



MD755-W MD755-N

January 16, 2008

Overview

The MD755 is a motion detector accessory designed for the Denon DN-V755 Network Audio/Visual Player. The sensor can be used to trigger content that delivers greetings, advertisements, and special instructions. Applications include lobbies, waiting rooms, office complex directories, retail stores, kiosks, cinemas, tradeshow exhibits, security systems and much more.

The detector is highly immune to noise and can distinguish IR radiation even in strong direct sunlit environments up to 30,000 LUX. This makes it ideal for a wide variety of retail and commercial visual messaging applications. The MD755 motion detector will sense movement as far as 6 meters (~19 feet). Upon detection, the sensor activates trigger program number 6 within the Denon playlist. For more information concerning Playlists, refer to the Denon DN-V755 User Manual.

The MD755 is compact and easy to install. To achieve a basic "wake-up" trigger, the detector is connected directly to the parallel port of the Denon DN-V755. The detector can also be installed between the Denon player unit and the SW755 Remote Control Interface* without interrupting keypad operation. The MD755 is powered directly from the Denon player, and requires no batteries or other external power source.

Wide and Narrow Detection

There are two versions of the MD755. The "W" version features a wide detection zone while the "N" version has a narrow or a "spot" detection zone characteristic. The "N" model is best suited for applications, where there is heavy foot traffic, or where selective triggering is preferable. The "W" version's wide detection zone is better in areas where more coverage is desired.

*also a Marchetti Engineering product

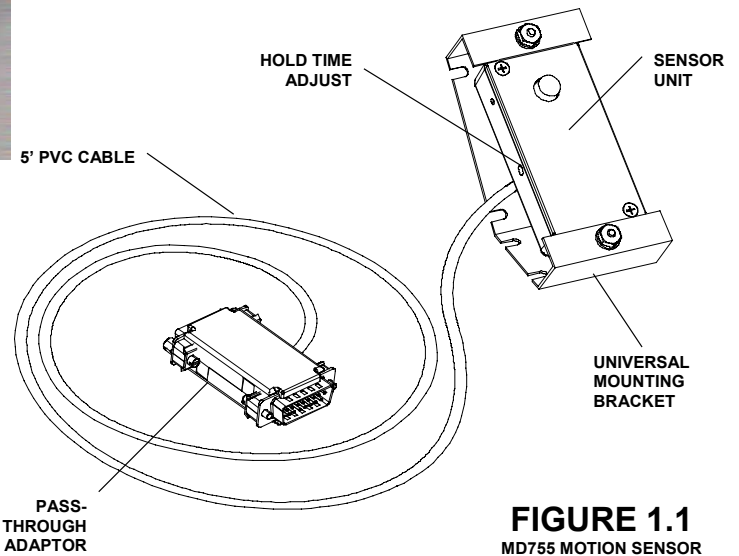


FIGURE 1.1
MD755 MOTION SENSOR
ACCESSORY

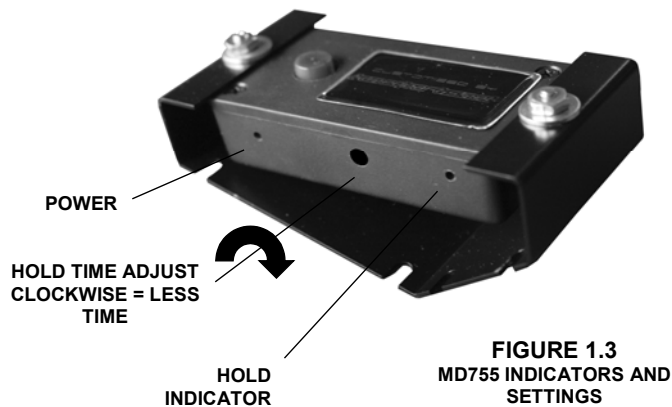
Sensor Behavior and Hold Time

The sensor immediately senses a person that crosses the detection zone. It then triggers the program, and starts the HOLD TIME countdown clock. During the HOLD TIME, further triggering is suppressed. If the program (trigger 6) ends before the HOLD TIME countdown is reached, control is returned to the default playlist. As soon as the HOLD TIME clock expires, the sensor is re-armed and awaits the next detection. A red LED indicator is on during the countdown cycle as shown in Figure 1.3.

Realistically, and as you would expect, people will remain within the detection zone to watch the display. And unless they remain perfectly still, would continuously trigger the same program over and over. This undesirable characteristic is eliminated by a re-trigger suppression circuit, which keeps the sensor disarmed while someone remains within sensor range, regardless of the HOLD TIME. As long as motion continues to be detected, this motion adds to any remaining HOLD TIME.

Adjusting Hold Time

Finding the proper HOLD TIME for your application requires a bit of trial and error. The MD755 has an adjustment for setting the HOLD time between 6 and 75 seconds. Use a small flat head screwdriver to adjust the trimmer shown in Figure 1.3. Turning the trimmer clockwise decreases the hold time. To make adjustment easier, watch the red HOLD Indicator LED. If possible, stay out of the detection zone when making the adjustment. Remember, if the sensor continues to detect motion, the HOLD TIME is prolonged indefinitely. When no further movement is detected and the HOLD time clock has expired, the trigger is re-armed (Red LED goes off).



