Artwork is page 2-5 of 500-226.pdf
(Native artwork file is 500-226art.cdr)

Print page 4/9 on rear

Print page 3/10 on front

Print page 2/11 on rear

Print page 6/7 on rear

Print page1/12 on front

Print page5/8 on front

Fold paper in ½ as shown.

Finished product

Unless otherwise specified
Decimals are in inches
Tolerances are

Fractions	Decimals	Angles
±1/32	.xx ±.01	±1°
	.xxx ±.005	

CHANNEL VISION
Costa Mesa CA 92626

Title
Manual WA-320 and WA-360

Finish
Print black

Size		Dwg No.	
A		500-226	

Material
8.5" x 11" white paper (20-24lb)

Scale	Sheet	Rev
na	1 of 1	I

CHANNEL VISION™

2 Year Limited Warranty

Channel Vision Technology will repair or replace any defect in material or workmanship which occurs during normal use of this product with new or rebuilt parts, free of charge in the USA, for two years from the date of original purchase. This is a no hassle warranty with no mail in warranty card needed. This warranty does not cover damages in shipment, failures caused by other products not supplied by Channel Vision Technology, or failures due to accident, misuse, abuse, or alteration of the equipment. This warranty is extended only to the original purchaser, and a purchase receipt, invoice, or other proof of original purchase date will be required before warranty repairs are provided.

Mail in service can be obtained during the warranty period by calling (800) 840-0288 toll free. A Return Authorization number must be obtained in advance and can be marked on the outside of the shipping carton.

This warranty gives you specific legal rights and you may have other rights (which vary from state to state). If a problem with this product develops during or after the warranty period, please contact Channel Vision Technology, your dealer or any factory-authorized service center.

CHANNEL VISION™

www.channelvision.com

234 Fischer Avenue, Costa Mesa, California 92626 USA
(714)424-6500 • (800)840-0288 • (714)424-6510 fax
email: techsupport@channelvision.com

500-226 rev I
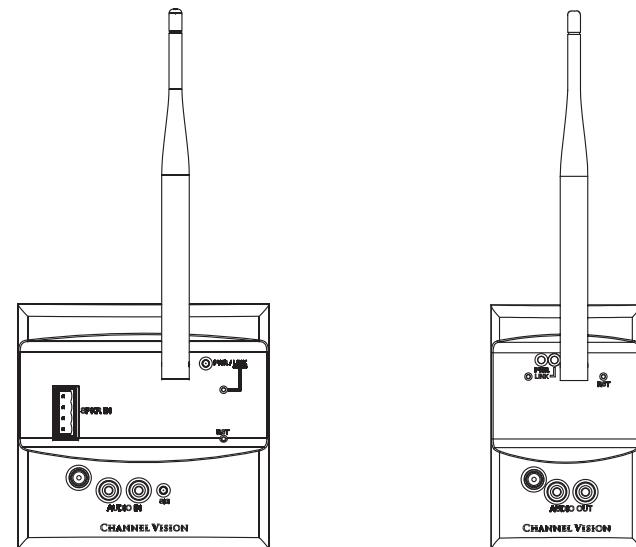
WA-320
1-to-1 Wireless Audio Transmitter

WA-360
1-to-1 Wireless Audio Receiver

CHANNEL VISION™
©2010 CHANNEL VISION TECHNOLOGY

The **WA-320** 1-to-1 Wireless Audio Transmitter and **WA-360** 1-to-1 Wireless Audio Receiver make it possible to create a distributed audio system without running wires from one room to another. The WA-320 can accept either line level or speaker level audio, making it easy to distribute signals to the rear speakers of a surround sound system. The transmitter and receiver link together on a 1-to-1 basis and can operate over 8 different transmission channels. This allows up to 8 independent stereo audio streams to be distributed in one home.

Features:
- Wirelessly transmits audio up to 300ft.
- Line-level and Speaker-level inputs (WA-320)
- Standard Line-level audio outputs (WA-360)
- 8 transmission channels
- Easy installation and linking

Antenna... Transmits RF signal to the receiver.

Speaker-Level Input... Accepts speaker-level input from an amplifier.
The terminal pinout is:
L + (Left Positive)
L - (Left Negative)
R - (Right Negative)
R + (Right Positive)

Power/Link LED... Indicates power and link activity.

Link Button... Press to begin the linking process. Press the link button on the receiver to complete the process.

Power In... Connect power supply here.

Reset Button... Press to reset transmitter.

