ZAC-30
ZAC-30jr
User Manual

ZAC-30 and ZAC-30jr User's Guide

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Specifications and designs subject to change.

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IMPORTANT SAFETY INSTRUCTIONS

1. Read and understand all instructions.

2. Follow all warnings and instructions marked on the product.

3. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning when necessary.

4. Do not subject this product to high humidity. Do not operate this equipment while you are in or near water (e.g., do not operate this equipment with wet hands).

5. Do not drop.

6. Slots present on components are provided for ventilation. To protect from overheating, these openings must not be blocked. This product should never be placed near or over a radiator or other heat source. This product should not be placed in a built-in installation where proper ventilation is not provided.

7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your local power company.

8. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be subjected to damage.

9. Never push objects of any kind into this product through cabinet/enclosure slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

10. To reduce the risk of electric shock, do not disassemble this product. Opening or removing the covers, other than at the specified access points, may expose you to dangerous voltages or other risks. Incorrect reassembling can cause electric shock when the appliance is subsequently used.

11. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

12. Unplug this product from the wall outlet and contact Oxmoor under the following conditions:

    a. The power supply cord is damaged or frayed.

    b. Liquid has been spilled into the product.

    c. The product has been exposed to rain, water or excessive moisture.

    d. The product does not operate normally by following the operating instructions. Adjust only those controls covered by these operating instructions, because improper adjustment of other controls may result in damage and will often require extensive work to restore the product to normal operation.

    e. The product's cabinet/enclosure have been damaged or broken.

    f. The product exhibits a distinct change in performance.

13. If you are unsure about the proper operation and/or installation of this product, contact Oxmoor or your authorized reseller for assistance.

Oxmoor Corporation, LLC
1-205-982-8200
Internet: www.zonaudio.com

14. Save these instructions.

For Future Reference:

Date of Purchase: _____

Date of Installation: _____

Order Number/Details:

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Introduction

ZAC-30 Audio Controller/Amplifier

The ZAC-30 is designed for use as a sub-zone controller/amplifer (e.g. master bathroom, dining room, sun room, etc.). It is approximately half the size and power of the ZAC-60 Audio Controller/ Amplifier, but has nearly all the features of it's 60 watt counterpart.

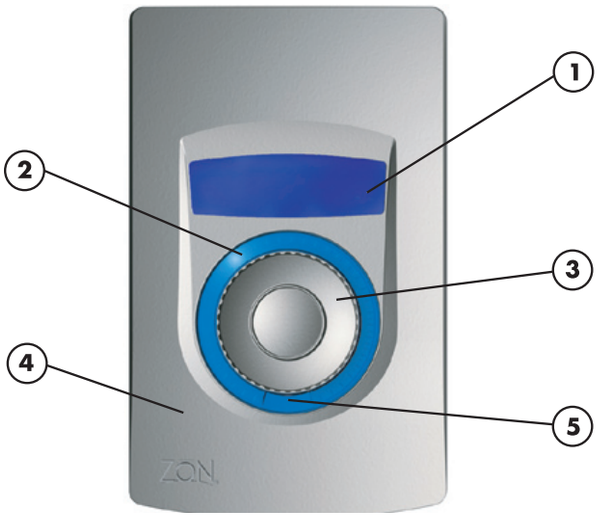
Incorporating ZON's popular user interface, the ZAC-30 has a powerful 30 Watt digital stereo amplifier, built-in infrared receiver and adjustments for bass, treble, loudness and EQ settings. It is compatible with the functions and use of the ZIR-232 Device Commander.

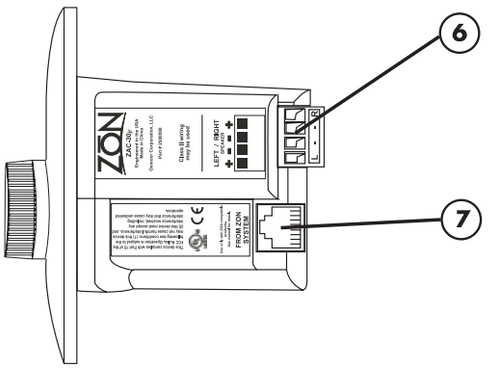
Like other ZON digital products, it connects to the system with a single CAT-6 or CAT-5e cable. The ZAC-30 connects via an expansion jack on the ZAC-60. This allows the area covered by the ZAC-30 to share the same digital audio signal, but have independent control of volume and tone. The parent controller (ZAC-60) can be muted (or "off") and the ZAC-30 will continue to function with full capabilities, making the ZAC-30 a smart and powerful sub-zone solution.

