

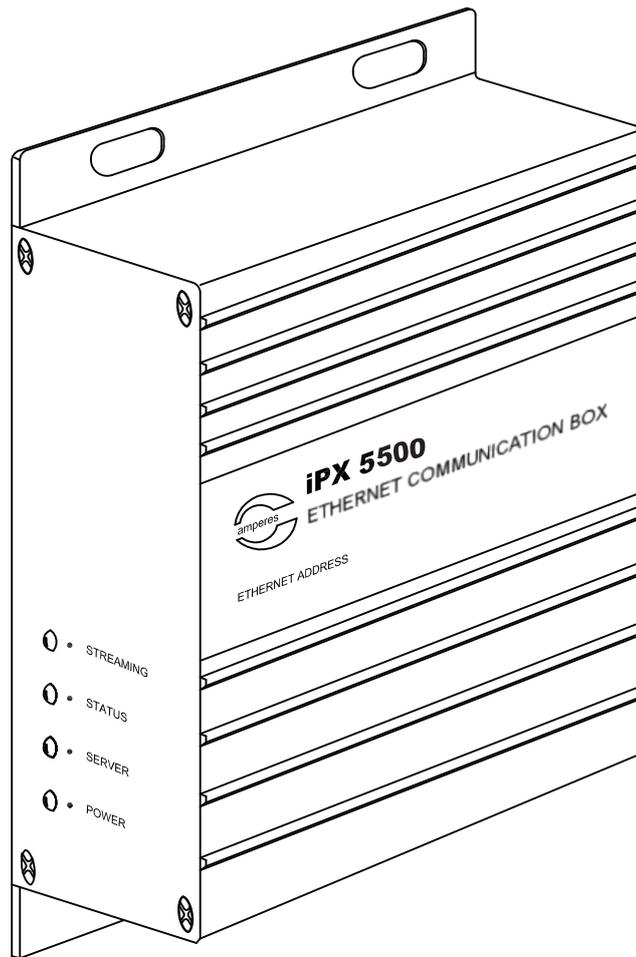


# INSTRUCTION MANUAL

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## iPX5500

Ethernet Communication Box

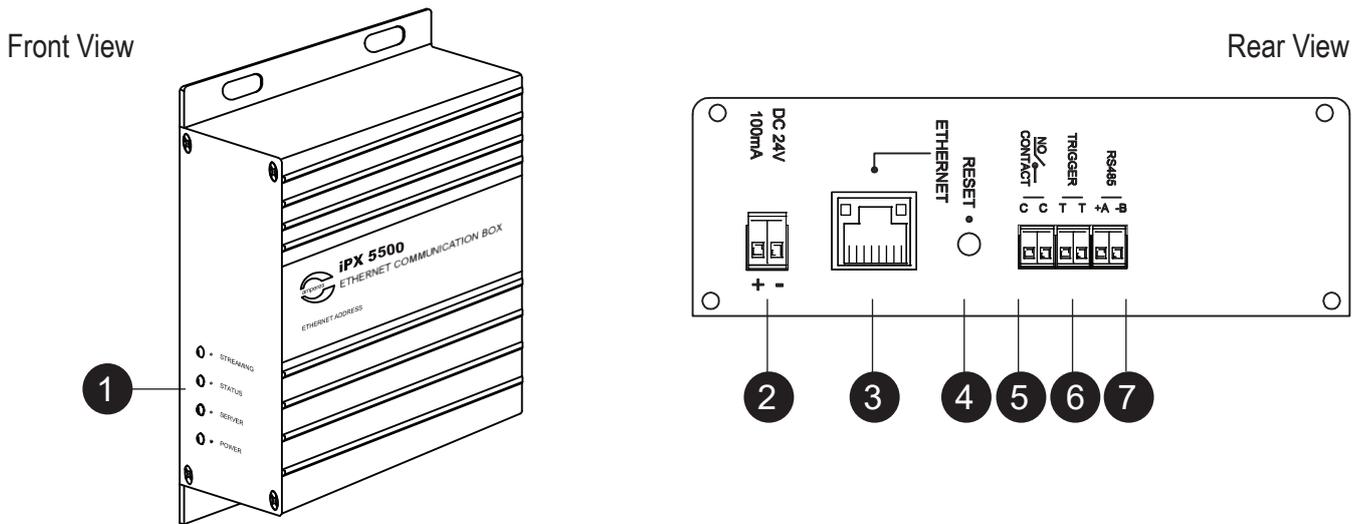


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*Thank you for choosing another quality product from Amperes Electronics.*

