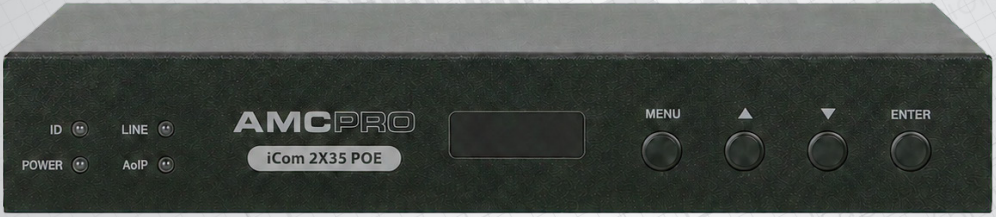
User Manual

iCOM 2X35 PoE
Communication Amplifier



Safety instructions

When using this electronic device, basic precautions should always be taken, including the following:

1 Read all instructions before using the product.

2 Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool etc.)

3 Use this device when you are sure that amplifier has a stable base and it is fixed securely.

4 This product, in combination with loudspeakers and amplifier may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult with otorhinolaryngologists.

5 The product should be located away from heat sources such as radiators, heat vents, or other devices that produce heat.

6 The product should be connected to a power supply that is described in the operating instructions or are marked on the product.

7 The power supply should be undamaged and never share an outlet or extension cord with other devices. Never leave device plugged into the outlet when it is not being used for a long period of time.

8 Care should be taken that objects do not fall into liquids and liquids would not be spilled on the device.

9 The product should be serviced by qualified service personnel if:

- The power supply or the plug has been damaged.
- Objects have fallen into or liquid has been spilled on the product.
- The product has been exposed tor rain.
- The product has been dropped or the enclosure damaged.

10 There are some areas with high voltage inside, to reduce the risk of electric shock do not remove cover of the microphone receiver or power supply. The cover should be removed by the qualified personnel only.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

To reduce the risk of electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel. To reduce the risk of fire, electric shock or product damage, do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

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Before you start

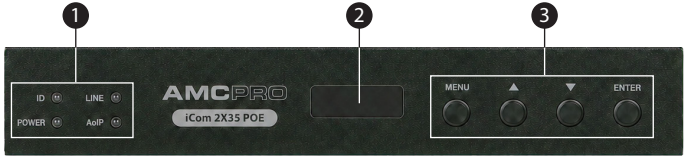
iCOM 2X35 PoE is a two-channel amplifier using class D amplifier technology. It can be used for powering low impedance (4Ω/8Ω) stereo systems with a maximum power of 2x 35 Watts or 1x 70 Watts (Mono). It features 2-channel digital audio over IP inputs and outputs, and 2-channel balanced or unbalanced analog inputs and outputs, built-in audio DSP processor. The amplifier can be controlled via RS-232, TCP/IP and Web GUI.

FEATURES

- 70W D class power amplifier
- Can be powered using PoE network
- Audio over IP digital input
- Analog inputs with phantom power
- Line outputs
- Integrated DSP audio processor
- Local 5-12V input trigger for muting amplifier
- Supports network and RS-232 control
- Graphic WEB user interface for controlling all functions

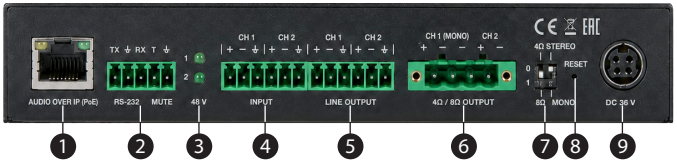
Operation

Front Panel



1. LED indicators | 2. OLED screen | 3. Control buttons

Rear Panel



1. RJ45 network port with PoE input | 2. RS-232 signal and Mute trigger port | 3. LED indicators for input phantom power
4. input connector | 5. Line output connector | 6. Power output connector | 7. Dip switch for power output parameters
8. Device reset button | 9. 36V DC power input

Operation

Front panel functions

POWEL INDICATOR LED
- Green ON: The system is powered up (PoE or DC power supply).
- Red ON: The system is in standby mode.
- OFF: The system is powered off.

ID LED INDICATOR
This LED indicates the presence of the amplifier. It can be controlled through Web GUI or API command, so that you can find the corresponding machine in the system.
- Flash: Device identification
- OFF: No device identification

LINE / AoIP INDICATOR LEDS
Input signal source indicators. When the AoIP or LINE IN port detects signal input, the corresponding green LED will be on.

LCD SCREEN
The LCD screen displays the status information of the product. With menu buttons operation, the user can query the software version, or set the input gain, DHCP on/off, output audio volume.

DEVICE CONTROL BUTTONS
Used to query/set various function of the product, including input gain adjustment, network setting, output audio volume adjustment, software version query.

Rear panel functions

AoIP PORT
Audio over IP network port, supporting PoE, with the following two functions:
- Digital audio input and output port.
- Web GUI and TCP/IP control port.

RS-232 / MUTE PORT
- RS-232: Serial control port, used for RS-232 signal pass-through or controlling this product via API commands.
- TRG: MUTE control signal input port, effective at rising edge voltage and falling edge voltage. When the input trigger is detected, the amplifier will mute the audio. For details, please refer to the input trigger settings on the System page of Web GUI.

48V PHANTOM POWER LEDS
Two 48V Phantom power indicators.
- Green ON: Phantom power on.
- OFF: Phantom power off.

