



# INSTRUCTION MANUAL

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## iPX5101

Ethernet Paging Server



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

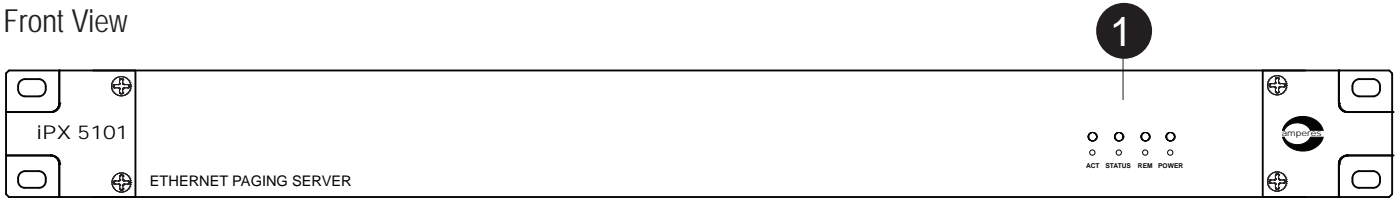
iPX5101 is an upgraded version of Ethernet Paging Controller, enhanced with superb features such as larger IP Client connectivity, Multicast transmission for speedier broadcast of paging signal and also simplified setting works.

It functions as a traffic controller for all paging clients ( iPX5151 ). Every activity from Clients shall be monitored by iPX5101 and would determine the intended routing to be allowed or otherwise, considering the priority level, traffic condition and the zone configuration.

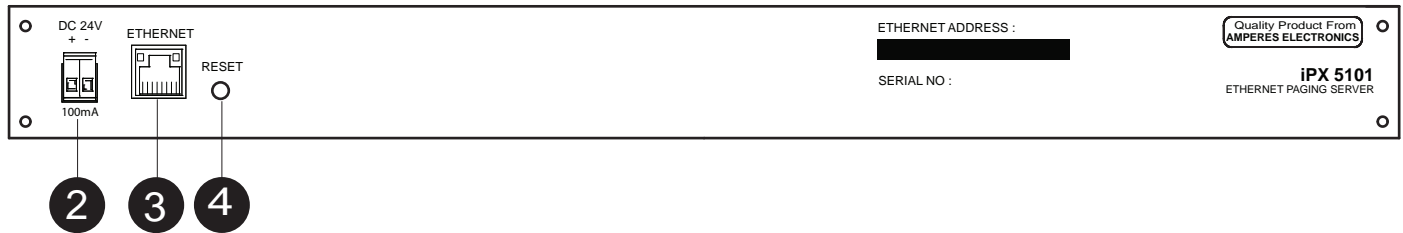
With the growing demand of IP Paging System, Amperes IP related products such as iPX5101 shall be the great tool for coming future. Do read through the manual in order to tap the many advantages that Amperes IP system has to offer.

# Parts Identification

Front View



Rear View



## 1. INDICATOR LEDS

Various LEDs for Power, Activity and Status

## 2. POWER CONNECTOR

24V DC input for power, use only regulated power supply.

