

eBOX HUB

Central GPI/Tally Hub - New Product Information



eBOX Hub is a completely new addition to JLCooper's eBOX family of products*. It operates as a central Tally/GPI hub for connecting up to seven additional remote eBOX and eBOX GPI8 units, (eight units total, including the eBOX Hub). It's ideal for LAN, WAN and Internet control of switchers, cameras, alarms, lights, projectors, commercial insert and other applications that use GPI control, allowing broadcast or networked facilities to control remote locations or distant machine rooms from a facility's central server.

eBOX and eBOX GPI8 are 10/100 BASE-T (Ethernet) to GPI/Tally hardware interfaces. They act as portals for controlling devices across your facility or across the world. They simplify long distance cabling by using IP addressable, point-to-point architecture, to send control messages over existing 10/100 BASE-T wiring. eBOX Hub connects with up to 7 eBOX and eBOX GPI8 units in a Hub and Spoke Network Configuration.

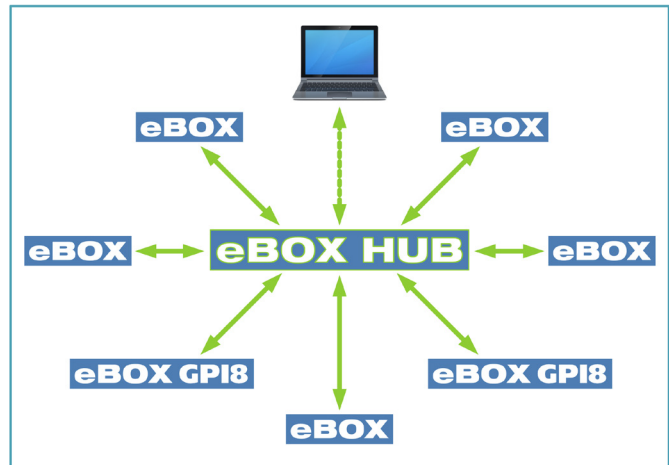
eBOX units communicate over standard TCP/IP which allows them to be used with any host computer. With TCP/IP, traffic can be routed over internal LANs, wireless LANs, MANs, WANs and over the Internet.

JLCooper's Developer Documentation provides comprehensive tools for software developers to link Visual Basic, C++, HTML or embedded devices for direct control of any device connected to any eBOX.

eBOX Hub is the Central Core

eBOX Hub works like an eBOX on it's own. You can think of it as a stand-alone eBOX + 3 eBOX IOs, with no serial ports. It allows networked facilities to control remote facilities from a central control room.

eBOX units are ideal for broadcast television, streaming media networks, multi-room facilities, news production teams, a lert systems, monitor switching or in any audio/video/multimedia studio where remote hosts need to control devices over long distances or via the Web.



eBOX products are directly supported by Chyron Hego, Ensemble Designs, Grass Valley, Harmonic, Imagine Communications, Middleman Software, Newtek, Playbox Neo, Yamaha and others.



eBOX Hub Rear Panel

Two types of GPI inputs

The rear panel has 24 TTL/CMOS compatible inputs (with internal pull-ups to +5 volts and referenced to ground) on a 25 pin D-sub connector. It also has 24 parallel, opto-isolated inputs, on high-quality, detachable Weidmüller terminal block connectors.

Two types of GPI Outputs

The rear panel GPI Output has 24 TTL/CMOS compatible outputs on a 25 pin D-sub connector. CMOS GPI outputs can deliver 0 to 5 volts and can source or sink up to 6 mA. There are also 24 parallel, electrically isolated dry relay outputs on detachable, Weidmüller terminal block connectors. Relay Outputs can handle up to 500 mA @ 200 VDC max.

Ethernet

The Ethernet Port can be connected to a hub, switch or router. eBOX Hub supports IEEE 802.3u clause 28 Auto-Negotiation which automatically senses the port speed & duplex operation and chooses the highest performance settings.

Programming

Program and review all eBOX Hub functions including; Port speed, parity, IP address, remote IP address and TCP port from the front panel or using free software application for Mac and Windows.

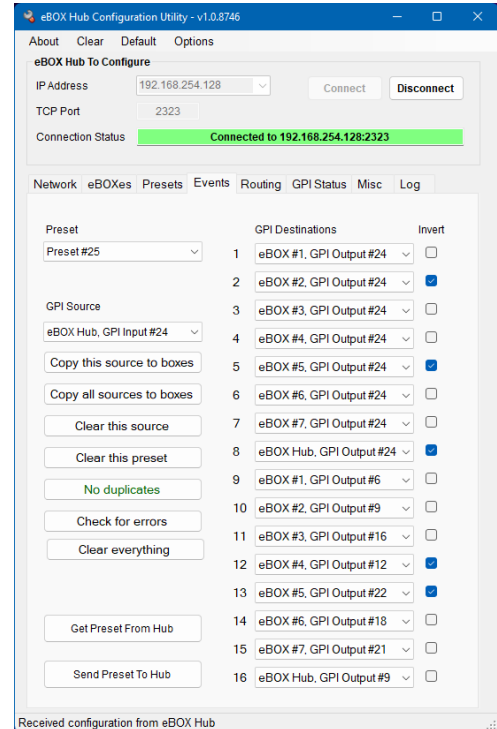
Events

eBOX Hub is a client, with functionality similar to a standard eBOX. Up to 7 remote eBox or eBOX GPI8 units (in any combination) can connect to eBOX Hub. Each connected eBOX or eBOX GPI8 is set up as a server. eBOX Hub can exchange messages with all of them.

Each GPI Input allows up to 16 events to take place when a GPI is triggered. Events include destination eBOX, GPI output number, and polarity (meaning that a GPI can be inverted as part of the event). An assignment table is stored in the hub, as the result of front panel or remote software programming that will determine how inputs from remotely connected eBOX units are routed to the GPI outputs on the eBOX Hub and vice versa. Spoke to spoke communication is possible.

Presets

25 presets contain the contents of the assignment tables. Each can be named up to 32 characters.



Compatible eBOX Family Products

eBOX - 24 GPI Inputs and 24 GPI Outputs, 4 RS-232/422 serial ports



eBOX io - Companion to eBox adds 8 opto-isolated GPI inputs and 8 electrically isolated, relay outputs.



eBOX GPI8 - a simpler, lower cost eBOX, with built-in eBOX IO connections and no serial ports



sBOX 8R - Rack Version Companion to eBOX, eBOX GPI8, with illuminated, re-legendable trigger buttons



sBOX 8D - Desktop Version Companion to eBOX, eBOX GPI8, with illuminated, re-legendable trigger buttons



- Connects with up to 7 eBOX and eBOX GPI8 units
- 24 CMOS GPI Inputs and Outputs
- 24 GPI Parallel Opto-isolated Inputs
- 24 GPI Parallel Dry Relay Outputs
- Software for Mac and Windows
- Built In USB and 10/100 Ethernet
- RJ-45 Ethernet Connector
- Ultra Low Latency < 20 ms
- Use with eBOX, eBOX GPI8 and sBOX
- 2 x 40 Backlit LCD Display
- Detachable Weidmüller terminal strip connectors
- Front panel power switch
- Single 19" rack space
- Heavy duty rack enclosure
- Internal Universal Switching Power Supply

eBOX Hub Physical Specifications

- Size - 10" x 1.75" x 3.87" - Weight - 3.25 lbs.

*ebox family of products includes Atlas, eBOX, eBOX IO, eBOX GPI8, gBOX, sBOX8D, sBOX8R and the new eBOX Hub.