AMPLIFIER LINK CONNECTORS
Connect outgoing audio signal from input connectors to additional amplifier. Input and link connectors are connected with each other directly.

Operation

MIC/LINE INPUTS
• LINE analogue audio input port, supporting balanced/unbalanced 2CH, with a Max input level of 24dBu.
• MIC analogue audio input port, supporting balanced/unbalanced 2CH, with a Min input level of -35dBV.

LINE OUTPUTS
LINE analogue audio output port, supporting balanced/unbalanced 2CH, with a Max output level of 2V RMS.

POWER OUTPUTS
Analogue audio output port, supporting balanced 2CH, with Max output power 2x35W@4/8ohm Stereo, 1x70W@4/8ohm Mono. 1+/1- and 2+/2- are for Low Impedance (4/8ohm) Stereo Speakers. 1+/1- is for Low Impedance (4/8ohm) Mono Speaker.

The audio amplifier can output the same power at both 4 ohms and 8 ohms. The amplifier output power varies depending on the input power supply or PoE adapter connected to it, it does this by adjusting the internal gain to allow you to get most of the amplifier. Please ensure that you select the correct impedance option via the speaker impedance selection switch on the rear of the device

Dip switch for power output parameters
• Speaker Lo-Z Impedance Select: Toggle up the left switch to connect the 4Ω speaker, or toggle down the left switch to connect the 8Ω speaker.
• Speaker Lo-Z Connection Select: Toggle up the right switch for stereo dual channel output, or toggle down for bridged mono output.

RESET button
• Short press this button to reset the product.
• Press and hold this button for 3 seconds to restore to factory default settings (excluding the network).
• Press and hold this button for 10 seconds to restore to factory default settings (including the network).

DC 36V IN
DC 36V/2.5A power input port. To be used when amplifier is not powered via PoE network.

Operation

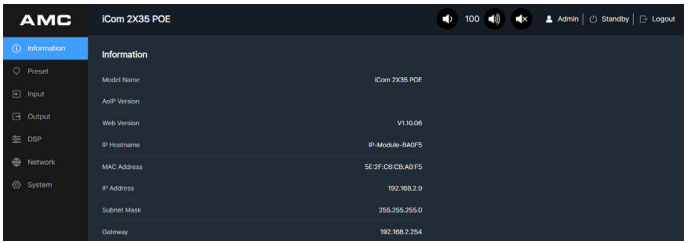
Web graphical user interface (Web GUI)

CONNECTING TO DEVICE

- Connect the AoIP port of the amplifier to the Ethernet Switch.
- Connect the PC to the same Ethernet Switch, and set the Network connection setting of PC to be “Obtain an IP address Automatically”.
- Note the device IP address shown on the amplifier display.
- Input the IP address of the device into your browser on the PC to enter the login interface of the Web GUI.
- Default passwork for users "User" and "Admin" is "**1234**".

INFORMATION PAGE

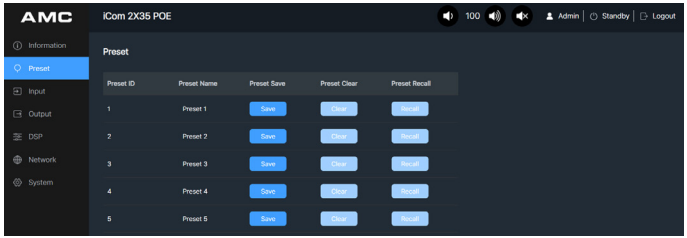
The Information page provides basic information about the product, such as model name,
MCU version, Web version, DEP SDK, IP Hostname and network configuration information.



PRESET PAGE

Up to 5 preset scenes can be set on the Preset page.

- Preset Name: You can name the preset scene.
- Preset Save: Click the Save button to save the scene.
- Preset Clear: Click the Clear button to clear the saved scene.
- Preset Recall: Click the Recall button to recall the saved scene.

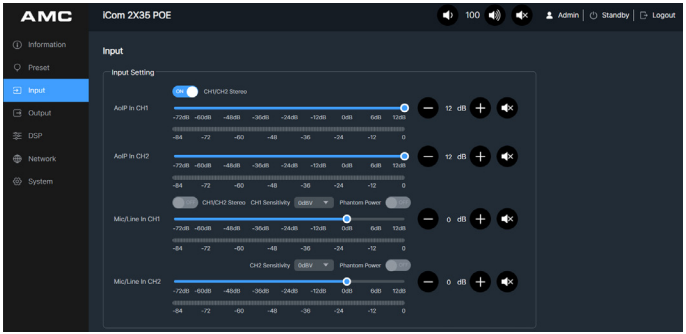


INPUT PAGE

- Digital audio In CH1/digital audio In CH2: You can respectively set the volume or mute/unmute the input audio for digital audio In CH1/digital audio In CH2. Besides, you can click the CH1/CH2 Stereo switch to turn on/off the stereo mode.
- Mic/Line In CH1/Mic/Line In CH2: You can respectively set the volume or mute/unmute the input audio for Mic/Line In CH1/Mic/Line In CH2. Besides, you can click the CH1/CH2 Stereo switch to turn on/off the stereo mode, click the drop-down list of CH1/CH2 Sensitivity to select the sensitivity value (+24dBu/+14dBu/0dBu/-18dBu/-35dBu), or click the Phantom Power switch

Operation

to turn on/off the Phantom Power. When the Phantom Power switch is turned on, the Mic/Line In CH1/Mic/Line In CH2 port on the rear panel of the audio amplifier can supply power to the connected MIC.



