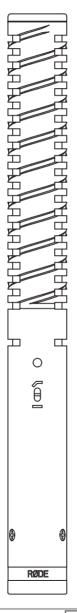


# NTG-1

**Instruction Manual** 





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- pro audio with a smile

## RØDE NTG-1

I want to thank you for your purchase of a **RØDE** NTG-1.

Please take the time to read this manual as it contains information that will help you achieve the best results from your microphone, as well as help you get many years of reliable service from your investment.

The design brief for this microphone was to build a shotgun that could be used in professional video, film and live stage applications where low noise, a wide frequency response and tightly controlled polar patterns are vital. I am sure that once you have used your new microphone, you will agree we achieved our aim!

Like all **RØDE** microphones the NTG-1 is manufactured using the finest surface mount electronic components available, and has a body machined of high grade aluminium which is finished in hard wearing epoxy paint. The heart of any microphone is the capsule, and with the NTG-1, we have designed and incorporated what we believe to be one of the best transducers in its class.

The NTG-1 has many uses. It can be mounted on video cameras using either the on-board camera mic mounts or the optional **RØDE** shock mount. The NTG-1 is also suitable as a boom mounted mic for film and video use where it is desirable to get closer to the sound source yet still be out of the shot. Another area where the NTG-1 excels is in a live sound situation, and the NTG-1 is perfect for plays, as well as a cymbal overhead mic or can be used to great effect as a 'crowd mic' when doing a live band recording.

The NTG-1 comes complete with a heavy duty microphone holder and a wind cover for 'moderate' outdoor applications. **RØDE** has also designed a series of products which include 'furry' wind socks (for high wind applications), pistol grips and boom poles as well as cables and adaptors. Details of these units are available on the website www.rodemic.com

If you have any questions or comments, please dont hesitate to contact us direct at <a href="mailto:info@rodemic.com">info@rodemic.com</a>

Peter Freedman Sydney, Australia

## RØDE NTG-1

# **Specifications**

## Acoustic principle:

Line plus Gradient.

#### Directional pattern:

Super-Cardioid.

## Frequency range:

20 Hz ~ 20 kHz selectable HPF a 80 Hz/12 dB octave

## Output impedance:

50 Ω

## Signal/Noise ratio DIN/IEC 651:

76 dB (1 kHz rel. 1 Pa; per IEC651, IEC268-15)

#### Equivalent noise:

18 dB SPL (per IEC651, IEC268-15)

#### Maximum SPL:

139 dB (@ 1% THD into 1 k $\Omega$ )

## Sensitivity at 1 kHz into 1 k $\Omega$ :

-36 dB re 1 Volt/Pascal (15 mV @ 94 dB SPL) +/- 2 dB (at 1 kHz in free field into open circuit)

# Dynamic range - Amplifier DIN/IEC 651:

121 dB (per IEC651, IEC268-15)

### Power (Supply voltage):

P48 Phantom, 44 V to 52 V

#### Current consumption:

3.5 mA

### **Output Connection:**

3 pin XLR, balanced output between pin 2 (+), pin 3 (-) and pin 1 (ground)

## Weight approx.:

105 g approx. (3.37 oz.)

## **Features**

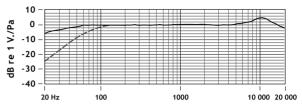
- · Broadcast sound quality.
- Low noise circuitry.
- · Condenser transducer.
- Rugged metal construction.
- · Low handling noise.
- Includes stand mount, zip pouch and windshield.
- · Designed and manufactured in Australia
- Full 2 year guarantee.

## RØDE NTG-1

# Specifications cont.

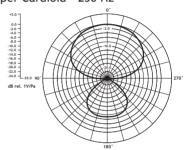
## Frequency range:

20 Hz ~ 20 000 Hz selectable (HPF) @ 80 Hz 12 dB/octave.



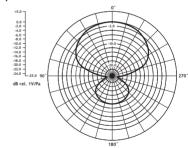
## NTG-1 Polar Pattern:

Super Cardioid - 250 Hz



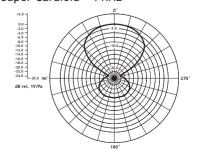
### NTG-1 Polar Pattern:

Super Cardioid - 1 KHz



#### NTG-1 Polar Pattern:

Super Cardioid - 4 KHz



# Power Your NTG-1

The NTG-1 requires power to operate.
 This is supplied via 48V phantom supply which is available from most professional video cameras or mixing consoles.

# Mounting your NTG-1

2) The NTG-1 comes complete with a heavy duty stand mic holder as shown in figures 1 - 3.





fig. 1

fig. 2

Install as shown by pushing the mic in on an angle coming from the back. You will notice the holder is quite firm, and this is intentional so that the the NTG-1 will not come out easily, which could damage the mic.



Make sure you do not block the slots on the side of the mic (Fig 3) as blocking these will affect the sound quality and the polar pattern (directional qualities).

fig. 3

# Connecting your XLR cable

3) The NTG-1 offers a balanced microphone level output and is wired Pin 1 earth, Pin2 + and Pin3 -. Make sure you use a high quality low loss cable that is as short as practical to avoid losses and distortion (see Fig 4 and Fig 5).

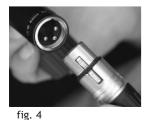




fig. 5

## **RØDE NTG-1**

## NTG-1 Controls

4) Now that you have the NTG-1 securely fastened to your camera or mic stand, and the audio output lead connected, you are ready to use the mic.

The NTG-1 also incorporates a switchable high pass filter set at 80 Hz. This is activated by the recessed switch shown in fig.(6 & 7).



High Pass Filter - (HPF)



fig. 6 - NTG-1 Controls

Flat Response

fig. 7 - HPF Control

A small screwdriver or even a pen will work for this application. Use the high pass filter when you wish to remove low frequency noise that is not part of your intended sound source. Remember however the tonal characteristics will be affected by this, so it is important that you listen to the sound with and without the HPF in circuit before deciding if it is appropiate for the source.

# NTG-1 Windshield

5) The NTG-1 comes with a foam windshield.

The windshield should be used even in the slightest breeze as this can cause sound interference. When using the mic outside in heavy winds you may need to purchase a more specialised wind shield.

RODE has a full line of accessories such as windshields, boom poles, cable extenders and pistol grips which will be available in early 2005.

## **RØDE NTG-1**

6) While it may sound like a contradiction, shotgun mics are not designed for long distance pick up. I have heard people ask, "How far away can this mic pickup sound?". Of course you can boost the gain level on your camera and you will hear more defined sounds over a longer distance than with conventional microphones.

Long distance pick up microphones include parabolic reflector systems and more recently adaptive arrays using multiple capsules and Digital Signal Processing (DSP) technologies. Shotgun microphones have a narrow pick-up angle or polar response, and so can be used to great effect with cameras for news gathering, weddings or sporting events.

# Warranty Service

The **RØDE** NTG-1 is warranted for two years from the date of purchase and the warranty card should be used to record and 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 problems or have any questions regarding your **RØDE** microphone, first, contact the dealer who sold it to you. If the microphone requires factory authorized service, that dealer will organise return.

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 or contact your local distributor.

# **Contact Details**

#### International:

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