
TRF-900 Giant

Multifunctional Test Instrument



Analog Video Generator (PAL, SECAM, NTSC and all substandards)
Teletext generator, Closed caption generator and VPS generator
TV & SAT RF modulators with PLL and Dual-Tone ID
Digital Video Stream Generator
Analog Video and Digital Video Analyzer
Two insulated power supplies (5 V & 0.25 A/ 3.3V & 0.25 A)
Insulated USB interface (USB 1.1, USB 2.0 compatible)
Modular concept, Expansion slot for future enhancement
Fully programmable & configurable from PC
Warranty 24 months, lifetime service

psillon

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TRF-900 Giant, Technical specification

Note: TRF-900 is supplied in several versions according to customer's request. In this versions some function may not be available. Check detail specification of the appropriate version, please. Some functions also require later issue of operating system or specialized application.

Display	Graphic LCD, 320 x 240 dots, white backlight
Control	Analog touch panel, responds to finger or stylus tap PS/2 Keyboard (low power type Chicony KB-9810) IR remote control
Setup	Graphic menu
TV standards	PAL, SECAM, NTSC and all substandards
Picture format	4/3, 14/9, 16/9
TV lines count	625/ 50 Hz, 525/ 60 Hz
Scanning	Interlaced, non-interlaced
Colour subcarrier	According to PAL, SECAM or NTSC standard
Teletext	Enhanced teletext ETS300706, 6.9375 Mb/s Support for World Standard Teletext (WST), 5.7272 Mb/s Support for North-American BroadcastText System (NABTS), 5.7272 Mb/s
Closed caption	Yes
Wide screen signalling	Yes
VPS	Yes
Test patterns	
Standard	64 standard patterns
User	All patterns are of redefinable type, limited only by memory size
Generation method	TRUE PICTURE technology (maximum TV resolution)
Inputs & Outputs	
CVBS (Video)	75 ohm, level 1,2 Vpp (colour bars 100/0/100/0), level 1 Vpp (colour bars 75/0/75/0)
S-Video	
Y (luminance)	75 ohm, level 1 Vpp (colour bars 100/0/100/0)
CHROMA (chrominance)	75 ohm, level 0,6 Vpp (colour bars 100/0/100/0)
R (red)	75 ohm, level 0,7 Vpp (colour bars 100/0/100/0)
G (green)	75 ohm, level 0,7 Vpp (colour bars 100/0/100/0)
B (blue)	75 ohm, level 0,7 Vpp (colour bars 100/0/100/0)
C _R	
Y	
C _B	RGB outputs can be switched to CDF (colour difference) mode, levels are adjustable
Audio	Two asymmetrical audio outputs (level, frequency and shape adjustable) Two channel audio input, typ. level: 0,775 Vrms/ 1 kOhm
TV	Asymmetrical TV output 75 ohm, 80 dBuV (0 dB attenuation set)
SAT	Asymmetrical SAT output 75 ohm, 85 dBuV (0 dB attenuation set)
Digital Video Stream	8 bit data stream input, 4:2:2 format 8 bit data stream output, 4:2:2 format
PC Interface	USB 1.1 & USB 2.0, electrically insulated from generator and from power supply for external application; drivers for Windows 98 & Windows XP
Power supply for external application	5.0 V/ 2%, max. 0.25 A 3.3 V/ 2%, max. 0.25 A Both supplies are electrically insulated from generator and USB/ PS2 port

TRF-900 Giant, Technical specification

<p>TV output Output level Picture carrier frequency Video modulation</p> <p>I. sound subcarrier frequency Picture to sound ratio Modulation type Modulation signal</p> <p>II. sound subcarrier frequency Picture to sound ratio Modulation type Modulation signal</p> <p>Pilot signal Frequency shift ID signal Validity</p>	<p>30 ..80 dBuV (adjustable via digital attenuator), ripple -4 dB/ +1 dB 38 ..855,25 MHz, tuning step 62.5/ 125/ 250/ 500/ 1000 kHz (or TV channel) Negative AM DSB, adjustable modulation depth 72,5% to 90%</p> <p>4,500 MHz, 5,500 MHz, 6,000 MHz and 6,500 MHz -11 ..-18 dB (adjustable) FM, adjustable frequency deviation Frequency, level and shape adjustable</p> <p>5,000 ..7,000 MHz, tuning step 1 kHz -13 ..-20 dB (adjustable) FM, adjustable frequency deviation Frequency, level and shape adjustable</p> <p>54,6875 kHz, +/-1Hz 2,5 kHz (II. sound subcarrier frequency deviation is 30 kHz, or else relative) AM (m=0,5), 0 Hz (mono), 117,5 Hz (stereo), 274,1 Hz (duo) Interlaced mode and vertical frequency 50 Hz</p>
<p>SAT output Output level Picture carrier frequency Video modulation</p> <p>I. sound subcarrier frequency Modulation type Modulation signal</p> <p>II. sound subcarrier frequency Modulation type Modulation signal</p>	<p>60 ..85 dBuV (adjustable via digital attenuator), ripple +/-5 dB 860 ..1900 MHz, tuning step 125 kHz FM, CCIR405-I preemphasis</p> <p>5,000 ..8,500 MHz, tuning step 1 kHz FM, frequency deviation 30 kHz Frequency, level and shape adjustable</p> <p>5,000 ..8,500 MHz, tuning step 1 kHz FM, frequency deviation 30 kHz Frequency, level and shape adjustable</p>
<p>Power supply</p> <p>Plug</p> <p>Dimensions</p> <p>Weight</p>	<p>~95..125V/ 50..60 Hz ~195..265V/ 50..60 Hz Automatic selection</p> <p>IEC60320 inlet & power cord</p> <p>350 x 120 x 150 mm (W x H x D) 13.78 x 4.72 x 5.90 inch (W x H x D)</p> <p>5 kg 11 pounds</p>
<p>Operating system</p> <p>Available functions</p>	<p>Version 1.0 (may be simply upgraded from PC to last version)</p> <ul style="list-style-type: none"> - Analog video generator (all analog outputs are available) - Enhanced teletext generator (6.9375 Mb/s) - Two channel audio generator - Two channel audio input - RF TV and SAT modulator with PLL and Dual-Tone ID - Two independent and insulated power supplies for external application - USB & PS/2 interface

TRF-900 Giant, Ordering information

TRF-900	TV	SAT	FD1	TCXO
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TRF-900 ..Base type specification

TV ..TV module is present
 blank ..TV module is not present

SAT ..SAT module is present
 blank ..SAT module is not present

FD1 ..One FLASH disk is available (1x 64Mb)
FD2 ..Two FLASH disks are available (2x 64Mb)
FD3 ..Three FLASH disks are available (3x 64Mb)

TCXO ..Temperature compensated base oscillator (ask for availability)
 blank ..Standard crystal oscillator