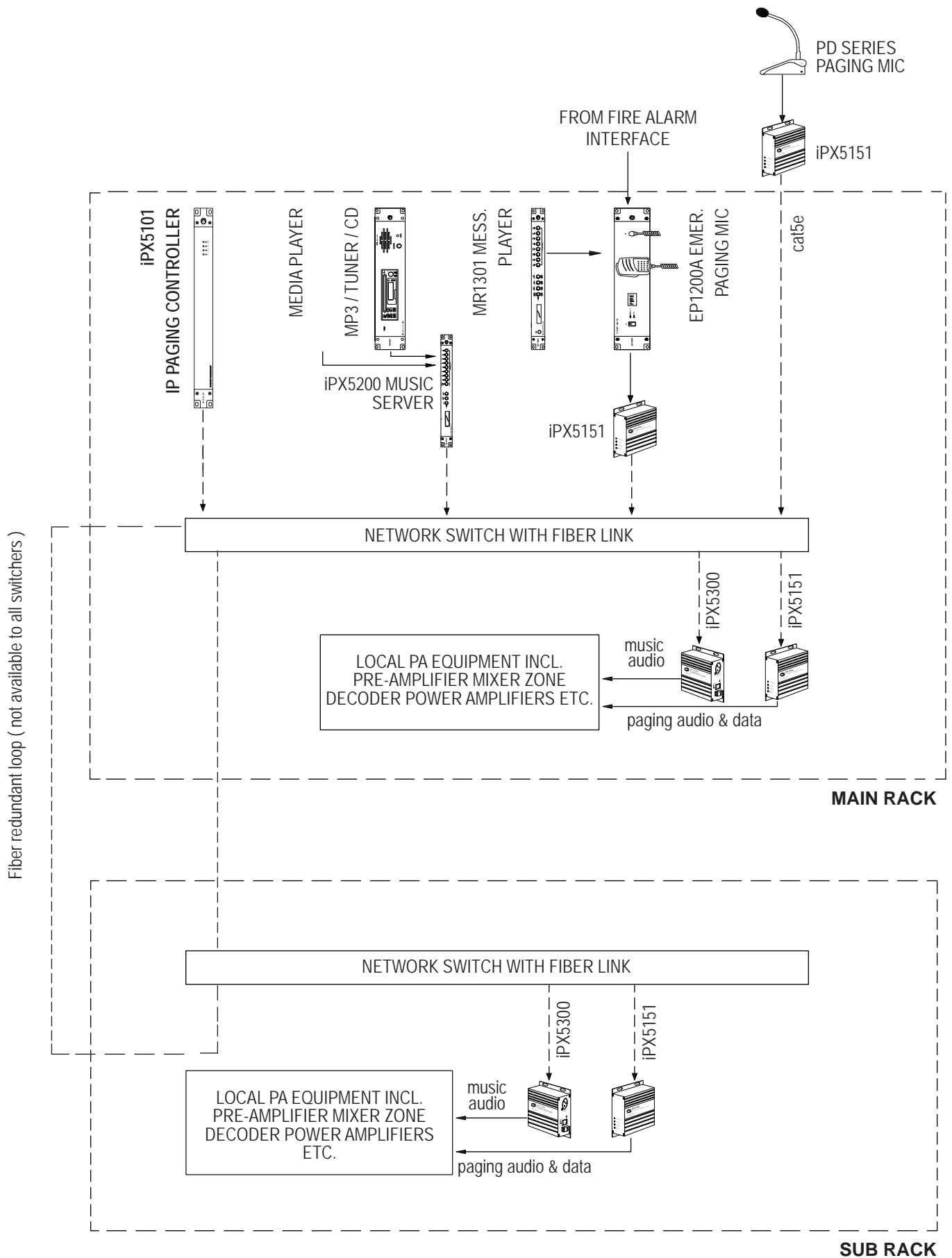
## 3. ETHERNET PORT

Connectivity to network switch.