Loudspeakers connect directly to the ZAC-30 by way of installation-friendly, removable screw terminals.

Faceplate and jog wheels are available in all of the ZON color and finish options.

Here are the key components of the ZAC-30 Audio Controller/Amplifier:





1. LCD Display
2. Volume Level Indicator (Virtual Pointer™)
3. Multi-Function Jog Wheel ("Knob")
4. Removable Faceplate
5. IR-Receiver
6. Removable Loudspeaker Connector
7. From ZAC-60 Expansion Connector

ZAC-30jr Audio Controller/Amplifier

The ZAC-30jr is designed for use as a sub-zone controller/amplifer (e.g. master bathroom, dining room, sun room, etc.). It is approximately half the size and power of the ZAC-60 Audio Controller/ Amplifier, and has a simplified user interface.

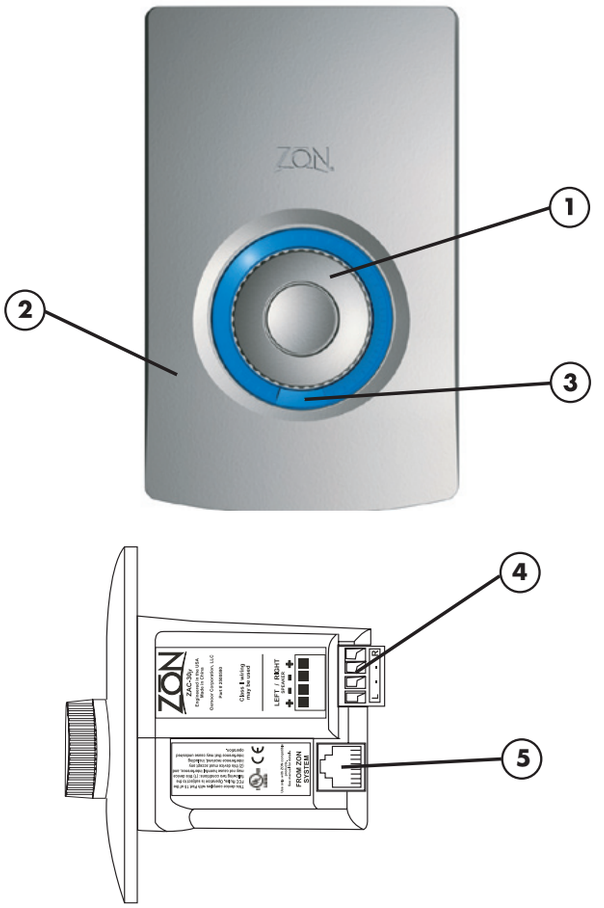
Incorporating ZON's popular styling, the ZAC-30jr has a powerful 30 Watt digital stereo amplifier and a built-in infrared receiver. Adjustments for bass, treble, loudness and EQ settings are user-defined via the ZON Serial Configuration Utility (ZON Config).

Like other ZON digital products, it connects to the system with a single CAT-6 or CAT-5e cable. The ZAC-30jr connects via an expansion jack on the ZAC-60. This allows the area covered by the ZAC-30jr to share the same digital audio signal, but have independent control of volume and tone. The parent controller (ZAC-60) can be muted (or "off") and the ZAC-30jr functions with full capabilities, making the ZAC-30jr a simple and powerful sub-zone solution.

Loudspeakers connect directly to the ZAC-30jr by way of an installation-friendly, removable screw terminal.

Faceplate and jog wheels are available in all of the ZON color and finish options.

Here are the key components of the ZAC-30jr Audio Controller/Amplifier:



1. Multi-Function Jog Wheel ("Knob")
2. Removable Faceplate
3. IR Receiver
4. Removable Loudspeaker Connector
5. From ZAC-60 Expansion Connector

Installation

Installing the ZAC-30 / ZAC-30jr

Before you install ZON system components, it is important to have all of the required wiring installed and tested. Please refer to the ZON system's Installation and User's guide for more information on the proper procedure for installing ZON components.

If you are installing this product as part of an authorized DIY kit, you may need to refer to additional instructional guides that will help you with planning and installing ZON wiring.

