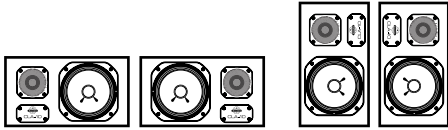


## PLACEMENT

Proper placement is essential for getting the ideal, intended response and imaging from any studio monitor. Of course, not every room and setup is the same, but these simple steps will ensure that your source material is being heard as accurately as possible.

1. **Left and right:** Ensure that the left speaker is placed on the left side, and the right speaker is placed on the right side. This is important for correct phase and imaging. The CLA-10 Active can be used vertically but be aware that the left speaker and right speaker should be swapped in this case, retaining the tweeters on the outside orientation.



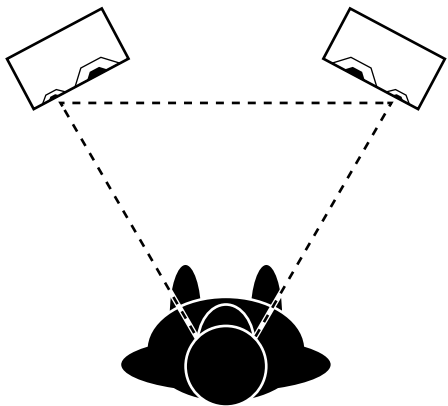
Horizontal Orientation

Vertical Orientation

2. **Room considerations:** Place your monitors away from walls and corners. Ideally, they should be centered in your room. Because this isn't always possible, a good rule of thumb is to keep at least 12 inches of space between the monitors and the back wall, maintaining a symmetrical distance from the side walls.

3. **Height:** Posit your monitors at ear-height from your most comfortable mixing/listening position to make sure you're in the proper sweet spot at all times.

4. **Distance and width:** From your most comfortable listening position, create an equilateral triangle from your ears to the monitors, and the monitors to each other as shown below. Measure the distance between the tweeter of each speaker, and ensure that your listening position is that same distance — directly in the center. Finish by rotating each monitor inward towards your listening position. It's best to ensure that each monitor has been rotated by the same amount. This may be an old-school method, but it's a method of proven science to help any listener hear the intended stereo image.



## ADVANCED ADJUSTMENT

**Calibration:** A decibel meter (or even a decibel meter app on your phone) is very helpful while adjusting monitor gain. This is strongly recommended to ensure that your stereo image between a pair of monitors is accurate. Note that each monitor needs to be individually calibrated.

1. Set your meter to C-weighted monitoring with slow response.
2. Place the decibel meter at your listening position — right where your ears go.
3. Turn the monitor gain to 0 on both monitors and power them on.
4. Set your source hardware to Unity.
5. Set your pink noise generator to -20dB.
6. Slowly bring up the left monitor gain until the decibel meter reads 80dB.
7. Power the left monitor off.
8. Slowly bring up the right monitor gain until the decibel meter reads 80dB.
9. Power the left monitor back on. You're done!

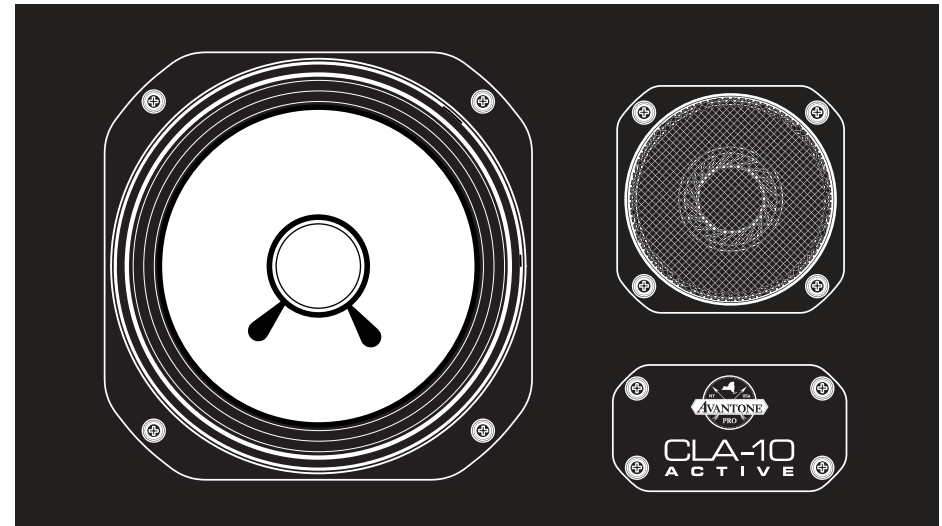
*NOTE: If you are calibrating multiple pairs, then repeat the same process for each speaker.*