OUTPUT PAGE: OUTPUT SETTING

- Master Out: You can respectively set the output volume or mute/unmute the output audio for digital audio Out CH1/digital audio Out CH2/Line Out CH1/ Line Out CH2/Speaker Out CH1/Speaker Out CH2, or set several/all of them together when turning on corresponding options synchronously.
- Digital audio Out CH1/digital audio Out CH2/Line Out CH1/Line Out CH2/ Speaker Out CH1/Speaker Out CH2: Click the CH1/CH2 Stereo switch to turn on/off the stereo mode. In addition, you can respectively set the delay, increase/ decrease the audio or mute/unmute the audio.

Note: When the stereo mode is turned on, the CH1 and CH2 channels will not delay synchronously.





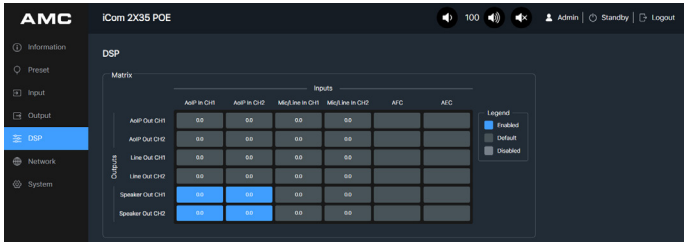
Operation

OUTPUT PAGE: DUCKING SETTING

- Ducking: Click the drop-down list to select the ducking input channel. Clicking the switch can turn on/off the ducking function.
- Output: Click the drop-down list to select the output channel.
- Duck Level: Click to set the ducking level.
- Threshold: Click to set the threshold.
- Attack Time [3~1000]: Input values to set the attack time.
- Hold Time [3~2000]: Input values to set the hold time.
- Release Time [3~10000]: Input values to set the release time.

DSP PAGE: AUDIO MATRIX

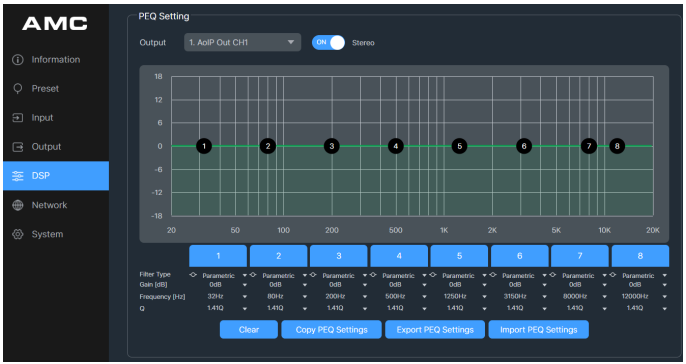
- Inputs: The product features four audio input channels (digital audio In CH1/ digital audio In CH2/ Mic/Line In CH1/Mic/Line In CH2) and supports two channels of audio mixing (Mixer 1/2). Therefore, there are six audio signal sources for audio output channels (digital audio Out CH1/ digital audio Out CH2/Line Out CH1/Line Out CH2/Speaker Out CH1/Speaker Out CH2). One audio source can be selected by one or multiple output channels clicking the corresponding grid.
- Outputs: The product features six audio output channels (digital audio Out CH1/digital audio Out CH2/ Line Out CH1/Line Out CH2/Speaker Out CH1/ Speaker Out CH2). Only one audio source can be selected for each audio output channel to perform one-to-one switching.
- All Outputs: Select one audio input channel by clicking the corresponding grid, then the corresponding audio input source will be output through all output channels synchronously.
- Mixer 1/2: Two channels of audio mixing (Mixer 1/2) are supported. You can respectively set the audio volume of digital audio In CH1/digital audio In CH2/ Mic/Line In CH1/Mic/Line In CH2 to adjust the audio of Mixer 1/2, then click the corresponding grid to select one or multiple output channels to output the mixing audio.
- Legend: The blue grid indicates that the corresponding input/output channel is selected; The grey grid indicates that the corresponding input/output hannel is not selected.



Operation

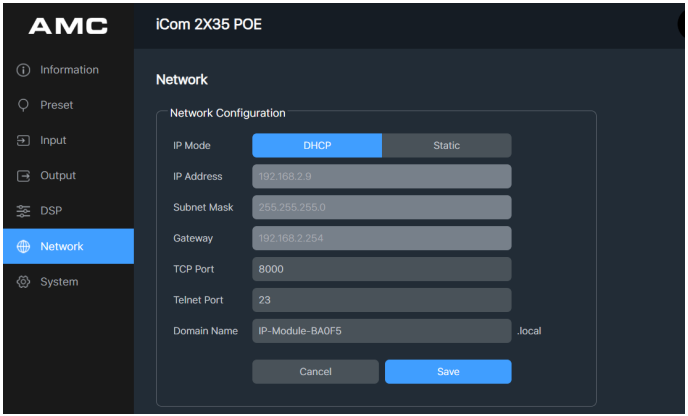
DSP PAGE: PEQ SETTINGS

- Output: Click the drop-down list to select the output channel.
- Stereo: Click the switch to turn on/off the stereo mode.
- Equalizer: Click the buttons to set the equalizer: Flat / Custom1 / Custom2.
- 8 band buttons of PEQ. Blue grid indicates that the corresponding band is selected, and then you can set the parameters for it. For example, you can click the drop-down icon to set the filter type, gain, frequency and Q value respectively.
- Clear: Click the button to clear the settings.
- Copy PEQ Settings: Click the button to copy PEQ settings.
- Export PEQ Settings: Click the button to export PEQ settings.
- Import PEQ Settings: Click the button to import PEQ settings.



