

Owner's Manual

#### **PRECAUTIONS**

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

#### INSTALLATION

- 1 Water and Moisture Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.
- 2 Heat Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
- **3 Mounting surface** Place the unit on a flat, even surface.
- 4 Ventilation The unit should be situated with adequate space around it so that proper ventilation is assured. Allow 10 cm (4 inches) clearance from the rear and the top of the unit, and 5 cm (2 inches) from each side. Do not place on a bed, rug, or similar surface that may block the ventilation openings. Do not install the unit in a bookcase cabinet, or airtight rack where ventilation may be impeded.
- 5 Objects and liquid entry Take care that objects or liquids do not get inside the unit through the ventilation openings.



**Carts and stands** - When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart to overturn or fall.

7 Wall or ceiling mounting - The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

#### WARNING!

TO REDUCE THE RISK OF FIRE OR ELECTRONIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE



This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 89/68/EEC and 73/23/EEC

#### **ELECTRIC POWER**

- 1 Power Sources Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
- 2 Polarization As a safety feature, some units are equipped with polarized AC power plugs which can only be inserted one way into a power outlet. If it is difficult or impossible to insert the AC power plug into an outlet, turn the plug over and try again. If it still does not easily insert into the outlet, please call a qualified service technician to service or replace the outlet. Avoid defeating the safety feature of the polarized plug, do not force it into a power outlet.
- 3 AC power cord When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself. Never handle the AC power plug with wet hands, as this could result in fire or shock. Power cords should be routed to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket. Avoid overloading AC outlets and extension cords beyond their capacity, as this could result in fire or shock.
- 4 Extension cord To help prevent electric shock, do not use a polarized AC power plug with an extension cord, receptacle, or other outlet unless the polarized plug can be completely inserted to prevent exposure of the blades of the plug.
- 5 When not in use The primary method of isolating the turntable from the mains supply is to disconnect the mains plug. Ensure that the mains plug remains accessible at all times. Unplug the AC power cord from the AC outlet if the unit will not be used for several months or more.

#### **EXPLANATION OF GRAPHICAL SYMBOLS**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



#### CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

#### MAINTENANCE

Clean the unit only as recommended in the Operating Instructions.

#### DAMAGE REQUIRING SERVICE

Have the unit serviced by a qualified service technician if

- The AC power plug has been damaged.
- · Foreign objects or liquid have got inside the unit.
- The unit has been exposed to rain or water.
- The unit does not seem to operate normally.
- The unit exhibits a marked change in performance.
- The unit has been dropped, or the cabinet has been damaged

#### DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

#### NOTES ON ENVIRONMENTAL PROTECTION



At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's manual and packaging, point this out.

The materials can be reused in accordance with their markings.

Through re-use, recycling of raw materials or other forms of recycling of old products, you are making an important contribution to the protection of our environment. Your local administrative office can advise you of the responsible waste disposal point.

# INFORMATION ABOUT COLLECTION AND DISPOSAL OF WASTE BATTERIES (DIRECTIVE 2006/66/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF EUROPEAN UNION) (FOR EUROPEAN CUSTOMERS ONLY)



Batteries bearing any of these symbols indicate that they should be treated as "separate collection" and not as municipal waste. It is encouraged that necessary measures are implemented to maximize the separate collection of waste batteries and to minimize the disposal of batteries as mixed municipal waste.



End-users are exhorted not to dispose waste batteries as unsorted municipal waste. In order to achieve a high level of recycling waste batteries, discard waste batteries separately and properly through an accessible collection

point in your vicinity. For more information about collection and recycling of waste batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

By ensuring compliance and conformance to proper disposal of waste batteries, potential hazardous effects on human health is prevented and the negative impact of batteries and waste batteries on the environment is minimized, thus contributing to the protection, preservation and quality improvement of the environment.

