

**BEXT**

## LD STL Series

Frequency Agile,  
Composite  
940-960 MHz STL's  
10, 20 & 35 W Models

Available also for  
220 - 440 MHz



- Completely Microprocessor supervised
- Frequency directly programmable from Front Panel via LCD Display menu
- Telemetry and remote controllable settings and functions
- State of the art audio quality
- High sensitivity & high selectivity receiver, designed to withstand the most hostile RF sites
- Excellent stereo separation
- Meets or exceeds all FCC and CCIR requirements

- **Power Output available:**

Mod. **LDT**:  
0.5 W to 10 W, adjustable  
Mod. **LDT + LKA20** amp:  
20 W, adjustable  
Mod. **LDT + LKA35** amp:  
35 W, adjustable

- **LDT STL - TX Specifications**

**Frequency Range:**

940 - 960 MHz directly digitally programmable  
in 10 kHz increments

(on request, any selected 15 MHz range  
between 220 MHz and 440 MHz)

**Frequency of Operation:**

Synthesized, microprocessor controlled

**RF Output Connector / Impedance:**

Type "N" female / 50 ohm

**Frequency Stability:**

Better than 1 ppm ( $\pm 1$  kHz),  $-10^{\circ}$  to  $50^{\circ}$  C  
( $14^{\circ}$  to  $122^{\circ}$  F)

**Modulation Type:**

Direct FM at the carrier frequency

**Asynchronous AM S/N ratio:**

Better than  $-70$  dB referred to 100% AM, no  
de-emphasis

**Synchronous AM S/N Ratio:**

Better than  $-50$  dB referred to 100% AM (FM  
modulation  $\pm 75$  kHz at 400 Hz), no de-emphasis

**Transient Intermodulation Distortion:**

$< 0.1\%$  (typ.  $0.05\%$ ) measured with a 3.18 kHz  
square wave & a 15 kHz sinewave, FM 75 kHz

**Front panel displays:**

Frequency, Modulation, Fwd Pwr, Ref Pwr,  
DC V, Current, Temperature, Alarms & Status  
indication for all functions

**AC Power requirement:**

85 to 260 V, 50 or 60 Hz, single phase, auto  
sensing, auto adjusting

**AC Power Consumption:**

approx 60 VA

**DC Power Input:**

24V DC, approx 2 A,

**Ambient Temperature Range:**

$-10^{\circ}$  to  $50^{\circ}$  C ( $14^{\circ}$  to  $122^{\circ}$  F)

**Spurious and Harmonic Emissions:**

Meets or exceeds all FCC and CCIR  
requirements

**Modulation Capability:**

MPX / Composite program + RDS/RBDS  
+ 2 SCA Subcarrier channels

**Audio Inputs:**

Mpx / Composite: Unbalanced BNC and  
Balanced XLR (selectable)

Mono: Balanced XLR

SCA / RDS / RBDS: Unbalanced BNC (2)

L & R Channels: Balanced XLR inputs

(models with built-in optional Stereo  
Generator Card only)

All levels adjustable from  $-20$  dBm to  $+13$  dBm,  
typically set for 3.5 Vp-p (1.237 Vrms / 4.1 dBm)

Pre-emphasis (75  $\mu$ sec for FCC, 50  $\mu$ sec for  
CCIR), defeatable for flat inputs

**RF Monitor:** BNC, approx.  $-30$  dB

**Interlock:** BNC, mutes RF when grounded

**Serial Interface:** DB9 female RS 232

**Telemetry & Remote Control:** DB15 female

**Composite FM S/N Ratio:**

Better than 80 dB below 75 kHz deviation

measured in a 40 Hz to 75 kHz bandwidth,  
de-emphasized, RMS detector

**Composite Total Harmonic Distortion:**

Better than 0.1%

**Stereo Separation:**

Greater than 65 dB

**Composite Amplitude Response:**

$\pm 0.2$  dB or less, 40 Hz – 53 kHz

$\pm 0.3$  dB or less, 53 kHz – 100 kHz

**Front Panel Size:**

483 mm (19") W x 88 mm ( $3\frac{1}{2}$ " ) H

(2 standard rack spaces high)

**Overall Depth:** 344 mm ( $13\frac{1}{2}$ " )

**Net Weight:** 6 kg (13.2 Lbs)

**Options include:** available Built in Stereo  
Generator Card

- **LDR STL - Receiver Specifications**

**RF Input Connector/Impedance:**

Type "N" female, 50 ohm

**Frequency Range:**

940 - 960 MHz directly digitally programmable  
in 10 kHz increments

(on request, any selected 15 MHz range  
between 220 MHz and 440 MHz)

**Sensitivity:**

Monaural,  $-67$  dBm for  $> 68$  dB S/N RMS, de-  
emphasized, 75 kHz deviation

Composite,  $-47$  dBm for  $> 68$  dB S/N RMS,

de-emphasized, 40 Hz to 15 kHz

Stereo (Left and Right Channel, decoded, de-  
emphasized),  $-47$  dBm for  $> 62$  dB S/N RMS

**Composite Total Harmonic Distortion:**

0.4% or less

**Composite amplitude response:**

$\pm 0.2$  dB or less, 40 Hz to 53 kHz

$\pm 0.6$  dB or less, 53 kHz to 100 kHz

**Stereo Separation:**

Greater than 50 dB @ 1 kHz

Greater than 40 dB 50 Hz to 15 kHz

**Crosstalk:**

Main to Sub / Sub to Main, Greater than 45 dB

**Selectivity (static):**

$-20$  dB @ 200 KHz

$-35$  dB @ 300 KHz

$-55$  dB @ 400 KHz

**LCD Displays:** Frequency, Modulation, RF

Signal Level, Alarms & Status indication for

all functions

**Audio Outputs:**

Mpx / Composite: Unbalanced BNC and

Balanced XLR (selectable)

Mono: Balanced XLR

SCA / RDS / RBDS: Unbalanced BNC

L & R Channels: Balanced XLR Outputs

(models with built-in optional Stereo Decoder  
Card only)

**10.7 MHz IF Monitor:**

BNC connector

**RS232:**

DB9

**Telemetry & Remote Control:**

DB25

**Levels:** All levels adjustable from  $-20$  dBm to  
 $+13$  dBm, typically set for 3.5 Vp-p (1.237

Vrms / 4.1 dBm)

**Temperature Range:**  $-10^{\circ}$  to  $50^{\circ}$  C ( $14^{\circ}$  to  
 $122^{\circ}$  F)

**AC Power requirement:**

85 to 260 V, 50 or 60 Hz, single phase, auto

sensing, auto adjusting, approx 20 W

**DC Pwr Input:**

24V DC, approx. 0.5 A

**Front Panel Size:**

483 mm (19") W x 88 mm ( $3\frac{1}{2}$ " ) H

(2 standard rack spaces high)

**Overall Depth:**

344 mm ( $13\frac{1}{2}$ " )

**Net Weight:**

5.5 kg (12.1 Lbs)

**Options include** available Built-in Stereo  
Decoder Card