

## GV-198

The exceptional attributes the **GV-198** video generator consists of have been designed in accordance with the latest trends of modern technology.

Its application field is ranging to every use in which a professional feature is requested, such as to achieve the hardest requirements both in the synchronism step, and the colour and radiofrequency ones.

User-friendly, compact and strong, the **GV-198** is a specified tool for all servicing needs. The **GV-198** will become a consummate partner for after-service professionals, both in workshop tasks and home repairs and fittings.

Direct access keys to nine different pattern charts is available, allowing essential settings to be made in any television receiver, as well as to detect abnormalities through a visual picture examination. The charts can be in format 4:3 and 16:9. Besides, this equipment builds additional functions, to be connected or disconnected by means of the rotary selector.

The synthesized RF modulator ranges from 37 MHz to 865 MHz, so any defect in tuning circuits or in the IF of the receiver can be detected. Tuning is performed by channel (CCIR, OIRT or FCC channes), or directly by frequency in 50 kHz steps. An electronic attenuator allows up to a maximum of 50 dB to be attenuated in 10 dB steps.

A microcontroller carries out the interaction with the user, showing at any moment the state of the generator on the 2 x 16 characters display and by the luminous indicator lit next to the function keys.

The **GV-198** is designed to cover the basic standards: **NTSC / PAL / SECAM**, B / G / D / K / L / I / M / N. It has EUROCONNECTOR with the controlled commutation signal, as well as a composite synchronism output.

It has 10 memories for storing 10 different configurations, from direct access.



✓ **NTSC, PAL, SECAM**

✓ **16:9 & 4:3 IMAGE FORMATS**



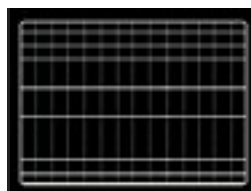
Red pattern



Green pattern



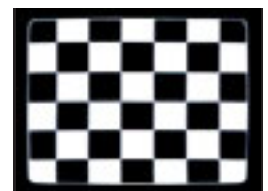
Blue pattern



Grid



Dots



Checkboard



Colour bars



100% white pattern



Black pattern

SPECIFICATIONS	GV-198
Standard	NTSC M PAL B/G, D/K, I, N SECAM B/G, D/K, L
Display	Digital, 16 characters, with backlight, with memory indication, TV standard and sound system, SCART commutation, channel and frequency (5 digits). Attenuation level
<b>Colour subcarrier</b> <b>NTSC (M)</b>	
Frequency	3.579545 MHz $\leq \pm 30$ ppm
Burst duration	2.38 $\mu$ s (10 $\pm$ 1 Fsc period)
Posición del burst	5.56 $\mu$ s + 100 ns from the line previous synchronism flank
Phase	-180° as referred to U axis
Amplitude error	$\pm 5\%$
Burst	ON / OFF, selectable
Chrominance	ON / OFF, selectable
<b>PAL</b>	
Frequency	4.43361875 MHz $\leq \pm 30$ ppm
B, G, H, D, K, I	3.58205625 MHz $\leq \pm 30$ ppm
N	3.5756118 MHz $\leq \pm 30$ ppm
M	
Burst duration	2.4 $\mu$ s (10 $\pm$ 1 Fsc period)
Burst position	5.6 $\mu$ s + 100 ns from the line previous synchronism flank
Phase	135° as referred to U axis
Amplitude error	$\pm 5\%$
Burst	ON / OFF, selectable
Chrominance	ON / OFF, selectable
<b>SECAM</b> <b>(B, G, H, D, K, L)</b>	
Subcarrier frequency	Fdr = 4.406250 MHz $\pm 2$ kHz Fdb = 4.250000 MHz $\pm 2$ kHz Selectable ON / OFF using burst key
Line identification points	
Chroma signal	
Amplitude	D'r = -1.9 (E'r - E'y) D'r = -1.5 (E'b - E'y)
Chroma pre-correction	Bell filter
<b>Video modulation</b>	
Modulation type	AM double side band
Modulation index	85%
<b>Test pictures</b>	
Pattern charts available	Colour bars Red pattern Green pattern Blue pattern Checkboard 100% white pattern Black pattern Grid Dots

<b>Sound modulation</b>	
Type	Mono multistandard
Carrier	ON / OFF selectable
Carrier frequency	4.5 MHz (M, N) 5.5 MHz (B, G, H) 6.0 MHz (I) 6.5 MHz (D, K, L)
Sound / video carrier ratio	13 dB
Modulation type	FM int. (1 kHz) (M, N, B, G, H, D, K, I) AM int. (1 kHz) (L)
FM modulation	
Pre-emphasis	50 ms (B, G, H, D, K, I) 75 ms (M, N)
Modulation deviation	30 kHz (FM) (B, G, H, D, K, I) 15 kHz (FM) (M, N)
Modulation indication	50% (AM)
<b>Composite video signal</b>	
Amplitude	1 Vpp
Bias	Negative
Output impedance	75 $\Omega$
Connector	BNC and EUROCONNECTOR
<b>R-G-B outputs</b>	
Amplitude	0.7 Vpp
Impedance output	75 $\Omega$
Connector	EUROCONNECTOR
<b>Trigger output</b>	
Signal	Vertical + Horizontal
Amplitude	2.5 Vpp
Impedance output	1 k $\Omega$
Connector	BNC
<b>Low frequency output</b>	
Amplitude	500 mVpp
Frequency	1 kHz
Impedance output	10 k $\Omega$
Connector	EUROCONNECTOR
<b>Radiofrequency output</b>	
Range	From 37 to 865 MHz (synthesized)
Tuning	By frequency: in 50 kHz steps
Channel plans	CCIR, OIRT and FCC
Frequency indication	5 digits
Output amplitude	85 dB $\mu$ V $\pm 3$ dB
Attenuator	50 dB (in 10 dB steps)
Impedance	75 $\Omega$
Connector	BNC
<b>Power supply</b>	
Mains voltage	AC 110-125-220-230-240 V $\pm 10\%$ / 50-60 Hz
Consumption	15 W
<b>Mechanical features</b>	
Dimensions	W. 212 x H. 102 x D. 241 mm
Weight	1.78 kg
<b>Accessories included</b>	90901207 BNC/TV coaxial cable, CC-07 90901105 Mains cable, CA-05 Spare fuse