Audio In... Connect audio source here.

Signal LED... Illuminates when signal is present.

WA-320

Antenna... Receives RF signal from the transmitter.

Link LED... Indicates when receiver is linked to a transmitter.

Power LED... Indicates power.

Link Button... Press to complete the linking process after the link button has been pressed on the transmitter.

Reset Button... Press to reset receiver.

Power In... Connect power supply here.

Audio Out... Connect audio amplifier here.

WA-360
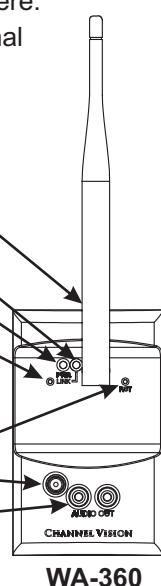
Specifications: (typical at 25º C)

General:
Storage Temperature:	-40 to +85º C
Operating temperature:	0 to +55º C

Transmit and Receive:
Input Voltage:	5 VDC @ 250mA
THD+N:	0.7% Max
S/N Ratio:	80 dB
Audio Latency:	3.8 ms
Operating Frequency:	2400 MHz
Data Rate:	1.152 Mbps
Audio Sampling Rate:	48 kHz
Channels:	8 (User Selectable)

Transmit:
Transmission Power:	8.5 dB (9.5dB Max)
Modulation Type:	GFSK
Channel Spacing:	9 MHz
Max. Audio Input:	2.6 Vpp
Input Impedance:	20 kOhm
Max. Speaker Level In:	100 Watts RMS

Receive:
RX Sensitivity:	-85 dBm
Image Rejection:	47 dBc
Audio Output Level:	2.6 Vpp
Audio Output Impedance:	16 Ohm
Frequency Response:	20-20kHz +/- 3dB
Adjacent Channel Rejection:	>45 dB

Specifications subject to change without notice

The WA-320 transmitter is compliant with FCC Part 15, subpart C. The WA-360 receiver is compliant with FCC Part 15, subpart B. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

Channel Vision WA-320	Channel Vision WA-360
FC Tested To Comply With FCC Standards	**FC** Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE	FOR HOME OR OFFICE USE

Troubleshooting:

Problem: Hum in System

Troubleshooting: Plug all parts of the system into the same outlet to see if the hum goes away.

Cause: The different components in the system are connected to different electrical grounds. This forces electrical currents to find alternate paths to ground causing an audible 60Hz hum.

Solution: Plug products into an electrical circuit with a common ground. If it can be done safely, consider lifting the ground with a ground lifting plug.

Problem: Transmitter is not linking with the receiver.

Troubleshooting: Make sure you are linking compatible models (WA-320 with WA-360). Check if pwr/lnk LED indicator on the transmitter is turning amber and that the signal LED is lit.

Cause: Link button on WA-360 is not being pressed quickly enough. Review the linking procedure in this manual. Please note that a transmitter and receiver will remain paired even after being unplugged. This allows you to complete the linking process before placing the receiver in it's final location.

Solution: Press the Link button on the WA-320 and confirm that the pwr/lnk LED turns amber. Within 6 seconds, press the Link button on the WA-360.


Problem: Can't link to the transmitter, or audio is cutting out.

Troubleshooting: Check the source, is it sending a signal? Consider setting the jumpers on the transmitter (WA-320/WA-321) to the "disable audio-sensing" position during setup procedure (see the Rear Panel Features and Connections section). This will ensure that the transmitter will not mute during pauses or very quiet passages.

Cause: Either there is no audio going into the transmitter, or the audio is very quiet which is causing the transmitter to mute.

Solution: Use a known good audio source. If you can't find any other problems, try using a different source component even if you think your audio source is OK.

WA-320 Rear Panel Features and Connections:

WA-320
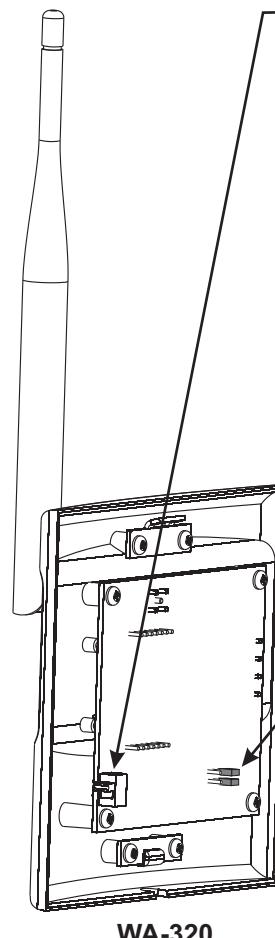
Input Switch...
Place in the down position when using speaker-level inputs and up position when using the line-level inputs.

