



TACTICAL COMMUNICATIONS BRIDGE

www.tcbIP8.net

# Tactical TCB-IP8

Six interface ports with integrated VOIP and front panel operator position

Simple pushbutton operation from the front panel operating matrix

Optional Cisco(TM) Mobile Access Router enables secure wired and wireless operation. Optional Integrated x86 PC enables Windows(TM) programs, applications and encryption HAIPES(TM) modules.

Fully Waterproof with the lid closed. Water Resistant when lid is open. Unit is operational when the lid is open or closed

Housed in a Pelican 1490 series ruggedized briefcase: (18 x 12 x 4)", (45 x 29 x 11)mm and weighs 13.50 pounds (without optional mobile access router and x86 PC

Available in Black, Tan or Olive Green colors

LCD screen displays radio receive and transmit status and also accesses the setup of the units IP address

Adjustable VOX detector non-VOX based COR inputs

Large assortment of radio interface cables available for both handheld/mobile radios and includes support for 5/6 pin MIL-STD Audio

Ethernet Interface for remote control operation



**Small Size:** Housed in a rugged briefcase enclosure (18" x 12" 4")

**Easy to Use:** Front panel operation matrix with simple pushbutton control of 3 Nets plus a User Operator Position



**Enclosed in a rugged briefcase sized case**



Finally an Interoperability system can be easily hand carried into the environment that it will be used in. The TCB-IP8 is housed in a briefcase sized, IP-57 certified, hard sided enclosure that is small enough to be carried on most airplanes. Sleekly designed, the Tactical IP8 looks like a high quality briefcase on the outside, yet is a powerful 6 radio port, VoIP integrated, local and computer controllable Radio Interoperability Control system.

The TCB-IP8 has combined the industries most requested features of ease in operation without compromising flexibility into a small portable system. Operation is as easy as selecting one of the three Nets you want to operate on and press the radio ports you want as members of the Net.

The system includes an industry standard Ethernet 10/100 port that enables the IP8 to be remotely controlled and operated from a computer(s). In addition to the local operation with the Connection Matrix buttons, remote IP based operation is part of the IP8 system. A remote computer running the included Windows(TM) GUI software can setup and operate five Nets. Streaming VoIP audio from the IP8 allows the remote computer operation to access the receiver audio from the computer. Control from the computer is also supported enabling remote microphone to IP8 with a keyboard PTT transmit bar. This feature can be accessed by up to four computers at the same time, from different IP addresses over an RS-232 serial port, LAN, WAN or satellite network.

Users can monitor a ports receiver and transmitter status with the included LCD display. The status display shows Net membership in addition to the radio RX/TX status. The LCD is also used to enable setting the IP8's Ethernet address and DHCP settings. IP address, Netmask and Gateway settings can be statically set if DHCP is not desired or available. The LCD can be directly viewed in sunlight and night time operation with the user controlled backlight.

Local operation of the IP8 is also supported with the included Console interface feature, a local speaker, and microphone port. Using the Connection Matrix switches, the local operator can access any of the three Nets with a single push of a button or can access any combination of attached radio ports and the VoIP port by pressing the Red Monitor button followed by the desired ports. Net membership is not affected by this selection, it is simply a method to enable the local console access to the IP8's ports.

For more information on the TCB-IP8, currently supported radios, options, documentation and pricing, contact your nearest authorized dealer or visit the support and information site at [www.tcbip8.net](http://www.tcbip8.net).



Link  
Communications Inc.

