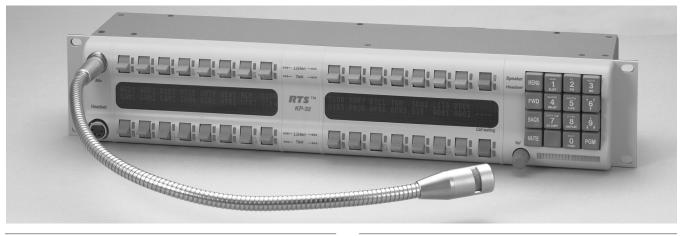
DIGITAL MATRIX



### DESCRIPTION

The RTS<sup>™</sup> Model KP-32 Keypanel is two rack spaces high and has 32 lever keys: 30 keys for intercom talk/listen assignment; 1 key for call waiting respond/clear; and 1 key for headset/microphone switching. The KP-32 combines all of the programmable features of the KP9X Series Keypanels and the KP-12 Keypanel. Plus, it adds significant new features such as digital signal processing and binaural headset operation with left/right assignment of audio signals. The KP-32 also introduces large, super-bright, long-life flourescent displays with adjustable brightness control, making it suitable for all types of ambient lighting from direct sunlight to darkness.

# FEATURES

- Super-bright, flourescent displays. Provide much better visibility and useable 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 KP9X series keypanels. Keys support both latching (hands-free) and momentary (push-to-talk) operation.
- Enhanced programming keypad. Provides the complete KP9X keypad command subset, plus new keypad commands and an extensive scrollable menu system. Menus include helpful prompts to walk the user through setup.
- Only 90 mm deep behind the front panel (approx 130 mm with connectors). Perfect for consoles, OB vans, etc.
- Digital Signal Processing (DSP). Improves microphone voice activation and limiting. Adds new mixing, metering, and filtering capabilities.
- Binaural (5-pin) Headset Connector: Works with the DSP mixing feature. Lets you independently assign intercom, mic, and program audio to left or right headphone. Note: monaural (4-pin) connector available as an option. For monaural operation, the mixer lets you select which items are monitored in the headphones.
- Upgradeable. Firmware updates can be received via the internet, for example, and then downloaded to the KP-32 via the intercom connection. Ready for future communication enhancements, including coax, fiber, and ISDN.

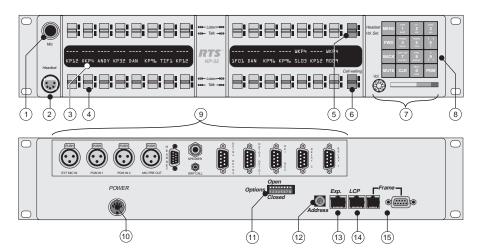
## **OPTIONS**

- Connector Module: Factory install or easy add-on. Provides connectors for two line-level audio inputs (program 1 and 2), an unswitched mic preamp output, an external headset, an external speaker, and a group call foot switch input (for remote switch activation of all "on" keys). Also includes a General Purpose Interface (GPI), with four 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.
- EKP-16 and EKP-32 Expansion Keypanels. Add 16 or 32 keys for a total of up to 64 keys.
- LCP-32 Level Control Panels. Provide easy adjustment of point-to-point and party line listen levels for individual intercom keys. One LCP-32 adjusts the top row of keys, and one adjusts the bottom row. LCP-32's are 1 RU high.

### 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: pointto-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.



- 1. Gooseneck microphone connector.
- 2. Binaural, dynamic-mic headset connector. Supports left/right headphone assignment of mic, intercom, and program ½ audio.
- 3. Super-bright, flourescent, 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.
- Master volume control and bar-graph level display. The display can also be set to meter intercom audio, or mic audio, or program <sup>1</sup>/<sub>2</sub> 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 Level Control Panels and EKP-16/32 Expansion Panels.
- 14. Parallel-wired DB9 and RJ12 connectors for connection to the intercom system.

Model KP-32 Specifications			
Microphone Preamplifier			
Audio Input Level (at 1 kHz):			
Electret Mic:	-42 dB, 5 kohm		
Dynamic Mic:	-60 dBm, 150 ohms		
Output Level (to matrix):	+8 dBu, ± 0.2 dBu		
Max Voltage Gain, Mic to Line:	70 dB, ± 2 dB		
Frequency Response:	100 Hz to 8000 Hz, ± 3 dB		
Test Oscillator:			
Output Level (to matrix):	+8 dBu $\pm$ 2 dBu		
Output Frequency:	400 Hz		
Headphone Amplifier:			
Maximum Voltage Gain:	30 dB		
Frequency Response:	100 Hz to 8000 Hz, ± 3 dB		
Headphone Impedance:	50 to 600 ohms		
Output Power:	150 mW into 50 ohms		
Output Voltage Level:	8 volts peak-to-peak (max.)		
Mute:	Full: 70 dB min. Partial: 0 to 30 dB		
Sidetone Range:	30 dB		
Speaker Amplifier and Speaker			
Frequency Response:	100 Hz to 8000 Hz, ± 3 dB		
Output Power (per amplifier):	5 watts into 4 ohms		
Output Voltage Level:	16 volts peak-to-peak (max.)		
Volume Control Range:	70 dB		
Mute:	Full: 70 dB min. Partial: 6 dB, 0 to 30 dB adjustable		

Speaker:	2 watts continuous,		
	4 watts peak		
Intercom Line Input/Output			
Output:	+8 dBu, ± 0.2 dBu nominal		
Input:	Nominal: +8 dBu		
-	Peak: ± 20 dBu max.		
External Line Input:	+8 dBu nominal		
General			
AC Supply:	External, switching type, 90-264 VAC, 50/60 Hz with locking DIN connector for attachment to the keypanel and universal IEC con- nector for connection to various AC mains cords		
Environmental:			
Storage:	-40°C to +60°C		
Operating:	-10°C to +41°C		
Dimensions:	19" wide x 2RU x 3.5" (90 mm) deep		
Standard Connectors (Other connector options available)			
Panel Microphone:	3-circuit, 1/4" phone jack w/threaded metal bushing, compat- ible w/ RTS MCP5/6		
Headset	XLR5 female standard; XLR4 fe- male optional		
Power Input:	5-pin locking DIN		
Intercom:	Parallel-wired DE9S and RJ12 Connectors		
Expansion:	RJ45		

# **Telex**<sup>®</sup>

TELEX COMMUNICATIONS, INC. • 9600 Aldrich Avenue South Minneapolis, Minnesota 55420 USA Telephone 612-884-4051, Fax 612-884-0043 WEST COAST OFFICE: 2550 Hollywood Way #207, Burbank, CA 91505 Telephone: 818-566-6700 EAST COAST OFFICE: 516-724-2411 MIDWEST OFFICE: 248-360-0430 UK OFFICE: 44 (0) 870 8404260 www.telex.com • e-mail: pro.sound@telex.com PB Specifications subject to change without notice. © Telex Communications, Inc. 1999