## SPECIFICATIONS

- > **System Type:** 400 W Total full-range two-way stereo pair / 200 W per speaker
- > **Frequency Response:** 60 Hz-20,000 Hz (Accessible musical range)
- > **Sensitivity:** 90 dB SPL (1 W, 1 m on axis)
- > **LF Driver:** AV10-MLF 18 cm cone
- > **HF Driver:** AV10-MHF 3.5 cm soft dome
- > **Cabinet:** Sealed cabinet design, hybrid medium-density fiberboard with real wood veneer
- > **Cabinet Dimensions:** 381.5 mm x 215 mm x 197.5 mm (15" x 8 1/2" x 7- 7/8")
- > **Cabinet Weight:** 8 kg / 17.6 Lbs (each)

# CLA-10 ACTIVE

## ACTIVE STUDIO MONITOR



## IMPORTANT SAFETY INSTRUCTIONS

Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerable in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) have specified the permissible noise level exposures shown in the following chart.

According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here.

Duration, per day in hours	Sound Level dBA, slow response	Typical example
8	90	Duo in small club
6	92	
4	95	Subway train
3	97	
2	100	Very loud classical music
1.5	102	
1	105	That couple screaming at each other
0.5	110	
<0.25	115	Loudest parts at a rock concert



The Avantone CLA-10 Active Monitors comply with all applicable / RoHS / WEEE European Union directives.

**Do not attempt to service this unit yourself, as it will void your warranty.** Please check your unit carefully upon receipt and return to place of purchase immediately if there are any problems with the product. After that, the standard AVANTONE 5 YEAR warranty will apply to defects in materials and workmanship.

## CONNECTING YOUR CLA-10 ACTIVE MONITORS

Before plugging in and powering up your speakers please take a moment to be certain that the proper AC MAINS operating voltage setting has been selected on the rear panel.

Set all faders and level controls to minimum on your console/monitors feed. All other equipment should be powered up before turning on the

## U.S.A.

Should your AVANTONE product require service, please contact the AVANTONE PRO Service Department. +1 845 642 3697-or- e-mail info@avantonepro.com. **You must obtain an RA # (Return Authorization number) from us before shipping a unit back to us. This RA # must be clearly written on the outside of the box.**

**Please safely pack the units...It is best to use the original packing materials. AVANTONE PRO cannot be responsible for any damages incurred in shipping to us due to poor packaging. PLEASE PACK CAREFULLY and FULLY INSURE THE SHIPMENT.**

## INTERNATIONAL

For service or warranty assistance, please contact the AVANTONE PRO distributor in your country through the dealer from whom you purchased this product.

## LIMITED 5 YEAR WARRANTY

AVANTONE CLA-10 Actives are warranted by Avantone Pro to be free from defects in materials and workmanship for the period of 5 YEARS to the original purchaser. In the event of such defects, the Avantone Pro product will be repaired without charge or, at our option, replaced with a new one if delivered to Avantone Pro prepaid, together with a copy of the sales slip or other proof of purchase date. The warranty excludes problems due to normal wear, abuse, shipping damage or failure to use the product in accordance with the specifications.

All speaker systems are vulnerable to damage from sustained amplifier clipping. This can be described as a distortion of the signal caused by the amplifier running out of headroom. Heat will then be generated in the voice coil of the driver beyond the heat handling capabilities of wire and glue. At some point the voice coil will burn, causing the speaker to sound very distorted; eventually the driver will stop working.

