

Features

- ◆ 85 hours operation with dry cells
- ◆ 30 Hz to 20 kHz level generator
- ◆ 0 Ω , 40 Ω , 600 Ω impedance
- ◆ 16 Spot frequencies
- ◆ Single Step or Sweep

Audio/Sound Broadcast Testing



H HEUER INSTRUMENTS

LEVEL GENERATOR LG21

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Rev 1, Dec 2003

30 Hz to 20 kHz

The Level Generator LG21 is a handheld battery powered instrument.

Easy and Fast Operation

The LG21 has been designed for ease of use without requiring the use of a handbook. The frequency and level of the output signal can be quickly and easily set using only the rotary knobs. Other modes of operation are configured by pressing a single button.

A 32 character, 2 line LCD gives a clear indication of impedance, level and frequency.

Battery Life

Long battery life is one of the most important features of portable equipment. The LG21 runs for 85 hours on quality dry cells. The battery condition is continuously monitored and if the voltage falls below 3.8 V a warning is given.

Frequency Range

The output frequency of the LG21 can be varied over a wide range between 10 Hz and 20 kHz. Resolution of 0.1 Hz is possible over the whole range.

A set of predefined frequencies in the range 40 Hz to 15 kHz, are provided which enable the user to quickly step through commonly used frequencies. The LG21 is also capable of continuously sweeping through the spot frequencies to characterise the frequency response of a circuit.

Level Range

The output level can be set between -55 dBm and +20 dBm with a choice of output impedances: 0 Ω , 40 Ω and 600 Ω .

Loop Hold

The LG21 will automatically hold a subscriber loop when connected by sinking the DC current.

Technical Specifications (LG21)

Frequency	
<i>Range</i>	30 Hz to 20 kHz
<i>Resolution</i>	1 Hz: 30 Hz to 1 kHz 10 Hz: 1 kHz to 20 kHz
<i>Spot Frequencies</i>	40, 60, 100, 200, 400, 600, 800, 1000, 2000 4000, 5000, 7500, 10000, 12000, 14000, 15000 Hz
<i>Accuracy</i>	$\pm 1\%$
<i>Sweep Mode</i>	The following sequence is provided - 1 kHz reference for 10 sec - pause for 5 sec - spot frequencies for 5 sec each - pause for 5 sec
<i>Control</i>	Individual spot frequencies are selected by quickly stepping through the spot frequencies
<i>Variable</i>	Continuous coverage between spot frequencies, 30 Hz to 20 kHz
<i>Accuracy</i>	$\pm 0.1\%$
<i>1 kHz reference</i>	A 1000 Hz $\pm 0.1\%$ crystal locked reference signal for frequency offset measurements
Level	
<i>Range</i>	-55 dBm to +14 dBm (Z = 600 Ω) -55 dBm to +20 dBm (Z = 0 Ω , 40 Ω)
<i>Accuracy</i>	± 0.2 dB
<i>Resolution</i>	0.1 dB
<i>Control</i>	INC/DEC selected digit in display
Distortion	
<i>Harmonics</i>	< -60 dB
Impedance	
<i>Output Impedance</i>	0 Ω (approx.), 40 Ω , 600 Ω balanced
<i>Output Return Loss</i>	>25 dB, 100 Hz to 20 kHz
Balance Ratio	
	>40 dB when measured with ITU O.121
Loop Hold	
	The instrument is capable of holding a looped telephone circuit
Interfaces	
<i>Output</i>	balanced, floating 3-pin 4 mm CF connector
<i>Charging</i>	2.5 mm DC socket
Power Supply	
<i>Battery Type</i>	4 AA (NiCd or Alkaline)
<i>Battery Life</i>	25 hrs typical (NiCd) 85 hrs typical (Alkaline)
<i>Low Battery Indication</i>	< 3.8 V
<i>AC Operation (& charging)</i>	Ext. Adaptor: 240Vac to 6 Vdc (100mA)
<i>Auto Power-Off</i>	12 mins after last button press
General	
<i>Display</i>	16x2 LCD
<i>Operating Temperature</i>	0 $^{\circ}$ C to 50 $^{\circ}$ C
<i>Storage Temperature</i>	-20 $^{\circ}$ C to 60 $^{\circ}$ C
<i>Dimensions</i>	178 mm x 97 mm x 55 mm (L x W x H)
<i>Weight</i>	790g with batteries

Data subject to alterations without notice



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