

RØDE[®]
MICROPHONES



NT 2
Instruction Guide

RØDE STUDIO CONDENSER MICROPHONES



CE (EMC, LVD)

RØDE NT2

Serial Number:

Checked by:

Date:

Thank you for purchasing a **RØDE NT 2**. This precision microphone will, if you follow the basic operational/storage information, give you years of high performance, trouble free service.

RØDE is part of the Freedman Group of Companies which was founded by the late Henry Freedman. Henry was born in London England, emigrating to Stockholm Sweden in the early 50's where his career as an Electronics Engineer began. In 1966 he moved his family to Australia and established Freedman Electronics, a pioneer in the Professional Audio Industry.

The Company Headquarters are in Sydney Australia, home of the 2000 Olympic games. There are divisions that import and distribute professional audio products, and others that design and manufacture speaker systems, amplifiers and associated electronics.

The **NT 2** is part of a growing family of microphones and accessories backed by over forty years of experience in Professional Audio, and is the result of a two year research and development program. Each microphone is hand assembled in Australia using imported and locally produced parts. The electronic components used were selected not only for their reliability and technical specification, but extensive listening tests were also carried out to gauge their sonic qualities before being included.

All wiring and solder is of Hi-Fi Industry grade and all connecting points are Gold plated as well as being treated with Deoxidizing Solution. The PCB's are sprayed with a Conformal, and the above procedures assure long term immunity to signal degrading corrosion.

Each microphone is 'soak tested' for 24 hours prior to its final test.

We are proud of this microphone, and hope that you are, and remain fully satisfied with your purchase.



Peter Freedman

RØDE Australia

SPECIFICATIONS:

Capsule: Dual pressure gradient transducers.

Frequency Response: 20 - 20,000 Hz

Noise: 17dB-A SPL

Sensitivity: 16 mV/Pa

Max SPL: 135dB – 145 with pad.

Output Impedance: 200W

Power Requirement: 48V D.C.

Current Consumption: 3.5ma.

Weight: 530 gm

Features:

- Large Capsule with gold plated membrane.
- Low-Noise, transformerless circuitry.
- Omni and Cardioid polar patterns.
- High Pass Filter.
- -10db Pad.
- Full Frequency Response.
- Gold Plated Output Connector and internal head pins.
- Designed and Manufactured in Australia.

The NT2 comes complete with:

- Flight Case.
- Shock Mount (SM-1).
- Windshield (WS-2).
- 2 Spare SM-1 Rubber Bands.
- Guarantee and Instruction Guide.
- Pack of Moisture-Absorbing Crystals.

The NT2-NC comes complete with:

- Zip Pouch (ZP-1)
- Shock Mount (SM-1).
- 2 Spare SM-1 Rubber Bands.
- Guarantee and Instruction Guide.
- Pack of Moisture-Absorbing Crystals.

When you open the storage box for the first time, check that you have all the accessories listed.

- Before connecting and using the NT2 please take a few minutes to read these instructions.

1. You will need a power supply to operate the NT 2. For optimum results, this should be a 48V D.C. supply.

Most professional mixing consoles have an internal 48V supply, or you can purchase a separate supply. Make sure the power supply you use is a professional unit that is operating correctly. Damage due to connection of the NT 2 to a faulty power supply is not covered by the guarantee.

2. Set the polar pattern switch to your desired setting either omni or cardioid.

Set the response switch to your desired setting either flat response or low frequency cut.

This switch also allows for a 10 db pad to be inserted into the signal path which allows for very high SPL operation.

3. The NT 2 comes complete with a shock mount suspension device (SM 1). Connect the shock mount to a stable microphone stand (studio mic's do not like to be dropped!). The shock mount pivot screw should be tightened (by hand) when you have positioned it at the appropriate angle. To fit the NT 2, grasp the two levers located centrally and push them inwards, this will open up the suspension and the NT 2 can be placed in the mount.

4. When first connecting the NT 2 to a mixing console we suggest that you have the gain control adjusted to full attenuation.

5. Please make all cable connections before applying power to the microphone. Never remove the microphone cable while the power is connected.

6. Check that you have the NT 2 correctly connected. You can connect the microphone directly into the mixer without an external supply if 48V is available on the mixer.

Always use a balanced (3 pin XLR style) microphone cable. **Note: Ensure that the cable is a wired pin 1 screen, pin 2+ pin 3-**.

We suggest you purchase a lead with gold plated plugs, as contact resistance due to corrosion is a major cause of problems in all sound systems. **Note:** All contact points on the NT 2 are gold plated.