Choosing the best input for the application...
Speaker-Level Inputs: All home stereo amplifiers have speakers outputs which can be used to feed the speaker inputs of the WA-320 even when line-level outputs are not available. These inputs are also perfectly suited for wireless home theater speaker applications where the relative volume level of all speakers needs to be determined by the master volume control of the A/V receiver.

Line-Level Inputs: All standalone audio equipment and many A/V amplifiers have line-level outputs which can be connected to these inputs. These are generally "fixed" level signals which means that some kind of volume control will be needed on the output of the amplifier connected to the WA-360.

J8 & J9 Audio Sense Jumpers...
Set to pins 1&2 to enable audio-sensing.
Set to pins 2&3 to disable audio-sensing.

When audio-sensing is enabled, the transmitter will mute whenever there is no input audio present.

When audio-sensing is disabled, the transmitter will never mute, even if there is no audio input.

IMPORTANT SAFETY INSTRUCTIONS
1. Read these instructions.
2. Keep these instructions for future reference.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this device near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with these instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. This apparatus must not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13.

⚡ **CAUTION**
**RISK OF ELECTRIC SHOCK**
DO NOT OPEN
！

Warning: To reduce the risk of electric shock, do not remove the cover (or back), no user serviceable parts inside, refer servicing to qualified service personnel.

Accessories & Complementary Products (sold separately)
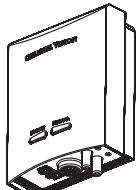
A0240... 2-channel 40 Watt amplifier. It can be used to power a small 1-room audio system or integrated with Channel Vision's A0302 to provide supplemental power to low power distributed audio systems.
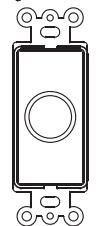
VC-302... Impedance Matching Volume Control
The VC-302 is an impedance matching volume control with an IR receiver knockout. The knockout allows Channel Vision's IR-2400 to be integrated with the volume control for applications that require IR repeating. The VC-302 comes with white, ivory, and almond knobs and face plates to easily match other wall plates in the room.
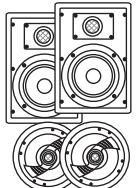
In-wall and In-ceiling Speakers... Channel Vision offers a full line of premium in-wall and in-ceiling speakers. These speakers are perfect for whole-house music or home theater applications.

4

Using the WA-320 & WA-360 for Distributed Audio
These wireless audio products make it easy to transmit audio from one room to another. Connect any standard audio component to the input connectors of the WA-320 in Room 1, and use the RCA outputs of the WA-360 to feed an amplifier in Room 2. If a fixed gain amplifier is used (such as the A0240), a volume control like the VC-302 will be needed to adjust the volume level in Room 2.

Room 1

Audio Source

WA-320

Room 2

A0240   **WA-360**

VC-302

Speaker Wire
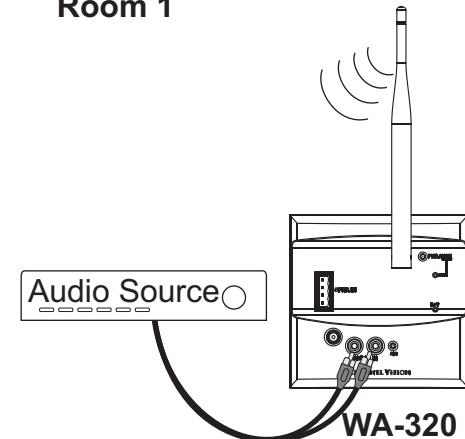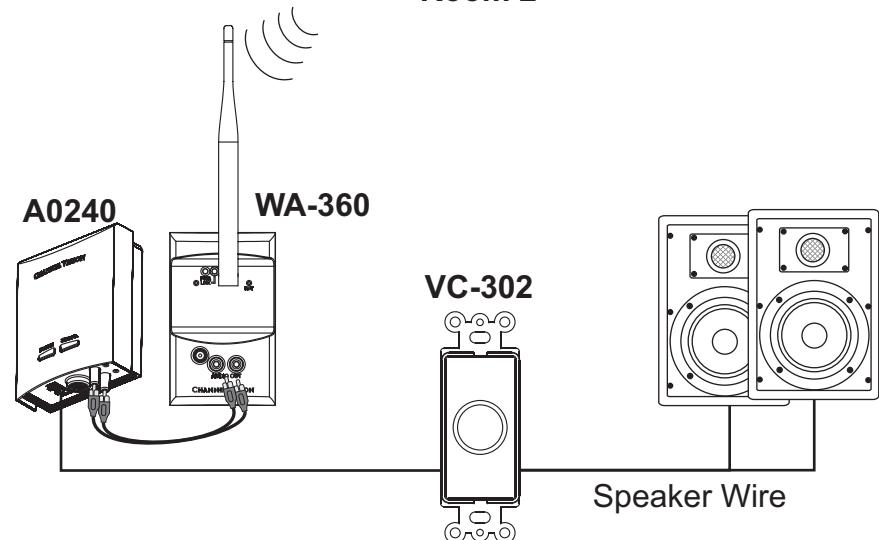
Using the WA-320 & WA-360 in a Home Theater

