

DENON
PROFESSIONAL

DN-506S

User Guide (English)

Introduction

The DN-506S is designed to meet your needs in multiple environments such as boardrooms, classrooms, presentation facilities, and other installed applications. It is focused on delivering pure sound reproduction, excellent for both speech and music.

The DN-506S delivers a wide-range frequency response by employing three extraordinary drivers and unique crossover technology. It boasts a balanced low-mid frequency response along with a defined mid and high frequency response. A dedicated mid-range driver provides exceptional speech intelligibility—ideal for applications where vocal clarity is required.

Box Contents

DN-506S (1)
IEC power cable
User Guide
Safety & Warranty Manual
Non-slip pad

Support

For the latest information about this product (system requirements, compatibility information, etc.) and product registration, visit denonpro.com.

Quick Setup

Connection Diagram

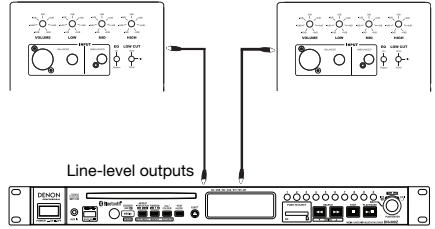
Items not listed under **Introduction > Box Contents** are sold separately.

The DN-506S loudspeakers feature balanced XLR and 1/4" connectors, as well as unbalanced RCA-type analog inputs. Connect the outputs of your audio interface, monitor controller, mixer, or other line-level device to these inputs.

Tip: *If your mixer, interface, or other audio source features both XLR/TRS and RCA-type outputs, use the XLR or TRS connectors instead of the RCA connectors whenever possible. XLR and TRS cables incorporate a "balanced" design that carries a signal over three conductors ("hot," "cold," and "ground") instead of two conductors as found in RCA cables ("hot," and "ground"). This results in lower noise, higher rejection of radio-frequency (RF) interference, and better overall fidelity. If XLR/TRS jacks are unavailable, use RCA-style cables but try to keep the cables as short as possible.*

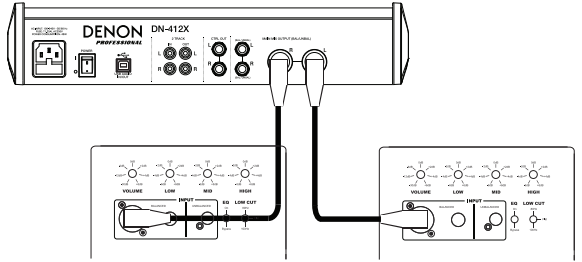
Scenario 1

Media Player
(Unbalanced RCA to Unbalanced RCA)



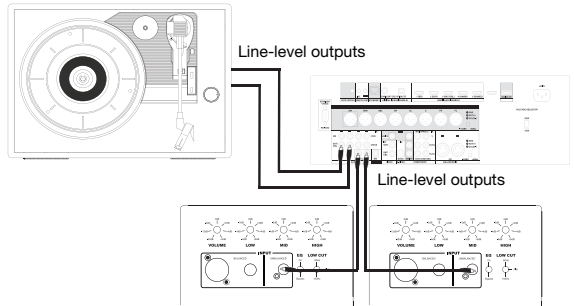
Scenario 2

Mixer
(Balanced XLR to Balanced XLR)



Scenario 3

Preamplifier
(Unbalanced RCA to Unbalanced RCA)



Features

Front Panel

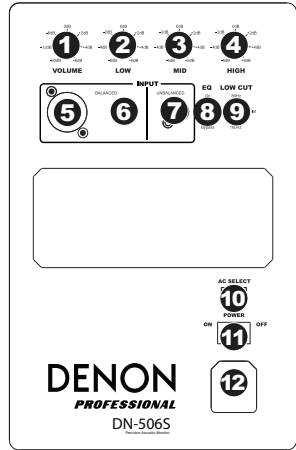
1. **Power Indicator** (front panel, not pictured): The power indicator illuminates when the monitor is receiving power and the rear panel Power Switch is in the "ON" position.
2. **Low-frequency Driver** (front panel, not pictured): The low-frequency driver outputs the bottom range of the audio spectrum.
3. **Mid-frequency Driver** (front panel, not pictured): The mid-frequency driver outputs the middle range of the audio spectrum.
4. **High-frequency Driver** (front panel, not pictured): The high-frequency driver outputs the top range of the audio spectrum. The driver is a "coaxial" design, inset into the center of the mid-range driver.