#### OWNER'S RECORI

For your convenience, record the model number and serial number in the space provided below. Please refer to them when you contact your dealer in case of difficulty.

| Model N  | lo.:  | <br> |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------|-------|------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Serial N | lo. : | <br> | ٠. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| IMPORTANT SAFETY INSTRUCTIONS | 2 |
|-------------------------------|---|
|                               |   |
| INTRODUCTION                  |   |

## 

# ASSEMBLY AND INSTALLATION. 5 TRANSPORT SCREWS. 5 PLATTER, SUB-PLATTER AND DRIVE BELT INSTALLATION 5 ADJUSTING THE PULLEY HEIGHT 5 TONEARM ASSEMBLY. 5 LEVELING THE TURNTABLE 8 USING THE CLAMP, STARTING THE MOTOR, 8 CHANGING THE SPEED 8

| REFERENCE       |      |
|-----------------|------|
| TROUBLESHOOTING | 9    |
| SERVICE         | 9    |
| WARRANTY        | 9    |
| SPECIFICATIONS  | . 10 |

#### Dear Music Lover,

Congratulations and thank you for choosing NAD Products. Your NAD C558 turntable has been handcrafted and rigorously tested by skilled technicians to give you years of enjoyable, trouble free service.

Please contact your dealer if you require additional assistance.

# The C558 incorporates an array of features that contribute to its audiophile performance:

- 1 Proprietary ultralow noise AC motor and high precision frequency DCdriven AC generator for speed stability. The motor is fixed on the main chassis. The tonearm and platter are mounted on a separate suspended MDF chassis.
- 2 The platter with TPE damping and felt mat sits on top of a belt-holding sub- platter. The platter is constructed from an aluminum magnesium alloy sitting on a brass bearing.
- 3 The tonearm construction is a combination of conical carbon fibre tube, sandwich aluminium headshell, cardan bearing in horizontal axle with hardened tips sitting in zircon bowl and ABEC7 ballraces in vertical axle. The counterweight is damped with thermo-plastic elastomer (TPE) damping pad.
- 4 All key features for cartridge alignment and adjustability are available on the tonearm VTA/SRA, VTF, azimuth, anti-skate, and a slotted aluminum headshell for overhang and offset angle.
- 5 The conical thermo-plastic elastomers (TPE) suspension system dampens vibrations.
- **6** A low-profile sandwich floating chassis made of MDF is what gives this table a "superflat" silhouette.

#### IMPORTANT

Your turntable was shipped partially disassembled in order to avoid damage to sensitive parts. Please check immediately to make sure that neither the packaging nor the device was damaged in transit. If you are missing parts or if the unit is damaged, please do not operate and contact your dealer.

#### PLEASE DO YOUR PART TO HELP PROTECT THE ENVIRONMENT

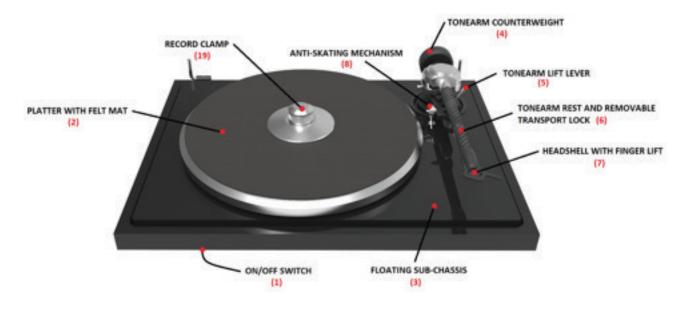
#### **DISPOSAL OF PACKAGING MATERIAL**

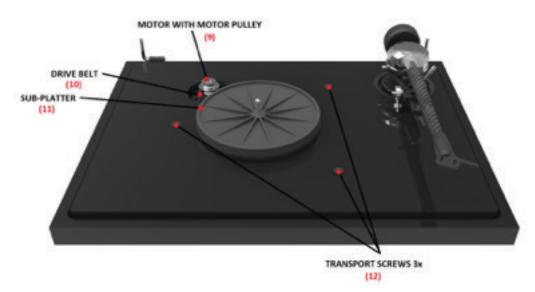
NAD packaging is carefully designed to protect your component from damage in transit and **you are strongly urged to keep the original packaging in order to safely ship or otherwise transport your turntable in the future**.

However, the packaging materials were chosen to be environmentally friendly, so if you must discard the packaging, please recycle.

