porch width
 - 1.5 μs, ±0.1 μs 1.5 μs, ±0.3 μs
 - H sync width 4.7 μs, ±0.1 μs 4.7 μs, ±0.2 μs
 - V front porch width
 - 3 H 2.5 H
 - V sync width 3 H 2.5 H
 - Serrated pulse width
 - 4.7 μs, ±0.1 μs 4.7 μs, ±0.2 μs

	(UG511)	(UG512)
Equalizing pulse width	2.4 μs, ±0.1 μs	2.35 μs, ±0.1 μs
H blanking width	10.9 μs, ±0.2 μs	12.0 μs, ±0.3 μs
V blanking width	20 H	25 H
Subcarrier frequency accuracy	3.579545 MHz, ±20 Hz	4.433618 MHz, ±20 Hz
SCH phase	±10°	±10°
● Genlock function	VBS (composite video signal) or black burst signal is required as an external sync signal.	
Sync signal input level	285.7 mVp-p, ±6 dB	300 mVp-p, ±6 dB
Color burst signal input level	285.7 mVp-p, ±6 dB	300 mVp-p, ±6 dB
Note:	Genlock status is automatically activated when these units input an external sync signal (VBS or BB).	
● Sampling frequency	14.31818 MHz	14.1875 MHz
● Digital word length	10 bits	10 bits
● General specifications		
Power supply	AC 90 to 250 V, 50/60 Hz	
Power consumption	Approx. 60 VA (UG511) Approx. 80 VA (UG512)	
Operating temperature range	0°C to 40°C	
Relative humidity	20% to 90%RH (non-dewing)	
Dimensions	426 (W) x 49 (H) x 460 (D) mm	
Weight	Approx. 6 kg	
Accessories	Power cord	x 1
	User's manual	x 1

● Available models and their output signals (UG511, UG512)

Model	Output signal
UG511A	FULL FIELD COLOR BAR
UG511B	SPLIT FIELD COLOR BAR
UG511C	SMPTE COLOR BAR
UG511D	EIA COLOR BAR
UG511E	CROSS HATCH
UG511F	CROSS DOT-1
UG511G	CROSS DOT-2
UG511H	100% WHITE
UG511I	50% WHITE
UG511J	RED RASTER
UG511K	MULTI BURST
UG511L	10 STAIR STEP
UG511M	MOD. 10 STAIR STEP
UG511N	100% CHROMA
UG511P	PULSE & BAR
UG511Q	WINDOW

Model	Output signal
UG512A	EBU COLOR BAR
UG512B	BBC COLOR BAR
UG512C	SPLIT FIELD COLOR BAR
UG512D	DEMODULATOR PATTERN
UG512E	CROSS HATCH
UG512F	CROSS DOT-1
UG512G	CROSS DOT-2
UG512H	100% WHITE
UG512I	50% WHITE
UG512J	RED RASTER
UG512K	MULTI BURST
UG512L	10 STAIR STEP
UG512M	MOD. 10 STAIR STEP
UG512N	100% CHROMA
UG512P	PULSE & BAR
UG512Q	WINDOW

