

# KP 32

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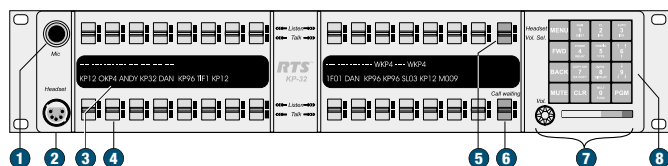
*The KP-32 DSP digital matrix keypanel represents the highest level of programmability and functionality of any keypanel station available today. 30 individual Talk/Listen assignments, super bright variable dimming display all in an incredibly small 2 RU by 3 1/2" deep package. The KP-32's size and performance make it the perfect choice for Control Rooms, Mobile Production Trucks, Training Facilities or any other application where maximum efficiency and performance is required. Unique DSP design plus an enhanced 16 key user programming keypad with scrollable menus make the KP-32 the most powerful, feature packed communications station in the world. KP-32...the new industry standard.*

- **Super Bright Display.** With the brightest, most readable display available, the KP-32's long lasting, cutting edge fluorescent variable dimming display is perfect for virtually any lighting condition. From direct sunlight to a darkened control room or anything in between, rest assured, you'll get the message.
- **More Talk/Listen Assignments.** Communicate directly with up to 30 individual locations using 30 fully programmable keys. Technology is supposed to make your life easier, not more complicated. No swapping screens or other multi-button games necessary. Just push one clearly labeled key and you're connected, right now!
- **Enhanced 16 Key Programming Keypad.** The KP-32 has the most powerful programming features in the industry. Access the complete KP-9x keypad command subset, plus new and enhanced keypad commands. In addition, there is a complete scrollable menu system with helpful prompts to walk the user through setup.
- **Digital Signal Processing (DSP).** Advanced DSP technology improves voice activation and limiting for clean, unclipped audio even when using VOX in noisy environments. In addition you get new audio mixing, metering and filtering capabilities for the ultimate in total communications control.

- **CD Quality Audio.** Better than broadcast quality audio and unique audio shaping circuitry ensure the highest level of voice intelligibility under virtually any background noise condition.
- **Only 3 1/2" Deep.** The most powerful keypanel in the world is also the smallest. At only 3 1/2" deep behind the front panel, the KP-32 is perfect for consoles, OB vans or any space sensitive application where performance is critical.
- **Binaural Headset Connector.** With DSP mixing you can independently assign any combination of intercom, mic and program audio to the left or right headphone. Take control of your communications. Listen to what you want, the way you want! (Monaural connector also available.)
- **Fully Upgradeable.** With fully upgradeable firmware the KP-32 is ready for future communications enhancements including coax, fiber, and ISDN, so you won't get left behind in today's fast moving technology race. Receive free firmware updates via the Internet or other data source and then download to the KP-32 via the intercom connection.
- **Full Backward Compatibility.** Unlike other digital matrix communications systems, the full line of RTS products, including the KP-32, is completely backward compatible. Don't get stuck. Choose RTS.

## OPTIONS

- **More Connector Options.** The KP-32 provides the I/O choices you need. Two line level audio inputs, unswitched mic pre-amp output, external headset, external speaker, group call foot switch input. A General Purpose Interface (GPI) with 4 opto-isolated inputs, two open-collector outputs and two SPDT relays. Inputs can activate single keys, groups of keys, or change setup pages. Outputs can activate external devices from keypanel keys or from GPI inputs.
- **Expansion Panels.** 32 keys isn't enough? No problem. With the EKP-32 and EKP-16 you can add 16 or 32 keys for a total of up to 64 keys.
- **Level Control Panels.** Conveniently control point-to-point and party line listen levels, with individual volume knobs for each intercom key. One LCP-32/16 adjusts either the top or bottom row of keys. LCP-32/16s can be combined and are 1 RU.



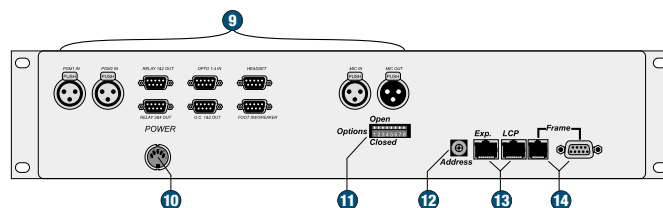
- 1 Gooseneck microphone connector.
- 2 Binaural, dynamic-mic headset connector. Supports left/right headphone assignment of mic, intercom, and program audio.
- 3 Super-bright, fluorescent, 4-character alphanumeric display for each key.
- 4 Intercom/phone keys with separate talk and listen status indicators. Keys can be assigned for all types of talk/listen activation.
- 5 Microphone on/off (toggle up) and Headset on/off (toggle down).
- 6 Call waiting key, with talk (down) and clear (up) positions.
- 7 Master volume control and bar-graph level display. The display can also be set to meter intercom audio, or mic audio, or program audio when not adjusting volume.
- 8 Programming keypad and scroll menu access. (Speaker behind keypad.)
- 9 Optional connector module.
- 10 Power supply connector (locking DIN type).
- 11 Option switches.
- 12 Rotary keypanel address selector.
- 13 Expansion connector for daisy-chain connection of LCP-32/16 Level Control Panels and EKP-16/32 Expansion Panels.
- 14 Parallel-wired DB9 and RJ12 connectors for connection to the intercom system.

