

BEXT

LJ STL Series

Frequency Agile
Composite
940 - 960 MHz
STL's

10, 20 & 35 W

Available also for
200 - 800 MHz

- Directly programmable from front panel with digital frequency readout
- State of the art audio quality
- Excellent stereo separation
- Adjustable squelch/mute function
- Meets or exceeds all FCC and CCIR requirements

• LJT STL - TX Specifications

Power Output, 940 - 960 MHz models:

Mod. **LJT 10**: 0.5 W to 10 W, adjustable

Mod. **LJT 10 + LKA20** amp: 20 W, adjustable

Mod. **LJT 10 + LKA35** amp: 35 W, adjustable

Power Output, 200 - 800 MHz models:

Mod. **LJT Custom**: 0.5 W to 5 W, adjustable
(others available on request)

Frequency of Operation:

Synthesized, microprocessor controlled

RF Output Connector/Impedance:

Type "N" female / 50 ohm

Frequency Stability:

Better than 4 ppm (± 4 kHz), -10° to 50° C
(14° to 122° F)

Frequency Range:

940 - 960 MHz directly digitally programmable
in 10 kHz increments

(or, for 200-800 MHz models, any selected
15 MHz range in the 200-800 MHz band)

Modulation Type:

Direct FM at the carrier frequency

Asynchronous AM S/N ratio:

80 dB below reference carrier with 100% AM
modulation, 75 μ sec de-emphasis (no FM
modulation present)

Synchronous AM S/N Ratio:

80 dB below reference carrier with 100% AM
modulation (FM modulation ± 75 kHz)

Front Panel Displays:

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

AC Power requirement:

100, 120, 220 or 240 VAC 50/60 Hz,

approx 50 W for 2 W models

approx 100 W for 10 W models

Ambient Temperature Range:

-10° to 50° C (14° to 122° F)

Spurious and Harmonic Emissions:

Meets or exceeds all FCC and CCIR
requirements

Modulation Capability:

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

Audio Inputs:

Mpx / Composite: Unbalanced BNC

Mono: Balanced, hard wire on terminal posts

SCA / RDS / RBDS: Unbalanced BNC (3)

Audio Monitor: Unbalanced BNC

Interlock: BNC

All levels adjustable from -18 dBu to +18 dBu,
typically set for 3.5 Vp-p (1.237 Vrms / 4.1
dBm)

Pre-emphasis (75 μ sec for FCC, 50 μ sec for
CCIR), defeatable for flat inputs

Telemetry & Remote Control: DB9 and hard
wire type terminals

Composite FM S/N Ratio:

65 dB below 75 kHz deviation at 400 Hz, left
and right channel, decoded and
de-emphasized

Composite Harmonic Distortion:

.05% or less (.03% typical)

Audio Frequency Response:

± 0.3 dB from 30 Hz to 100 kHz

Total Harmonic Distortion:

0.1%, typical 0.05% or less measured
at 1 kHz

Stereo Separation:

Greater than 50 dB, typical 55 dB

Composite Phase Response:

± 0.5 from linear phase, 30 Hz - 53 kHz

Front Panel Size:

483 mm (19") W x 88 mm (3½") H
(2 standard rack spaces high)

Overall Depth:

380 mm (15")

Net Weight:

9.5 Kg (21 Lbs)

• LJR STL - Receiver Specifications

Frequency Range:

940 - 960 MHz directly digitally programmable
in 10 kHz increments

(or, for 200-800 MHz models, any selected
15 MHz range in the 200-800 MHz band)

RF Input Connector/Impedance:

Type "N" female, 50 ohm

Sensitivity:

Composite, 1 mV typ. for S/N > 65 dB

Monaural, 0.1 mV typ. for S/N > 65 dB

Composite amplitude response:

± 0.1 dB or less, 30 Hz - 53 kHz

± 1 dB or less, 53 kHz - 75 kHz

± 2 dB or less, 75 kHz - 100 kHz

Stereo Separation:

better than 45 dB, typical better than 50 dB

Total Harmonic Distortion:

0.2%, typical 0.1%

Front Panel Displays:

Frequency, Modulation, RF Signal Level,

DC V, Status indication for all functions

Audio Outputs:

Mpx / Composite: Unbalanced BNC

Mono: Unbalanced BNC

SCA / RDS / RBDS: Unbalanced BNC (2)

Unbalanced BNC Outputs for L & R Channels

out (models with built-in optional Stereo

Decoder Card only)

6.3 mm jack female for headphones

10.7 MHz IF Monitor:

BNC connector

Telemetry & Remote Control: DB9 and hard
wire type terminals

Levels:

All levels adjustable from -18 dBu to +18 dBu,
typically set for 3.5 Vp-p (1.237 Vrms / 4.1
dBm)

Temperature Range: -10° to 50° C (14° to
 122° F)

AC Power requirement:

100, 120, 220 or 240 VAC 50/60 Hz,

approx 50 VA

Front Panel Size: 483 mm (19") W x 88 mm
(3½") H (2 standard rack spaces high)

Overall Depth:

380 mm (15")

Net Weight:

8.5 kg (19 Lbs)

Options include Built-in Stereo
Decoder Card and RDS Decoder Card