

KPI

24II

compunetix, inc.

Red/Black Communication Station



The KPI-24II red/black instrument is a new addition to the successful CONTEX® mission-oriented digital voice communication system product line. The unit provides users with a single headset solution for a dual access problem, while maintaining proper system isolation.

The front panel has 12 secure line keys and 12 non-secure line keys. Up/down page keys provide customers with up to 96 red and 96 black circuits. Any number of circuits can be monitored simultaneously per side, red or black. Talk access is front panel selected by the user as either red mode active or black mode active. Each line key has a line status LED and a voice activity LED. The non-secure, or black, audio is supported with a built-in loudspeaker.

PHYSICAL DIMENSIONS:

- Standard 19" rack mount
- 2U height (3.5")
- Enclosed construction
- Optional wooden desktop enclosure

The Compunetix Model KPI-24II (Red/Black) Instrument has been certified through a government-approved laboratory to meet the TEMPEST requirements of NSTISSAM TEMPEST/1-92 for secure voice communication.

The Compunetix KPI-24II red/black instrument provides dual system access and is a feature-rich offering in a 2U high package. The KPI-24II red/black instrument is ready to meet the voice communication demands of any mission-critical application.

The KPI-24II red/black instrument is a new addition to the successful CONTEX mission-oriented digital voice communication system product line. The KPI-24II was designed to provide users with a single headset solution for a dual access problem, while maintaining proper system isolation. Anyone who has worked in multi-level secure voice environments knows just how vital it is to easily identify where you are currently talk active at all times. The goal of the Compunetix engineers was not only to maintain TEMPEST level security isolation, but to provide the user with easy red/black circuit separation and identification. The KPI-24II passed TEMPEST certification testing. Additionally, the secure circuit line keys, line status LEDs, and LCDs are all on the left side of the instrument, identified with a red outline for easy user identification. The Compunetix KPI-24II red/black instrument provides all of the targeted goals in a 2U high package, and is ready to meet the demands of any mission-critical application.

The Compunetix KPI-24II red/black communication station provides users with both secure and non-secure voice circuit accesses from a single user station. The KPI-24II front panel has 12 secure line keys and 12 non-secure line keys. Up/down page keys provide customers with up to 96 red and 96 black circuits. Any number of circuits can be monitored simultaneously per side, red or black. Talk access is front panel selected by the user as either red mode active or black mode active. The KPI-24II isolation module provides fail-safe indication of the current talk mode enabled. Users can join with or drop out of any displayed conference and switch between monitor and talk modes simply by pressing the associated circuit line key. The unit supports all standard circuit types: Conference Nets, Voice Direct Lines, Dial Lines, Public Address Circuits, and Range Radio for Air-to-Ground Communications. Each line key has a line status LED and a voice activity LED. The non-secure, or black, audio is supported with a built-in loudspeaker. The KPI-24II uses multi-mode fiber optic TX/RX pairs for both the red system interface and the black system interface. Separate red and black power connections are also provided.

All operational software for the KPI-24II is maintained and downloaded by the host red and black systems, CONTEX Mini-T, 500T, 1000T, or 2000T. The instrument key assignments and access levels are downloaded in real time from the associated host system. All instrument functions are software controlled to provide a very versatile configuration for many applications.

FRONT PANEL FEATURES:

- **Circuit Push Line Keys (12/12)**
Permits operator to access circuit audio as monitor only, talk, or idle. Line key states can be changed by pressing the button multiple times.
- **Circuit Status LED**
This is the bi-color (red/green) LED next to each circuit line key. The typical circuit states are: idle=off, monitor=red, and talk=green.
- **Circuit Voice Activity LEDs**
This is the second LED (yellow) next to each circuit line key. The LED flashes in relation to the audio activity occurring on a given circuit. This indicator operates independent of line key status.
- **Backlit Liquid Crystal Display**
There are four backlit LCDs on the front panel of the KPI-24II. The displays are used for line key name assignments from the host system. Each line key is provided with two rows of five characters each, for a total of 10 character assignments possible per line key. The displays are also used for digital volume control levels, unit configuration menus, self-test menus, and unit maintenance information.
- **Page Up/Down Keys**
This pair of keys is used to scroll through the pages of line keys assigned to the KPI-24II from the host system. This function operates on the side of the unit, either red or black, that is currently talk active.
- **Talk-Mode Volume Control**
This digital volume control permits the operator to adjust the audio level of the talk mode circuits at any time. The actual volume control level is shown on the display during changes. Red side volume levels are independent from black.
- **Monitor Volume Control**
This digital volume control permits the operator to adjust the audio level of the monitor mode circuits at any time. The actual volume control level is shown on the display during changes. Red side volume levels are independent from black.
- **Built-in Speaker**
The KPI-24II has a built-in loudspeaker. To maintain security level separation, the speaker is connected only to the black audio.
- **Speaker Volume Control**
This digital volume control is shown on the front panel display during changes.
- **Speaker Mute**
This toggle button provides the operator with a quick speaker on/off function.
- **DTMF Key Pad**
Allows tone dialing for placing dial-intercom calls, PBX, or CO dial-line calls. It also allows for programming call forward station numbers. (Note that the CONTEX dial-intercom feature displays the calling station number and provides progressive conference calls among other user stations.)

■ Function Keys (1-5)

F1 provides the user with a menu of features and information, such as which port the unit is connected to on the host system. F2 is used as the selection switch between red talk active or black talk active. F3-F5 are factory programmable function keys that can support user options.

■ Left/Right Headset Jacks

The front panel audio jack plates are made to support several different connector styles available today. This option is selected at time of order. This configuration capability demonstrates the versatility of today's Commercial-Off-The-Shelf (COTS) Compunetix systems.

■ Hold, Hook, and Flash Keys

These function keys are provided to assist in typical call state progressions.

SIGNAL INTERFACES:

(Red and Black side, each)

- Signal:
ISDN "U" interface 2B+D multi-mode fiber optic TX/RX pair

ELECTRICAL INTERFACES:

(Red and Black side, each)

- Input Voltage:
nominal 48VDC, minimum 36VDC, maximum 59VDC
- Amperage:
nominal 0.50A, minimum 0.38A, maximum 1.0A

Compunetix, Inc. is a subsidiary of Compunetics, Inc. a high-technology circuit board fabricator. Compunetics was founded in the state of Pennsylvania in 1968.

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