## 4. RESET SWITCH

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

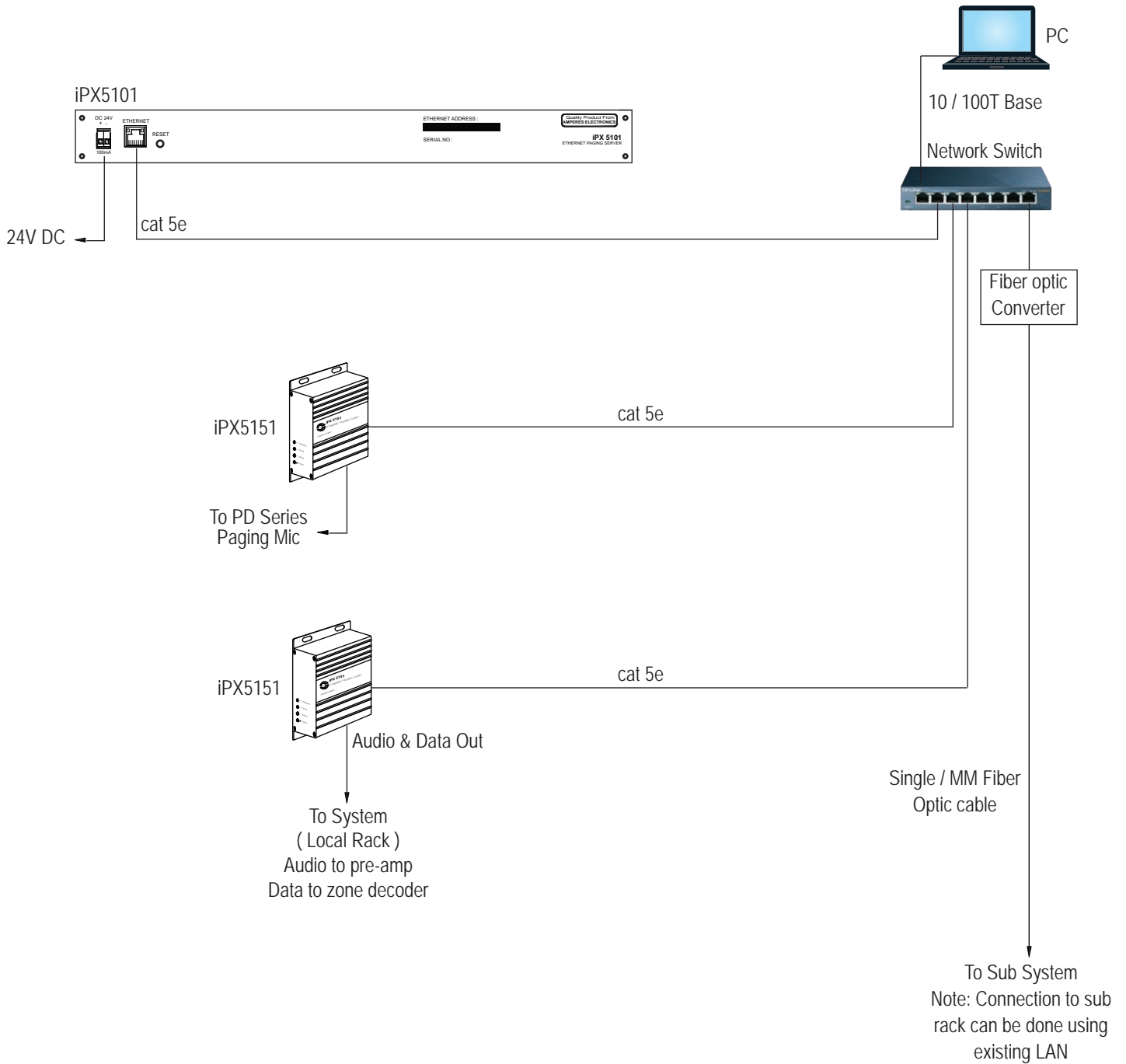
# Schematic Diagram



## Note:

In a system, only one iPX5101 is required, no matter what the size of the system or the number of clients ( iPX5151 ) are installed.

