

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual in a safe place for future reference.

WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Do not open

- This device contains no user-serviceable parts. Do not open the device or attempt to disassemble the internal parts or modify them in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the device or other property. These precautions include, but are not limited to, the following:

Location

- Do not place the device in an unstable position where it might accidentally fall over.
- Do not place the device in a location where it may come into contact with corrosive gases or salt air. Doing so may result in malfunction.
- Do not place the device where it is always exposed to water. Doing so may result in malfunction.
- Do not place the device where it is exposed to oil. Doing so may result in malfunction.
- Construction work should be carried out in accordance with construction-related law and always by a professional constructor. If the device installation requires construction work, make sure to observe the following precautions.
 - Choose mounting hardware and an installation location that can support the weight of the device.
 - Avoid locations that are exposed to constant vibration.
 - Use the required tools to install the device.
 - Inspect the device periodically.

Connections

- Before connecting the device to a power amplifier, turn off the power for all devices. Before turning the power on or off for all devices, set all volume levels to minimum.
- Use only speaker cables for connecting speakers to the speaker connectors. Use of other types of cables may result in fire.

Maintenance

- Do not wipe the outer packaging with benzene, thinner, or synthetic detergent and do not use electrical contact cleaner. These may damage the outer packaging and dissolve the parts.

Handling caution

- Avoid inserting or dropping foreign objects (paper, plastic, metal, etc.) into holes of the grille. If this happens, have the device inspected by qualified Yamaha service personnel.
 - Do not operate the device if the sound is distorting. Prolonged use in this condition could cause overheating and result in fire.
 - When choosing a power amplifier for use with this device, make sure that the output power of the amplifier is lower than the power capacity of this device (see SPECIFICATIONS).
- Even if the output power of the amplifier is lower than the power capacity of this device (PGM), use of excessive input signals resulting in clipping may cause damage to the device.
- Malfunction or fire may occur especially when the following sounds or noises are generated:
- feedback, when using a microphone
 - continuous and extreme volume sound from a musical instrument
 - extreme continuous distorted sound
 - noise caused by plugging/unplugging the cable while the amplifier is turned on

NOTICE

To avoid the possibility of malfunction/damage to the product or damage to other property, follow the notices below.

● Handling and Maintenance

- Do not place vinyl, plastic or rubber objects on the device, since this might discolor the panel.
- When cleaning the device, use a dry and soft cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.
- Condensation can occur in the device due to rapid, drastic changes in ambient temperature-when the device is moved from one location to another, or air conditioning is turned on or off, for example. Using the device while condensation is present can cause damage. If there is reason to believe that condensation might have occurred, leave the device for several hours until the condensation has completely dried out.
- Be sure to observe the amplifier's rated load impedance (see SPECIFICATIONS), particularly when connecting speakers in parallel. Connecting an impedance load outside the amplifier's rated range can damage the amplifier.
- When connecting the speakers with high impedance, be sure that the output total of each speaker does not exceed the rated output of the power amplifier.
- ABOUT THE PROTECTION CIRCUIT
This speaker system has an internal protection circuit that shuts off the speaker unit when an excessive input signal is applied. If the speaker unit emits no sound, reduce the volume level of the amplifier immediately. The sound will return automatically in several seconds.
- Place the speaker on a flat and smooth surface.
- Do not place the speaker on the ground with the grille faced down.
- Do not touch the speaker driver unit.

● About This Manual

The illustrations as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your device.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the device.

UNPACKING

Unpack the contents and confirm that all the following items are included.

- Speaker x 2
- Bracket base x 2
- Mounting bracket x 2
- Bracket cover x 2
- Screw for attaching the mounting bracket x 4 (VXS8/VXS8W: M6, VXS5/VXS5W: M5)
- Stopper screw x 2 (M3, VXS8/VXS8W only)
- Bolt with hexagon hole x 2
- Safety wire x 2
- Terminal cover x 2
- Safety pin x 2
- Hexagon wrench x 1
- Owner's Manual (this manual)

* Screws/bolts to fasten the bracket base onto the wall/ceiling and speaker cables are not included.

