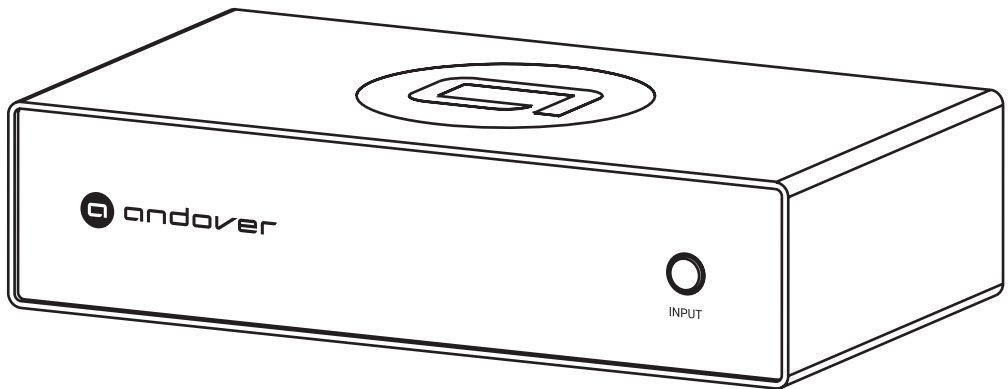


SPINSTAGE

MOVING MAGNET/MOVING COIL PHONO STAGE



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www.andoveraudio.com

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Thanks for selecting SpinStage!

Your SpinStage has been painstakingly engineered to deliver outstanding sound quality with virtually any Magnetic or Moving-Coil cartridge. It is the perfect choice to add a phono input to an audio system that lacks one, to add Moving-Coil compatibility, or to simply improve upon your system's internal circuit.

The selectable input resistance and capacitance can be set to optimize the performance of your magnetic cartridge and extract all the performance the manufacturer intended. The Moving-Coil input utilizes a Transconductance amplifier that ideally loads the cartridge for optimum response and lowest noise. This precision circuit is usually found in much more expensive phono stages, and automatically adjusts its gain based on the impedance of the cartridge without requiring manual selection.

Spinstage uses completely isolated dual-mono circuitry for the left and right channels in order to minimize any signal crosstalk, maintaining the stereo image to the full capability of your cartridge.

And finally, there are no electrolytic coupling capacitors in series with the audio signal, eliminating any detrimental sonic side effects they may contribute. A DC Servo circuit actively corrects undesired DC voltage offset at the output without the need for common DC blocking capacitors and their intrinsic distortion.

SpinStage connects to a "Line" or "Aux" input on your system. The Aux input on SpinStage restores this functionality to your system in case it is needed for other components.

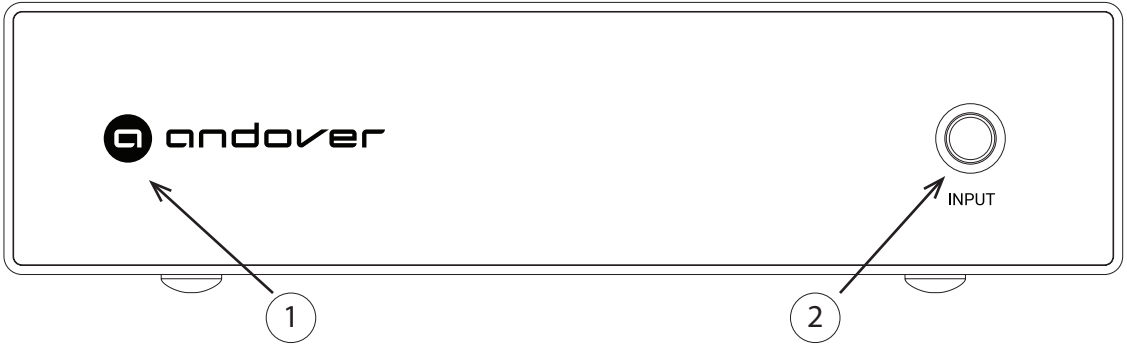
Please take a few moments to read through this booklet to get the most enjoyment from your SpinStage. If you have any questions not covered here please contact Andover Audio support via email (www.andoveraudio.com/support) or phone (+1 978.775.3670).

Safety Instructions

The power adapter is used to connect and disconnect the unit from the AC power source. Make sure that the plug is easily accessible at all times. Connect the power adapter first to the SpinStage, then plug it into the AC outlet. Never handle the power adapter while your hands are wet or damp.