NETWORK PAGE

Select to set the IP Mode (DHCP/Static). When Static is selected, you can manually set the IP Address, Subnet Mask and Gateway as required, then click "Save" to take effect. When DHCP is selected, the system will search and fill the IP Address with the one assigned by the router automatically.
In addition, you can set the TCP Port, Telnet Port and Domain Name.
Note: The Domain Name "iCom 2X35 POE xxx.local" can be used to login to the AoIP® Web GUI.
After setting up, click "Save" to take effect, or you can click "Cancel" to cancel the setting.

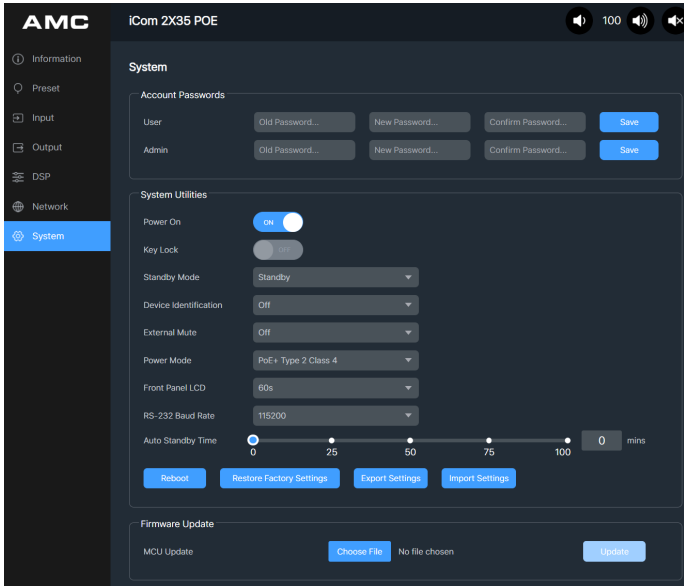


Operation

SYSTEM PAGE

- Account Passwords: You can modify the login password for User and Admin. After setting up, click "Save" to take effect.
- Power On: Click the switch to power on/off the amplifier.
- Key Lock: Click the switch to lock/unlock the front panel buttons.
- Standby Mode: Click the drop-down list to select the standby/sleep mode.
- Device Identification: Click the drop-down list to set the display status of the ID LED on the front panel of the amplifier.
- Input Trigger: Click the drop-down list to set the input trigger mode (Off/ High Level/Low Level). If high level is set as the input trigger mode, when the TRG port of the audio amplifier detects a high level, the amplifier will enter the protected mode and mute the audio.
- Power Mode: Click the drop-down list to set the power mode. When the audio amplifier is powered by DC, the Power Mode is fixed as "DC Power Supply" and no other modes can be selected. When the audio amplifier is powered by PoE, the two PoE modes are selectable and the default mode is PoE Class 0.
- Front Panel LCD: Click the drop-down list to set the display time (Always on/Off/15s/30s/ 60s) of LCD on the front panel of the audio amplifier. When 15s/30s/60s is selected, the LCD will turn off after 15s/30s/60s if there is no operation.
- RS-232 Baud Rate: Click the drop-down list to set the RS-232 baud rate.
- Auto Standby Time: Drag the slider to set the auto standby time.
- Reboot: Click this button to reboot the amplifier.
- Restore Factory Settings: Click this button to restore the amplifier to factory settings.
- Export Settings: Click this button to export configuration files.
- Import Settings: Click this button to import configuration files.
- Firmware Update: You can update the firmware. Click "Choose File" to select the update file, then click "Update" to start update. When the progress bar reaches 100%, the update is complete.

In the Login interface, select the username "User" and input the password "1234", then click the "LOGIN" button to enter the User page.



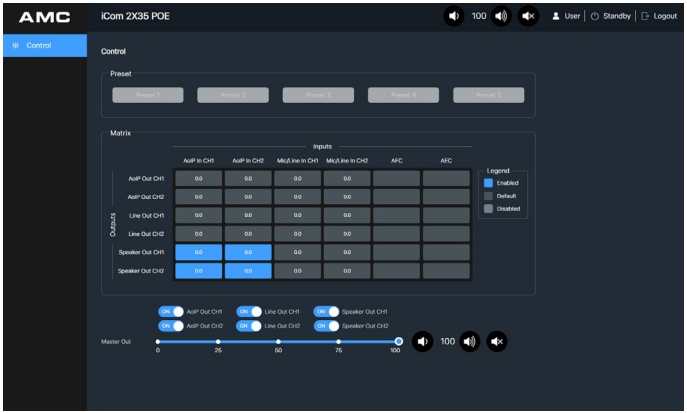
Operation

USER PAGE

- Preset: Recall the preset application scenes.
- Matrix: Set the audio matrix in the same way as the DSP page of Admin account.
- Master Out: Set the audio volume or mute/unmute the audio for Master Out. You can turn on/off the switch of digital audio Out CH1/digital audio Out CH2/ Line Out CH1/Line Out CH2/Speaker Out CH1/Speaker Out CH2 to respectively set the output volume or mute/unmute the output audio.

