



- **4 fixed Black Burst outputs**
- **CV and Y/C test output**
- **Choice of 8 test patterns**
- **Output with related phase**
- **PAL / NTSC**
- **1KHz balanced audio output**

GMB101-M 09/06/08

ELPRO Video Labs s.r.l.
Via della Praia 4/a FERRIERA di BUTTIGLIERA ALTA (TO) – ITALY
Tel.+39 0119348778 - FAX +39 0119348779



INSTALLATION AND USE OF THE GMB101 UNIT**INDEX**

- 1.0 Overview**
- 2.0 Power supply**
- 3.0 Settings**
- 4.0 Insallation**
- 5.0 Test signals**
- 6.0 Techincal data**
- 7.0 Notes**

When installing the GMB101 unit, please read this handbook carefully.

The manufacturer shall not be held responsible for any damage or injury caused by use, even correct, of its products.

The data and characteristics of the product may be modified without prior notice



2.0 POWER SUPPLY

The GMB101 unit must be powered at 230 Vac 50Hz using the cable provided. The socket of the cable must be inserted in the related panel plug to the left on the back of the unit.



The panel plug is fitted with a fuse-holder for 5X20 fuses. If the fuse blows, replace with a fuse **with the same rating** as specified on the back of the unit.

WARNING

All operations must be carried out by qualified personnel only who must be informed of the risks of electric shock.

In some countries, the current plug must be adapted to comply with local standards. The wires are identified according to the following coding:

- Brown PHASE (Identified with the letter L, may be red)
- Blue NEUTRAL (Identified with the letter N, may be black)
- Yellow/Green GROUND (Identified with the letter E, may be green)

WARNING

A ground connection is compulsory.

3.0 SETTINGS

The GMB101 unit does not have internal settings. NTSC functioning is obtained through a firmware setting. (See 5.1)

4.0 INSTALLATION

- a) Make sure that the switch on the back of the GMB101 is in the off (O) position.
Power on the appliance as describe in paragraph 2.0
- b) Turn the switch on the back of the unit to the ON (I) position.
In these conditions, the GMB101 unit generates four concurrent Black Bursts present on the BNCs identified as "Black Burst 1÷4", and also the bars at 75% present on the BNC connector and 4-pin mini-Din identified as "TEST SIGNAL"

The PAL format is present on the BNC while the Y/C format is present on the 4-pin mini-Din. In these conditions, the "75% BARS" led on the front panel is ON.

- c) Connect the video destinations of your system as required

Any outputs not used can be left free.

The GMB101 also features a balanced audio output on a 3-pin XLR connector.

The connections are:

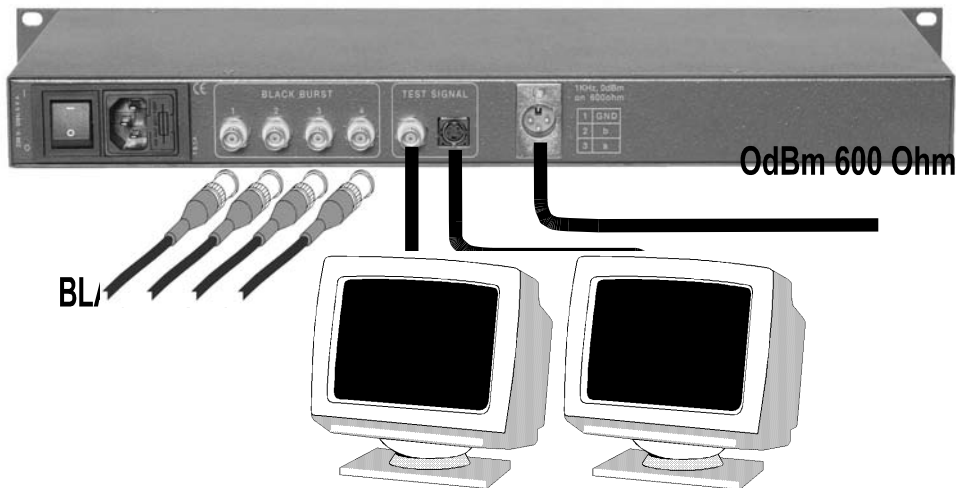
1: GND	2: b	3: a
--------	------	------

Pins **a** and **b** are active, ground is on pin 1 of the XLR connector.