SPECIFICATIONS

		VXS8/VXS8W	VXS5/VXS5W
Type		2-way, Bass-reflex	
Component	LF	8" (20 cm) Cone driver	5-1/4" (13 cm) Cone driver
	HF	1" (2.5 cm) Soft dome tweeter	3/4" (2 cm) Soft dome tweeter
Coverage angle (500 Hz - 4 kHz on average)		100° H x 100° V	120° H x 120° V
Nominal impedance		8 Ω	
Power rating (IEC, 100h) *1	NOISE	90 W	75 W
	PGM	180 W	150 W
	MAX	360 W	300 W
Sensitivity (1W, 1m) *2		91 dB SPL	89 dB SPL
	Maximum SPL (Calculated, 1m) *3	117 dB SPL	114 dB SPL
Frequency range (-10 dB) *2, *4		51 Hz - 20 kHz	62 Hz - 20 kHz
Crossover frequency		2.8 kHz	3 kHz
Connector		Euroblock (4 pin) x 1 (input: +/-, loop-thru: +/-) Max. wire size 12 AWG (2.5 mm ²)	
Transformer taps	70 V	60 W, 30 W, 15 W, 7.5 W	30 W, 15 W, 7.5 W, 3.8 W
	100 V	60 W, 30 W, 15 W	30 W, 15 W, 7.5 W
Overload protection		Full-range power limiting to protect network and transducers	
Magnetically shielded		No	
Dust and water resistant *5		IP35	
Enclosure	Shape	Rectangle	
	Cabinet material	ABS	
	Baffle material	PC/ASA	
Grille material		Powder coated perforated aluminum (t=1 mm) Aperture ratio: 51%	
Finish		VXS8/VXS5: Black (Not painted, approximate value: Munsell N3) VXS8W/VXS5W: White (Not painted, approximate value: Munsell 9.3)	
	Dimensions (Speaker only) (W x H x D in vertical cabinet orientation)	278 x 430 x 239 mm (10.9" x 16.9" x 9.4")	176 x 280 x 163 mm (6.9" x 11.0" x 6.4")
Net weight (Speaker only, 1 piece)		8.2 kg (18.1 lbs)	3.6 kg (7.9 lbs)
Packaging		Packaged in pair	

*1: Pink noise with 6 dB crest factor.

*2: Half-space (2π)

*3: Calculated based on power rating and sensitivity, exclusive of power compression.

*4: When connecting with low impedance

*5: IP34 when installing the speaker to the ceiling vertically.

Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.

The dimensions are shown overleaf.

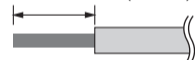
INSTALLING THE SPEAKERS

Install the speakers onto the wall/ceiling with the supplied brackets. Ensure that the wall/ceiling is sufficiently strong. Illustrations in this manual are for the VXS5. The installation method is the same for other models.

Pre-installation (Preparation of the cable)

Use stranded wire for cables attached to the Euroblock connector. Strip their insulation as shown in the figure and connect them.

About 7 mm (0.3 in.)



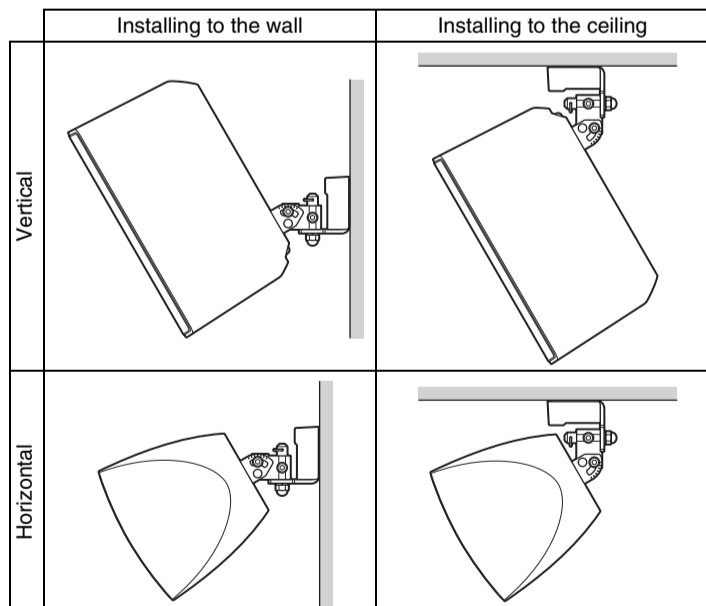
NOTE

Do not plate stranded wires by solder. Doing so will cause the wire to break.

An installed speaker is shown below. Install the bracket base and attach the mounting bracket as shown.

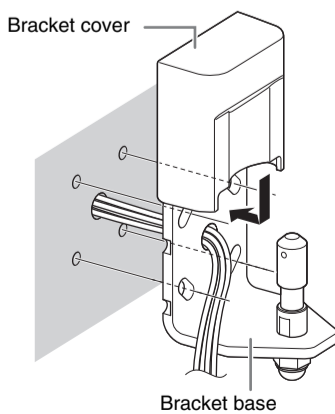
NOTE

- When installing the speaker to the ceiling with the grille parallel to the ground, install the speaker horizontally.
- When installing the speaker to the ceiling, be sure to install the bracket base with its shaft facing horizontally, and not inclined to the ground.
- Mounting bracket is made to not turn left or right when installing the speaker to the ceiling.