Besides, you can do the following operations in the upper right corner of each page.

- Display and set the audio volume of Master Out. Click the volume icons to increase/ decrease the audio volume of Master Out, or click the mute icon to mute/unmute the audio of Master Out. When muted, the mute icon displays red.
- Display the current username (User or Admin).
- Click the power icon to power on the switch or set it in standby mode.
- Click the logout icon to logout and return to the login interface.



Operation

RS-232 Control

The amplifier supports RS-232 command control. Open a Serial Command tool on PC to send ASCII commands to control the product. The ASCII command list about the product is shown as below.

Communication Protocol:
RS-232 Baud rate: 115200 (default),
Data bits: 8bit,
Stop bits:1,
Parity bit: none
TCP/IP port: 8000
x - Parameter 1, y - Parameter 2

Command Code	Function Description	Example	Feedback	Default Setting
System settings				
?	Get the list of all commands	?	List all API commands	
help	Get the list of all commands	help	List all API commands	
get type	Get device model	get type	iCom 2X35 POE	
status	Get device current status	status	Please refer to the note at the end of the list.	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get fw version	Get firmware version	get fw version	GUI: V1.00.01 MCU: V2.0.0 DEP: V1.3.5_20250101	
power on	Power on the device	power on	Power on System Initializing... Initialization Finished! GUI: V1.00.01 MCU: V2.0.0 DEP: V1.3.5_20250101	
power off	Power off the device	power off	Power off	
get power	Get current power state	get power	power on /power off	
reboot	Reboot the device	reboot	Reboot… System Initializing... Initialization Finished! GUI: V1.00.01 MCU: V2.100 DEP: V1.3.5_20250101	
reset	Reset system settings to default (Should type "Yes" to confirm, "No" to discard)	reset	Sure to Reset System Settings To Default? Type "Yes" after next prompt to confirm…	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
reset all	Reset system and network settings to default (Should type "Yes" to confirm, "No" to discard)	reset all	Sure to Reset System and Network Settings To Default? Type "Yes" after next prompt to confirm…	
set auto stb x	Set system auto standby time x=0: Auto standby off x=[1-100]: Auto standby time (mins)	set auto stb 10	Auto standby time: 10mins	10
get auto stb	Get system auto standby time	get auto stb	Auto standby time: 10mins	
set lcd on/off/15/30/ 60	Set LCD always on or auto turn off in power on state or turn on 15s/30s/60s	set lcd on set lcd off set lcd 15 set lcd 30	LCD: on LCD: off LCD: 15s	60s
get lcd	Get LCD on/off status	get lcd	LCD:60s	
set idled on/off/15/ 30/60	Set ID LED on or auto turn off in power on state or turn on 15s/ 30s/60s	set idled on set idled 15 set idled 30	ID LED: on ID LED:15s	off
set trigger on/off x	Set trigger on/off with trigger level:x x=0: Low Level (0V) Mute Output x=1: High Level (5-12V) Mute Output	set trigger on 1 set trigger off	Trigger on with high level Trigger off	off

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get trigger	Get trigger on/off status	get trigger	Trigger on with high level	
set rsb x	Set serial port baud rate to xbps x=(115200,57600,38400,19200, 9600,4800)	set rsb 115200	Baud rate: 115200	115200
get rsb	Get serial port baud rate	get rsb	Baud rate: 115200	
set key lock on/off	Set front panel key lock on/off	set key lock off	Key lock: off	on
get key lock	Get front panel key lock on/off status	get key lock	Key: lock on	
set amp mode x	Set amplifier power mode:x x=1: PoE++ Type 4 Class 8 x=2: PoE++ Type 4 Class 7 x=3: PoE++ Type 3 Class 6 x=4: PoE++ Type 3 Class 5 x=5: PoE+ Type 2 Class 4	set amp mode 1 set amp mode 2	Error: AMP is DC power supply, adjusting the AMP power is invalid. AMP power mode: PoE Class 0	0
get amp mode	Get amplifier power mode	get amp mode	AMP power mode: PoE Class 0	
Input settings				
set input x stereo on/off	Set input: x stereo mode on/off x=[0-2] 0: All Inputs, 1: AoIP In CH1/2, 2: Mic/Line In CH1/2	set input 1 stereo on	AoIP In CH1/2 stereo mode: on	Off