7. Switch the power supply/mixer on. The microphone will take about six seconds to stabilise. Adjust the mixer gain so that the Peak light flashes on the peaks of the program source to be recorded (Voice or Instrument).

You are now ready to use the microphone.

8. Microphone technique, or how to get the sound you want requires experimentation. We suggest that you start with the channel EQ set to 'off' or flat (no boost or cut). Try to get the sound you are after by changing the mic's position using either the omni or cardioid selection (depends on application), and/or by placing either reflective or absorbent panels at various angles adjacent to the source being recorded. Changing the acoustic properties of the space the microphone is in, is our recommended initial approach for obtaining the best sound quality. (Remember you can not change a room's acoustic properties with EQ.) After you have the best sound quality achievable with this approach, then equalisation and effects such as reverb or indeed any other signal processing can be used for enhancement, but should be used sparingly! We have designed the NT 2 to exhibit a rising response centered around 12K. This characteristic is found in many of the 50's classics, and is a very desirable quality in vocal and other applications. Because of this inherent 'presence', high frequency equalisation, with its signal degrading consequences, is not usually required to restore clarity lost in the recording/mixing process.

Some tips that may be helpful:

1. Condenser microphones do not like moisture! Never take the NT 2 into the shower, never sing in the rain or go swimming with one. Seriously, the NT 2, like all studio mics, should be kept dry at all times. The capsule will be subjected to a lot of moisture in vocal applications, and we suggest the Windscreen be used for all vocal work.

2. Never subject the NT 2 to mechanical shock by hitting or dropping the mic as this can cause it to be severely damaged and is not covered by your warranty.
3. After every use, the NT 2 should be removed from its suspension, wiped down with a dry soft cloth, and placed in its case. Be sure to place the moisture absorbent crystals (white pouch) at the head end of the mic. The crystals will absorb any moisture present. Eventually, this pack needs to be dried out. When the crystals have turned pink, the pack should be placed in an oven set to between 100 to 150°C. They will be activated when they turn blue.
4. The body of the NT 2 is finished in a matt nickel plating over brass. To clean the body, carefully unscrew the bottom angled end piece, remove the end piece, the barrel will now be able to be removed. Place the mic back in its case while you are cleaning the barrel.

Use a non abrasive 'kitchen style' solution to clean the barrel, rinse with clean water and then fully dry before replacing the barrel. There is a pin guide on the end of the main mic body that locates the barrel in the correct position. Replace the end piece and tighten until the barrel does not move. Be sure not to over-tighten as this may damage the microphone.
5. **Never** remove the cage that surrounds the capsule!!! The temptation to touch the delicate membrane will be too much to bear and you will have ruined your microphone. If you are rich and have 'a few roo's loose in the top paddock', and really want to do this, go ahead, we can replace the capsule at great cost, which of course includes renewing your warranty that you made void by sticking your fingers where they don't belong.
6. **Never** be tempted to let the local electronics 'genius' modify the microphones' electronic circuit! Even if they guarantee to achieve what he/she may call a 'great improvement' in sonic quality. At best this will void your warranty, and at worst???
7. **Never** use the NT 2 as a hammer or football.
8. **Never** lend the NT 2 to anyone! Tell them to buy one of their own.

Warranty Service:

All **RØDE** products are warranted for one year from date of purchase and the warranty card should be used to register that purchase.

The warranty covers parts and labour that may be required to repair the microphone during the warranty period. The warranty excludes defects caused by normal wear and tear, modification, shipping damage, or failure to use the microphone as per the instruction guide.

If you experience any problem, or have any questions regarding your **RØDE** microphone, first, contact the Dealer who sold it to you. If the microphone requires Factory authorised service, return will be organised by that Dealer. We have an extensive Distributor/Dealer network, but if you have difficulty getting the advice or assistance you require, do not hesitate to contact us directly.

The warranty excludes defects caused by normal wear, modification, shipping damage or failure to use the microphone as per the instruction guide.

If you experience any problems, or have any questions regarding your **RØDE** microphone, first contact the dealer who sold it to you. If your microphone requires factory authorised repair, you will be given a return authorisation number and an address where to send the unit. Please include all accessories, your name, address and contact number.

Except to the extent precluded by applicable state law, the manufacturer of this product will have no liability for any consequential, incidental or special damages; any warranty of merchantability or fitness for particular purpose expires when this warranty expires.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

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or contact your local **RØDE** Distributor