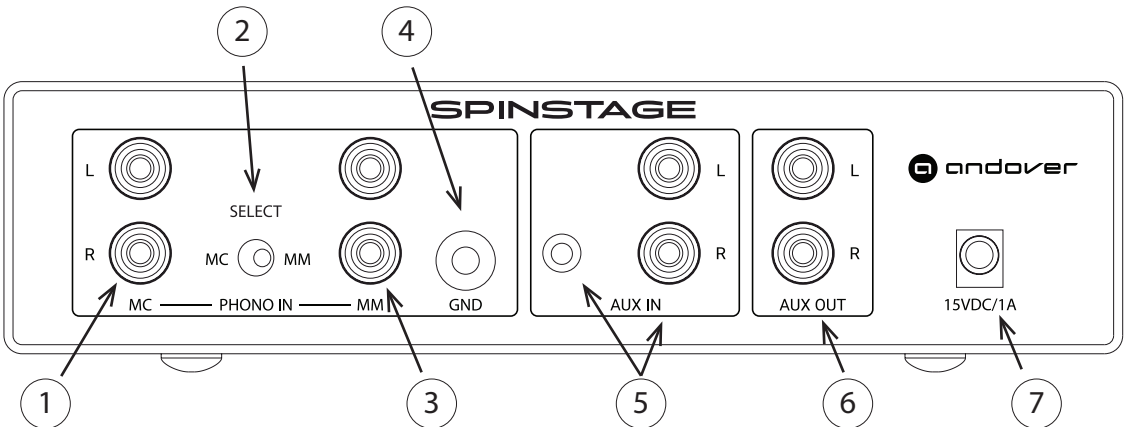
Avoid letting liquids enter the device. Never place any item containing liquid, like a flower vase, on or near the device. Never spill any liquid on the device. Never place any open flame sources, like lighted candles, on or near the device. The product shall not be used in damp or wet locations, next to a bathtub, sink, swimming pool or any other similar conditions.

Keep plastic bags away from children to prevent risk of suffocation.



Front panel control and indicator:

- (1) Status LED
WHITE - Phono input
GREEN- Aux input
- (2) Power/Input switch
Short press - Turn on and toggle inputs
Long press - Standby



Rear panel connections:

- (1) Input for turntable equipped with a Moving-Coil cartridge.
- (2) Switch to select Moving-Coil or Moving-Magnet input.
- (3) Input for turntable equipped with a Moving-Magnet (or Moving-Iron or High Output Moving-Coil) cartridge.
- (4) Connection for turntable Ground Wire.
- (5) Auxiliary Input (Use one or the other, not both simultaneously).
- (6) Main Output - to amplifier Line or Aux input.
- (7) Input from DC Power adapter.

Connections

1. Connect a pair of standard RCA-type phono cables from the Aux output of SpinStage into a Line-level or Aux input of your amplifier or powered speaker system. Do not connect SpinStage to a Phono input, or you will experience high distortion and poor sound.
2. Connect your turntable to either the Moving-Coil or Moving-Magnet input jacks on SpinStage, according to the cartridge type installed in your turntable. If you are not sure what type of cartridge you have, connect it to the Moving-Magnet input. If you later find that there is extremely low output with this connection, you should then switch to the Moving-Coil input. **NOTE: High-Output Moving-Coil cartridges should be treated as a Moving-Magnet cartridge and connected to the Moving-Magnet input.**
3. If your turntable is equipped with a ground wire, connect it securely to the ground terminal near the Moving-Magnet input. Failure to do so will result in a high level of "hum". Some turntables have an internal ground connection in the audio wiring and do not require a separate ground connection.
4. Set the input selector toggle switch towards the input you used to connect your turntable.
5. Connect the supplied Power Adapter to the power input on SpinStage, then plug the adapter into the wall outlet.

IMPORTANT: If your turntable is equipped with a built-in preamplifier, set the preamp switch to bypass that preamplifier. This may be labeled "Bypass", "Direct" or "Off" depending on your turntable brand. A few turntable models do not allow the built-in preamplifier to be bypassed, and are not compatible with SpinStage unless bypassed by a qualified technician.

Operating SpinStage

Press the INPUT button on the front panel. SpinStage should turn on to the PHONO input as indicated by the WHITE LED on behind the Andover logo icon.

Select the input on your audio device that SpinStage is connected to. Adjust your audio device to the desired sound level and enjoy.