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get input x stereo	Get input:x stereo mode on/off status	x=[0-2] 0: All Inputs, 1: AoIP In CH1/2, 2: Mic/Line In CH1/2	get input 1 stereo	AoIP In CH1/2 stereo mode: on
set input x gain y	Set input:x gain to y x=[0-4] 0: All Inputs, 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2 y=[-12~12]dB Input gain value, Step=0.1dB	set input 1 gain 10	AoIP In CH1 gain: 10dB	0
get input x gain	Get input:x gain value x=[0-4] 0: All Inputs, 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2	get input 1 gain	AoIP In CH1 gain: 10dB	
set input x sensitivity y	Set input:x sensitivity to y x=[3-4] 3: Mic/Line In CH1, 4: Mic/Line In CH2 y=[1-6] 1: +24dBu, 2: +14dBu, 3: +4dBu, 4: 0dBV, 5: -18dBV, 6: -35dBV	set input 3 sensitivity 1	Mic/Line In CH1 sensitivity: +24dBu	0dBV
get input x sensitivity	Get input:x sensitivity x=[3-4] 3: Mic/Line In CH1, 4: Mic/Line In CH2	get input 3 sensitivity	Mic/Line In CH1 sensitivity: +24dBu	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
set input x phantom power on/off	Set input:x 48V phantom power on/off x=[3-4] 3: Mic/Line In CH1, 4: Mic/Line In CH2	set input 3 phantom power on	Mic/Line In CH1 phantom power: on	Off
get input x phantom power	Get input:x 48V phantom power status x=[3-4] 3: Mic/Line In CH1, 4: Mic/Line In CH2	get input 3 phantom power	Mic/Line In CH1 phantom power: on	
set input x gain+ set input x gain+y	Increase input:x gain by y x=[0-4] 0: All Inputs, 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2 y=[0.1-24]: Steps, y can be empty (Step=1dB)	set input 1 gain+ set input 1 gain+5	AoIP In CH1 gain: 1dB AoIP In CH1 gain: 5dB	
set input x gain- set input x gain-y	Decrease input:x gain by y x=[0-4] 0: All Inputs, 1:AoIP In CH1, 2:AoIP In CH2, 3:Mic/Line In CH1, 4:Mic/Line In CH2 y=[0.1-24]:Steps, y can be empty (Step=1dB)	set input 1 gain- set input 1 gain-5	AoIP In CH1 gain: -1dB AoIP In CH1 gain: -5dB	
set input x mute on/off	Set input:x mute on/off x=[0-4] 0: All Inputs, 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2	set input 1 mute on	AoIP In CH1 mute: on	Off
get input x mute	Get input:x mute on/off x=[0-4] 0: All Inputs, 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2	get input 1 mute	AoIP In CH1 mute: on	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
Output setting				
set master member <abcdef>	Set master output member (a/b/ c/d/e/ f=0-1) a/b/c/d/e/f=0: Exclude the member a/b/c/d/e/f=1: Include the member a: AoIP Out CH1 b: AoIP Out CH2 c: Line Out CH1 d: Line Out CH2 e: Speaker Out CH1 f: Speaker Out CH2	set master member <111111>	Master member: 111111	111111
get master member	Get master output member	get master member	Master member: 111111	
set master vol x set vol x	Set master output volume to x x=[0-100] volume value	set master vol 50 set vol 50	Master volume: 50	50
get master vol get vol	Get master output volume	get master vol get vol	Master volume: 50	
set master vol+ set vol+ set master vol+y set vol+y	Increase master output volume Increase master output volume by y y=[1-100]: Steps, y can be empty (Step=1dB)	set master vol+ set vol+ set master vol+5 set vol+5	Master volume: 51 Master volume: 51 Master volume: 55 Master volume: 55	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
set master vol- set vol- set master vol-y set vol-y	Decrease master output volume Decrease master output volume by y. y=[1-100]: Steps, y can be empty (Step=1dB)	set master vol- set vol- set master vol-5 set vol-5	Master volume: 49 Master volume: 49 Master volume: 45 Master volume: 45	
set master mute on/ off set mute on/off	Set master output mute on/of	set master mute on set mute on	Master mute: on	Off
get master mute get mute	Get master output mute on/off status	get master mute get mute	Master mute: on	
set output x stereo on/off	Set output:x stereo mode on/off x=[0-3] 0: All Outputs, 1: AoIP Out CH1/2, 2: Line Out CH1/2, 3: Speaker Out CH1/2	set output 1 stereo on	AoIP Out 1/2 stereo mode: on	Off
get output x stereo	Get output:x stereo mode on/off status x=[0-3] 0: All Outputs, 1: AoIP Out CH1/2, 2: Line Out CH1/2, 3: Speaker Out CH1/2	get output 1 stereo	AoIP Out 1/2 stereo mode: on	
set output x gain y	Set output:x volume to y x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[0-100] volume value	set output 5 gain 50	Speaker Out CH1 volume: 50	50

