

User's Manual



M-1 & MR-1 Motor Housings
NM-1, NRM-1 & NRM-1/S Power Supplies

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Safety Information



Caution!

To avoid the risk of electrical shock, do not open the device or remove it from its housing. For service procedures, contact a qualified technician or the manufacturers directly.

Read the user's manual carefully and completely before using the device.

Follow all of the warnings and operating instructions contained in this manual or written on the device itself.

Store the device in a safe place!

Power Supply

Be sure to use this equipment only with the provided cables and only when connected to a suitable AC voltage source (see the chapter on technical data). The equipment can only be used with a grounded

voltage source. Damaged cables are should never be used and require immediate replacement.

Electrical Charge

Before installation, be sure that the device does not contain an electrical charge. Unplug the power cord or shut off the power source.

Cables

Use only the cables that were delivered with the device. Damage that occurs from the use of cables that were not provided by the manufacturer is not covered by the warranty. Be certain that the cables lay in such a way that they do not cause a tripping hazard.

Mechanics

The device should only be used on a stable, level surface. Be certain that the drive belts can move freely with out interference from other objects and that they do not rub or grind.

Breach of Warranty

The manufacturer cannot accept responsibility devices that

- were not used in accordance with the given regulations,
- were repaired or modified by unauthorized sources,
- exhibit visible external damage that was not reported upon delivery,
- were damaged by third party devices.

The manufacturer cannot be liable for damages that may occur to other devices as a result of use of this product.

Operational Range

These devices are intended to be used indoors. Avoid exposure to extreme cold, heat and moisture.

Description

The M-1 drive unit with the NRM-1 or NRM-1/S, as well as the MR-1 with the NM-1, are made to operate heavyweight record turntables. Permitted operational speeds are 33 rpm and 45 rpm.

Delivery Contents

M-1 with the NRM-1 or NRM-1/S combination:

- 1 x MR-1 motor housing
- 1 x NRM-1 or NRM-1/S power supply
- 2 x Drive belts in clear casing
- 1 x Power cord
- 1 x User's manual

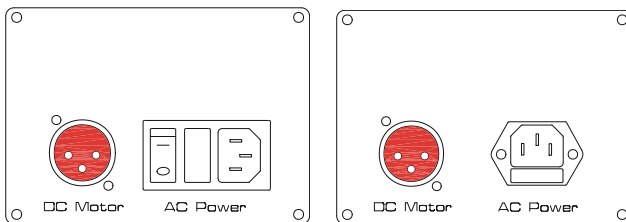
MR-1 with the NM-1 combination:

- 1 x MR-1 motor housing
- 1 x NM-1 power supply
- 2 x Drive belts in clear casing
- 1 x Power cord
- 1 x User's manual

Set-up and Connection

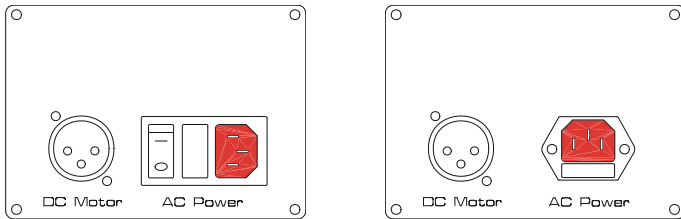
Place the motor housing next to the record player. Set the delivered bullseye level on top of the motor housing and adjust the three supports until it is level. The height of the motor housing should be such as that the drive belts can wrap around about 1/3 down from the top of the turntable. Now wrap the drive belts around the turntable and the drive housing's drive pulley. By moving the motor housing, the drive belts can now be pulled taut. However, be careful not to pull the belts too taut: The distance should be just far enough that about the width of a finger can be pressed into the middle of the belt. Be sure that the tape faces in an outward direction on the position where it is to be applied.

Connect the motor housing cable to the „DC MOTOR“ plug on the power supply.

