
DIGITAL BROADCAST
GREEN RF
LOCK
STEREO
ON
REMOTE
VSWR
RESET
SYSTEM CHECK
PWR
DEV
MANUAL
REMOTE
MONO
DIGITAL BROADCAST
GREEN RF
LOCK
SQUELCH
ON
SYSTEM CHECK
STEREO
MONO

KE / KV Series Specifications

The KE and KV analog STL Series are the best audio quality links for contribution and/or distribution broadcasting networks.

Synthesized

Synthesized from 48 to 1020 MHz (/1B, /FM, /3B, /4B, /5B, /GHz models) and from 1.2 to 2.7 GHz (/2G models). The transmitted and received frequency can be easily set by internal dip - switches.

Excellent stereo separation

A built-in group delay and amplitude pre-corrector guarantees a very low phase distortion and a great stereo separation in the whole audio band.

Suitable for digital audio

The subsonic over-modulation and the low frequency phase distortion are controlled by a feedback circuit in order to exalt the audio quality of the latest digital studio equipment.

Low THD distortion

The THD value with stereo or mono demodulated signals is negligible.

Low noise

The excellent signal to noise ratio either in mono or in stereo allows the use of this STLs in multi hops networks without decreasing the audio quality.

High sensitivity

It allows to reduce the STL's antennas investment.

Great RF immunity

Allows to operate in most hostile RF environments.

High adjacent channel rejection

Obtained thanks to the excellent mechanical shielding and the precision of RF channel filtering.

High frequency stability

High frequency stability with the internal temperature compensated crystal reference.

Full metering

Complete diagnostic and measurement front panel displays are available.

Meets or exceeds

Meets or exceeds all FCC and CCIR requirements.

TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS	
Frequency Range:	
• KE/1B, KV/1B	48-80 MHz
• KE/FM, KV/FM	80-108 MHz
• KE/3B, KV/3B	160-300 MHz
• KE/4B, KV/4B	300-512 MHz
• KE/5B, KV/5B	512-830 MHz
• KE/G, KV/G	830-1020 MHz
• KE/2G, KV/2G	1.1-2.7 GHz
Composite Frequency response	± 0.1 dB typ. from 16 Hz to 53 kHz, 0.5 dB up to 100 kHz
Mono Frequency response	±0.5 dB from 20 Hz to 15 kHz
Stereo separation	≥ 58 dB (from 15 Hz to 15 kHz)
Stereo cross talk	≥ 55 dB
Signal to Noise Ratio (mono) (-50 dBm received)	≥ 72 dB with 75 kHz dev. deemphasized
Signal to Noise Ratio (stereo) (-50 dBm received)	≥ 68 dB with 75 kHz dev. deemphasized
THD (stereo)	< 0.1 %
THD (mono)	< 0.1 %
IMD (two tone ΔF= 1 kHz)	D2 ≤ 0.09%, D3 ≤ 0.06% (from 15 Hz to 15 kHz)

TRANSMITTERS SPECIFICATIONS	
Power outputs (continuously adjustable from 0 to nominal power):	
• KE/1B	15 W
• KE/FM	30 W
• KE/3B	15 W
• KE/4B	15 W
• KE/5B	15 W
• KE/G	8 W (25 W on request)
• KE/2G	2 W
• KE5/2G	5 W (10 W, 25 W on request)
Input connectors	XLR, 600 Ω for mono or stereo (Left&Right) BNC, 10kΩ for MPX
Output connector	N female, 50 Ω
Modulation	FM
Pre-emphasis	0 / 50 / 75 µs
Spurious and harmonic suppression	Exceeds CCIR/FCC requirements
Syncronous AM S/N Ratio	≤ -60 dBc with dev. ±75 kHz
Asyncronous AM S/N Ratio	≤ -70 dBc respect to 100% AM mod.
Capability	1 mono/stereo program, up to 3 SCA (optional)
Metering	output level, peak modulation, diagnostic functions
Frequency setting	internal dip-switches
Dimensions	depth 483 mm (19") x 2 U (standard rack unit)

RECEIVERS SPECIFICATIONS	
Monoaural Sensitivity	8 µV for S/N 52 dB, 16 µV/60 dB, 200 µV/70 dB, 1 mV/78 dB
Composite Sensitivity	8 µV for S/N 40 dB, 16 µV/42 dB, 150 µV/60 dB, 1 mV/72 dB
Noise figure	(RF in = 2mV) < 8 KTo
Selectivity	± 160 kHz at -3 dB IF BW, ± 500 kHz at -78 dB IF BW
Metering	RF input level, peak modulation
Frequency setting	internal dip-switches
RF input	N female, 50 Ω
Image rejection	> 68 dB
Squelch threshold	adjustable from 8 µV
Outputs	composite, monoaural, IF 10.7 MHz
Dimensions	depth 483 mm (19") x 2 U (standard rack unit)

AC POWER REQUIREMENTS	
AC input voltage	115 / 230 VAC ± 15%, single phase.
AC supply frequency	50 Hz or 60 Hz, ±5%

ENVIRONMENT	
Cooling	Forced air
Service	Continuous 24/24h
Operating temperature	-5°C to +45°C Derate 3°C per 500mt above 2000mt asl
Relative humidity	Up to 95%

AVAILABLE OPTIONS	
/S	High performance built-in Digital Stereo Coder for KE transmitter
/SD	High performance built-in Digital Stereo Decoder for KV receiver
/R	Remote control interface
/VDC-12	12 VDC power supply option

All specifications are subject to change without notice.

Contact Information

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