User Manual

iComC 2X20
Communication Amplifier

AMC®

AMCPRO
iComC 2X20
VOL TREBLE BASS BAL
LINE1 LINE2 MIC
STEREO BRIDGE
SOURCE
LEVEL
POWER
TWO CHANNEL
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). Care should be taken that objects do not fall into liquids and liquids would not be spilled on the device.

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

4 This product, in combination with loudspeakers 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 otorhinolaryngologist.

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

6 Note for power connections: for pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

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 Power disconnection: when the power cord connected to the power grid is connected to the machine, the standby power is turned ON. When the power switch is turned ON, the main power is turned ON.The only operation to disconnect the power supply from the grid, unplug the power cord.

9 Protective Grounding - An apparatus with class I construction shall be connected to a power outlet socket with a protective grounding connection.
Protective Earthing - An apparatus with class I construction shall be connected to a mains socket outlet with a protective earthing connection.

10 The lightning flash with an arrowhead symbol, with an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage' within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

11 The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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

13 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 to rain.
 – The product has been dropped or the enclosure damaged.

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
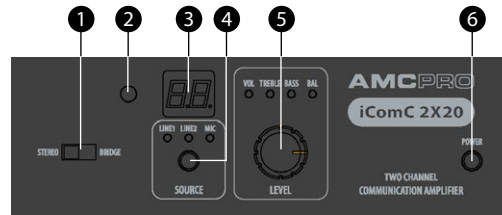
Operation

Specifications

Before you start

iComC 2X20 is a two channel communication amplifiers with RS232 interface and IR remote control (sold separately). Designed for small size applications. D class power amplifier, limiter, stereo and bridge mode, tone control, line input, balanced microphone input, phoenix output connector, phantom power and loudness function.

FEATURES

- 2 x 20 W D class power amplifier

- Stereo or bridge amplifier modes

- RS232 and IR remote control

- Tone controls for bass and treble

- Balanced MIC input with phantom power

- 2 x stereo LINE inputs

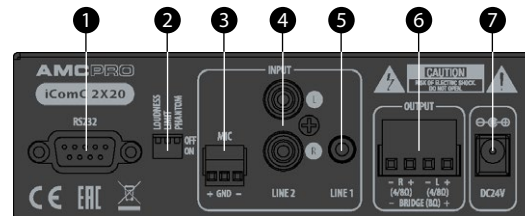- Phoenix speker output connector

- Limiter

Operation

Front Panel

1. Stereo/Bridge mode selector | 2. IR detector | 3. Level indicator | 4. Input selection button and indicator
5. Selected function indicator and level adjustment knob | 6. Power switch
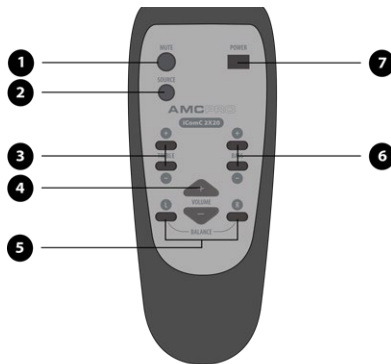
Rear Panel

1. RS-232 interface | 2. Dip switch for loudness, limiter and phantom power functions | 3. Balanced MIC input | 4. Stereo RCA line input
5. Stereo 3.5 mm TRS LINE input | 6. Loudspeaker output connector | 7. DC power input

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Operation

IR Remote Control
Optional accessory

Changing Batteries
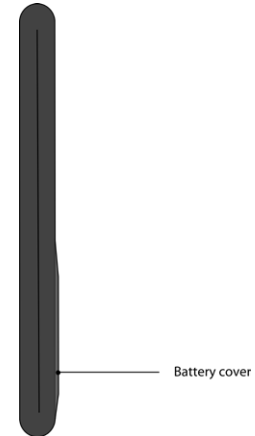
1. Mute | 2. Input selector | 3. Tone control (treble)
4. Volume control | 5. Balance control | 6. Tone control (bass)
7. On/off button

1. Open the battery cover.
2. Insert two AAA batteries in accordance with marks in the remote control battery compartment.
3. Close the battery cover.

