

# UP25 Series

TELEVISION INSTRUMENTS

## TEST PATTERN GENERATOR



### General

These three units are digital composite color pattern signal generators designed as an integrated signal source for use in the production of televisions, VCRs, CRTs and other equipment in NTSC-M format (UP251), PAL-B, G, D, I/K format (UP252) or SECAM-B, G format (UP253).

### Features

- Output signal comprises simultaneous output of a composite color pattern and one other signal. Four models are available in each series: The UP251 series consists of the UP251A through the UP251D, the UP252 series consists of the UP252A through the UP252D, and the UP253 series consists of the UP253A through the UP253D. The user can select the models that output the required signals.
- Equipped with genlock function.

### Optional racks

- Output signals
  - Number of outputs 2 lines per signal
  - Connector type BNC, 75 Ω
- Available models and their output signals

	UP251	UP252	UP253
	NTSC	PAL	SECAM
A	Full field color bar	EBU color bar	Full field color bar
B	Split field color bar	Split field color bar	Split field color bar
C	Red raster	Red raster	Red raster
D	Cross hatch	Cross hatch	Cross hatch

Note: Output signal for each model is different.

- General specifications
  - Power supply AC 90 to 250 V, 50/60 Hz
  - Power consumption
    - Approx. 60 VA
  - Operating temperature range
    - 0°C to 40°C
  - Relative humidity 20% to 90%RH (non-dewing)
  - Dimensions 426 (W) x 49 (H) x 510 (D) mm
  - Weight Approx. 7 kg
  - Accessories
    - Power cord x 1
    - User's manual x 1

Specifications

Model	UP251	UP252	UP253
	NTSC	PAL	SECAM
<b>Specifications</b>			
Sampling frequency	14.31818 MHz	14.1875 MHz	14.1875 MHz
Word length	10 bits/word	10 bits/word	10 bits/word
<b>Signal outputs</b>			
● Output signal levels			
Video signal	714.3 mVp-p, ±2% (in 100% signal)	700 mVp-p, ±2% (in 100% signal)	700 mVp-p, ±2% (in 100% signal)
Sync signal	285.7 mVp-p, ±2%	300 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	15.625 kHz
Field frequency	59.94 Hz	50.0 Hz	50.0 Hz
H front porch width	1.5 μs, ±0.1 μs	1.5 μs, ±0.3 μs	1.5 μs, ±0.3 μs
H sync width	4.7 μs, ±0.1 μs	4.7 μs, ±0.2 μs	4.7 μs, ±0.2 μs
V front porch width	3 H	2.5 H	2.5 H
V sync width	3 H	2.5 H	2.5 H
Serrated pulse width	4.7 μs, ±0.1 μs	4.7 μs, ±0.2 μs	4.7 μs, ±0.2 μs
Equalizing pulse width	2.3 μs, ±0.1 μs	2.35 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	12.0 μs, ±0.3 μs
V blanking width	20 H	25 H	25 H
Subcarrier frequency accuracy	3.579545 MHz, ±15 Hz	4.433618 MHz, ±15 Hz	
<b>Genlock function</b>			
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	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).