

NT3 Instruction Manual



www.rodemic.com

CE (EMC, LVD)

Introduction

Thank you for investing in the **RØDE** NT3 studio condenser microphone.

Stylish and modern, the NT3 is a studio and location workhorse. With both P48 phantom power and internal 9V battery operation, this **RØDE** condenser microphone is at home anywhere.

Intended for studio, stage and location work, this versatile handheld or stand mounted microphone incorporates a true externally polarized condenser (cardioid polar response) transducer with an internal capsule shock mounting system, and an ultra-low noise electronic circuit that has a high immunity to R.F. interference.

Please take the time to visit **www.rodemic.com** and register your microphone for a full ten year warranty.

While there you can view studio tips and techniques, as well as browse the comprehensive range of accessories for the NT3 and other **RØDE** microphones.

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Specifications

Acoustic Principle:	Externally polarised 19mm (¾") condenser
Active Electronics:	JFET impedance converter with bipolar output buffer
Directional Pattern:	Cardioid (see graph)
Frequency Range:	20Hz ~ 20,000Hz (see graph)
Output Impedence:	200 Ω
Sensitivity:	-39dB re 1V/Pa @ 1kHz (12mV/Pa @ 94dB SPL) ±2dB @ 1kHz
Equivalent Noise:	<16dBA SPL (per IEC651)
Maximum Output:	+9.5dBu (@ 1kHz, 1% THD into 1k Ω)
Dynamic Range:	>123dB (per IEC651)
Maximum SPL:	>140dB (@ 1kHz, 1% THD into 1k Ω)
Signal/Noise:	>77dB SPL (@ 1kHz, rel 1Pa per IEC651)
Power Requirement:	8mA @ P48 (20-60v) 7mA @ P24 (12-30v) 1.4mA @ P12 (11-26v) 1.2mA @ 9V (battery)
Output Connection:	3-pin XLR
Net Weight:	371g
Dimensions:	270 x 130 x 50mm

Frequency Response



Polar Response



Accessories



Stand mount with 3/8" - 5/8" thread adaptor

- True condenser externally biased ¾" capsule
- Dual power operation
- Cast metal body with durable satin-nickel finish
- Transformerless output
- Internal capsule shock mounting
- Internal shock mounting system
- High level of RF rejection
- Designed & manufactured in Australia
- Full 10 year warranty*

Powering the NT3

- The NT3 can be powered by either phantom power or 9 volt battery (see specifications).
- Most professional mixing consoles include a 48v phantom power supply, however in the case that one does not a separate power supply may be used.
- If phantom power is not available on your equipment and you do not have a power supply, you will need to use battery power. A 9 Volt (PP3) battery should be fitted into the cavity within the microphone body ensuring correct polarity (+ to + and - to -).
- We recommend that you use a high quality alkaline battery. Tests have shown a life expectancy for a high quality alkaline battery used in the NT3 to be in excess of 400 hours. This is roughly the equivalent of 8 hours usage per week for a year.

^{*}Online product registration required.

 The NT3 features a handy power indicator light to help notify you when the battery is running low.

L.E.D. SINGLE FLASH – When the L.E.D. flashes (illuminates for around one second), the battery power is 'good'. This indicates that the microphone has just been powered.

L.E.D. STAYS ON – When the L.E.D. light illuminates continuously the battery power is getting low. Please replace the battery as soon as possible, as the microphone's sensitivity is reduced when operated with a low battery.



- When using NT3 on battery power, it is a good idea to keep the microphone in the off position when not in use. This will save battery power and increase the battery life. We recommend that during long periods of non-use the battery should be removed, as it may leak and potentially damage the microphone.
- If phantom power is available the NT3 will not draw any power from the 9v battery.

To fit the battery:

 Unscrew the lower section of the body to reveal the battery cavity.



Unscrewing NT3 body

- 2. Flip open the battery clip so that it doesn't interfere with loading the battery.
- Insert the battery into the cavity, inserting the bottom first. Take note of the plus and minus symbol on the floor of the battery cavity to ensure the battery is positioned the correct way.



Inserting the battery

- Push the battery into place so that it is parallel with the top of the cavity. Secure the battery in place by flipping the battery clip over so that it sits on the battery.
- 5. Reassemble the body, screwing lower section firmly together with the upper section.

Using the NT3

- A stand mount clip (RM3) is included with your NT3, and should be used to connect the NT3 firmly and safely to a stable microphone stand.
- Always use a high quality microphone cable and ensure that it is wired Pin 1 screen, Pin 2 (+), Pin 3 (-). You may of course use XLR-XLR, XLR-jack or XLRmini-jack depending on your input socket.
- We recommend that any connections made to the mixer or recorder are made with the attenuation (gain) set to OFF.
- When first switching the mixer on and phantom power has been applied to the NT3, or when the battery power has just been switched on, you should allow several seconds for the microphone to stabilize.
- To ensure the lowest noise/distortion your mixer input gain control should be set so that the Peak Program Indicator (PPI) LED flashes ON during peaks of the source (voice/instrument). If there is no PPI, adjust the input gain while listening for distortion of the sound. If distortion is heard, gradually reduce the gain until it is no longer present.
- 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 want by placing either reflective or absorbent panels at various angles adjacent to the source being recorded. Changing the acoustic properties of the space around the microphone is our recommended initial approach for obtaining best sound quality.
Remember you cannot change a room's acoustic properties with EQ.

When the preferred sound has been achieved (as above) then EQ and effects such as reverb or indeed any signal processing can be used for enhancement, but should be used sparingly.

- When used as a vocal mic, the NT3 will be potentially subject to moisture, which should be avoided when using condenser microphones. We recommend the use of the included windshield to minimise any moisture build up. This will also minimise plosive sounds (hard 'p', 'b', 'k' and 't' sounds) that can bottom-out the capsule causing a popping sound.
- As a live vocal mic the NT3 offers studio-quality sound in a stage environment, superior to the sound quality achieved from a dynamic microphone.



 The low frequency of the NT3 extends to below 20Hz which is an attractive quality for most recording situations, however in a live situation you may wish to reduce these frequencies when using it as a vocal mic. If you have a high pass filter/bass roll-off then switch it in.

Alternatively try moving the microphone away from the sound source (out of the proximity effect). This basic microphone control/technique should be practiced to ensure that the best possible results are achieved.



- After use the NT3 should be removed from its stand mount, wiped with a dry, soft cloth and placed in its protective zip pouch with the supplied moisture-absorbent crystals.
- Be sure to place the moisture-absorbent crystals (supplied) at the head of the microphone(s), so as to absorb any moisture present.

Eventually this pack of crystals will need to be dried. This is indicated by the crystals turning pink in colour.

They can easily be re-used by placing them in an oven at 100 - 150 degrees celsius for approximately ten minutes. The crystals will operate effectively again once they have turned blue.



Warranty

All **RØDE** microphones are warranted for one year from date of purchase. You can extend that to a full ten years if you register the microphone online at **www.rodemic.com**.

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 a 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.

RØDE Microphones

For Technical Support

For all technical support matters, please see the RØDE support Frequently Asked Questions at www.rodemic.com/support

If you are unable to resolve your issue, please contact RØDE at the email addresses below:

Australian customers – ozsupport@rodemic.com

US customers - support@rodemic.com

English speaking customers from other regions – worldsupport@rodemic.com

For support in languages other than English please contact your local RØDE representative (listed at www.rodemic.com/distributors)