+406-245-5002

1-800-610-4085

<http://www.link-comm.com>

## Tactical Communications Bridge Tactical TCB-IP8 Specifications

<b><u>Power and Size</u></b>	
Voltage / Current	11V .. 18V DC / 400mA DC @ +12V/DC (backlight off), 450mA (backlight on)
Operating Temperature	-4 ° F to 158 ° F (-20 ° C to 70 ° C)
Size/Weight	18" length x 12" width x 4" deep (45mm x 29mm x 11mm), Weight with AC power supply: 13.50 Pounds
Radio Ports	6 radio ports, RJ-45 connector (Balanced Input / Output, COR, CTCSS and VOX). Opto-Isolated COR / CTCSS inputs
Harsh Environment Rating	IP-57 on the Pelican 1449 case when the lid is closed
Waterproof Rating	Waterproof during storage and operation to 1 meter depth, Water resistant when open and operational
Case Specifications	Housed in a rugged waterproof, dust-proof, crushproof and carries a lifetime warranty on the case
<b><u>Audio Characteristics</u></b>	
Input Level / Range / Response	150mV p-p .. 8V p-p, 96dB (16 bit digital conversion ADC). > 50K ohms, AC Coupled, 2Hz - 3.5 KHz (-3dB point)
Output Level / Range / Response	0V p-p .. 4.30V p-p, 96dB (16 bit ADC). 600 ohms, AC Coupled. 15Hz - 3.5 KHz (-3dB Point), (600 Ohm Load)
Dispatch Local Speaker/Microphone	2" x 3", 10 watts nominal, 15 watts max, speaker. Hand style front panel microphone included
Local Microphone (included)	Hand microphone included
<b><u>I/O Characteristics</u></b>	
Local Operation Controls	17 momentary action pushbuttons. Switches are backlit for ease in operation
Pushbutton Definitions	Connection Matrix Section: Green selects the Talkgroup (Net), Yellow selects the Port, Red selects Port Monitor mode Port Status and System Configuration Section: Green selects Up/Down/Left/Right and Previous/Next modes
COR and CTCSS Inputs	0V - 48V, Optical Isolated with a 4.7K ohm load. Programmable active high/low condition
Access Modes	VOX (Activates on audio), COR, CTCSS, COR and CTCSS, COR or CTCSS
PTT Output	0V - 200V, 2 Amp, Opto-Isolated FET (RJ-45)
<b><u>Digital Characteristics</u></b>	
DSP Processor / Firmware	100 MIPS floating point Analog Devices DSP radio card processor. 66 MIPS Motorola system control uProcessor
Audio CODEC	16 Bit @ 16 KHz sample rate, 8 KHz input/output bandwidth
Liquid Crystal Display (LCD)	40 characters x 2 lines monochrome screen. LCD Backlight either ON, OFF or User Adjustable Timer
RS-232 and Ethernet Port	RS-232 port up to 115 K baud. 10/100 Ethernet port. Windows(tm) Remote Control Software GUI included
Voice Over Internet Protocol (VOIP)	16 Bit @ 16 KHz PCM (TCB-IP8 to TCB-IP8 or any VoIP enabled TCB unit) and (TCB-IP8 to Windows(tm) GUI Interface)
<b><u>Operating Modes</u></b>	
Conventional, Trunked, Duplex	Half /Full duplex radios. Duplex repeater mode enables on-site repeater operation from a TCB-406 single radio port
<b><u>Audio Delay Description</u></b>	
Fixed Audio Delay	Each radio ports receiver supports a digital audio delay up to 5.0 seconds, adjustable in 0.1 second increments
<b><u>Database Description</u></b>	
Radio Database	The TCB-IP8 contains a radio database that has the set-up information for up to 50 radio types. The user can simply select the type of radio connected to each radio port. Once selected, the receiver and transmitter setting will be automatically recalled for the selected radio. No adjustments should be needed when setting up a radio. The radio technician can also edit the radio's settings to exactly match the connected radio. If a radio is not found in the radio database, the radio technician can develop their own profiles using the radio set-up utility.
<b><u>Options Available</u></b>	
Radio Cables	Most handheld / mobile radios are supported and more are added weekly. Custom cables are available for most radios that are listed in radio database. Contact Link Communications for pricing and availability cables and radios not listed.



**Visit [www.tcbip8.net](http://www.tcbip8.net)**

*Tactical Communication Bridge and its Logo are Registered Trademarks of  
Link Communications, Inc. of Billings Montana*