# Connecting The Unit

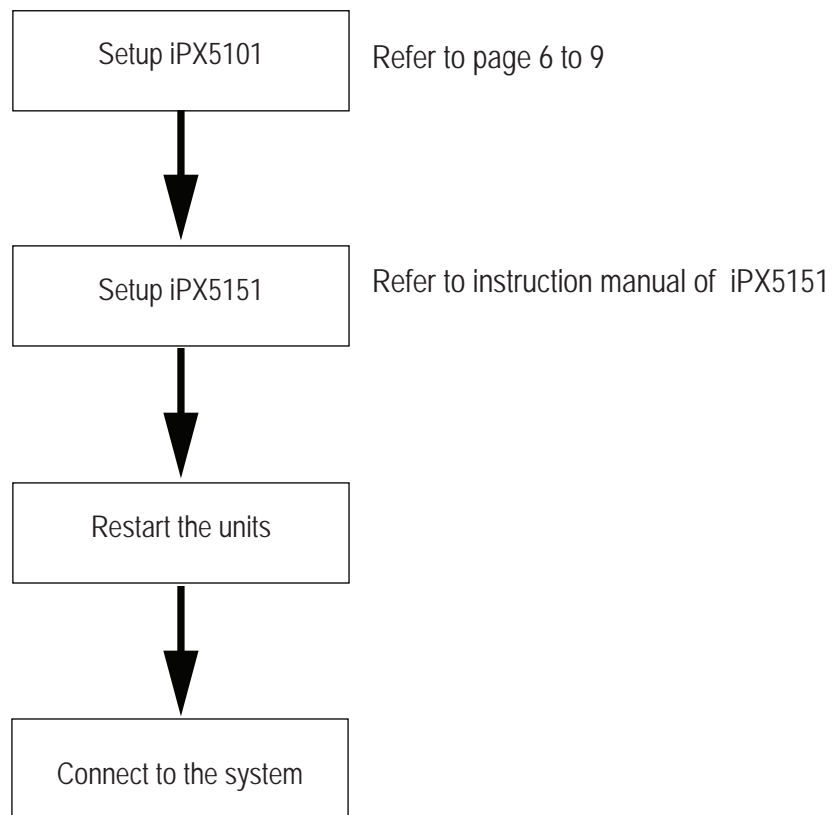


## Note:

For basic configuration, every system shall need one iPX5101 and 2 units of iPX5151 at the main rack.

# System Setup

Before the system can be operated, few basic setups are required at the network controller ( iPX5101 ) and clients ( iPX5151 ).



To access iPX5101 homepage, open your browser ( chrome / IE ) with the default IP address 192.168.0.101. A login page shall appear with default User ID and password as " admin ".

Please login with your Username and Password.

Login

Login page

# Device Setup Via Browser

The first page to appear upon login shall be “ Device Info “. Information regarding the device shall be available:

## Info / Main Page

**Hardware Information:** For hardware information such as Firmware Version, Hardware Revision, Serial Number & Device Name.

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

**Software Information:** For Software Settings such as Multicast IP, Communication Port & Streaming Port.

To alter the device parameters, tap to the subsequent pages.

## 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.

# Device Setup Via Browser

## System Configuration

**Application Settings:** The Device Name, Simultaneous Paging, Zone Range and Web Page Theme can be set accordingly. The default source refers to the unit's selected source every time it is turned on.

Device Name: You can rename the device name.

Simultaneous Paging: To set multiple paging in the same time.

Zone Range: To indicate number of zones available in the overall system in relation to the server.

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.

**System Configuration:** Both the browser and firmware are stored in the unit's memory. Should there be any updates available, use this section to perform system upgrades accordingly.

### Note:

Ensure Paging Server IP is correctly set. If the paging source is iPX5101, the default IP address shall be 192.168.0.101. If PMX II LAN is used as the source, the Paging Server IP shall correspond to the PC's IP address.

### Application Settings

Device Name  
Simultaneous Paging  
Zone Range  
Web Page Theme

### Authentication

New User Name  
Old Password  
New Password  
Confirm Password

### System Configuration

Update Web Page

No file chosen

Update Firmware

No file chosen

## Device Setup ( Con't )

### Paging Server

**Server Up Time:** It shows the server up time.

**Total Clients:** iPX5151 Paging Clients connected to the server are listed accordingly.

**Remote Servers:** If more than one iPX5101 are connected in a large system, it shall be shown accordingly.

**Client Status:** Its show the information of Client Name, Client IP Address, Client Status and Source Device.

### Paging Server

#### Server Status

Server Up Time **528529**

Total Clients **1**

Remote Servers **0**

#### Client Status

NO	Reg ID	Client Name	Client IP Address	Client Status	Source Device
1	128	PAGING CLIENT 01	192.168.0.153	CONNECTED	-

# System Bootloading ( Firmware / Browser Update)

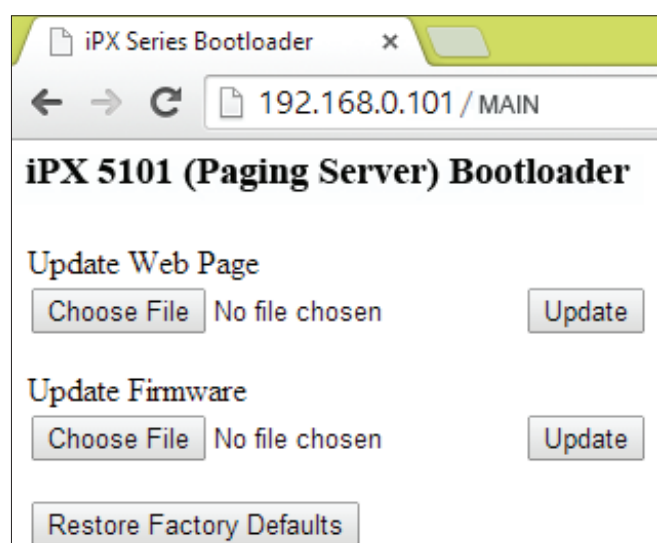
System firmware or Browser shall be updated once in a while when new features are available or to fix bugs. There are 2 methods of doing;