The WA-320 can accept the left/right surround speaker outputs from a home theater amplifier and transmit the signal to the WA-360. The WA-360 can then output the signal to a small amplifier like the A0240 which powers the speakers. The volume level of the surround speakers will be raised and lowered by the volume control of the home theater amplifier.

Front Left

Center

Front Right

Speaker Wire

Home Theater
Amplifier

Amplifier

Surround
Speaker
Outputs
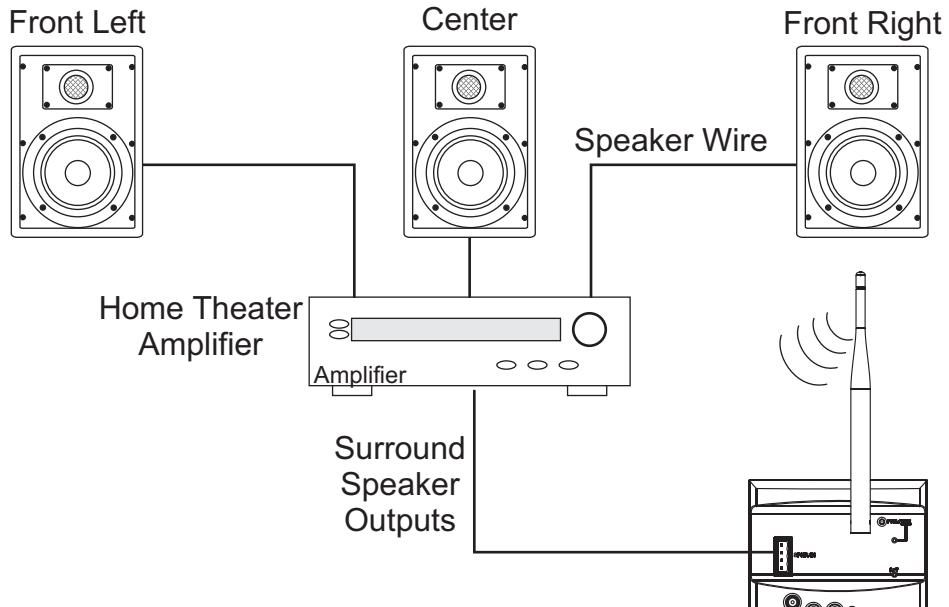
WA-320

Surround speaker are powered by the A0240, but the volume is controlled by the home theater amplifier.

A0240

WA-360

Surround
Left

Surround
Right

Speaker Wire
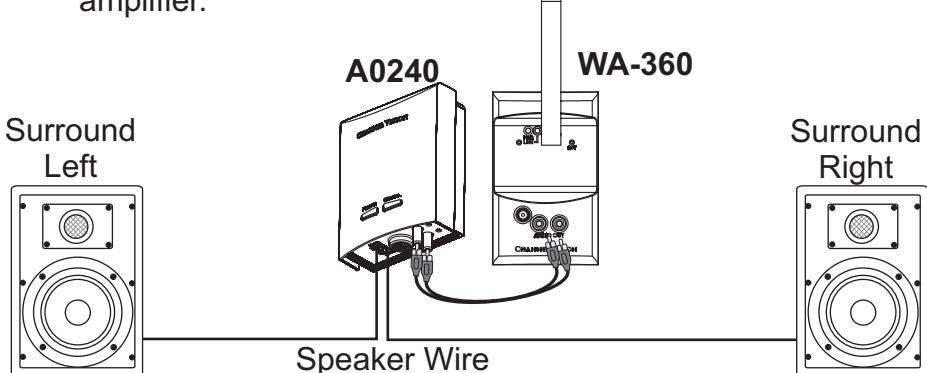
Linking the WA-360 to the WA-320

The WA-360 and WA-320 operate on a 1-to-1 basis and therefore they must be "Linked" to each other prior to the first use. Once linked they will maintain their paired status even if a power loss occurs. The "RST" button can be used to reset and separate a linked pair.