If you require the use of the input that SpinStage occupies on your audio device for another source component, you may use the Aux input of SpinStage to restore the function without requiring you to change cables. Attach your other source to the Aux input of SpinStage. Select it by pressing the INPUT button until the LED status indicator turns GREEN. Each short press of the input button will toggle between PHONO and AUX.

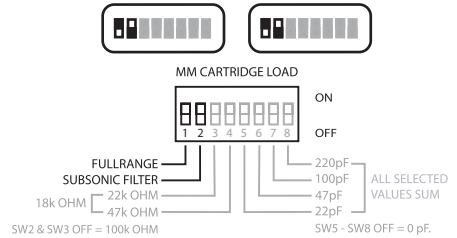
Press and Hold the INPUT button for a few seconds until the LED turns off to enter Standby mode. SpinStage consumes very little power when idle, and may be left on for convenience if desired.

Performance Optimization - Magnetic Cartridges

Magnetic cartridges perform their best when the input resistance and capacitance of SpinStage matches the values recommended by the cartridge manufacturer. DIP switches, accessible through the bottom panel of your SpinStage, allow adjustment of these parameters, as well as selection of full range output or subsonic filtered output. Refer to the specifications supplied with your cartridge for the manufacturer's recommended settings. Optimum settings extract the full performance of your cartridge by minimizing noise and delivering the high-frequency performance intended by the cartridge manufacturer.

Subsonic Filter

1. FULLRANGE ON will pass the full frequency range without alteration.
2. SUBSONIC FILTER ON will reduce the bass output below 20 Hz. This reduces excess speaker excursion below the audible range and unnecessary power consumption. We recommend this setting for most systems.
3. You must choose one or the other. Choosing neither will result in no output.

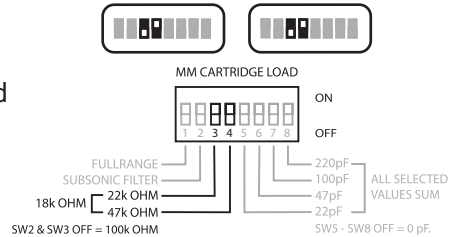


SUBSONIC FILTER "ON" is illustrated

Input Resistance

The majority of Magnetic cartridges are designed to match a 47kOhm input impedance. However, some cartridges may benefit by deviating from this standard load. Some High Output Moving-Coil cartridges are in this category.

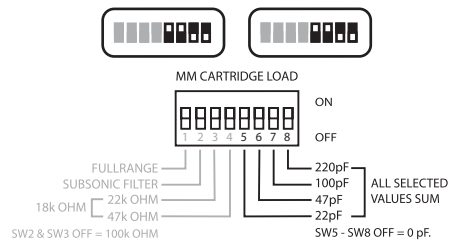
SpinStage provides the option to select 18kOhm, 22kOhm, 47kOhm and 100kOhm. Feel free to experiment with different settings to your preference.



47kOhm impedance is illustrated

Input Capacitance

The input capacitance interacts with the cartridge coils, affecting the high frequency response. A mismatch between the actual capacitance and the optimum value may result in either dull, or overboosted treble response. Use the switches to get as close to the cartridge manufacturer's recommendation as possible. Each switch adds the pF indicated, and any combination may be used. The capacitance of the cables used to connect your turntable to SpinStage also add to this total value. If you do not know the actual capacitance of your cables, we suggest using 100pF as a reasonable approximation.



69pF impedance is illustrated plus ~100pF for cables = 169pF total.

Performance Optimization - Moving Coil Cartridges

The Moving-Coil input of SpinStage works on the principal of voltage to current transconductance, resulting in stable performance that doesn't require manual gain or impedance selection to optimize performance. The preamplifier gain will automatically adjust based on the cartridge's output impedance, which typically tracks output voltage. SpinStage uses this trait to automatically set gain without requiring user selection.

