

RØDE[®]

M I C R O P H O N E S



K2

Instruction Manual



www.rodemic.com

Introduction

We at RØDE would like to thank you and congratulate you on purchasing the **RØDE** K2.

This valve microphone represents the finest studio microphone technology currently available.

The K2 is a valve condenser design in the tradition of the classic studio microphones. The character of the K2 sound will become immediately obvious the first time you record with it.

While we have captured the subtlety of the legendary valve microphones, we have also made sure the noise specification and reliability is equal to current professional recording standards.

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 **RØDE** microphones.



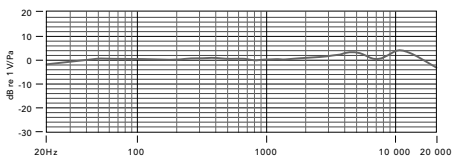
Peter Freedman
RØDE Microphones
Sydney, Australia

Specifications

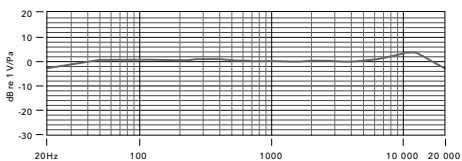
Acoustic Principle:	Pressure, Pressure gradient
Active Electronics:	Valve/tube impedance converter with bipolar output buffer
Directional Pattern:	Multi Pattern (see graph)
Frequency Range:	20Hz ~ 20,000Hz (see graph)
Output Impedence:	200Ω
Sensitivity:	-36dB re 1V/Pa @ 1kHz (16mV/Pa @ 94dB SPL) ±2dB @ 1kHz
Equivalent Noise:	10dBA SPL (per IEC651, IEC268-15)
Maximum Output:	>+30dBu (@ 1kHz, 1% THD into 1kΩ)
Dynamic Range:	150dB (per IEC651)
Maximum SPL:	162dB (@ 1kHz, 1% THD into 1kΩ)
Signal/Noise:	>81dB SPL (@ 1kHz, rel 1Pa per IEC651)
Power Requirement:	Dedicated power supply (100-120V / 200-240V AC 50/60Hz)
Net Weight:	815g
Dimensions:	208 x 55 x 55mm

Specifications

Frequency Response

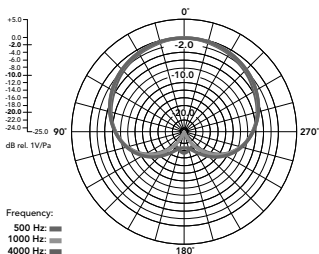


Cardioid

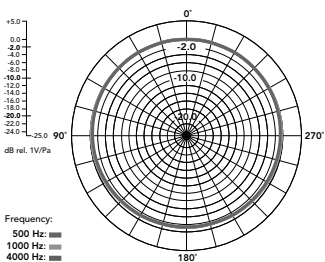


Omni

Polar Response



Cardioid



Omni

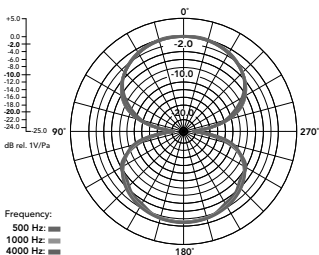


Figure 8

Features

- Large capsule (1") with gold-plated diaphragm
- Class "A" valve circuitry
- Hand selected and graded 6922 twin-triode valve
- Dedicated power supply
- Ultra low noise
- Wide dynamic range
- Continuously variable polar patterns controlled at the power supply.
- High level of RF rejection
- Designed & manufactured in Australia
- Full 10 year guarantee*

Accessories

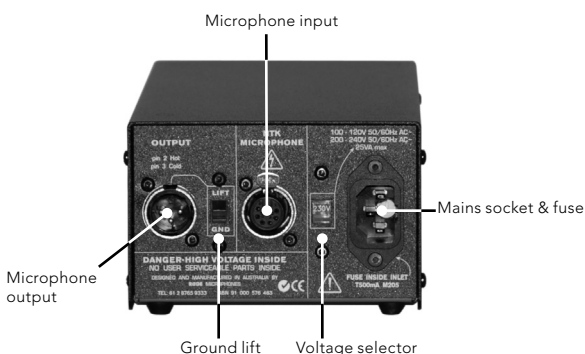


- | | |
|----------------|---------------------|
| • Power supply | • Power cable |
| • K2 cable | • Stand mount (SM2) |

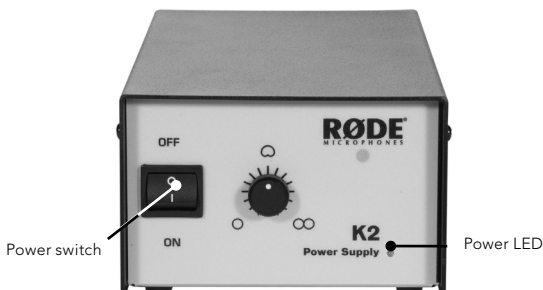
*Online product registration required.