Rear Panel

- Volume Knob:** This knob adjusts the gain level of all three of the rear panel inputs (XLR, 1/4" and RCA). The gain is at minimum when the knob is turned fully counter-clockwise; the gain is set to its maximum level when the knob is turned fully clockwise; additionally, the gain is set to unity when at the 12:00 position. Adjust this knob to a position where you are working with a comfortable range of travel on the output volume knob of your connected audio interface, monitor controller, or mixing console.
- Low Frequency Knob:** This knob boosts or cuts the low-frequency response of the monitor, allowing you to tailor the response of the monitor's woofer to the acoustics of your environment. The low-frequency response can be boost or cut by 6 dB, at a center frequency of 100 Hz. When the knob is set to the center position, no boost or cut is applied.
- Mid Frequency Knob:** This knob boosts or cuts the mid-frequency response of the monitor, allowing you to tailor the response of the mid-range driver to the acoustics of your environment. The mid-frequency response can be boost or cut by 6 dB, at a center frequency of 1 kHz. When the knob is set to the center position, no boost or cut is applied.
- High Frequency Knob:** This knob boosts or cuts the high-frequency response of the monitor, allowing you to tailor the response of the tweeter to the acoustics of your environment. The high-frequency response can be boost or cut by 6 dB, at a center frequency of 10 kHz. When the knob is set to the center position, no boost or cut is applied.
- XLR Input (+4 dBu):** This input jack accepts line-level signals from a balanced XLR connector. Connect your audio interface, monitor controller, mixer, or other line-level audio source to this jack.
- 1/4" Input (+4 dBu):** This input jack accepts line-level signals from a balanced 1/4" TRS connector. Connect your audio interface, monitor controller, mixer, or other line-level audio source to this jack.
- RCA Input (-10 dBV):** This connector accepts line-level signals from audio sources with unbalanced RCA-style outputs.
- EQ Bypass Switch:** This switch allows you to toggle all three bands of equalization for the loudspeaker on/off with a single control. When the switch is set to "bypass", no equalization will be applied to the loudspeaker drivers, no matter what position the equalization knobs are set to.
- Low Cutoff Switch:** This 3-position switch allows you to further tailor the low-frequency cutoff point of your DN-506S monitor, by filtering audio below a certain cutoff frequency.

 - Flat:** No low-cut
 - 80 Hz:** Audio material below the frequency of 80 Hz is filtered
 - 100 Hz:** Audio material below the frequency of 100 Hz is filtered
- Input Voltage Selector:** This recessed switch adjusts the input voltage from 100-120V or 220-240V and allows your DN-506S monitor to be used worldwide. Make sure this switch is set correctly for your country to prevent damage to the loudspeaker.

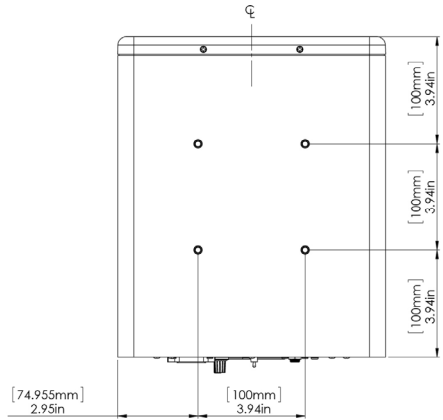
***Important:** Power outlets in North America, Japan, and many parts of South America usually supply between 100V and 120V, whereas outlets in Europe and most of Africa and Asia provide between 220V and 240V. If you are not sure about your region, be sure to check your power outlet's rating and set the Input Voltage selector before connecting and switching on your DN-506S loudspeakers.*
- Power Switch:** This switch powers your DN-506S loudspeakers on and off. The "auto-power" feature will go into low-power "eco" mode if there is no signal present for about 12 minutes. To "wake" from low-power mode, send an audio signal to the speakers.
- Power Connector:** This socket accepts a standard IEC-type power cable.



Mounting Points

Using the threaded inserts on the bottom face of the enclosure, you may optionally attach the loudspeaker to VESA-standard mounts (sold separately) for installation on walls or ceilings. Use standard M4 machine screws (0.7 mm pitch) which can be found from a local hardware store or home improvement store.

Important: We recommend using screws that are **10–14mm longer** than the thickness of your mounting bracket. Do not drive the screws more than 14mm into the threaded inserts. Follow the specifications and instructions provided by the mount manufacturer for proper installation.



Appendix (English)

Technical Specifications

Low-frequency driver	6.5" woven Kevlar low-frequency driver
Mid-frequency driver	5.25" woven Kevlar mid-frequency driver
Tweeter	1" silk dome tweeter with integrated waveguide
Frequency response	50 Hz - 20 kHz
Crossover frequency	Low-Mid: 400 Hz Mid-High: 4 kHz
Low-frequency amplifier power	110 W
Mid-frequency amplifier power	30 W
High-frequency amplifier power	20 W
LF cutoff	flat, 80 Hz, 100 Hz
LF boost cut	±6 dB at 100 Hz
MF boost cut	±6 dB at 1 kHz
HF boost cut	±6 dB at 10 kHz
Polarity	Positive signal at + input produces outward LF cone displacement
Input impedance	20 KΩ balanced, 10 KΩ unbalanced
Input sensitivity	85 mV pink noise input produces 90 dBA output SPL at 1 meter with volume control at maximum
Power	160 W
Protection	Output current limiting; over-temperature; transient on/off protection to prevent loudspeaker "pops"; subsonic filter; external mains fuse
Cabinet	Metal grille and plastic front baffle with vinyl-laminated high-acoustic-efficiency MDF
Power Requirements	100-120V, 50/60 Hz; 220-240V, 50/60 Hz
Dimensions (Width x Height x Depth)	10.6" x 15.4" x 11.2" 268 mm x 391 mm x 285 mm
Weight	23.4 lbs./unit 10.6 kg/unit

Specifications are subject to change without notice.

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California Proposition 65 Warning

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

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