Make sure you have steady audio source playing into the WA-320.

Press and hold the Link button for 3 seconds to begin the linking process.

The green PWR/LINK LED will turn orange.

The WA-320 can broadcast on 8 different channels. **If you encounter interference, press the link button on the WA-320 to skip to a different broadcast channel.**

WA-320

SPKR IN

PWR / LINK

RST

AUDIO IN

CHANNEL VISION
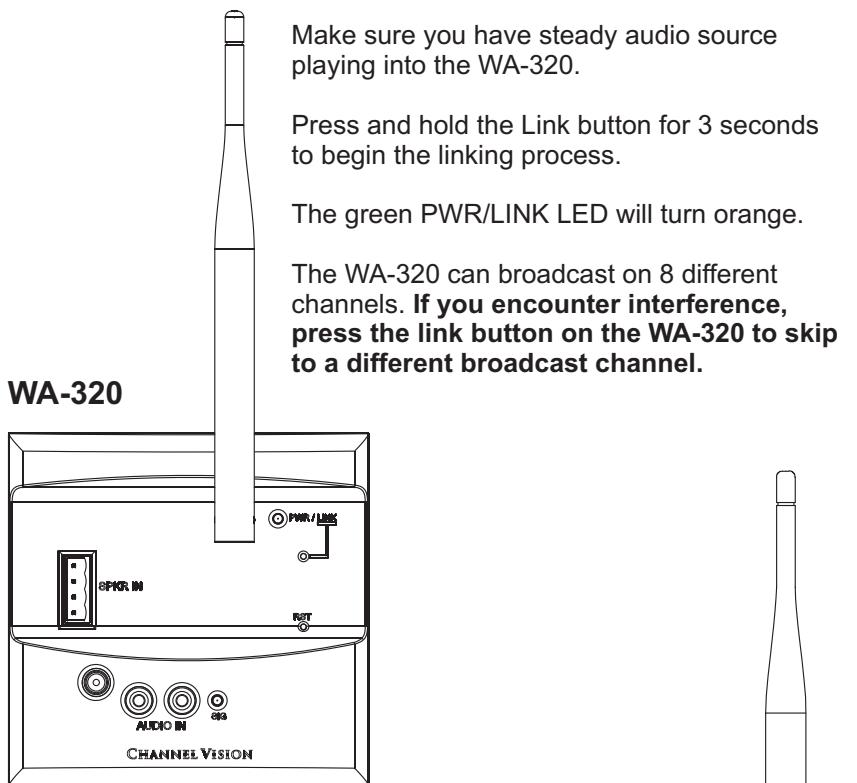
Press the link button on the receiver within 6 seconds to complete the process.

Note: The green PWR/LINK LED will blink until the receiver has been linked.

WA-360

PWR
LINK

RST

AUDIO OUT

CHANNEL VISION
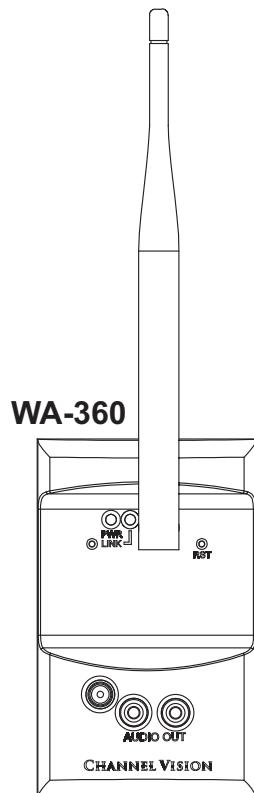
WA-320 Installation
The WA-320 can be installed in the wall using a standard 2-gang junction box or low-voltage mounting ring. For surface mounted or free-standing applications, it can be installed in the back box provided.
Follow the simple illustrations below.

