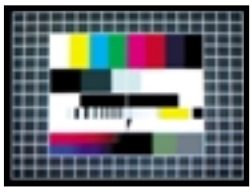
TV PATTERN GENERATORS

Multistandard and Multisystem TV Signal Generators **GV-798+** and **GV-898+**, have the widest selection of functions for an instrument of this type. 37 different patterns, including 16:9 format, are the base over which different configurations can be designed. Those settings can then stored in 32 memories for later immediate recall.
All the functions can be selected on three different menus presented on a backlighted graphic LCD display.
The instrument includes the possibility to program two different colour logotypes that can be moved. It does also include a clock and possibility to display different prestored messages.
All common interface connectors such as S-VHS, RGB, SCART…. are available on the rear panel. The RS-232 interface is specially useful being bidirectional to control the instrument and for data exchange.

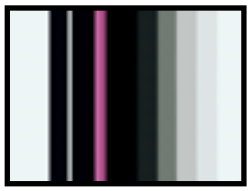
37 PATTERNS TO SATISFY ANY TEST NEEDS


Complete pattern 4:3


Complete pattern 16:9


FuBk pattern ,PAL system


Colour bars 100/0/75/0


VITS CCIR 17, B/G/L/D/K


VITS CCIR 330 B/G/L/D/K


Purity: red

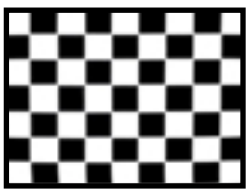

Purity: green


Purity: blue

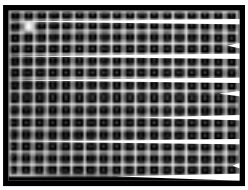

Pluge, B/G/I/L/D/K

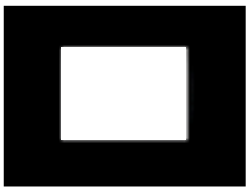

Sin X/X, B/G/I/L/D/K


Ramp


Checker board, 4:3


Centred


Convergence, 4:3


Window


Grey scale, 5 levels


Grey scale, 10 levels


Multi-Burst, B/G/I/L/D/K

TV PATTERN GENERATORS

VIDEO & AUDIO CONFIGURATION

SYNTHETISED RF OUTPUT
The tuning can be through frequency or channel according to the selected standard (CCIR, STDL, OIRT or FCC).

OUTPUT LEVEL
The output RF signal level is adjustable in 1 dB steps. Maximum attenuation being 60 dB.

MULTISTANDAR
Systems available are: PAL (B,G,I,D,K), NTSC (M) and SECAM (L,D,K). Others are available upon request.

32 CONFIGURABLE MEMORIES
They allow to automatic selection of the prestored configurations.

FORMAT SELECTION
The format can be selected 4:3 or 16:9

SOUND MODULATION
Sound modulation can be selected among MONO, ZWEITON (B,G,D,K,M) and NICAM (B,G,I,L). The modulated signal can be internal or external (except NICAM) and any of the channels (L o R) can be removed. In the stereo modulations, the second carrier can be stereo or dual.

TELETEXT, VCR SYNCHRONISATION SIGNALS (VPS AND PDC), CLOCK AND INTERLACED CONFIGURATION

TELETEXT
It contains an index page and four data pages in 4 languages (English, Spanish, French, German). Includes Clock Cracker.

VCR SYNCHRONISATION SIGNALS
The VPS (Video Program Service) and PDC (Program Delivery Control) signals are information delivered by broadcasters during the transmission of the program to synchronise the turn on and off on compatible videos.

CLOCK
When Clock is turned on, this information appears at the on the right hand lower corner on all patterns.

INTERLACED
This turns on and off the interlacing.

WSS (Wide screen Signal) This signal actuates on 16:9 receivers incorporating this feature. It is possible to generate eight different combinations for the 4:3, 14:9 and 16:9 formats.

SYNCRONISMS, LOGOTYPES, EUROCONNECTOR-SCART AND TEST SIGNALS (VITS) CONFIGURATION

SYNCHRONISM SELECTION
It is possible to select the polarity of the horizontal and vertical synchronism independently. It is also possible to activate the synchronism in the G output.

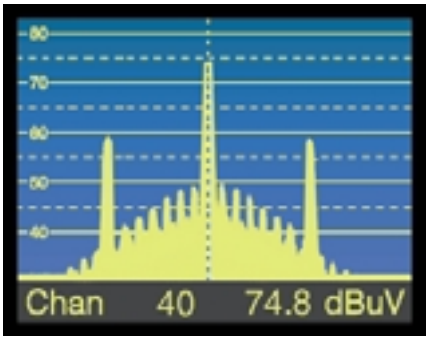
RGB/COMPONENTS SELECTION
Possibility of selecting as output RGB or Y/C, Pb, Pr components.