### **IDENTIFICATION OF CONTROLS**

#### **FEATURES AND CONNECTIONS**







- 1 ON/OFF switch
- 2 Platter with felt mat
- **3** Floating sub-chassis
- 4 Tonearm counterweight
- 5 Tonearm lift lever
- **6** Tonearm rest and removable transport lock
- 7 Headshell with finger lift

- 8 Anti-skating mechanism
- 9 Motor with motor pulley
- **10** Drive belt
- 11 Sub-platter
- **12** Transport screws 3x
- 13 RCA output with earth connection
- 14 Damped adjustable feet

- 15 Power supply socket
- **16** Dustcover
- 17 Dustcover hinge
- **18** Dustcover hinge fasteners
- 19 Record clamp

#### TRANSPORT SCREWS

Remove the three transport screws (12) from the top part of the chassis before installing the sub-platter (11), the drive belt (10) and the platter (2).



#### NOTE

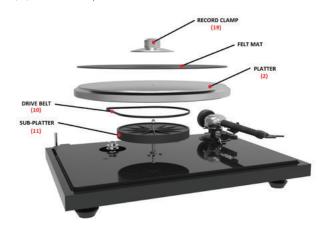
The transport screws are used to ensure safe shipping and transport, and should be reinstalled prior to any future shipment or transportation of the turntable.

#### PLATTER, SUB-PLATTER AND DRIVE BELT INSTALLATION

Remove the protective cover from the sub-platter (11).

Install the sub-platter (11) and the drive belt (13) as shown in the following illustrations.

Install the platter (2) on the sub-platter (11) and screw the Record clamp (19) with LP on the platter.



#### **ADJUSTING THE PULLEY HEIGHT**

In rare instances, you may have to adjust the pulley height if it taps against the platter:

Carefully remove platter and drive belt from the turntable. Using a small flathead screwdriver, loosen the small screw and move the pulley to the desired position.

Tighten the screw back and fit the drive belt and the platter.



#### **TONEARM ASSEMBLY**

The tonearm includes a combination of cardan bearings in horizontal axle and Japanese ball bearings in vertical axle.

See the next steps to set up your tonearm.

#### 1 CARTRIDGE INSTALLATION

If you purchased this turntable in a package that included the cartridge, this has already been done for you.

Install the cartridge into the aluminium headshell, using the appropriate hardware included with your cartridge.

Connect the cartridge as indicated below:

White left channel L+
Red right channel R+
Green right channel RBlue left channel L-

For correct cartridge alignment, use the two-point cartridge alignment protractor provided with your C-Sharp accessories. If unfamiliar with two-point setup, please refer to your dealer.

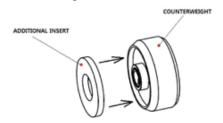
#### **2 COUNTERWEIGHT ASSEMBLY**

The counterweight has two separate parts:

The first part is the counterweight itself. The second part is an additional insert that enables optimal balancing of heavier cartridges.

The counterweight without the additional insert can balance cartridges from 5 to 9 g. (The weight of the counterweight itself is  $110 \, g$ .)

The counterweight with the additional insert can balance cartridges from 9 to 17 g. (The weight of the counterweight with the additional insert is 148 g.)



#### 3 VERTICAL TRACKING FORCE SETTING (VTF)

Before setting the Vertical Tracking Force, confirm the exact weight of your cartridge. Depending on your cartridge weight, determine whether to use the counterweight with or without the additional insert, in accordance with the specifications above.

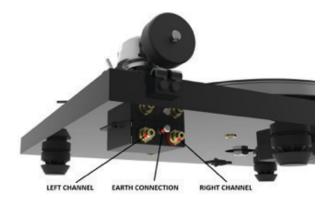
Pushing carefully, turn the counterweight onto the rear end of the counterweight support rod as shown in the illustration below. Place the stylus pressure gauge (not supplied) onto the platter. To set the required VTF, lower the tonearm lift lever as indicated in the illustration and place the tip of the stylus on the pressure gauge.

As viewed from the headshell, turning the counterweight counterclockwise (moving it in closer toward the tonearm) increases the VTF, turning clockwise (away from the tonearm) reduces the VTF. Turn the counterweight appropriately until the VTF shown on the pressure gauge matches your cartridge's recommended vertical tracking force specifications.



#### 4 TONEARM OUTPUT CONNECTION

Connect the tonearm cable provided with the accessories to the RCA tonearm output that is located at the rear of the turntable, behind the tonearm. Connect the grounding cable on the earth connection screw.



