



UNcompressed Digital STL



MODEL 460 DIGITAL STL TRANSMITTER

The TFT Digital STL is a new addition to the TFT family of STL products with up to six uncompressed program channels and a data channel to meet the requirements of consolidated operations. It provides the maximum number of high quality program channels over a single RF channel.

GENERAL DESCRIPTION

The TFT Digital STL consists of a transmitter and receiver pair that accommodates up to three AES/EBU stereo pairs or up to six discrete audio channels. The transmitter has a 5 Watt output and delivers them uncompressed in a configurable digital method to the receiver. Sample rates of 32, 44.1, and 48 ks/s are supported. The method of modulation is a function of the number of channels and sample rate and is configurable for the most robust operation from a front panel jack that can be connected to a laptop PC. The RF system is frequency agile and set by software in the transmitter and receiver.

REMOTELY CONFIGURABLE

The frequency and input/output configuration of both the transmitter and receiver can be set for optimum values of threshold and modulation via a local laptop PC or connected via modem. User friendly software with a graphical user interface (GUI) is provided with each system. The transmitter and receiver can be remotely controlled over an internet or LAN connection.

FEATURES & BENEFITS

- *Up to 6 Channels Uncompressed*
- *PC Configurable*
- *256/64/16 QAM or 8PSK*
- *32, 44.1, 48 ks/s Sample Rates*
- *AES/EBU or Analog I/Os*
- *12.5 kHz Step Size*
- *200 MHz to 1.9 GHz Bands Available*
- *Major and Minor Alarms*
- *FCC ID: BIO460*
- *RoHS Compliant*

SPECIFICATIONS

SYSTEM

Frequency.....940-960 MHz
 200-240 MHz
 1.7-1.9 GHz

Step Size.....12.5 kHz

Frequency Stability.....± 5 ppm (±0.0005)%

Occupied Bandwidth.....≤ 500 kHz
 (≤ 230 kHz 64QAM, 44.1 ks/s, 2-channels)

I/O.....AES/EBU (XLR, 110 Ω) or
 Analog (XLR, 600 Ω)

Linear Channels	Sample Rate (ks/s)	Modulation Type
6	32	256QAM
4	48	256QAM
4	44.1	256QAM
4	32	64QAM
2	44.1	64QAM
2	48	16QAM
2	44.1	16QAM
2	32	8PSK

Frequency Response
 0.5 Hz to 22.5 kHz (48 ks/s)
 0.5 Hz to 15 kHz (32 ks/s)

Distortion.....< 0.005% at 1 kHz

Noise.....> 90 dB

Dynamic Range.....40 dB static

Crosstalk.....< 80 dB

Time Delay.....< 1 msec

Data Channel.....9600 baud, 9-pin, RS-232

TRANSMITTER

Output Power.....> 2 Watts (nominal)
 (5 Watts, 1.7-1.9 GHz, higher with external PA)

Output Impedance.....50 Ω

Output Connector.....Type N (female)

PC Interface.....Front Panel 9-pin RS-232

Analog Audio Inputs.....600/10k Ω selectable

Analog Levels.....- 10 to + 18 dBm adjustable

AES/EBU Inputs.....110 Ω
 Transformer Balanced

RECEIVER

Modulation	Sensitivity
256QAM	63 μV (-71 dBm) 6 channels 56 μV (-72 dBm) 4 channels
64QAM	14 μV (-84 dBm)
16QAM	10 μV (-87 dBm)
8PSK	10 μV (-87 dBm)

Bit Error Rate at Threshold.....< 10⁻⁶
 for no perceptible loss

Analog Audio Outputs.....600 Ω balanced

Analog Output Levels.....- 10 to + 8 dBm

MECHANICAL AND ENVIRONMENTAL

Dimensions.....19 x 3.5 x 17, in.
 48.3 x 8.9 x 43.2, cm
 (19 x 5.25 x 19, in. 1.7-1.9 GHz 460 Tx)
 (48.3 x 13.3 x 48.3, cm 1.7-1.9 GHz Tx)

Weight.....26 lbs. (11.8 kg)

AC Power Requirements



MODEL 467 DIGITAL STL RECEIVER



Sound Quality Since 1970

1953 Concourse Drive, San Jose, California 95131-1708 U.S.A.

Telephone: (+1) 408-943-9323 Fax: (+1) 408-432-9218

<http://www.TFTInc.com>

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