RTS

Technical Data Sheet

Innovating the Future of Global Communications

KP-32

Keypanels

The RTS Model KP-32 keypanel fits in a standard 19" rack and is two (2) **RU** (Rack Units) high. It has 32 lever keys: 30 keys are for intercom talk/listen assignment; one (1) key is for call waiting response; and one (1) key is for headset/microphone/ program selection and volume setup. The KP-32 combines all of the programmable features of the KP-9X series keypanels and the KP-12 keypanel. **DSP** (Digital Signal Processing) and binaural headset operation with left/right assignment of audio signals. The KP-32 introduces large, super-bright, long-life fluorescent displays with adjustable brightness control, making it suitable for all types of ambient lighting from direct sunlight to darkness.

Features

- Super-bright, fluorescent displays provide much better visibility and usable life than LCD displays. A display saver mode with programmable scrolling message extends display life and conserves power during periods of inactivity.

- 32 lever keys, with 30 keys available for full talk/listen configuration doubles the number of channels over the KP-9X series keypanels. Keys support both latching (hands-free) and momentary (push-to-talk) operation.

- Enhanced programming keypad provides the complete KP-9X keypad sequences and an extensive scrollable menu system. Menus include helpful prompts to walk the user through setup.

- Only 90mm deep behind the front panel (approximately 130mm with connectors). Perfect for consoles, OB vans, etc.

- **DSP** (Digital Signal Processing) improves microphone voice activation and limiting. Adds mixing, metering, and filtering capabilities.

- Binaural (5-pin) headset connector works with the DSP mixing feature. Lets you independently assign intercom, microphone, and program audio to left or right headphone.

- Firmware updates can be received via the Internet and then download them to the KP-32 via the intercom connection. Ready for future communication enhancements, including coax, fiber, and ISDN.

  Note: monaural (4-pin) connector available as an option. For monaural operation, the mixer lets you select which items are monitored in the headphones.

Line Drawing
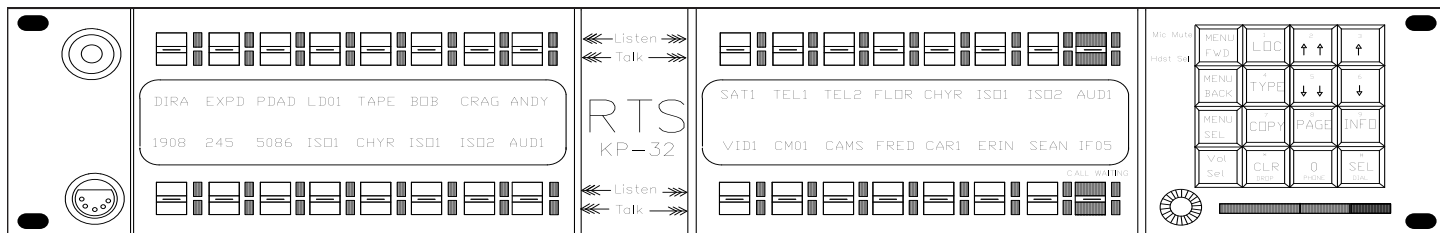
Specifications

Microphone Preamplifier
Electret Mic Input Level @ 1kHz: -42dBμ, 150Ω
Dynamic Mic Input Level @ 1kHz: -50dBμ, 150Ω
Output Level (to matrix): +8dBu, ±0.2dBu
Max Voltage Gain, Mic to Line: 70dB, ±2dB
Frequency Response: 100Hz to 10kHz, ±2dB
Limiter: 8dB above (nom.)

Tone Generator
Output Level (to matrix): +8dBu ±2dBu
Output Frequency: 500Hz

Headphone Amplifier
Maximum Voltage Gain: 200dB
Frequency Response: 100Hz to 10kHz, ±2dB
Headphone Impedance: 8 to 600
Output Power: 1W into 50Ω
Output Voltage Level: 8 volts peak-to-peak (max.)
Sidetone Range: 25dB

Speaker Amplifier & Speaker
Frequency Response: 100Hz to 10kHz, ±2dB
Output Power (per amplifier): 4 Watts into 4Ω
Output Voltage Level:
12 volts peak-to-peak (max.)
Volume Control Range: 30dB
Speaker Rating: 4 Watts (max.)

