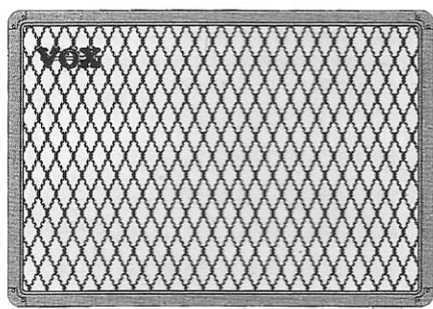


Valvetronix

Extension Speaker Cabinet

English

AD212 & AD412



*Owner's Manual
Manuel D'utilisation
Bedienungsanleitung
取扱説明書*



Precautions

Location

Using the unit in the following locations can result in a malfunction.

- In direct sunlight
- Locations of extreme temperature or humidity
- Excessively dusty or dirty locations
- Locations of excessive vibration
- Close to magnetic fields

Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Handling

To avoid breakage, do not apply excessive force to the switches or controls.

Care

If the exterior becomes dirty, wipe it with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

Keep this manual

After reading this manual, please keep it for later reference.

Keeping foreign matter out of your equipment

Never set any container with liquid in it near this equipment. If liquid gets into the equipment, it could cause a breakdown, fire, or electrical shock. Be careful not to let metal objects get into the equipment.

CE mark for European Harmonized Standards

CE mark which is attached to our company's products of AC mains operated apparatus until December 31, 1996 means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC). And, CE mark which is attached after January 1, 1997 means it conforms to EMC Directive (89/336/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (73/23/EEC).

Also, CE mark which is attached to our company's products of Battery operated apparatus means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

IMPORTANT NOTICE TO CONSUMERS

This product has been manufactured according to strict specifications and voltage requirements that are applicable in the country in which it is intended that this product should be used. If you have purchased this product via the internet, through mail order, and/or via a telephone sale, you must verify that this product is intended to be used in the country in which you reside.

WARNING: Use of this product in any country other than that for which it is intended could be dangerous and could invalidate the manufacturer's or distributor's warranty.

Please also retain your receipt as proof of purchase otherwise your product may be disqualified from the manufacturer's or distributor's warranty.

Welcome aboard!

Many thanks for purchasing a VOX AD212 or AD412 speaker cabinet. Both of these cabinets are crafted from the finest materials and feature newly designed Custom VOX/Celestion Neodymium magnet speakers (dubbed *NeoDog*) that are highly efficient, extremely light weight and SOUND GREAT. They both also offer multiple impedance options, which means they can be connected to any amplifier of your choice while maintaining full efficiency and superior tone. Enjoy!

Getting Hooked Up

You'll notice the back of the cabinets have four (4) speaker jack options. *Please read this section carefully before making any connections to avoid doing any unnecessary harm to the speakers or amplifier and so that you can achieve the best possible sound.* On amplifiers with selectable impedance settings, always make sure that the impedance of the amplifier is set to the exact impedance of the jack(s) you use on the cabinet or of the total impedance in a multiple cabinet setup. On amps without selectable impedance settings (usually solid state) never connect speaker impedances lower than the recommended impedance for that particular amplifier. This can either be 8, 4 or 2 Ohms depending on the amp.

In multiple speaker cabinet configurations, you will have to use a little mathematics (Ohm's law) in order to figure out the correct setting. The formula will depend on whether you are hooking the speaker(s) up in series or parallel. Parallel is more common so we'll deal with this first...

Do not connect or disconnect speaker cables whilst the amplifier is operational. Ensure that the amplifier is turned off before doing this.

1. Parallel

When using two cabinets of the same impedance in parallel, simply divide the impedance of one cabinet by 2 and you get their combined impedance. For example, when using two 8 Ohm cabinets in parallel, set the amp for 4 Ohms ($8 \div 2 = 4$). Likewise, when using two cabinets and each is 16 Ohms set the amp for 8 Ohms ($16 \div 2 = 8$).

Using two cabinets of different impedance is more complicated. Here is the Ohm's Law formula for connecting two speakers (or cabinets) in parallel:

R1 is the impedance of our first cabinet; R2 is the impedance of the second one and R3 is the resulting impedance when they are hooked-up together.

$$R3 = \frac{R1 \times R2}{R1 + R2}$$

For example, let's take two 16 Ohm cabinets and use the formula:

$$R3 = \frac{16 \times 16}{16 + 16} = \frac{256}{32} = 8 \text{ Ohms}$$

Let's try two cabinets of different impedance:

$$R3 = \frac{16 \times 8}{16 + 8} = \frac{128}{24} = 5.33 \text{ Ohms}$$

In this case, set your tube amp to 8 Ohms. If you have a solid state amp though, please read your amplifier's owner's manual before proceeding. If the minimum impedance of your amp is 8 Ohms do NOT use it with 16 and 8 Ohm cabinets in parallel. If the minimum impedance for your amp is 4 Ohms, you are OK to go.

2. Series

In series configuration, all you do is add the individual impedances of the cabinets. For example, if you hook up two 8 Ohm cabinets to your amp, you need to set your amp's impedance to 16 Ohms ($8 + 8 = 16$). If however, one cab is 8 Ohms and the other is 4 Ohms, the total impedance is 12 Ohms ($8 + 4 = 12$). As there are no 12 Ohm settings on amps, you should set your tube amp to 16 Ohms. If you have a solid state amp (most of which do NOT offer impedance selection) you are probably safe to use this particular cabinet combination but, once again, please make sure by checking your amp's manual first.