#### 5 VERTICAL TRACKING ANGLE SETTING (VTA)

To set the Vertical Tracking Angle, first put a record on the platter. When the needle is lowered into the record groove, the tube of the tonearm should be parallel to the surface of the record. If it is not, loosen both hexagonal screws in the tonearm base just enough to allow vertical movement of the arm pillar without force, and slide the arm up or down until it is parallel.

Carefully and evenly retighten the hexagon screws without applying excessive force (which could deform the arm pillar).



#### **6 AZIMUTH SETTING**

The cartridge needle must be perpendicular to the record in order to trace the groove wall modulations correctly.

The azimuth (angle) is precisely set by the factory. In the event that you need to modify this setting, however, follow the instructions below. Loosen the small AZIMUTH SET SCREW, again using the 1.5 mm hexagonal key.

#### NOTE

#### DO NOT REMOVE THE AZIMUTH SET SCREW COMPLETELY!

Loosen the screw just enough to be able to gently rotate the arm tube and set the azimuth to the correct position. The correct position can be checked from the front view, preferably with the needle placed on a mirror placed on the platter. Once the azimuth setting is correct, gently re-tighten the AZIMUTH SETTING SCREW.



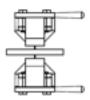
#### **EXAMPLES OF INCORRECT AZIMUTH SETUP**



Too much left angle



Too much right angle



The correct position is 100% perpendicular to the record.

#### 7 ANTI-SKATING ASSEMBLY AND ADJUSTMENT

The anti-skating mechanism is shipped partially disassembled to avoid damage during transport. For correct installation, please follow the steps below.

#### Step 1

Prepare all parts supplied from the accessories bag:

 Anti-skating sliding mechanism with anti-skating weight and thread for mounting on the tonearm



#### Step 2

Put the anti-skating sliding mechanism on the end of the anti-skating support rod.



#### NOTE

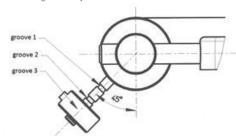
Be careful when handing the anti-skating thread in order to avoid damaging it.

#### Step 3

The anti-skating sliding mechanism is supplied with a pre-mounted anti-skating weight and anti-skating thread. Put the eye of the anti-skating thread around the hole for the HOOK SCREW and screw the HOOK SCREW into the tonearm through the eye of the anti-skating thread as shown in the illustration below.



**Step 4** Anti-skating force adjustment:



Adjust the anti-skating force by positioning the weight on the appropriate groove of the anti-skating sliding mechanism. Anti-skating downforce should be adjusted in correspondence with the tonearm downforce as follows:

| Tonearm downforce             | Anti-skating groove     |
|-------------------------------|-------------------------|
| Lower than 13 mN or 1.3 grams | 1st groove from bearing |
| 13–18 mN or 1.3–1.8 grams     | 2nd groove from bearing |
| 18–25 mN or 1.8–2.5 grams     | 3rd groove from bearing |

#### **LEVELING THE TURNTABLE**



Three precision adjustable damped feet are mounted under the turntable for leveling the turntable. Once the turntable is in final position, put the supplied spirit level on the sub-chassis, and then level the turntable by screwing or unscrewing the feet as needed. It is advisable to check level from several positions on the subchassis.

# USING THE CLAMP, STARTING THE MOTOR, CHANGING THE SPEED

Using the clamp – after placing a record on the platter, place the record clamp on the spindle and record. Do not screw the clamp for playback.

#### **CONTROLING THE TURNTABLE**

- To start rotation of the platter, press the button ON/OFF switch (1)
- To play 45 r.p.m., put the drive belt (13) over the larger diameter part
  of the motor pulley using accessory toll provided. To revert to 33r.p.m.
  repeat the proceedings using the smaller step on the pulley.