In-Wall Installation

WA-320

Mounting Plate
(sold separately)

Standard
2-gang ring
or j-box
(not included)
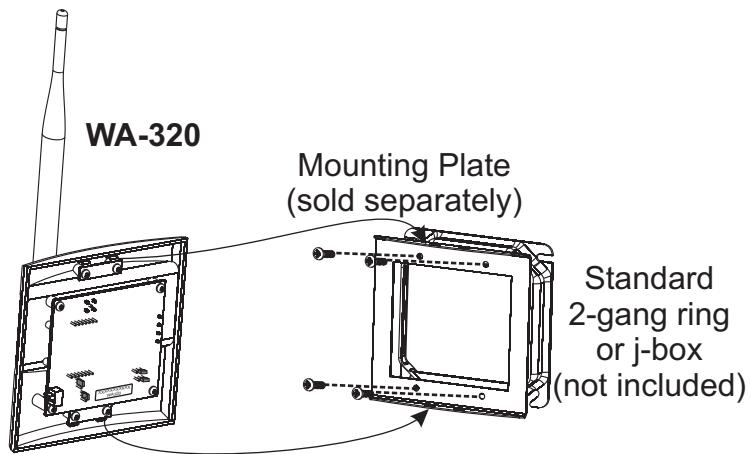
Align the tabs of the spring plates with the holes in the top and bottom flange of the mounting plate. Push on the face of the WA-320 until it snaps securely into the mounting plate.

Free-Standing Installation

WA-320

If necessary, remove the screws and metal mounting hardware.

Use the same 4 screws to attached the back box.

6
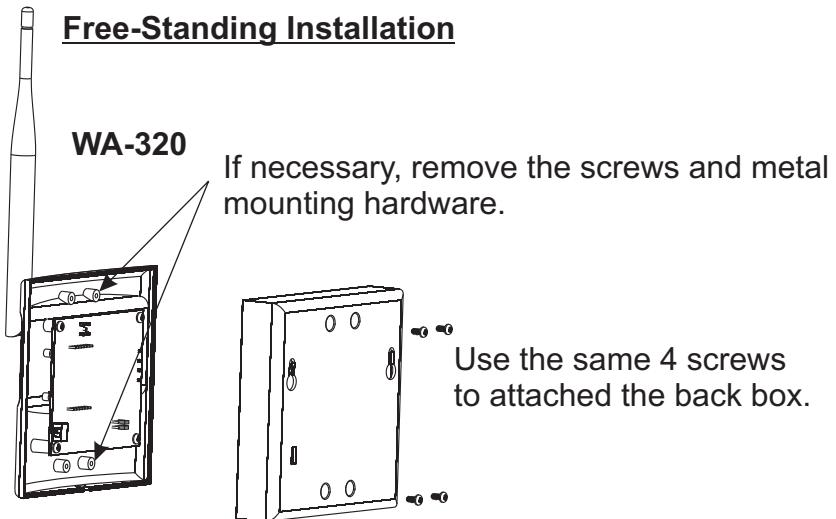
WA-360 Installation
The WA-360 can be installed in the wall using a standard 1-gang junction box or low-voltage mounting ring. For surface mounted or free-standing applications, it can be installed in the back box provided.
Follow the simple illustrations below.

In-Wall Installation

WA-360

Mounting Plate
(sold separately)

Standard
1-gang ring
or j-box
(not included)
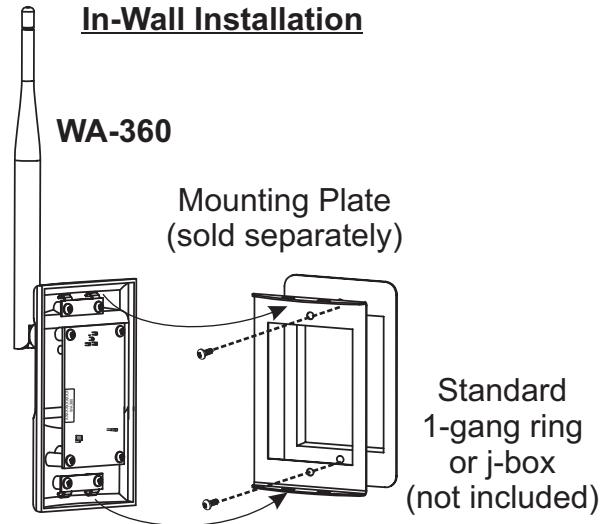
Align the tabs of the spring plates with the holes in the top and bottom flange of the mounting plate. Push on the face of the WA-360 until it snaps securely into the mounting plate.

Free-Standing Installation

WA-360

If necessary, remove the screws and metal mounting hardware.

Use the same 4 screws to attached the back box.