Installation in New Construction

If you are installing the ZAC-30 during new construction, it is recommended that you use a standard, single gang rough-in trim ring. There are some single-gang electrical back boxes that may work with the ZAC-30. If your particualr installation requires back boxes, it will be necessary to check that the ZAC-30 will fit the interior space of the box before installation.

Install ZAC-30s so that the center of the rough opening for the device is approximately 56" above the finished floor. This will provide optimal viewing of the LCD screen.

The ZAC-30jr can be installed at any desired height above the finished floor.

Installation in Existing Construction

If you are installing the ZAC-30 in existing construction it is recommended that you use a single-gang low-voltage trim ring, provided that your local building codes will allow the use of this type of mounting apparatus.

Before cutting a hole in your wall, make sure that your target location does not interfere with any obstructions behind the wall (studs, conduit, etc.).

If you are installing a ZAC-30, you will want to located the center of the trim ring so that it is approximately 56" above the finished floor. This will provide optimal viewing of the LCD screen.

The ZAC-30jr can be installed at any desired height above the finished floor.

In addition to the requirements listed above, it is also recommended that you take care to position the trim ring so that it is plum and square. The ZAC-30 mounts directly to the device mount screw holes on the trim ring, so major adjustments (up, down, left or right) are not possible once the trim ring is installed.

It is also a good idea to make sure that you allow at least 1.5 inches of clearance around the trim ring (when mounting next to switches, trim, etc.).

Connecting Wires to the ZAC-30

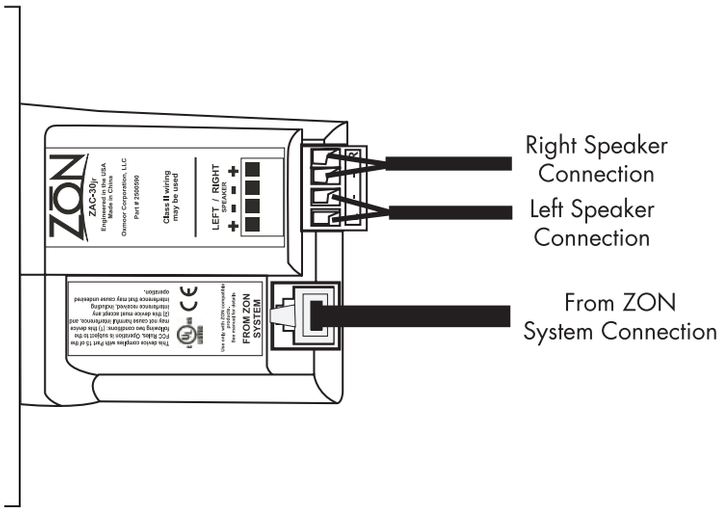
Following your wiring plan, you should have these cables ready for connection to the controller:

- A CAT-6/CAT-5e cable that runs from the rough opening to the EXPANSION jack of a ZAC-60 controller.

- Two speaker wire pairs that run from the rough opening to a pair of loudspeakers used in the room.

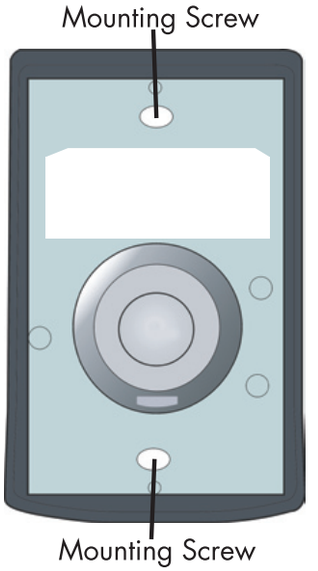
Connect the following wires:

- Connect the CAT-6/CAT-5e cable to the "FROM ZON SYSTEM" jack.
- Connect the speaker wires to the controller's loudspeaker connection. Be sure that you maintain proper polarity (+ to + and - to -).