iPX5500 is the communication interface for equipment with RS485 outputs and remote PC, enabling remote monitoring and controls via Amperes PMX II LAN software. It converts RS485 data received from equipment into IP and shall be received by remote PC in the LAN environment. Likewise for remote controlling, user would be able to perform setting or changing parameters via the software modules available in PMX II LAN.

# Parts Identification



## 1. INDICATOR LEDS

LEDs for Power, Server, Status and Streaming.

## 2. POWER PORT

24V DC power supply input.

## 3. ETHERNET PORT

Ethernet Port for connection to network switch.

## 4. RESET BUTTON

Button for resetting the unit to factory default. Use only when required as setting done previously would be lost.

## 5. RELAY CONTACT

This ports provide a dry contact which can be used to connect E/M overriding signal or activate ALL CALL at speaker zone selector.

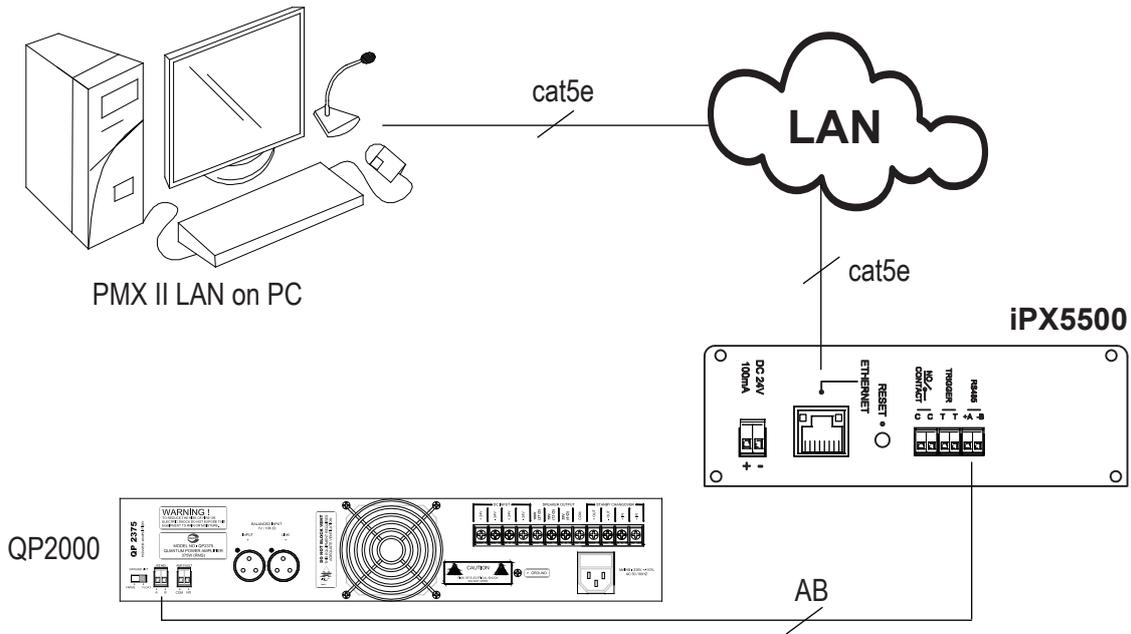
## 6. EXTERNAL MESSAGE TRIGGER PORT

Ethernet message player can be linked to it and can be broadcasted to the speakers when this port is triggered. A voltage free contact is recommended to trigger the message playback.