Technical Specifications

RIAA Equalization Accuracy:	+/- 0.1dB typ, 0.2dB max
Overall Frequency Response:	0.5Hz - 50kHz +/- 1dB
Signal to Noise Ratio (unweighted):	MM - 78dB MC - 76dB (Referenced to 500ohm source)
Input Impedance, MM (selectable):	18kOhm, 22kOhm, 47kOhm, 100kOhm
Input Impedance, MC:	Effectively 00hm
Input Capacitance, MM (Selectable):	0pF, 22pF, 47pF, 69pF, 100pF, 122pF, 147pF, 169pF, 220pF, 242pF, 267pF, 289pF, 320pF, 342pF, 389pF
Nominal Gain, MM:	40.5dB
Nominal Gain, MC:	66.5dB (with 100hm source)
Subsonic Filter:	20Hz, 12db/Octave. Bypassable.
Typical Output Level:	500mV RMS
Max Output Level:	8V RMS
Input Overload, MM:	120mV @ 1kHz
Input Overload, MC:	6mV @ 1kHz
Aux Input:	Direct passthrough, no active circuitry.

Note: Andover Audio subscribes to a policy of continuous improvement. As a result, specifications are subject to change without notice.

In Case of Difficulty

Your SpinStage is manufactured to the highest standards and underwent strict quality inspection before leaving the factory. Despite this, you may encounter difficulty due to improper installation, connection, or shipping damage. The following are a few examples, and their most likely causes.

No signal through one or both channels:

- No signal contact from the cartridge to the internal tonearm wiring. Check that the four small wires attached to the rear of the cartridge are attached and no wires are faulty.
- Faulty contact between the Tonearm and the Phono input on your SpinStage. Make certain both plugs are firmly and fully inserted.
- SpinStage is not switched on, or an incorrect input selected. If using a vintage amplifier, make sure the "Tape Monitor" switch is not engaged.
- The unit is not properly connected to the power adapter.
- There is no power at the wall outlet.
- The unit is in Standby mode.

The sound is low or non-existent:

- You have a low-output Moving-Coil cartridge attached to the Moving-Magnet input.
- The Moving-Magnet / Moving-Coil switch is in the wrong position.
- The stylus may not be fully seated in the cartridge body. A very slight misalignment can cause a significant reduction in output.
- You have not selected FULLRANGE or SUBSONIC FILTER on the DIP Switches on the bottom panel. You must select one of those options.

The sound is excessively high or distorted.

- Your Moving-Magnet cartridge is connected to the Moving-Coil input.
- SpinStage is connected to the Phono input of your amplifier or other audio device.
- Your turntable has a built in preamp that is not defeated or bypassed.

Stong hum:

- No, or poor ground connection between the turntable and SpinStage. (Note that due to the high gain required of phono circuits, it is normal to have a slightly higher noise level than typical auxiliary line-level sources such as CD players, DACs, or radio tuners.)

60-Day Satisfaction Guarantee (for orders placed on www.andoveraudio.com)

We are so convinced that you will love your new Andover product that if you are dissatisfied in any way, you may return your unit (purchased through www.andoveraudio.com) within 60-days from the time you receive your order for a full refund, minus the cost of any damaged, missing or abused components.

Products purchased through an authorized reseller are governed by the policies of that reseller.

To initiate a return for a unit purchased on our website, please email us at www.andoveraudio.com/support with the following information:

1. Your order number and product serial number (if applicable).
2. Your reason for returning the item: For example, repair or refund.
3. You will be issued a Return Authorization and a pre-printed shipping label, which must be used to ensure accurate transaction tracking.
4. You are responsible for any missing parts or accessories. Damage due to accident or abuse, products missing accessories, or not returned in their complete original packaging will be subject to restocking and/or replacement fees. Returned items are the customer's responsibility until they reach the return address. A refund will be issued once we receive and have inspected the returned items (normally within 3 business days). Refunds do not include any shipping costs.

Two-Year Limited Warranty

Andover Audio warrants this product against manufacturing defects and workmanship to the initial purchaser for a period of two (2) years from the date of delivery to customer. Andover Audio will repair or replace the unit as necessary to restore proper operation. This warranty covers both parts and labor for the warranty period. The warranty excludes physical damage caused by accident or abuse outside of our control, or if the unit is damaged due to incorrect return packing. The warranty also excludes normal wear items such as turntable stylus and belt. If you think you need warranty service, please contact us to obtain an RMA (Return Merchandise Authorization) by e-mailing www.andoveraudio.com/support or calling +1 978.775.3670. For more information on returns and exchanges, please visit www.andoveraudio.com/support.

Service

Should you encounter a problem that you are unable to solve, please contact customer service at www.andoveraudio.com/support, or the dealer that sold you your product. If you must return your Andover Audio product for any reason, it must be safely packed and shipped in its original carton and packing material. Damage that is the result of improper packaging is not covered by the warranty. Please contact Andover Audio if you need replacement packaging.

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