Before using the K2

- Ensure that your K2 has been set to the correct voltage, as used in your country. The K2 can be used with mains supply voltages of between either 110-120V 50/60Hz or 220-240V 50/60Hz.
 - To select for 110-120V use, set the voltage selector to 115V.
 - To select for 220-240V use, set the voltage selector to 230V.
- On either voltage selection the mains fuse (inside the mains socket) is always to be a T500mA slow blow fuse.
- The back panel of the K2 power supply has a microphone output socket, a ground (earth) lift, a microphone input socket, a voltage selector, and a mains power socket which also incorporates a fuse.



- The front panel of the K2 power supply has the mains power on/off switch, the Polar Pattern dial and a blue LED to indicate power status.



Connecting the K2

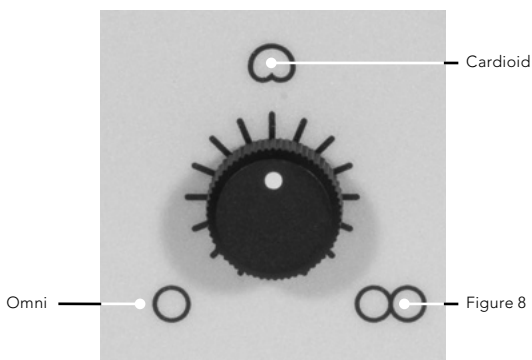
- Having ensured that the power supply is set to the correct voltage you can begin to connect the K2 to the power supply. **Do not connect the power to the mains before connecting the microphone.**
- Connect the male 7-pin plug of the K2 cable to the 7-pin input socket on the rear of the power supply.
- Connect the female 7-pin plug of the K2 cable to the microphone. Ensure that both plugs are correctly aligned and pushed firmly into their respective sockets.



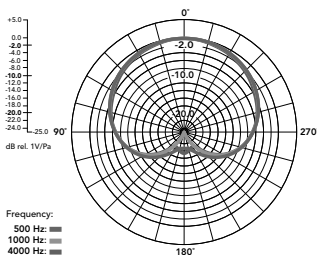
- Now connect an XLR microphone cable to the output socket on the rear of the power supply, taking that output to your mixer/pre-amplifier.
- We suggest the use of a high quality cable, preferably with gold plated contacts. Use as short a cable as possible, as long cables can adversely affect sound quality.
- Ensure that the K2 is fixed securely using the supplied SM2 shock mount to a stable microphone stand. The K2 condenser microphone is a precision instrument and should be treated with care.
- Now you can connect the power supply to the mains supply and begin using the K2 microphone. It is recommended to allow a minute or two to allow the microphone to stabilise.

Setting the Polar Pattern

- Your K2 can be adjusted to any Polar Pattern from omni, through cardioid to figure of eight. This flexibility allows recording of most instruments and/or voices with absolute control.
- Select the preferred Polar Pattern. This is done with the circular dial (knob) on the front of the K2 Power Supply. (The most commonly used pattern for vocal recording is Cardioid – at the 12 o'clock position).

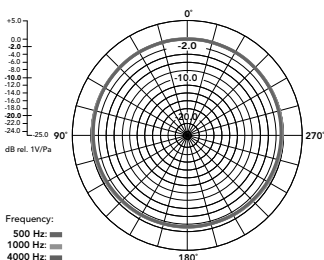


- When the cardioid position is selected, the microphone picks up sound from in front of the microphone, and rejects sound from the rear.

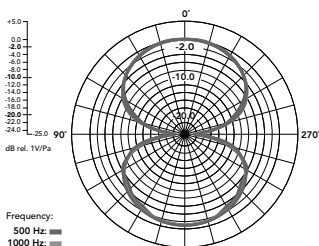


Setting the Polar Pattern

- When in the omni position (fully anti-clockwise), the microphone picks up sound from all around the microphone and there is less proximity effect than in cardioid mode. (Proximity Effect is an increase in lower (bass) frequencies when the sound source is 'close' to the microphone). The omni pattern is commonly used for room (ambient) micing or to record a more natural sound when close mi'ing instruments.