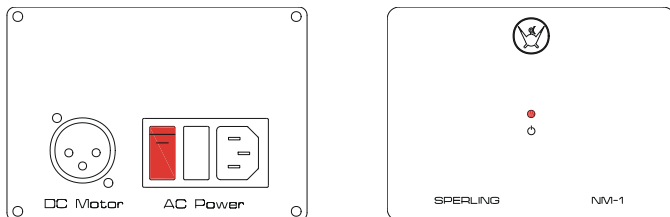


Now plug in the power supply into a power outlet using the provided cable. Make sure the outlet provides the

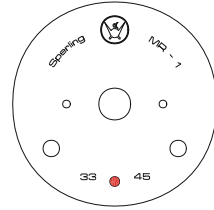
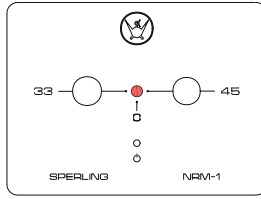
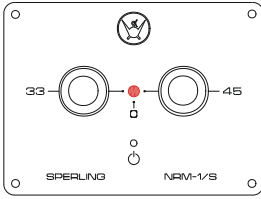
specified voltage (see technical data on page 12). One contact of the IEC socket is marked by a red ring. This allows the correct phasing of the unit. Please ensure that the used power-cable provides the "live" conductor to this contact.



When doing so, the power switch on the back of the device (on the front for the NM-1),

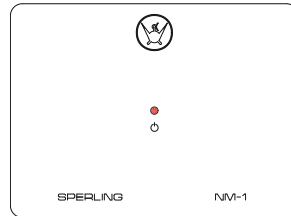
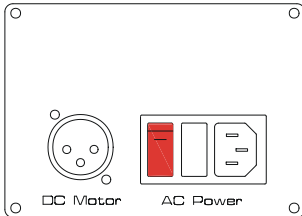


as well as the speed selector on the front of the device (on the top of the motor housing for the MR-1), should be set to "0" (default setting) .

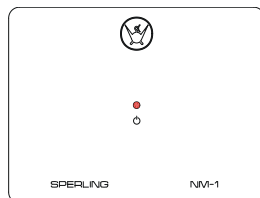
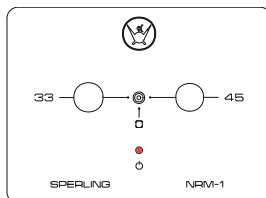
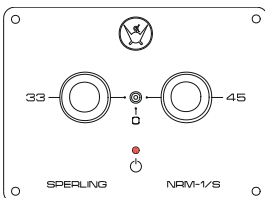


Start-up

Flip the power switch of the power supply, located on the back of the device (NRM-1 & NRM-1/S) or on the front of the device (NM-1), to on.



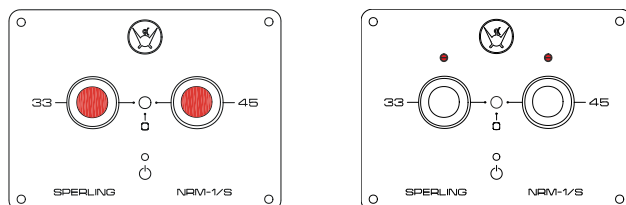
The red LED light on the front of the NRM-1 & NRM-1/S indicates that the device is switched on;



on the NM-1, the tip of the power switch will light up red.

Alignment to the turntable

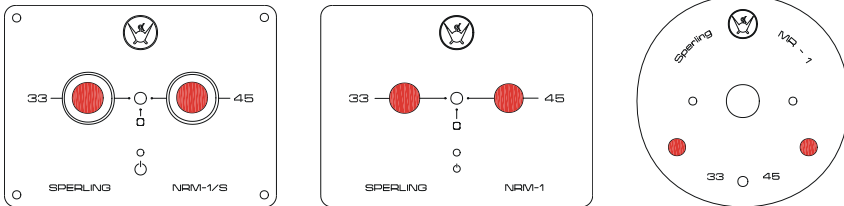
The version with pre-adjustment-pots above the rotary controls requires the following procedure:



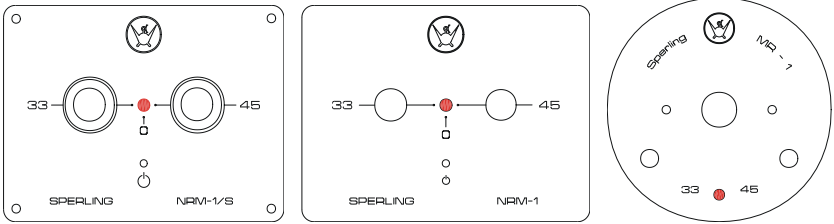
Please adjust the rotary-controls (pic on the left) into the center position, switch the motor-unit on and adjust the speed with the pre-adjustment-pots roughly (a small screw-driver is attached). The exact speed is now adjustable by using the rotary-controls as described in the next chapter. This pre-adjusting is only necessary once during the first start-up of the motor-drive and ensures the optimal alignment to your turntable.