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get output x gain	Get output:x volume value x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 5 gain	Speaker Out CH1 volume: 50	
set output x gain+ set output x gain+y	Increase output:x volume by y x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[1-100]: Steps, y can be empty (Step=1)	set output 5 gain+ set output 5 gain+5	Speaker Out CH1 volume: 51 Speaker Out CH1 volume: 55	
set output x gain- set output x gain-y	Decrease output:x volume by y x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[1-100]: Steps, y can be empty (Step=1)	set output 5 gain- set output 5 gain-5	Speaker Out CH1 volume: 49 Speaker Out CH1 volume: 45	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
set output x mute on/off	Set output:x mute on/off x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	set output 5 mute on	Speaker Out CH1 mute: on	Off
get output x mute	Get output:x mute on/off status x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 5 mute	Speaker Out CH1 mute: on	
set output x delay y	Set output:x delay:y x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[0-50]: Delay Time, Millisecond	set output 5 delay 50	Speaker Out CH1 delay: 50ms	0
get output x delay	Get output:x delay value x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 5 delay	Speaker Out CH1 delay: 50ms	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
set output x duck off set output x duck on y lv a1 th a2 at t1 ht t2 rt t3 y lv a1 th a2 at t1 ht t2 rt t3	Set output:x ducking on/off (with source:y, level:a1, threshold:a2, attack time:t1, hold time:t2, release time:t3) x=[0-6] 0:All Outputs, 1:AoIP Out CH1, 2:AoIP Out CH2, 3:Line Out CH1, 4:Line Out CH2, 5:Speaker Out CH1, 6:Speaker Out CH2 y=[1-2] 1:Mic/Line In CH1, 2:Mic/Line In CH2 a1=[-60~0]: Duck level value (Step=1dB) a2=[-60~0]: Threshold value (Step=1dB) t1=[3-1000]: Attack time (Step=1ms) t2=[3-2000]: Hold time (Step=1ms) t3=[3-10000]: Release time (Step=1ms)	set output 1 duck off set output 2 duck on 1 lv -9 th -12 at 100 ht 1000 rt 100	AoIP Out CH1 ducking: off AoIP Out CH2 ducking: Mic/Line In CH1, duck level: -9dB, threshold: -12dB, attack time: 100ms, hold time: 1000ms, release time: 100ms	Off
get output x duck	Get output:x ducking status x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 1 duck get output 2 duck	AoIP Out CH2 ducking: off AoIP Out CH2 ducking: Mic/Line In CH1 with duck level: -9dB, threshold: -12dB, attack time: 100ms, hold time: 1000ms, release time: 100ms	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
DSP setting				
set output x from y set output x1 x2... from y	Set output:x from y1 y2... x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[1-6] 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2, 5: Mixer 1, 6: Mixer 2	set output 5 from 1 set output 5 6 from 1	Speaker Out CH1 from: AoIP In CH1 Speaker Out CH1, Speaker Out CH2 from: AoIP In CH1	
set output x remove from y set output x1 x2... remove from y	Set output:x remove from y1 y2... x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[1-6] 1: AoIP In CH1, 2: AoIP In CH2, 3: Mic/Line In CH1, 4: Mic/Line In CH2, 5: Mixer 1, 6: Mixer 2	set output 5 remove from 1 set output 5 6 remove from 1	AoIP Out CH1 from: none AoIP Out CH2 from: Mic/Line In CH2 Line Out CH1 from: none Line Out CH2 from: Mic/Line In CH2 Speaker Out CH1 from: Mixer 1 Speaker Out CH2 from: Mixer 2	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get output x from	Get output:x source from x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 5 from	Speaker Out CH1 from: AoIP In CH1	
set afc active on/off	Set AFC active on or off	set afc active on/off	AFC active: on/off	
get afc active	Get AFC active on/off status	get afc active	AFC active: on/off	
set aec active on/off	Set AEC active on or off	set aec active on/off	AEC active: on/off	
get aec active	Get AEC active on/off status	get aec active	AEC active: on/off	
set output x eq y on/off	Set output:x EQ index:y on/off x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[0-8]: EQ index 0:All	set output 1 eq 0 on	AoIP Out CH1 EQ all: on	Off
get output x eq	Get output:x EQ on/off status x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 1 eq	AoIP Out CH1 EQ all: on	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
set output x eq stereo on/off	Set output:x EQ stereo mode (same EQ settings) on/off x=[0-3] 0: All Outputs, 1: AoIP Out CH1/2, 2: Line Out CH1/2, 3: Speaker Out CH1/2	set output 1 eq stereo on	AoIP Out CH1/2 EQ stereo mode: on	Off
get output x eq stereo	Get output:x EQ stereo mode (same EQ settings) on/off status x=[0-3] 0: All Outputs, 1: AoIP Out CH1/2, 2: Line Out CH1/2, 3: Speaker Out CH1/2	get output 1 eq stereo	AoIP Out CH1/2 EQ stereo mode: on	
set output x eq y typ t frq z val aa q bb	Set output:x EQ index:y TYP t to FRQ z VAL aa Q bb x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[0-8]: EQ index 0:All t=[1-5] 1: Parametric, 2: Lowpass, 3: Highpass, 4: Low Shelf, 5: High Shelf z=[20-20000]: Frequency value (Step=1Hz) aa=[-15~15]: Gain value (Step=0.1dB) bb=[0.02~16]: Q value (Step=0.01)	set output 1 eq 1 typ 1 frq 200 val -15 q 0.02	AoIP Out CH1 EQ 1: Type: 3, Frequency: 200Hz, Value: -18dB, Q: 0.02	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get output x eq setting	Get output:x EQ index:y value x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	get output 1 eq	AoIP Out CH1 EQ 1: Type: 3, Frequency: 200Hz, Value: -18dB, Q: 0.02 2: Type: 1, Frequency: 500Hz, Value: 3dB, Q: 0.7 3: Type: 1, Frequency: 1000Hz, Value: 3dB, Q: 0.7 4: Type: 1, Frequency: 200Hz, Value: 3dB, Q: 0.7 5: Type: 1, Frequency: 5000Hz, Value: -3dB, Q: 0.7	
set output x eq clear	Clear output:x EQ setting x=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	set output 1 eq clear	Clear AoIP Out CH1 EQ	
set output x eq copy to y	Set output:x EQ copy to y x=[1-6] 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2 y=[0-6] 0: All Outputs, 1: AoIP Out CH1, 2: AoIP Out CH2, 3: Line Out CH1, 4: Line Out CH2, 5: Speaker Out CH1, 6: Speaker Out CH2	set output 1 eq copy to 2	Set AoIP Out CH1 EQ copy to AoIP Out CH2	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
Preset setting				
set preset save x	Save the current unit's settings to the specified preset:x All settings except network setting. x=[1-5]: Preset 1 - Preset 5	set preset save 1	Save to preset 1	
set preset recall x	Recall preset:x into unit All settings except network setting. x=[1-5]: Preset 1 - Preset 5	set preset recall 1	Recall preset 1	
set preset clear x	Clear preset:x All settings except network setting. x=[1-5]: Preset 1 - Preset 5	set preset clear 1	Clear preset 1	
Network setting				
get ipconfig	Get the current IP configuration	get ipconfig	IP mode: DHCP IP: 192.168.62.106 Subnet mask: 255.255.255.0 Gateway: 192.168.62.1 TCP/IP port: 8000 Telnet port: 23 MAC: 6C:DF:FB:0C:B3:8E (Static: 169.254.100.200 255.255.0.0 169.254.100.1)	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get mac addr	Get network MAC address	get mac addr	MAC: 6C:DF:FB:0C:B3:8E	
set ip mode x	Set network IP mode to static IP or DHCP x=[0-1] 0. Static, 1. DHCP	set ip mode 0	IP mode: Static (Please use "s net reboot!" command or repower device to apply new config!)	1
get ip mode	Get network IP mode	get ip mode	IP mode: DHCP	
set ip addr xxx.xxx. xxx.xxx	Set network IP address	set ip addr 192.168.1.100	IP address: 192.168.0.100 (Please use "s net reboot!" command or repower device to apply new config!) DHCP on, Device can't config static address, set DHCP off first.	
get ip addr	Get network IP address	get ip addr	IP: 192.168.0.100	
set subnet xxx.xxx.xxx.xxx	Set network subnet mask	set subnet 255.255.255.0	Subnet Mask: 255.255.255.0 (Please use "s net reboot!" command or repower device to apply new config!) DHCP on, Device can't config subnet mask, set DHCP off first.	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
get subnet	Get network subnet mask	get subnet	Subnet Mask: 255.255.255.0	
set gateway xxx.xxx.xxx.xxx	Set network gateway	set gateway 192.168.1.1	Gateway: 192.168.1.1 (Please use "s net reboot!" command or repower device to apply new config!) DHCP on, Device can't config gateway, set DHCP off first.	
get gateway	Get network gateway	get gateway	Gateway: 192.168.1.1	
set tcp/ip port x	Set network TCP/IP port (x=1~65535)	set tcp/ip port 8000	TCP/IP port: 8000	8000
get tcp/ip port	Get network TCP/IP port	get tcp/ip port	TCP/IP port: 8000	
set telnet port x	Set network telnet port (x=1~65535)	set telnet port 23	Telnet port: 23	23
get telnet port	Get network telnet port	get telnet port	Telnet port: 23	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
set net reboot	Reboot network modules	set net reboot	Network reboot… Search for IP, Please wait ...! IP mode: DHCP IP: 192.168.62.106 Subnet mask: 255.255.255.0 Gateway: 192.168.62.1 TCP/IP port: 8000 Telnet port: 23 MAC: 6C:DF:FB:0C:B3:8E (Static: 169.254.100.200 255.255.0.0 169.254.100.1)	
set net hostname xxxx	Set network hostname to xxxx (x=[32 characters max])	set net hostname 1234	Hostname: 1234	
get net hostname	Get network hostname	get net hostname	Hostname: 1234	