## **TROUBLESHOOTING**

| CONDITION  | POSSIBLE CAUSES   |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
| The platter doesn't turn although the unit                 | The unit is not connected to the mains power supply (the building's electrical system).   |  |  |  |  |  |  |  |
| is switched on   | No mains power is being delivered at the socket.  |  |  |  |  |  |  |  |
|  | The drive belt is not fitted properly or has slipped off.   |  |  |  |  |  |  |  |
| No signal through one or both channels:                    | <ul> <li>No signal contact from the cartridge to the internal tonearm wiring; or from that to the arm lead; or<br/>from that to the phono box; or between that and the amplifier. This could be due to a faulty plug,<br/>broken wire or loose solder joint in the plug/socket connection.</li> </ul> |  |  |  |  |  |  |  |
|  | Phono input not selected at amplifier.  |  |  |  |  |  |  |  |
|  | Amplifier not switched on.  |  |  |  |  |  |  |  |
|  | Amplifier or speakers are defective or muted.   |  |  |  |  |  |  |  |
|  | No connection to the loudspeakers.  |  |  |  |  |  |  |  |
| Strong hum on phono input:                                 | No ground connection from cartridge or arm or arm cable to amplifier, or ground loop.   |  |  |  |  |  |  |  |
| Distorted or inconsistent sound from one or both channels: | Turntable is connected to wrong input of amplifier, or MM/MC switch is incorrectly set. Needle or cantilever damaged. Wrong rpm; drive belt overstretched or dirty; platter bearing needs lubrication or is dirty or damaged.   |  |  |  |  |  |  |  |

#### SERVICE

Should you encounter a problem that you are not able to identify or alleviate despite the above information, please contact your dealer for further advice. Only when the problem cannot be resolved should the unit be sent to the responsible distributor in your country.

Guarantee repairs will only be effected if the unit is returned in appropriate

packaging. For this reason we recommend keeping the original packaging.

Never return a turntable without making sure that is it properly disassembled and correctly packaged in the original packaging according to the supplied diagram. Please: Remove the feet, counterweight, platter, cartridge and belt and pack them separately. Fit the cartridge protection cap. Insert the transport lock for the tonearm prior to carefully packaging the turntable.

#### WARRANTY

The manufacturer accepts no responsibility for damage caused by failing to adhere to these instructions for use and/or by transportation without the original packaging. Modification or change to any part of the product by unauthorized persons releases the manufacturer from any liability over and above the lawful rights of the customer.

## **REFERENCE**

## **SPECIFICATIONS**

| MODEL                         | NAD C558  |
|-------------------------------|---|
| Nominal speed                 | 33/45 rpm, manual speed change (78 rpm possible with special pulley)        |
| Speed variance                | 33rpm: $\pm$ < 0.50%, 45rpm: $\pm$ < 0.45%                                  |
| Wow and flutter               | 33rpm: $\pm$ < 0.15%, 45rpm: $\pm$ < 0.15%                                  |
| Signal to noise               | S/N Ratio (mechanical noise): - 40 dB S/N Ration (electrical noise): -68 dB |
| Downforce range               | 0 - 30 mN   |
|                               | 0 - 3.0 grams   |
| Supplied counterweight system | Counterweight (black) for cartridges 5 - 12 g                               |
| Effective tonearm mass        | 9.5 g   |
| Effective tonearm length      | 230 mm  |
| Overhang                      | 18 mm   |
| Power consumption             | 5 W max/ 0.3W standby   |
| Voltage                       | Universal swith mode power supply 15 V DC/0,8 A, 100-240 V AC, 47 - 63Hz    |
| Dimensions (W x H x D)        | 435 x 340 x 125mm   |
| Weight (without box)          | 5,5 kg (turntable)  |
|                               | 1,74 kg (platter)   |
| Weight (with box)             | 8 kg  |

| ORTOFON OM 10 CARTRIDGE TECHNICAL DATA | 4                                       |
|--|---|
| Frequency range                        | 20-22.000Hz                             |
| Channel separation                     | 22dB/1kHz                               |
| Output voltage                         | 4mV                                     |
| Recommended load impedance             | 47kohms/amplifier connection — MM-input |
| Compliance/stylus type                 | 20μm/mN – elliptical                    |
| Recommended tracking force             | 15mN                                    |
| Weight                                 | 5q                                      |



#### www. NADelectronics.com

# ©2017 NAD ELECTRONICS INTERNATIONAL A DIVISION OF LENBROOK INDUSTRIES LIMITED

All rights reserved. NAD and the NAD logo are trademarks of NAD Electronics International, a division of Lenbrook Industries Limited.

No part of this publication may be reproduced, stored or transmitted in any form without the written permission of NAD Electronics International.

While every effort has been made to ensure the contents are accurate at the time of publication, features and specifications may be subject to change without prior notice.