Speed Settings

Now select the desired speed with the speed control switch by either switching it to the left for "33" or to the right for right for "45". To fine-tune the speed settings, use the corresponding controllers – preferably with the stroboscope disc – to make the adjustments.



All models are equipped with potentiometers with precision scale, which make it possible to make very exact settings. The NRM-1/S model is equipped with additional knobs with 1:6 reduction gear units, which allow for even more precise settings. The smaller knob at the front is for fine-tuning and the larger one behind the ring is for course adjustments. On this model, the smaller knob at the front makes 60 rotations from stop to stop. To indicate that the motor is on, the light at the tip of the speed selector switch lights up red:



→ TIP: Gently spin the turntable before turning on the motor. Doing so will help prevent the belts from slipping and will reduce the time that it takes for everything to start working.

Care

Only clean the drive with a soft, dry towel. Avoid exposing it to any kind of moisture!

A small amount of grit from the drive pulleys may collect on the inside of the drive belts after use. If a clearly visible gray stripe has accumulated on the middle of the belt, we recommend cleaning it off. To do so, simply dip a clean, lint-free towel in some isopropyl alcohol and pull the drive belt through it until the gray stripe has disappeared. The drive should run more smoothly once it has been cleaned.

Quality

Thank you for choosing this high quality, made in Germany product.

All drives are made by hand in Germany and are subjected to a 24-hour endurance test before shipping. Additionally, each motor and controller is also put through audible testing. The combination of these two tests guarantees the best possible operational reliability.

Technical Data

M-1 Motor Housing

Overall height	140-152 mm
Height at drive belts	133-145 mm
Diameter	128 mm
Weight	2825g

MR-1 Motor Housing

Overall height	141-153 mm
Height at drive belts	133-145 mm
Diameter	128 mm
Weight	2890 g

NM-1 Power Supply

Depth	192 mm
Width	120 mm
Height	94 mm
Weight	1054 g

NRM-1 Power Supply

Depth	193 mm
Width	120 mm
Height	94 mm
Weight	1222 g

NRM-1/S Power Supply

Depth	197 mm
Width	120 mm
Height	94 mm
Weight	1286 g

NRM-1/S Power Supply " Edition Fuchs "

"Edition Fuchs" means that the device has been made for turntables from the Robert Fuchs Company and are optimal for a turntable diameter of 400mm.



EG-Konformitätserklärung
EC-Declaration of Conformity



Hersteller:
Manufacturer: Medientechnik Sperling

Anschrift:
Address: Blumenstraße 10
D-59514 Welver
Germany

Produktbezeichnungen:
Name of products: M-1 ; MR-1
Type or model: NM-1 ; NRM-1 ; NRM-1/S

Das bezeichnete Produkt stimmt mit den Vorschriften folgender europäischer Richtlinien überein:
The indicated product is in correspondence with the following regulations of European Council:

Nummer / Kurztitel Number / Title	Eingehaltene Vorschriften Observed regulations
89/336/EWG EMV-Richtlinie EMC-Directive	EN 61000-4-2, Lev. 3 EN 61000-4-3, Lev. 3 EN 61000-4-4, IN: Lev.4, Out: Level 3 EN 61000-4-5, Lev. 3 EN 61000-4-6, 10V EN 61000-4-8 EN 61000-4-11 EN 55022.B
73/23/EWG Niederspannungsrichtlinie Low Power Directive	

Aussteller:
Issuer: _____
Anagar Sperling

Ort, Datum:
Place, Date: Welver, 28.05.2008

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, beinhaltet jedoch keine Zusicherung von Eigenschaften. *This declaration certifies the compliance with the indicated regulations, it doesn't gurantees attributes.*

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Notes

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User´s Manual Motor Housing Version 1.3b
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Mistakes and technical changes reserve !