Intercom Input/Output
Input: Nominal: +8dBu
Peak: +20dBu (max.)
Output: +8dBu, ±2dBu (nom.)

External Line Input: (Program Input)
Input Level: +8dBu (nom.)

General
AC Supply: External, switching type, 100–240VAC, 50/60Hz with locking DIN connector for attachment to the keypanel and universal IEC connector for connection to various AC mains cords
Environmental
Storage: -40°C to +60°C (-40°F to +140°F)
Operating: -10°C to +41°C (14°F to 106°F)

Dimensions
19" (482.6mm) W x 3.50" (76.2mm) H x 3.30" (90mm) D

Weight
6.3lbs (2.85kg)

Connectors (Other Connector Options Available)
Panel Microphone Connector
Type: 3-circuit, ¼" phone jack w/threaded metal bushing, compatible w/RTS MCP5/6
Pin-out
Tip: +Audio and DC bias
Ring: Common
Sleeve: Chassis ground
Headset Connector
Type: XLR-5 female
Pin-out
Pin 1: Mic low; Pin 2: Mic high; Pin 3: Common; Pin 4: Headphone left high; Pin 5: Headphone right high
Power Input Connector
Type: 5-pin locking DIN
Pin-out
Pin 1: Common; Pin 2: Common; Pin 3: +5VDC, 1.50A (max.); Pin 4: -15VDC, 0.150A (max.); Pin 5: +15VDC, 0.5A (max.)
Intercom Connectors: Parallel-wired DB9S and RJ-12 Connectors
Type: DB9S
Pin-out
Pin 1: Data +; Pin 2: Data -; Pin 3: Audio in (from matrix) shield; Pin 4: Audio out (to matrix) +; Pin 5: Audio out (to matrix) -; Pin 6: Data shield; Pin 7: Audio in (from matrix) -; Pin 8: Audio in (from matrix) +; Pin 9: Audio out (to matrix) shield
Type: RJ-12
Pin-out
Pin 1: Data -; Pin 2: Audio in (from matrix) +; Pin 3: Audio out (to matrix) +; Pin 4: Audio out (to matrix) -; Pin 5: Audio in (from matrix) -; Pin 6: Data +
Expansion Connector
Type: RJ-45
LCP Connector
Type: RJ-45

EXT MIC IN External balanced dynamic-mic connector
Type: 3-pin female XLR Audio connector
Pin 1: Shield (circuit common);
Pin 2: Mic input +; Pin 3: Mic input -

EXT LINE IN Balanced Program Audio Input
Type: 3-pin female XLR Audio connector
Pin 1: Shield (circuit common);
Pin 2: Audio input -; Pin 3: Audio input +
MIC PRE OUT unswitched, balanced microphone output
Type: 3-pin female XLR Audio connector
Pin 1: Shield (circuit common);
Pin 2: Audio output -; Pin 3: Audio output +

HEADSET External Headset Connector
Type: 9-Pin male D-sub
Pin 1: External balanced dynamic mic input -;
Pin 2: External balanced dynamic mic input shield (common); Pin 3: Headset balanced dynamic mic input +; Pin 4: Headset balanced dynamic mic input -; Pin 5: Headphone +; Pin 6: External balanced dynamic mic input +; Pin 7: Electret mic Audio input + and +5VDC bias; Pin 8: Electret mic common; Pin 9: Headphone -

SPKR External Speaker Output (8Ω min, 2 watts max)
Type: 3-Conductor, ¼ inch phone jack
Tip: Speaker +
Ring: Speaker -
Sleeve: No connection

Order Information

PK32LK • KP-32 • 32-position keypanel
KP3216LK • KP-32/16 • 16-position keypanel
KP-32/RC • KP-32/RC • Rear connector kit for KP-32
90027656000 • KP-32 power supply mounting kit

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