

MODEL STV-784 :Television Stereo Generator

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OPERATING TEMPERATURE RANGE

0 degrees C
to 50 degrees
C.

RF PROTECTION

All inputs and
outputs RF
suppressed.

INPUT/OUTPUT CONNECTIONS

Audio Input

No. 6 screw
terminals
0 to +10 dBm
peak, balanced,
600 Ohm or
bridging
Discrete Left &
Right or Sum &
Difference

Remote Inputs

No. 6 screw
terminals
6 to 24 VAC, 10
to 24 VDC
Floating,
optically isolated

Composite Video in/Out

BNC connectors
Bridged loop
thru

External SAP & Pro Generator Inputs

BNC connectors
SAP: 3.5 V peak
to peak
produces +/- 15
kHz of deviation
Pro: 3.5 V peak
to peak

produces +/- 3
kHz of deviation

Remote Binary Outputs

No. 6 screw
terminals
Isolated relay
contacts
Maximum 0.5 A
at 30 V non-
inductive

Remote Meter Output

0 VDC to 5
VDC, 1 k Ohm
source
impedance

Composite Baseband Output (For +/- 73 kHz deviation)

**Unbalanced
BNC connector**
0 V to 8 V peak
to peak, high Z
0 V to 4 V peak
to peak, 75 Ohm
load

Unbalanced XLR connectors (two)

0 V to 8 V peak
to peak, high Z
0 V to 4 V peak
to peak, 39 Ohm
load

Balanced (Optional) Male XLR type (two provided)

- +/- 0
V to 8
V
peak
to
peak
- 78.7
Ohm
imped

	ance, other values on specia l order
	<ul style="list-style-type: none"> • Drives up to 2500 feet (762m) of Belde n 9463 twina x cable termin ated with an option al MSI line receiv er.

SIZE Inches (mm)
H x W x D

Front Panel:
6.96 x 19 (177 x
483)
Chassis:
6.96 x 17 x
14.37 (177 x 432
x 365)

POWER

95 VAC to
130 VAC,
50/60 Hz, 60
W maximum
190 VAC to
260 VAC
option
available

INDICATORS

Meter Channel:
— — — — —

CONTROLS (front panel)

Tells what parameter is displayed on the D'Arsonval meter

Attenuation:

Loudness control attenuation in 0.5 dB steps

Stereo:

TSG is in stereo mode

Mono:

TSG is in mono mode

Sync:

Positive indication that video sync is being received and TSG is locked.

Stereo Rev:

Alarm that one channel of incoming audio is reversed, causing monaural cancellation

Fuse:

Indicates primary AC fuse blown

BTSC board

LEDs:

LEDs on BTSC board for setting precise 100% reference level

Meter Select:

Positions meter (as indicated by meter channel LEDs) on desired parameter

Input Level:

Sets the level of Left & Right audio into the TSG; if the input board is strapped for matrix input,

sets Sum and Difference levels

Mono/Stereo:

Switches the

TSG alternately between monaural and stereophonic operation

CONTROLS (front panel) AUDIO PROCESSOR

Loudness Step:

Each time pressed, reduces program level 0.5 dB

Loudness

Reset:

Smoothly restores program level to normal use after Loudness Step

Gate:

Sets threshold of gain expansion on quiet program material and prevents "pumping"

HFR:

Sets amount of high frequency audio gain reduction applied

Limit:

Sets threshold of broadband peak limiting

ACCURACY OF 75 MICROSECOND PREEMPHASIS

+/- 0.1 dB

STEREO SUBCARRIER SUPPRESSION

Less than +/- 90 Hz deviation of main carrier
Greater than 55 dB below +/- 50 kHz deviation of main carrier

FREQUENCY RESPONSE (left, right, main and subchannel)

BTSC (dbx encoded) +/- 0.3 dB 50 Hz to 14 kHz no more than -2.0 dB at 15 kHz
75 microsecond equivalent mode +/- 0.3 dB 50 Hz to 15 kHz

TOTAL HARMONIC DISTORTION

At any frequency from 50 Hz to 15 kHz at 25, 50 and 100% modulation; 100% modulation = +/- 25 kHz deviation for L+R; +/- 50 kHz for L-R; Bandwidth = 30 kHz, measured with 75 microsecond deemphasis or BTSC decode. Main channel (L+R) less than 0.05% Subchannel (L-R) less than 0.05% (75 microsecond equivalent mode) Subchannel (L-R) less than 0.3% (BTSC mode) note: 100% modulated BTSC measurement made with dbx clipper disabled.

SEPARATION

75 microsecond equivalent mode 50 Hz to 15 kHz: greater than 50 dB. BTSC (dbx encoded) Up to 12 kHz: greater than 40 dB Up to 14 kHz: smoothly decreasing to greater than 36 dB

CROSSTALK

Into main channel from L-R subcarrier: greater than 60 dB below +/- 25 kHz deviation. Into L-R subcarrier from main channel: greater than 60 dB below +/- 50

SIGNAL-TO-NOISE RATIO (equivalent mode, with 75 microsecond deemphasis)

kHz deviation.

FM noise in Left and Right channels: greater than 80 dB below +/- 25 kHz deviation M channel.
FM noise in L-R subchannel: greater than 85 dB below +/- 50 kHz deviation D channel.
FM noise in L+R subchannel: greater than 85 dB below +/- 25 kHz deviation M channel.

**75 microsecond
EQUIVALENT INPUT NOISE OF BTSC ENCODER**

Greater than 78 dB below 100 Hz 100% equivalent modulation level.

PILOT PROTECTION

Better than 35 dB in a bandwidth of 1 kHz, centered on pilot.

AUDIO PROCESSOR

Full audio processing is self-contained with the TSG; In addition to remote metering and remote control capabilities this features interleaving protection, significantly

reducing
dynamic
distortion
under real
program
conditions
(complete
specifications
of audio
processor
available on
request)