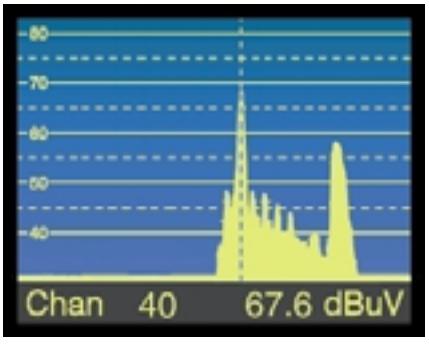
LOGOTYPES GENERATOR
It is possible to insert 2 colour logotypes of variable sizes on any of the test patterns. They can be moved to different positions within the pattern.

EUROCONNECTOR CONTROL
The FSTBK (Fast Blanking) signal activates the RGB inputs on television sets. The SWITCH signal activates audio and video on the Euroconnector.

TEST SIGNALS (VITS)
This function allows the activation of test signals for CCIR, UK and FCC standards.

VESTIGIAL SIDE BAND MODULATOR





Both TV Generator, the **GV-798+** and the **GV-898+**, offer the same features regarding test patterns and possible configurations. The difference is in the modulation type used. The **GV-798+** modulates the TV signal in **Double Side Band** and the **GV-898+** modulates in **Vestigial Side Band.** With **GV-898+** the simulation of the on-air transmitted signals is optimal since this is the system used in broadcast of analogue sygnals.
Both generators have 1 dB step adjustable output levels.

TV PATTERN GENERATORS

SPECIFICATIONS	GV-798+/GV-898+
Video Carrier	
Resolution	50 kHz, 10 kHz (GV-898+)
Tuning	By channels or by frequency through the rotary selector. Channel tables: CCIR, STDL, OIRT and FCC.
Storage	In any of the available 32 memories
RF Output	
Output level	80 dBµV
Attenuation	Up to 60 dB in 1 dB steps
Frequency range	35 to 900 MHz, 35 to 850 MHz (GV-898+)
Video modulation	AM-VSB (Vestigial Side Band)
	DSB (Double Side Band GV-898+)
Polarity	Negative except in SECAM L (positive)
Modulation index	85 %
Impedance	75 Ω
Video	
Video input	
Impedance	75 Ω
Voltage	1 Vpp
DC component	-2 V to +2 V
Maximum DC component	±3 V
Polarity	White Level positive
Coupling	AC with internal fixing
Video Output	
Impedance	75 Ω
Voltage	1 Vpp
Polarity	White Level positive
Coupling	DC
Black level	0 V ± 0.2 V
Blackburst otput	
Impedance	75 Ω
Synchronisms polarity	Negative
Level	0.45 Vpp
Connector	BNC
RGB outputs	
Impedance	75Ω
Amplitude	0.7 Vpp
Synchronisms in G	0.3 Vpp (seleccionable ON/OFF)
Connector	BNC
Black level	0 V ± 0.2 V
Scart	
S-VHS	
Impedance	75Ω
Amplitude	
Luminance	1 Vpp
Crominance	0.3 Vpp
Connector	S-VHS
Synchronism	
Synchronisms output, CS	
Impedance	75Ω
Amplitude	2.5 Vpp
Connector	BNC
Horizontal pulse output, H	
Impedance	75Ω
Amplitude	2.5 Vpp
Connector	BNC
Vertical pulse output, V	
Impedance	75Ω
Amplitude	2.5 Vpp
Connector	BNC
Crominance	
PAL NTSC	
TV systems	PAL B/G/D/K/I, NTSC M
	PAL B/G/D/K/I/M/N NTSC M (GV-898+)
Subcarrier frequency	4.433619 MHz PAL B/G/D/K/I
	3.579545 MHz NTSC M
	3.575611 MHz PAL M (GV-898+)
	3.582056 MHz PAL N (GV-898+)
Tolerance	< 4 ppm from 0 to 70º
SECAM	
TV systems	B/G/L/D/K
Subcarrier frequency	F_o R= 4.406250 MHz
	F_o B= 4.250000 MHz
Identification pulses	
Frame	
Amplitude D'R	540 mV
Amplitude D'R	500 mV
Line	
Amplitude D'R	215 mV
Amplitude D'R	167 mV
Subcarrier blanking	5.6 µs
Power supply	
Mains voltage	110-125-220-230-240 V AC ± 10%
Mains frequency	50-60 Hz
Consumption	40 W
Operating environmental conditions	
Altitude	Up 2000 m
Temperature range	From 5ºC to 40ºC
Maximum relative humidity	80 % (to 31ºC), decreasing lineally up to l 50% to 40ºC.
Mechanical features	
Dimensions	W.228 x H. 102 x D. 307 mm
Weight	5.6 kg, 5.8 kg (GV-898+)
Included accesories	Mains cord model CA-05
Options	OPT-798-01
	OPT-898-01