## 7. RS485 PORT

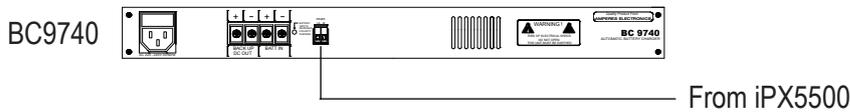
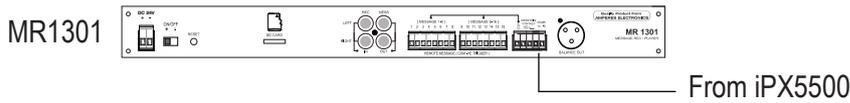
Data port for connection to equipment to be monitored / controlled, such as QP Power Amp, BC9740 Battery Charger, etc

# Connecting iPX550 to Equipment

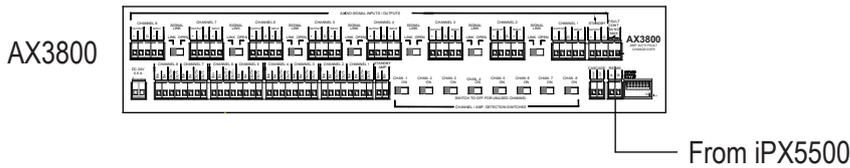


Devices can be connected to PMX II LAN by terminating RS485 port of the equipment to iPX550's RS485 terminals. For each data loop, max 16 nos of connections is possible.

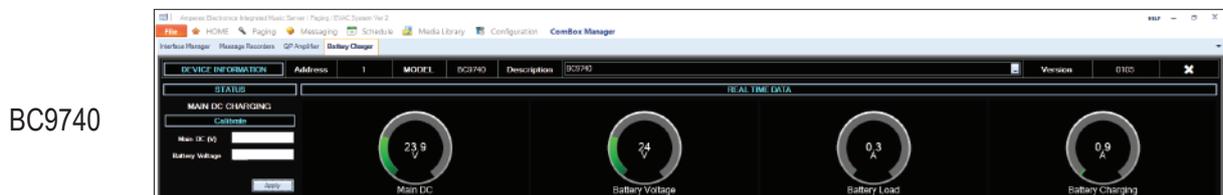
Other devices:



Upcoming devices:

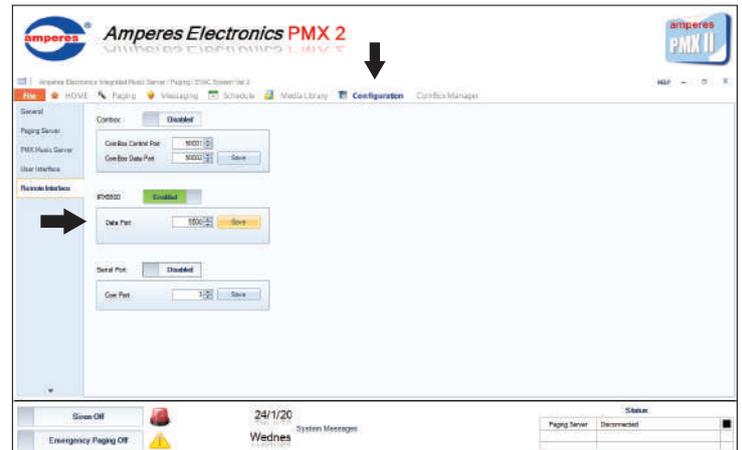
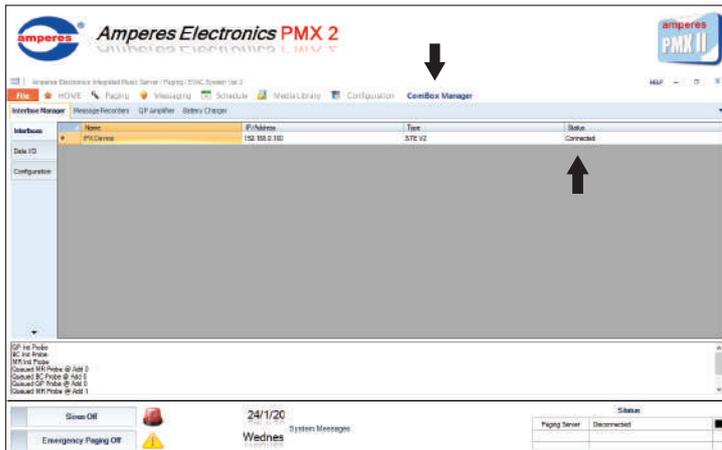


## Equipment Interface available at PMX II LAN :



# PMX II LAN Interface

## PMX II LAN Interface:



Connectivity of iPX5500 and PMX LAN and can be seen at the PMX LAN software under the tab: "Combox Manager".