The audio signal is output at level 0 dBm with impedance 600Ω. This means that, if charged with 600Ω, the level on the load will be 0 dBm, or .774Vrms, or 2.18Vpp

WARNING

**If the audio destination has a high impedance (10KΩ)
the output level will be +6dBm, or 1.55Vrms, or 4.37Vpp**



5.0 TEST SIGNALS

An operator-selectable test signal is present on the BNC and 4-PIN mini-Din connectors identified as "Test Signal".

The test signal is selected using the "Select" button on the front of the unit.

The type of output signal is indicated using leds. Each time the button is pressed, the signal changes and switching on of the led indicates the currently active signal.

At unit power-on, the 75% Bars signal is selected.

In sequence, the available test signals are as follows:

75% BARS
100% BARS
75% Y BARS
GRID
DOTS
RAMP
Y RAMP
WHITE WINDOW

WARNING

The test signal present at unit power-on can be modified.

To obtain a different signal from the 75% Bars at power-on, simply enable the signal required and then hold down the selection button for 3 seconds. Flashing of the led indicates that the setting has been saved.

5.1 Functioning in NTSC

The GMB101 can generate NTSC signals.

For generation of NTSC rather than PAL signals, hold down the SELECT key at power-on. From this moment and each time the unit is switched on, the GMB101 will operate as NTSC generator. The orange NTSC led on the front panel lights up.

To return to PAL functioning, repeat the operation described above. The NTSC orange led on the front panel will switch off.

The GMB101 is factory-set for PAL functioning.

6.0 TECHNICAL DATA**VIDEO:**

Output type	:std., clamped, with black level at 0VDC
BB out ret. Loss	:40dB at 5MHz
BB out isolation	:25dB at 5 MHz
Stability	:Better than 30ppm
Test Signal	:Std. PAL + Y/C
Available patterns:	:75% Bars; 100% bars; Y Bars; GRID; DOTS; RAMP; Y RAMP ; WHITE WINDOWS

AUDIO:

Output type	:Electronically balanced on XLR connector
Level	:0 dBm \pm 0,5dB on 600 Ω
Output impedance	:600 Ω
Frequency	:1KHz \pm 30Hz
Main input	:230Vac 50Hz
Power consumption	:5VA
Weight	:0.3Kg
Operating temp.range	:0÷45°
Safety	:according to EN60065
EMC	:according to EN55103-1 and EN55103-2

CE Mark

7.0 NOTES

This product is guaranteed for 2 years from the date of purchase.

If the fault in the product is due to improper use or operations carried out by third parties, the warranty is forfeited.

During the warranty period, Elpro will repair the faulty units free of charge.

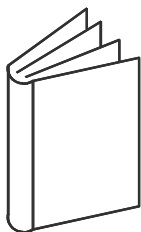
The faulty units must be sent CARRIAGE FREE to the Elpro offices in Turin with a regular accompanying note.

The units repaired will be returned CARRIAGE FORWARD to the addressee.

Outside the warranty period, Elpro will repair the faulty units EX its Turin offices, charging the cost of the repair to the customer.

**For any problems during installation of the GMB101
call the Elpro hot line +39 011 9348778
or E-mail: info@elprovideolabs.com**





The GMB101 Black Burst and test signal generator features 4 BB outputs and the test signal is present with the PAL and Y/C formats.

The GMB101 is an improved version of the GMB100 model.

The unit can be used as master generator in studio, OB-Van environments and in non-linear editing stations.

Its test outputs can be used to calibrate monitors and video-projectors. It can generate signals in PAL or NTSC.

The GMB101 also features a balanced auto output at 1KHz, 0 dBm on 600Ω.

1.0 OVERVIEW

The GMB101 unit

Check the contents of the packaging carefully. It contains:

- The mains cable
- N° 1 XLR f connector
- This handbook



Thank you for buying this product.