Operation

Command Code	Function Description	Example	Feedback	Default Setting
Password setting				
set admin password x	Set admin login password (x=[16 characters max])	set admin password 1234	admin password: 1234	1234
get admin password	Get admin login password	get admin password	admin password: 1234	
set user password x	Set user login password (x=[16 characters max])	set user password 1234	user password: 1234	1234
get user password	Get user login password	get user password	user password: 1234	

General Specifications

iCOM 2X35 PoE Communication Amplifier

Power supply	36V/2.5A 4 PIN Locking Power Supply PoE++ Type 4 Class 8
Max power consumption	94.6 W
Amplifier Type	Class D, 2 channels
Output power	2x35 W @ 4/8 Ω Stereo, 1x70 W @ 4/8 Ω Mono
Output	1x LINE OUT [6 pin-3.5 mm phoenix connector] 1x 4/8Ω AMP OUT [4 pin-5.08 mm locking phoenix connector]
Output impedance	600 Ω balanced, 300 Ω unbalanced
Input	1x MIC/LINE IN [6 pin-3.5 mm phoenix connector]
Input Impedance	20K Ω balanced, 10K Ω unbalanced
Control	1x RS-232 [3 pin-3.5 mm phoenix connector, API commands control] 1x TRIGGER [2 pin-3.5 mm phoenix connector, high/Low level configurable to disable amp out] 1x AoIP/IP [RJ45 connector, PoE+/PD (Class 8 IEEE 802.3bt)] [AoIP, Web GUI and TCP/IP]
Frequency Response	20 Hz to 20 kHz (-/+0.5 dB)
THD+N	< 0.01 % @ +4 dBu, 1 KHz
S/N ratio	>100 dB @ 0 dBu, 1k Hz A-weighted
Audio Output Delay	<1ms
Dimensions (W x D x H)	180 x 118 x 28 mm
Weight	0.67 kg

The specifications are correct at the time of printing this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.