Go to 'Configuration' menu and go to 'Remote Interface', make sure 'Data Port' same with web browser setting.

## Device Setup

iPX5500 shall require some simple setups, kindly follow the step by step instructions as listed below. The unit shall be connected to LAN network for a complete system. The default IP address is **192.168.0.100**. Login page shall appear and the default User ID and Password are both "**admin**".

### Info / Main Page

**Info:** Providing hardware, network and Application information. This shall be the first page once you entered the system's http browser.

**Network Configuration:** For configuration of IP address and its related ports.

**System configuration:** For Application Settings.

**Info**

**Network Configuration**

**System Configuration**

**DEVICE INFO**

Hardware Information

Firmware Version **V01.04 (Jan 23 2018)**

Hardware Revision **01.00**

Serial Number **550017010002**

Device Name **IPX Device**

Network Information

MAC Address **72:6A:76:10:15:27**

IPv4 Address **192.168.0.100**

Subnet Mask **255.255.255.0**

Gateway Address **192.168.0.1**

Application Information

Server IP **192.168.0.200**

Communication Port **5500**

# Device Setup

**NETWORK CONFIGURATION**

Network Settings

IP Address

Subnet Mask

Gateway Address

Application Settings

Data Port

## Network Configuration

Unless required, you are recommended to change the IP address only, leaving other setting such as port number as default. Once the address has been changed to suit the environment, click the “Save Changes” button.

## System Configuration

### Application Setting:

**Device Name:** You can rename the device name.

**Connection Mode:** You can adjust the connection mode, want to set auto or manual.

**Discovery Interval:** To set the time connection mode.

Low amount - Quickly connection to PMX

High amount - Will take a while before automatically find the PMX and connect to it.

**Server IP:** To indicate the IP address of the which the connected to.

**Web Page Theme:** You can choose the theme of the web page.

**Authentication:** You can alter the user name and password to avoid unnecessary access to the system.

**Firmware Update:** You can update firmware version via browser. ( See on the page 6 for detail )

### Note:

Ensure Server IP is correctly set. If PMX II LAN is used as the source, the Server IP shall correspond to the PC’s IP address.

**CONFIGURATION**

Application Settings

Device Name

Connection Mode

Discovery Interval

Server IP

Web Page Theme

Authentication

New User Name

Old Password

New Password

Confirm Password

Firmware Update

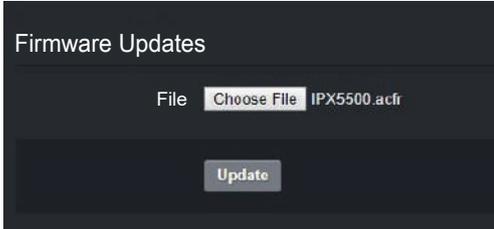
File  No file chosen

# System Bootloading (Firmware / Browser Update)

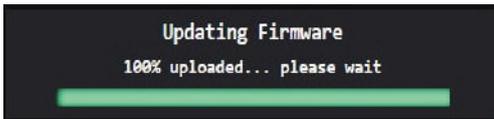
System firmware shall be updated once in a while when new features are available or to fix bugs. There are 2 methods of doing;

## Update via Browser

To update the firmware via html page, enter the IP Address (192.168.0.100) and go to 'System Configuration' page under "firmware updates" for firmware update.



To update the firmware, choose file ( new file downloaded from website or source directly from us ) and click update.

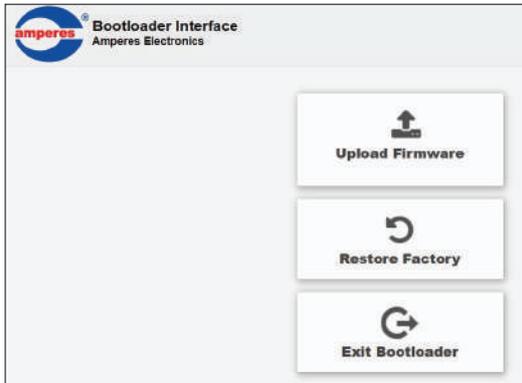


After finish updating firmware, the browser automatically restart.

