

M-112HD

M-115HD

Monitor



M-112



M-115

Owner's Manual

Crate Pro Audio monitors bring the "house" sound to the stage. High power handling, high efficiency and ultra flat response give Crate monitors a true sound without false coloration or hot spots. Their low profile means your audience watches you and not your equipment. Horn placement maximizes sound at your ears, not washing across the stage.

In order to achieve the highest level of performance from your monitor, please read this manual prior to its use.

And "Thank You" from





M-112HD/M-115HD Monitor

Your M-112HD/M-115HD is a high-quality two-way monitor speaker with a direct radiating vented woofer and horn-loaded high frequency driver. These professional quality transducers are contained in a durable enclosure with a rugged 16 gauge steel grill for superior protection while in use.

This system is designed to provide high quality stage monitor sound and is optimized for monitor use. The speaker will provide best results at distances of four to eight feet from the monitor to the performer.

The M-112HD and M-115HD monitors are equipped with a pair of Speakon® jacks and a pair of 1/4" jacks. Speakon® connectors are recognized as the standard for professional installations, assuring a secure, permanent connection that won't corrode, vibrate loose or be as easily tampered with as 1/4" phone plugs. While the 1/4" jacks are convenient, use of the Speakon® jack is recommended when using power amplifiers over 150 watts, for permanent installations or when daisy chaining a number of monitors.

Because monitors are often used along with microphones on stage there is always the possibility that feedback might occur if a live mic is pointed at or located too close to a stage monitor. Some suggestions to help minimize the problem of feedback include:

- Turn the monitor volume up no more than required
- Turn off (or down) unused microphones
- Use a directional microphone located between the monitor and the performer, pointed toward the performer and away from the monitor
- Don't try to cover too much of the stage with one monitor. A good rule of thumb is one person per monitor

Monitors normally give best results when placed on the floor pointed up at the performer from in front, which keeps the monitor pointed at the fewest microphones. A monitor pointed across the stage (often called side fill) is likely to be pointed at several microphones, offering many more chances for feedback.

The use of an electronic equalizer to "pull down" feedback can be effective if used correctly, but overuse of equalization can result in poor sound quality to the point of rendering the monitor useless. If an EQ is used, avoid extreme control settings – instead, try moving monitors and/or microphones until the feedback is minimized.

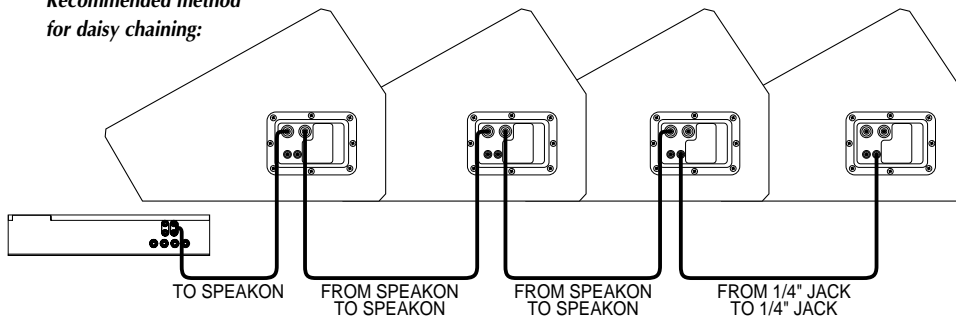


M-112HD/M-115HD Monitor



The Speakon® and 1/4" jacks are all wired together in parallel with each other, allowing easy daisy chaining from one cabinet to another. Any of the jacks may be used as an input or a through connection. The monitors each have an impedance of 8 ohms – up to four could be powered by one amplifier, *if* the amp is rated for 2 ohm operation.

Recommended method for daisy chaining:





M-112HD/M-115HD Monitor

TECHNICAL SPECIFICATIONS

	M-112HD	M-115HD
Impedance	8 ohms nom, 6 ohms min	8 ohms nom, 6 ohms min
RMS Power Handling	175 watts	230 watts
Peak Power Handling	700 watts	920 watts
Frequency Response ($\pm 3\text{dB}$)	60Hz - 18kHz	60Hz - 18kHz
Useable Low Freq Limit	35Hz	35Hz
Sensitivity	96dB SPL	98dB SPL
Maximum SPL	121dB	125dB
Nominal Dispersion	90° x 40°	40° x 90°
Components	12" woofer; CD horn	15" woofer; CD Horn
Crossover Frequency	4.5kHz	2kHz
Slope Rate	12dB/octave	12dB/octave
Dimensions (HxWxD)	15"x22"x18"	24"x21"x28"
Weight	45 lbs	56 lbs

Due to ongoing product development and improvement, the specifications contained herein are subject to change without notice.

WARNING: THIS SPEAKER IS CAPABLE OF PRODUCING SOUND PRESSURE LEVELS WHICH MAY LEAD TO HEARING IMPAIRMENT OR LOSS. HEARING PROTECTION IS RECOMMENDED.

The chart below shows the U.S. Government Occupational Safety and Health Administration (OSHA) regulations which were in effect at the time of this publication for permissible noise exposure, per 29CFR1910, Table G-16.

SOUND LEVEL dBA SLOW RESPONSE	DURATION PER DAY IN HOURS	SOUND LEVEL dBA SLOW RESPONSE	DURATION PER DAY IN HOURS
90	8	102	1-1/2
92	6	105	1
95	4	110	1/2
97	3	115	1/4 or less
100	2		

According to OSHA, any exposure in excess of those listed above could result in some hearing loss.

BE SURE THE SPEAKER CABLES DO NOT POSE A TRIPPING HAZARD, AND THAT THEY CANNOT TIP THE SPEAKERS IF PULLED.

NEVER SET UP A SPEAKER ON A STAND WHERE TIPPING OR COLLAPSE COULD CAUSE IT TO FALL ON PEOPLE.

WARNING: THIS SPEAKER IS NOT DESIGNED TO BE SUSPENDED OFF THE FLOOR FROM CABLES OR IN ANY OTHER MANNER. IF SUSPENSION IS DESIRED, CONSULT A REGISTERED PROFESSIONAL ENGINEER.



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