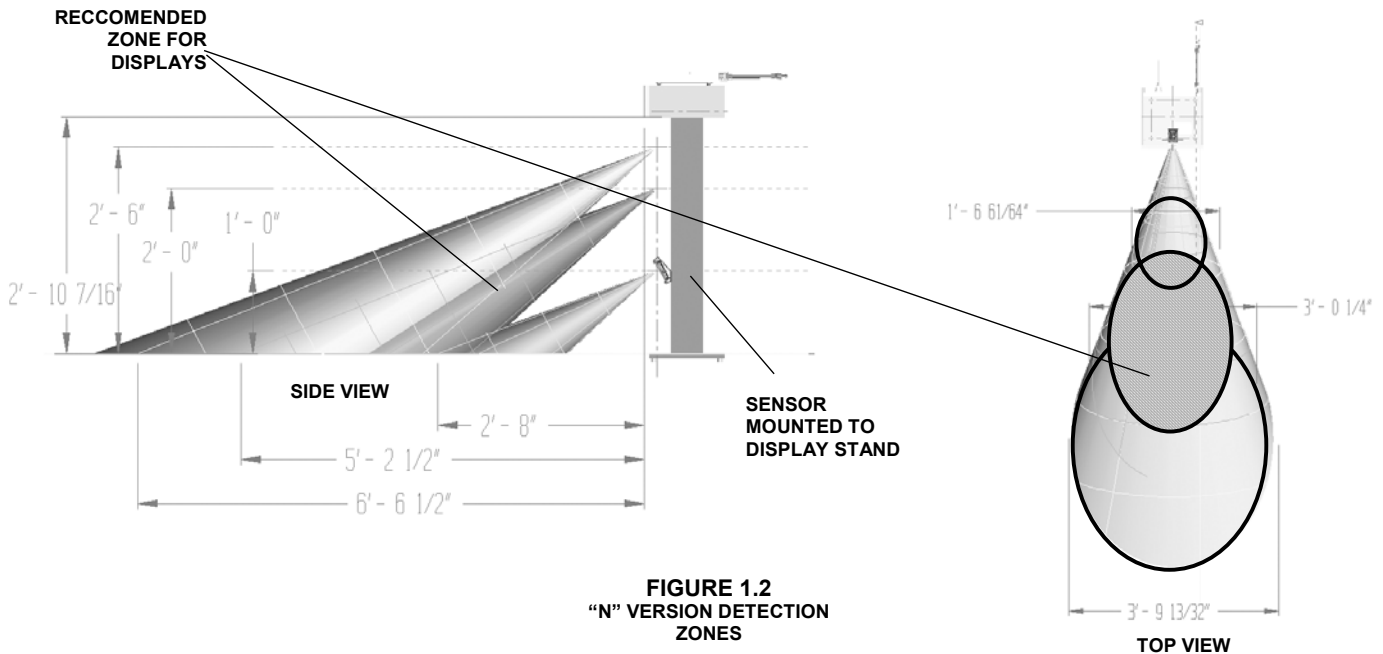
Here are a couple more things to keep in mind when adjusting the HOLD TIME. Program six will play in its entirety, even if the HOLD TIME has expired, provided that no motion has been detected. However, if during that time the sensor has had an opportunity to re-arm, movement will cause program six to re-trigger (start from the beginning).

Recommended Hold time

A good starting point is to adjust the HOLD TIME about mid-way. This gives you roughly 30 seconds of HOLD time, which is a reasonable amount of time for most triggered video programs. On the one hand, you don't want the HOLD TIME to be too short causing persistent triggering, especially in high traffic areas. On the other hand, setting the HOLD TIME too long will prevent the default playlist program from ever starting. Keep in mind that the HOLD TIME setting is dynamic, or always changing, as motion continues to be detected.

Mounting

A mounting bracket is included, which allows the sensor to be mounted in various orientations and positions, providing even greater control over the detection zone. Figure 1.2 shows the MD755 "N" version detection characteristics when mounted to the optional stand accessory. For example, when the detector is mounted two feet from the floor, the detection zone extends roughly five feet in front of the display, and approximately three feet side-to-side.



Coming Soon!

Model MD766 will have six-trigger capabilities. Upon detection, the sensor triggers interactive playlist program #1. The next detection triggers program #2, so on, and so forth, further enhancing the advertising experience!

Contact Jack at 978-534-0400 x 301. For more information please visit

www.marchettieng.com or call **877-636-2237**

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Known Issues and Troubleshooting

The player is a computer of sorts, and will occasionally freeze up from time to time, for various reasons: power surges, internal errors, and even pressing keypad buttons too fast. Like any computer, the problem can be fixed by simply restarting the player.