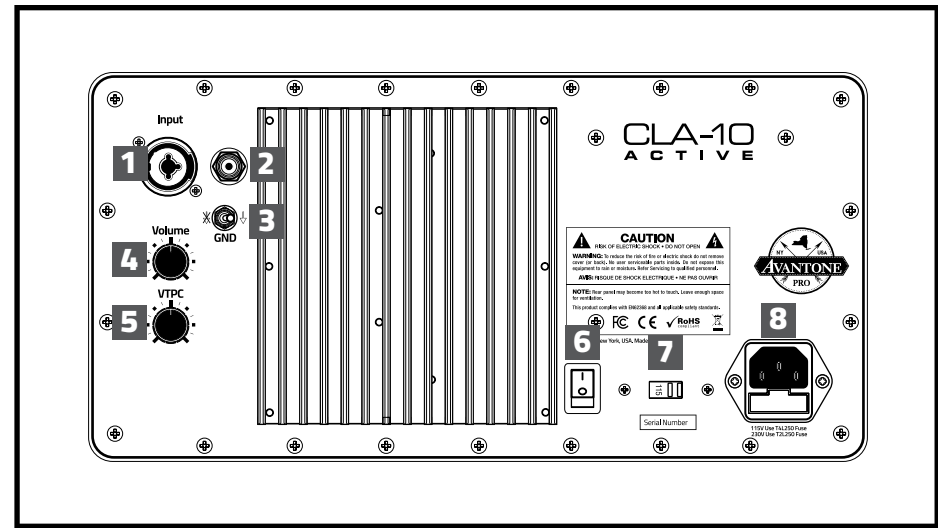
All parts and labor are covered under this Limited Warranty. However, if it is determined by AVANTONE PRO that the voice coil was burned due to sustained amplifier clipping, we reserve the right to charge the customer for the cost of the repair, since this is considered abuse.

Avantone Pro shall not be liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation or commercial loss or any other damages, whether incidental, consequential, or otherwise. This warranty gives you specific legal rights, and you may have other rights, which will vary from state to state.

**This warranty is not transferable.**



CLA-10 Actives so as to avoid loud turn-on spikes and surges. The input "SYSTEM GAIN" control is set at minimum at the factory so as to avoid an accidental overload upon initial hookup. This is intended to force the engineer to purposefully set the gain where appropriate and safe in reference to the monitor send output level from the console.



## REAR PANEL CONNECTIONS

**1. Combo TRS/XLR Input:** This combo XLR input accepts a BALANCED male XLR plug as well as a 3-conductor BALANCED TRS 1/4" connection. For unbalanced connections, please refer to the RCA input only.

**2. RCA Input:** This input accepts an unbalanced RCA plug.

**3. GROUND LIFT Switch:** By engaging this switch the pin 1 shield is lifted at the input jack. This can be used to aid in ground loop control of the incoming analog line signal.

	XLR	TRS	RCA
HOT (+)	Pin 2	Tip	Tip
COLD (-)	Pin 3	Ring	
Shield (Ground)	Pin 1	Shield	Shield

**4. Volume:** This passive attenuator adjusts the level of the signal coming into the unit. Rotating the control clockwise reduces attenuation while a counter-clockwise rotation increases attenuation. The detented gain positions allow for repeatable settings between speakers for proper matching.

*NOTE: When the signal appearing at the input is too hot, the amplifier can overload causing distortion and possible damage to the speaker. If overload occurs, decrease the input level by turning the knob counter-clockwise a few clicks.*

**5. VTPC:** (Virtual Tissue Paper Control) Adjusts the high frequency driver voice. Range is +3dB to -20dB. The Full clockwise setting matches the average standard voicing of the vertical passive monitors and roughly 3 o'clock matches the average standard voicing of the horizontal passive monitors.

**6. POWER Switch:** This switch turns the toroidal transformer power on and off. The unit still has live AC power at the inlet and upstream from the power switch.

**7. VOLTAGE SELECT Switch:** There is a switch on the power supply for selecting the proper AC/MAINS operating voltage for your location. CHECK THIS SETTING BEFORE APPLYING POWER!

**8. AC INPUT:** The AC inlet accepts standard IEC320 C14 cables. The integrated fuse tray should have the correct fuse value installed as indicated on the rear panel for the AC voltage being applied.

## CLA-10 ACTIVE BREAK-IN SUGGESTIONS

Because any new full-range speaker exhibits a certain amount of "tightness" when first played, you will most likely benefit from a break-in of the CLA-10 Active if you are going to be doing critical work. Normally, standard usage of the speakers over a short period of time is all that is required before you recognize the tonal changes that occur after some hours of use. However, if you need to get to work immediately; then we do have a suggested break-in mode that will advance the natural time process much quicker. Here's the quick version!

Though the CLA-10 Actives do perform solidly right out of the box, it is beneficial to run them through a burn-in period before using them in professional mix situations.

Some high-end speaker manufacturers claim that many speakers need a 100-200 hour break-in period before they are "normalized," which most professional engineers do just to get used to their new monitors. **We feel that simply playing any music with good low frequency content through them on a loop for 24-72 hours at a medium volume level can easily do this.** Users have reported that this speeds up the break-in process, and the speakers open up a bit more than when first powered up.

Whatever process you utilize, rest assured that you have purchased an amazing tool that will aid in determining the proper levels and tones of your all-important mixes!

Enjoy and here's to accurate mixes!