USE WITH VALVETRONIX COMBO OR HEAD

The following explains how to connect your new cabinet into either the Valvetronix AD60VT & AD120VT combos or the AD60VTH & AD120VTH heads.

AD120VT (combo) with AD212 or AD412: Plug the two speaker outputs into the two stereo 8 Ohm jacks.

AD60VT (combo) with AD212 or AD412: Plug the speaker output into the 4 Ohm mono jack.

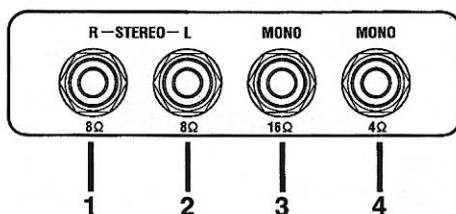
AD120VTH (head) with one AD212 or AD412: Plug one speaker output from the Left channel and one from the Right channel into the two stereo 8 Ohm jacks. Set the impedance selector on the amp to 8 Ohms.

AD120VTH with two AD212's or AD412's: (for the ultimate in stereo separation). Plug one speaker output from the Left channel and one from the Right channel into the 16 Ohm mono jacks on each cabinet. Set the impedance selector on the amp to 16 Ohms.

AD60VTH with one AD212 or AD412: Plug one speaker output into the 16 Ohm mono jack. Set the impedance selector on the amp to 16 Ohms.

AD60VTH with two AD212's or AD412's: (for increased sound spread). Plug the

speaker outputs into the 16 Ohm mono jacks on each cabinet. Set the impedance selector on the amp to 8 Ohms.

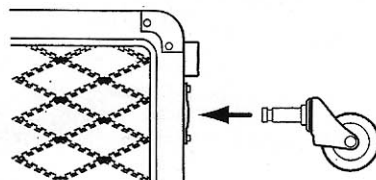


- 1) **8 Ohm stereo jack connection:** use this jack when connecting the right side of a stereo combo or head.
- 2) **8 Ohm stereo jack connection:** use this jack when connecting the left side of a stereo combo or head.
- 3) **16 Ohm mono jack connection:** use this jack when connecting a mono combo or head.
- 4) **4 Ohm mono jack connection:** use this jack when connecting a mono combo or head.

IMPORTANT NOTE: BE SURE TO **ALWAYS** FOLLOW YOUR AMPLIFIER'S INSTRUCTION MANUAL WHEN CONNECTING YOUR AMP TO THESE CABINETS. IMPROPER CONNECTIONS CAN CAUSE DAMAGE TO YOUR AMPLIFIER. DO **NOT** USE AN IMPEDANCE JACK ON THE CABINET THAT IS LOWER THAN RECOMMENDED FOR YOUR SOLID STATE AMPLIFIER. WE RECOMMEND USING THE EXACT IMPEDANCE SETTING WHEN USING A TUBE HEAD OR COMBO.

INSTALLING THE CASTORS

The AD412 includes a set of (4), easy-to-install, push-in castors so you can put wheels on your VOX cabinet, if you so wish. To install these, carefully lay the cabinet on its side (handle facing down) on a smooth (preferably carpeted) floor. Then insert one castor slowly into a socket about a 1/2" until you hear it "click" once. Then push it in the rest of the way. Repeat this for the other three wheels.



To remove the castors, simply grab the wheel and pull firmly. They will come out in one motion...and don't worry, even though these castors are easy to install and remove, they will **NOT** come out when you're wheeling your cabinet around!

NOTE: Do **NOT** lay the cabinet on its front or back when installing or removing the castors as doing so could damage the grill cloth or speaker jacks. For safety reason we recommend that the castors only be used for transportation purposes and should be removed when in use.

AD212/AD412 Specifications

AD212

Max input:

80W (L/R) stereo, 160W mono

Input Impedance:

8 Ohm (L/R) stereo, 16 Ohm mono, 4 Ohm mono.

Speakers:

Vox **NeoDog** Original Neodymium Speaker (Celestion)

12 inch, 8 Ohm x 2

Enclosure:

Closed back cabinet

Dimension (W x D x H):

701 x 271 x 501 (mm) / 27.60" x 10.70" x 19.70"

Weight:

19 kg / 41.89 lbs.

AD412

Max input:

160W (L/R) stereo, 320W mono

Input Impedance:

8 Ohm (L/R) stereo, 16 Ohm mono, 4 Ohm mono.

Speakers:

Vox **NeoDog** Original Neodymium Speaker (Celestion)

12 inch, 16 Ohm x 4

Enclosure:

Closed back cabinet

Dimension (W x D x H):

701 x 360 x 927 (mm) / 27.60" x 14.20" x 36.50" (without castors)

Weight:

38 kg / 83.78 lbs. (without castors)

Accessories

Included: 4 castors

*Specifications and features are subject to change without notice

FOR MORE INFORMATION ON VALVETRONIX AMPLIFIERS PLEASE VISIT
WWW.VALVETRONIX.COM