Mounting the Controller

Mounting the controller is straightforward, using these steps:

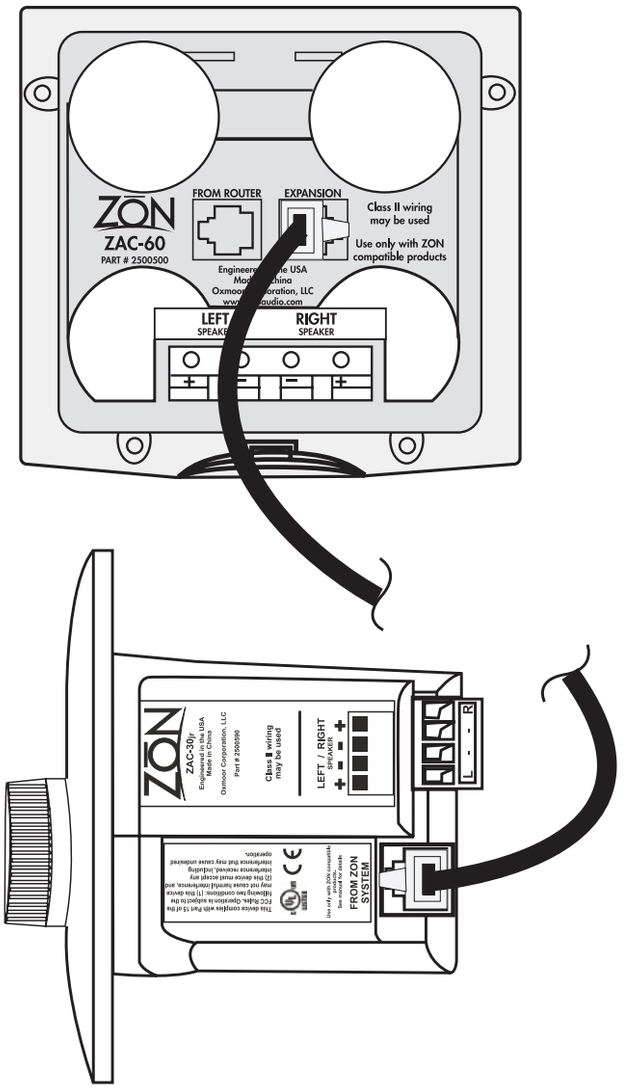


1. Carefully remove the controller's faceplate by lifting up and out on the cover from the center of the lower edge of the faceplate.
2. Align the controller's provided 6/32 screws with the threaded holes on the back box or trim ring.
3. Place the controller into the box or rough opening behind the trim ring, taking care not to crimp or bind the wire connected to the controller. Push back on the controller so that it touches the mounting surface.
4. Tighten the mounting screws. It is recommended that you use only a manual screwdriver for this operation to protect the mounting screws and the controller's display and circuit board.
5. Carefully reinstall the faceplate. Place the top edge of the faceplate on the top edge of the controller and snap in place by applying even pressure to the bottom center of the faceplate.

Connecting A Controller to the ZON System

At the parent ZAC-60, locate the EXPANSION jack. This jack is located on the back of the ZAC-60 next to the CAT-6/CAT-5e jack that connects the ZAC-60 to the ZON router. Connect the CAT-6/CAT-5e cable from the ZAC-30 to the EXPANSION jack on the ZAC-60.

Do not connect a ZAC-30 directly to a ZR-98 Router. The ZAC-30 will not function, and it could cause damage to both the controller and the ZR-98 router.



Using your ZAC-30 Controller

Working with ZAC-30 Controllers

Sleep/Background Mode

After a period of inactivity, your controller will automatically enter a "sleep" mode. The display and volume indicator ring are slightly illuminated. Turn or press the wheel to activate the controller's back light.

Adjust Volume

Turn the jog wheel to adjust volume. The Virtual Pointer gives a visual indication of the volume level.

A flashing LED on the Virtual Pointer indicates loudspeaker mute.

To manually mute, turn the wheel all the way down. You can also mute directly from a ZON mini remote (not included).

Select Audio Source

Briefly press the jog wheel. The display will change to the SELECT SOURCE menu.

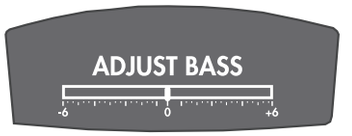
Turn the wheel left or right to view available sources. Press the jog wheel once to select the source shown on the display.

ZAC-30 Functions and Features

Listening Enhancements

The ZAC-30 provides tone and balance controls, EQ presets and loudness compensation. To access these features, press and briefly hold the jog wheel. The display will change to the CHOOSE FUNCTION menu. Turn the knob left or right to view the available functions. Press the knob to select the function shown on the display.

Bass and Treble



The bass and treble adjustment functions are available in the CHOOSE FUNCTION menu. Adjust the amount of bass and treble you desire by turning the jog wheel. Briefly press to select and exit the adjustment screen. There is 6 dB of boost and cut provided for each of these tonal settings.