1 INSTALL THE BRACKET BASE ONTO THE WALL /CEILING

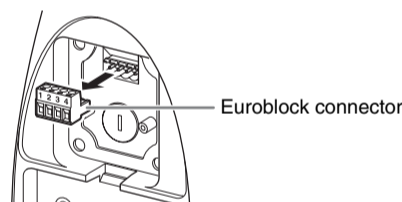
- Put the bracket base onto the wall/ceiling and mark the position for the screws/bolts and cables. The diameter of the screw/bolt holes at the four corners is M6, and speaker cables hole at the center is ø11 mm.
- Make holes through the wall/ceiling for the bolts and cables, as required, and feed the bolts and cables from the amplifier through the holes, as shown.
- Install the bracket base onto the wall/ceiling. Make sure to fasten four corners of the bracket base.
- Pass cables through the gap at the lower part of the bracket cover, and put the bracket cover on the bracket base.



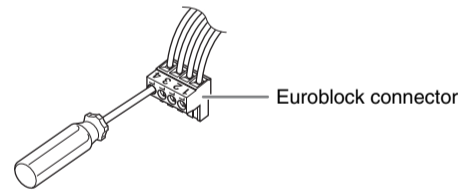
NOTE
If you want to adjust the slack of cables last, the bracket cover can be attached after step 5-6.

2 CONNECT THE WIRING TO THE CONNECTOR

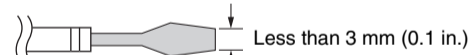
- Remove the Euroblock connector.



- After loosening the terminal screws of the Euroblock connector with a flat-blade screwdriver, insert the cable into each terminal and tighten the screws. Make sure that cables cannot be pulled out.



NOTE
Use a flat-blade screwdriver with a blade less than 3 mm (0.1 in.).

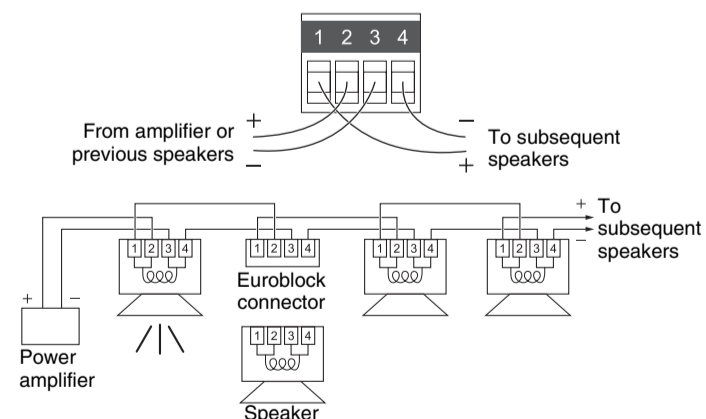


There are two acceptable wiring methods.

CAUTION
When connecting with low impedance, take note of the combined resistance.

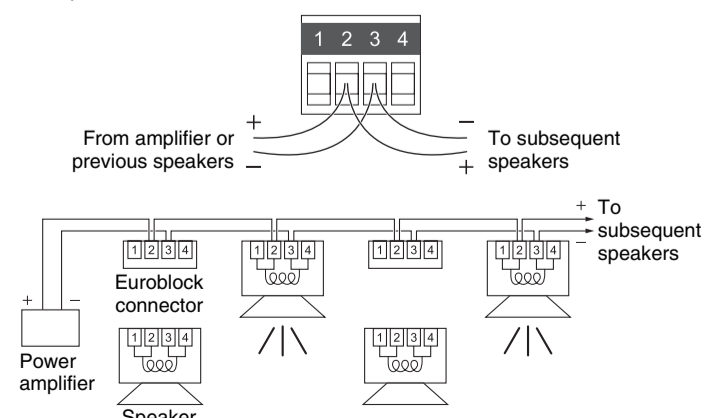
Using Loop-Through Terminals

For this method, cables are connected from terminals 1 and 4 to the subsequent speaker. If the Euroblock connector is disconnected from a speaker, all subsequent speakers will not work. This can be useful to identify which speaker has a problem.



Paralleling Input Terminals

For this method, cables are connected to terminals 2 and 3 of each speaker. Since the cables are connected via Euroblock connectors, subsequent speakers can work even if a problem occurs with a speaker.



3 SET THE LINE VOLTAGE/IMPEDANCE AND POWER

Select the line voltage/impedance (100V/70V/8Ω) and power tap for 100V/70V line distributed system, by rotating the tap selector switch on the rear side of the speaker with a flat-blade screwdriver.