### KP-32 Keypad / Menu Features

- Talk/listen key assignment: matrix, point-to-point (including phone), party line, IFB, ISO, special list, relay (GPIO), level 2 talk, auto functions, UPL resources.
- Key options: solo keys (activating a key turns all other keys off), chime tone for incoming call, key groups (simultaneous activation of multiple selected keys), 10-number autodial storage.
- Phone keys (requires optional Telephone Interface): support autodial, redial, manual dial.
- Information display: firmware version, key groups, keypanel ID, matrix name, level 2 key assignments, listen key assignments, key types (point-to-point key, party line key, etc.), channels currently on, GPI usage, setup page usage.
- GPI configuration: assign inputs to activate keys, key groups, change setup pages; assign outputs to activate external devices from keypanel keys.
- Gain adjustment: point-to-point listen gains, party line gains, program input gains.
- DSP functions: bar-graph metering of a selected audio source, audio source mixing to headphones/speaker/intercom channel, band pass/band reject filtering, mic compression and mic noise gating.
- Miscellaneous: display brightness, adjustable sidetone, mute level, tone generator.

All specifications are subject to change without notice.

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### Model KP-32 Specifications

#### Microphone Preamplifier

<b>Audio Input Level (at 1 kHz)</b>	
Electret Mic:	-42 dB, 5 kohm
Dynamic Mic:	-60 dBm, 150 ohms
<b>Output Level (to matrix):</b>	+8 dBu, $\pm 0.2$ dBu
<b>Max Voltage Gain, Mic to Line:</b>	70 dB, $\pm 2$ dB
<b>Frequency Response:</b>	100 Hz to 8000 Hz, $\pm 3$ dB

#### Test Oscillator

<b>Output Level (to matrix):</b>	+8 dBu $\pm 2$ dBu
<b>Output Frequency:</b>	400 Hz

#### Headphone Amplifier

<b>Maximum Voltage Gain:</b>	30 dB
<b>Frequency Response:</b>	100 Hz to 8000 Hz, $\pm 3$ dB
<b>Headphone Impedance:</b>	50 to 600 ohms
<b>Output Power:</b>	150 mW into 50 ohms
<b>Output Voltage Level:</b>	8 volts peak-to-peak (max.)
<b>Mute:</b>	Full: 70 dB min. Partial: 0 to 30 dB
<b>Sidetone Range:</b>	30 dB

#### Speaker Amplifier and Speaker

<b>Frequency Response:</b>	100 Hz to 8000 Hz, $\pm 3$ dB
<b>Output Power (per amplifier):</b>	5 watts into 4 ohms
<b>Output Voltage Level:</b>	16 volts peak-to-peak (max.)
<b>Volume Control Range:</b>	70 dB
<b>Mute:</b>	Full: 70 dB min. Partial: 6 dB, 0 to 30 dB adjustable
<b>Speaker:</b>	2 watts continuous, 4 watts peak

#### Intercom Line Input/Output

<b>Output:</b>	+8 dBu, $\pm 0.2$ dBu nominal
<b>Input:</b>	Nominal: +8 dBu Peak: $\pm 20$ dBu max. +8 dBu nominal
<b>External Line Input:</b>	+8 dBu nominal

#### General

<b>AC Supply:</b>	External, switching type, 90-264 VAC, 50/60 Hz with locking DIN connector for attachment to the keypanel and universal IEC connector for connection to various AC mains cords
<b>Environmental</b>	
Storage:	-40° C to +60° C
Operating:	-10° C to +41° C
Dimensions:	19" wide $\times$ 2RU $\times$ 3.5" (90 mm) deep

#### Standard Connectors (Other connector options available)

<b>Panel Microphone:</b>	3-circuit, 1/4" phone jack w/threaded metal bushing, compatible w/RTS MCP5/6
<b>Headset:</b>	XLR5 female standard; XLR4 female optional
<b>Power Input:</b>	5-pin locking DIN
<b>Intercom:</b>	Parallel-wired DE9S and RJ12 Connectors
<b>Expansion:</b>	RJ45

#### Ordering Information

Model No.	Description	Order by Cat.
KP32	32 key digital matrix keypanel (Grey)	9000-7656000
KP32	32 key digital matrix keypanel (Black)	9000-7656001