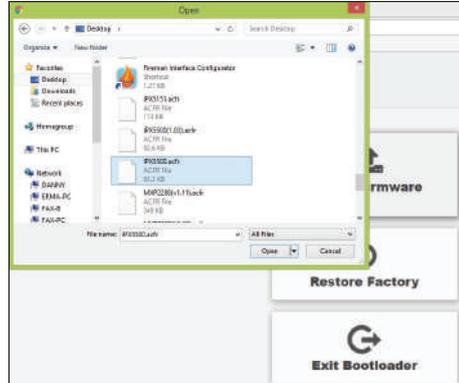
## Server Reset Bootloading

If the client "hanged", it is required to perform system reset by :

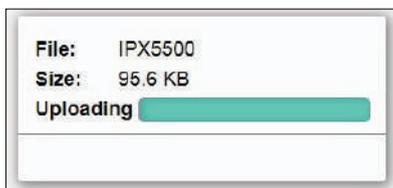
1. Default reset: Press & hold the reset button until LED "streaming" ON.
2. At the web browser, enter the IP address 192.168.0.100 and the page below shall appear. This is a "Safe Mode" page for Browser or Firmware update.



Click the Upload Firmware button to find the updated firmware file.



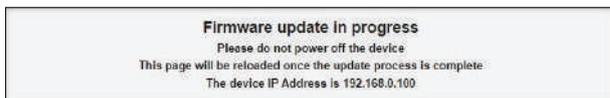
Find the updated firmware file.



Updating progress



Ready to upload, click Upload button to upload the firmware.



After finish updating firmware, the browser automatically restart.

# Technical Specification

Power requirement :	
Voltage	24V DC
Current	100 mA
Connectivity	
- LAN interface	RJ-45, 100Mb/s
- Common protocols	TCP/IP, UDP, IGMP, HTTP
- Priority protocols	UDMP, ADP
Broadcast mode	Multicast
User interface	(Web Browser) IE V8+, Firefox V22+, Google Chrome V25+, RS485
Firmware upgrade	Via Web Browser
Operating condition :	
Temperature	-20°C ~ 80°C
Humidity	0 - 70%
Case :	
Dimension (WxHxD)	100 x 147 x 40 mm
Weight	320 g

**Note:**

The above specifications are correct at time of printing but subjected to changes without prior notice due to product improvements.

# Warranty Conditions

Only Amperes Electronics Service Centres are allowed to make warranty repairs : a list of Amperes Electronics Service Centres may be asked for by the purchaser or send directly to Amperes Electronics Sdn Bhd at 70 Jalan Industri PBP 3, Tmn Perindustrian Pusat Bandar Puchong, 47100, Puchong, Selangor, Malaysia or its authorized dealers. This warranty is not valid if repairs are performed by unauthorized personnel or service centres.

This warranty covers only repairs and replacement of defective parts ; cost and risks of transportation as well as removal and installation of the product from the main system are for the account of the purchaser. This warranty shall not extend to the replacement of the unit.

This warranty does not cover damages caused by misuse, neglect, accident of the product as well as using the product with power supply voltage other than shown on the product, or any other power supply source / adaptor not recommended by the manufacturer.

This warranty does not cover damages caused by fire, earthquakes, floods, lightning and every cause not directly related to the unit.

This warranty does not include any indemnity in favor of the purchaser or the dealer for the period out of use of the unit; moreover the warranty does not cover any damages which may be caused to people and things when using the product.

This warranty certificate is valid only for the described product, and is not valid if modifications are made on this certificate or on the identification label applied on the product.

This warranty covers all the material and manufacturing defects and is valid for a period of 36 months from the date of purchase or for a specified period in countries where this is stated by a national law. In this case, the extension is valid only in the country where the product is purchased.

Amperes Electronics Sdn Bhd is not obliged to modify previously manufactured products under warranty if the design changes or improvements are made.

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It is recommended that all services and repairs on this product be carried out by AMPERES ELECTRONICS SDN BHD or its authorized service agents.

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