Balance

The balance adjustment function is available in the CHOOSE FUNCTION menu. Adjust the amount of balance you desire by turning the jog wheel. Briefly press to select and exit the adjustment screen.

Loudness and EQ

The loudness and EQ adjustment functions are available in the CHOOSE FUNCTION menu.

When you listen to music in the background, loudness compensation can be used to enhance low and high frequencies that are lost in low volume situations. To enable/disable loudness compensation, turn the knob right to move the cursor to ON (or left to move cursor to OFF). Briefly press the knob to select and exit the adjustment screen.

The EQ menu shows available EQ presets. To choose a preset, turn the knob to move the cursor up and down the list. If you are listening to music you will hear the changes in the audio when you move the cursor. Briefly press the knob to select and exit the adjustment screen.

Leaving CHOOSE FUNCTION Menu

To leave the CHOOSE FUNCTION menu, scroll with the jog wheel until the display reads "EXIT". Briefly press the knob to exit and return to the NOW PLAYING screen.

Controller Power Controls

To turn the controller off, press and hold the jog wheel until "TURNING OFF" is shown on the display. You can also turn the power off by pressing the POWER button on a ZON mini remote.

Working with ZAC-30jr Controllers

Adjusting Volume

Turn the jog wheel left or right to adjust the volume level. You can also use the ZON mini remote for this function.

Source Selection

A ZON mini remote is required for changing the active audio source on the ZAC-30jr. Use the SOURCE SELECT buttons to scan through the sources that are available to the ZON system. The mini remote provided with a ZAC-60 is compatible with ZAC-30 and ZAC-30jr.

Listening Enhancements

To adjust defualt settings for bass, treble, balance, loudness and EQ for the ZAC-30 and ZAC-30jr use the ZON Serial Configuration Utility.

Controller Power Controls

To turn the controller off, press and hold the jog wheel until "TURNING OFF" is shown on the display. You can also turn the power off by pressing the POWER button on a ZON mini remote.

Technical Specifications

	ZAC-30	ZAC-30jr
Amplification		
Type	Digital Stereo	Same
Power	30 Watts (15W x 2) RMS @ 6 ohm	Same
Amplifier Efficiency	> 90%	Same
Frequency Response	20 Hz - 20 kHZ	Same
Noise Floor	< -102 dBFS @ 1 KhZ 'A' Weighted	Same
THD + N	< 0.1 % @ 1 kHz, Maximum Power	Same
	<0.05 % @ 1 Watt	Same
Loudspeaker Impedance	4 - 8 ohms	Same
Loudspeaker Connection	Mini-Screw Terminals (L & R x 2)	Same
Controller		
Jog Wheel	Multi-Function Shaft Encoder	Same
Jog Wheel Indicator	Vitrual Pointer ™	None
Graphical User Interface	High Resolution Graphical User Interface with Icons	None
Remote Control	Compatible with all functions of ZON mini remote	Same
Volume Control	Adjustable via shaft encoder	Same
	Independent level from ZAC-60 parent controller	
Source Selection	Adjustable via shaft encoder or IR Remote	IR Remote Only
	Remotely selects parent ZAC-60 Source	Same
User Defined Labels	Available	None
Digital Signal Processing	Integrated onboard	Same
Equalization	User-selectable Presets	User-selectable Presets
	via GUI and setup software	via setup software only
Tone Control	User-selectable Bass, Treble and Loudness	User-selectable Bass, Treble and Loudness
	via GUI and setup software	via setup software only
Balance Control	User-selectable Presets	User-selectable Presets
	via GUI and setup software	via setup software only
IR Receiver	38 kHz pass through to selected input*	same*
Paging	Receives pages from ZON system	Same
	Cannot originate pages	Same
Connections		
Wiring Specifications	CAT-6 or CAT-5e	Same
	Class II, 4 twisted pair (100 ohm Impedance)	Same
Connection	8P8C Modular Jack from ZAC-60 Expansion Port	Same
Termination Method	568-A or 568-B	Same
Mounting		
Design Principle	In-wall single gang mounting ring	Same
Other		
Agency Approvals	UL, C, CE, FCC (Part 15 Class B)	Same
Front Panel Dimensions	2 13/16" W x 4 1/2 " H	Same
Depth Behind Wall	3 inches	Same
Colors	ZON Standard Color Pallete	Same
Shipping Weight	Approx. 1 Pound	Same

*When used with ZAC-60 that has a serial number VA0105-XXXXXX or greater

End User Notes

Worldwide Distribution by

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