## Server Reset Bootloading

If the server “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 192.168.0.101 and the page below shall appear. This is a “Safe Mode” page for Browser or Firmware update.

Safe mode: Press & hold the reset button until LED “status” ON.



### Update Firmware :

- To update firmware, choose binary file with “appbin” extension ( new file downloaded from website or source directly from us ) and click update.

### Update Web page :

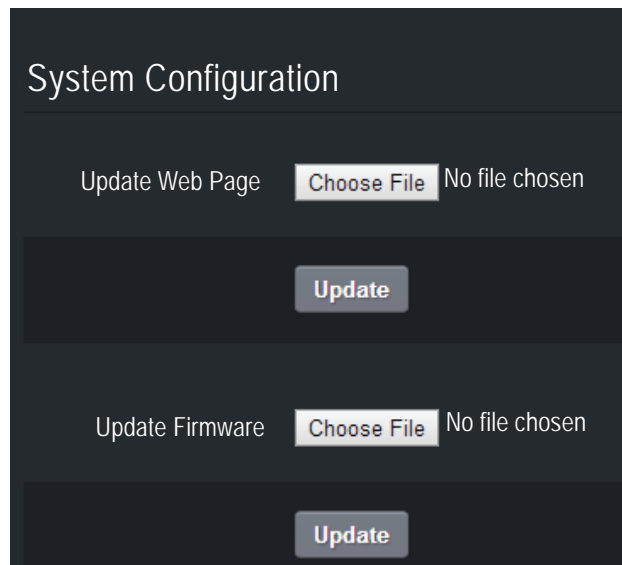
- To update web page, choose binary file with “webbin” extension and click update.

# System Bootloading ( Firmware / Browser Update)

## Update Using Web Server

To update firmware & browser via html page, enter the IP Address (192.168.0.101) and go to 'System Configuration' page for firmware or browser update.

1. To update the firmware, choose binary file with "appbin" extension ( new file downloaded from website or source directly from us ) and click update.
2. To update the browser, choose binary file with "webbin" extension and click update.



The screenshot displays a web interface titled "System Configuration". It contains two distinct update sections. The first section, "Update Web Page", features a "Choose File" button and the text "No file chosen", with an "Update" button below. The second section, "Update Firmware", also includes a "Choose File" button and the text "No file chosen", with an "Update" button below. The interface is dark-themed with light-colored text and buttons.

3. Restart the unit to enable the new firmware or browser to take effect.

## Technical Specification

### Power requirement :

Voltage	18 ~ 24V DC (Normal DC 24V)
Current	350 mA

### Connectivity

- LAN interface	RJ-45, 100Mb/s
- Common protocols	TCP/IP, UDP, IGMP, HTTP
- Priority protocols	UDMP, ADP

### Audio

- Analogue input (peak-to-peak)	1.25Vrms
- Input load resistance	30 Ohm
- Input load capacitance	100 pF
- Total harmonic distortion (THD)	0.1%
- S/N ratio (full scale signal)	83 dB
- Digital format	IMA ADPCM / MP3 (CBR / 320 kbps max) / WAV

Client connection	255 Max
User interface	(Web Browser) IE V8+, Firefox V22+, Google Chrome V25+, RS485
Firmware upgrade	Via Web Browser / Bootloading

### Operating condition :

Temperature	-20°C ~ 80°C
Humidity	80%

### Case :

Dimension	482 x 44 x 180 mm
Weight	1.9 kg

### 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 master distributor, TNT Links Sdn Bhd / MyPA Systems Sdn Bhd. 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 12 months from the date of purchase or for a longer 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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AMPERES ELECTRONICS SDN BHD  
MADE IN MALAYSIA  
Published : SEPT 2015