Operation

Functions

ON/OFF BUTTON
Switch amplifier ON or OFF

STEREO/BRIDGE MODE
There are 2 modes of operation: stereo and bridge. Only use this switch when the amplifier is turned off

Stereo mode: both amplifiers channels work independently.
Connected loudspeaker impedance should be at least 4 Ω.

Bridge mode: combines both channels to drive a single loudspeaker.
Connected loudspeaker impedance should be at least 8 Ω.

INPUT SELECTOR
Select one of tree available audio inputs: Line 1(3,5 mm stereo Jack connector), Line 2 (Stereo RCA connector), Mic (Phoenix connector). Selected input is indicated with a corresponding LED.

LEVEL INDICATOR
Displays level of a selected parameter.
Volume level can be adjusted in 64 steps from 0 to 63.
Treble and bass levels can be adjusted in 15 steps from -7 to 7.
Balance adjusting limits from L9 to R9.

LEVEL ADJUSTMENT KNOB
Push LEVEL button to select between volume, treble, bass and balance.
To adjust selected parameter, turn LEVEL knob.
After 3 sec. of inactivity, amplifier selects volume parameter by default.

RS-232 INTERFACE
D-Sub 9-pin connector for serial interface.

DIP SWITCH
Turn ON or OFF functions: loudness, limiter, Mic input phantom power.

BALANCED MIC INPUT
Connector for dynamic or condenser microphone.
If a condenser microphone is used, switch ON phantom power (+24 V DC).

LINE INPUTS 1 & 2
Stereo line level audio inputs. Input 1 is 3.5 mm TRS, input 2 is stereo RCA.

OUTPUT CONNECTOR
Phoenix type connector for loudspeakers.
Stereo and Bridge mode wiring is marked on the amplifier panel.

POWER CONNECTOR
DC 24V 1.5A power supply input.

Control protocol

RS 232 protocol

Baud rate of 9600
8 data bits
no parity
1 stop bit
no flow control

Notes:
Amplifiers respond prompt: PA>

Symbols xx in the volume control row mean volume level. Volume level range is 0-63.
Example: RS232 command "Volume 15<CR>" sets volume level 15.

Symbol x in the "Source selector" row mean input number.
Example: RS232 command "Source 2<CR>" enables audio signal from input 2.

Symbol xx in the treble row mean treble level. Treble level range is from -7 to +7. Default treble level is 0.
Example: RS232 command "Treble +3<CR>" sets treble level +3.
Example: RS232 command "Treble 0<CR> sets treble level to default.

Symbol xx in the bass row mean bass level. Bass level range is from -7 to +7. Default bass level is 0.
Example: RS232 command "Bass +4<CR>" sets bass level +4.
Example: RS232 command "Bass 0<CR> sets bass level to default.

Symbol xx in the balance row mean balance level. Balance level range is from L9 to R9. Default level is 0.
Example: RS232 command "Balance L5<CR>" sets balance to L5.
Example: RS232 command "Balance 0<CR> sets balance level to default.

Function	Command
Show status	Now<CR>
Power on	Power On<CR>
Power off	Power Off<CR>
Power on/off	Power Toggle <CR>
Mute on	Mute On<CR>
Mute off	Mute Off<CR>
Mute on/off	Mute Toggle<CR>
Volume control	Volume xx<CR>
Source selector	Source x<CR>
Treble control	Treble xx<CR>
Bass control	Bass xx <CR>
Balance control	Balance xx<CR>
Save settings	Save<CR>

General Specifications

iComC 2X20 Communication Amplifier

	iComC 2X20
Power supply	24 V DC 1,5 A
Output power	2 x 20 W
Phantom power voltage	24 VDC
Line input impedance	10 kΩ
Line input sensitivity	-7 dBu
Mic input impedance	600 Ω
Mic input sensitivity	-60 dBu
Total harmonic distortions	< 1%
S/N ratio	> 100 dB
Frequency response	35 Hz - 20 kHz
Equalizer	Bass: ±7 dB Treble: ±7 dB
Dimensions	145 mm x 120 mm x 45 mm
Weight	0.6 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.