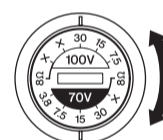


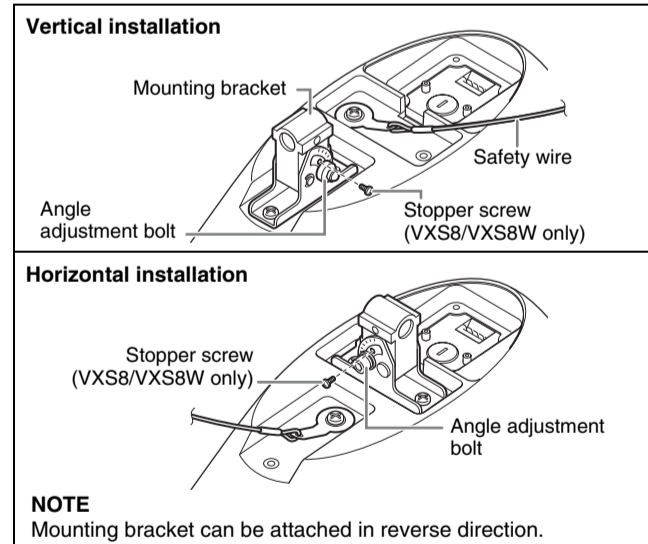
Illustration indicates the setting at 30 W for 100 V line and 15 W for 70 V line.

CAUTION

- The "X" position should not be selected. The 8Ω position should be selected for 8Ω audio systems only. If the setting is incorrect, it may cause malfunction of the speaker and amplifier.
- Make sure the amplifier is switched off before operating the tap selector switch.

4 ATTACH THE MOUNTING BRACKET AND SAFETY WIRE

- Attach the mounting bracket and safety wire to the speaker. Use the supplied screws to attach the mounting bracket. The way to attach the mounting bracket depends on the orientation of the speaker (vertical or horizontal).



NOTE
Mounting bracket can be attached in reverse direction.

- Set the desired vertical angle of the speaker. Loosen the angle adjustment bolt with the supplied hexagon wrench, adjust the angle of the speaker, and tighten the angle adjustment bolt to fix the speaker (indication of torque: 6.5 N·m).

NOTE

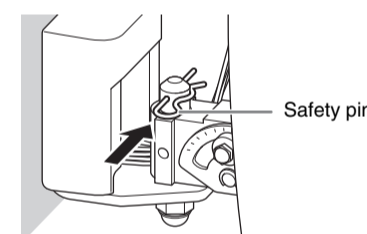
- Guide marked on the mounting bracket is every 10°.
- (VXS8/VXS8W only) When installing the speaker to the wall with a vertical angle of 30° or less, attach the supplied stopper screw.

5 INSTALL THE SPEAKER TO THE BRACKET BASE AND FIX THE CABLE

- Install the mounting bracket to the bracket base.

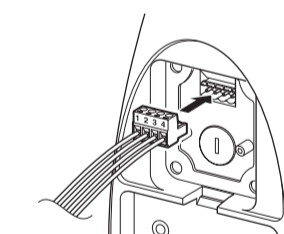


- Attach the safety pin. Be sure to attach the safety pin to prevent the mounting bracket from falling.

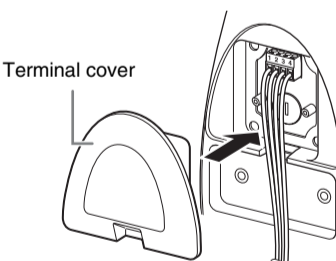


NOTE
The safety pin can be attached from either side of the mounting bracket depending on the angle of the speaker.

- Plug the Euroblock connector into the socket in the speaker.

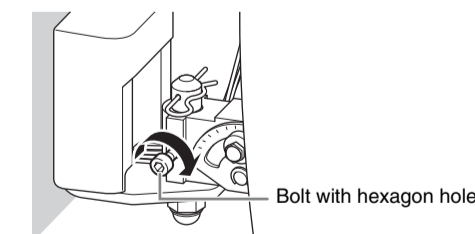


- Attach the terminal cover.



- (If installing the speaker to the wall) turn the speaker horizontally to set the angle.

- Make sure the mounting bracket is seated against the bracket base, then tighten the supplied bolt (indication of torque: 6.5 N·m).



NOTE

- When installing the speaker to the ceiling in particular, make sure the mounting bracket is seated against the bracket base.
- The bolt with hexagon hole can be attached from either side of the mounting bracket (left or right) depending on the angle of the speaker.

- Install the safety wire to the wall/ceiling.

NOTE

- Make sure to take measures to prevent the speaker from falling down in the event of an installation failure.
- When installing the safety wire to the wall, install it higher than the wire's attachment point on the speaker, with as little slack as possible.
- If the safety wire is too short, prepare another wire appropriate for the speaker weight and installation conditions. If the wire is too long, should the speaker fall, the wire may snap as a result of too much strain.