- When in the Figure 8 position (fully clockwise), the microphone picks up sound from in front and behind, and rejects sound from the other two sides. This pattern is commonly used for interviews (2 people with the microphone between them) or in conjunction with a cardioid microphone to use the MS (mid-side) stereo recording technique.



Setting the Polar Pattern

- You are able to select any position between these three main settings.

For example, if you choose a setting about halfway between the omni and cardioid positions, you will notice 'some' sound being picked up from the rear of the microphone, instead of being almost completely rejected (in cardioid). This can be particularly useful when you do in fact wish for 'some' sound from the rear, but not so much as when in omni mode.

- Experiment with the K2. Listen to the various patterns, and decide what suits your current application best.



Using the K2

- The gold dot on the face of the K2 indicates the front of the microphone, and the pick-up area of the cardioid pattern. Please be sure to have the side with the dot facing the sound source you wish to record.
- 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.

- It is worth mentioning that sometimes 'cutting' a particular frequency (sound) may be preferable to 'boosting' another. Of course 'boosting' can increase noise level and so should be done minimally.

As with many other aspects of the recording process, finding the preferred 'sound' is a matter of experimentation.

Using the K2

- We strongly recommend the use of a pop shield or filter for all vocal recording. These aid in minimising plosive sounds (hard 'P', 'B', 'T' and 'K' sounds) that produce a sudden jet of air which can cause the capsule to overload and produce a 'popping' sound.
- Any moisture on the microphone capsule can cause problems for condenser microphones, however the use of a pop shield or wind shield (optional accessory WS2) will reduce the risk of this occurring.



- Placement of the microphone and pop shield relative to the vocalist may be varied on several factors including room acoustics, the vocal performance, and whether the vocalist has a high or deep voice.

Using the K2

- An ideal reference is to begin with the pop shield directly in front of the vocalist, and approximately 15cm (6") away from the microphone. This will assist in keeping the performer at a constant minimum distance from the microphone and helps to maintain reasonable recording levels.
- Experimentation should be made with the angle from which the microphone is addressed, as different results can be achieved when the vocalist is 'off-axis' to the microphone (and the gold dot).



Ground lift

- If an earth loop is present (a mains frequency hum) there is a ground lift switch on the rear panel of the power supply, which should be raised to the 'lift' position. This earth loop can appear when two devices which are both earthed are connected together.

Storage

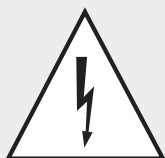
- After use the K2 should be removed from its mount, wiped with a dry, soft cloth and placed in its protective case.
- Be sure to place the moisture-absorbent crystals (supplied) at the head of the microphone, so as to absorb any moisture present.

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.

IMPORTANT NOTICE

DO NOT DISCONNECT THE MICROPHONE
CABLE WHILE THE SYSTEM IS POWERED
AS THIS MAY RESULT IN DAMAGE TO THE
MICROPHONE



NEVER REMOVE THE MAINS EARTH
DOING SO CAN HAVE LETHAL CONSEQUENCES

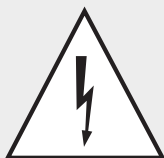
ACHTUNG: LEBENSGEFAHR
ENTFERNE NIEMALS DEN SCHUTZLEITER

NON SCOLLEATE IL FILO DI TERRA
POTREBBE ESSERE MOLTO PERICOLOSO PER IL RISCHIO DI
SCOSSE ELETTRICHE

RELIEZ IMPERATIVEMENT L'ALIMENTATION A LA PRISE TERRE
SOUS RISQUE MORTEL S'ÉLECTROCUTION

NUNCA MANIPULE LA TOMA DE TIERRA
ESTA ACCION PUEDE TENER GRAVES CONSECUENCIAS

IMPORTANT NOTICE



NOTE: There are no user-serviceable parts inside the K2 supply, but there ARE potentially lethal voltages.

If the supply does not work correctly, you should consult either the dealer you purchased the microphone from, or a qualified electronic technician.

DO NOT under any circumstance open the unit yourself!

ACHTUNG: Das K2 Netzteil enthält keine Teile, die vom Benutzer repariert werden können.

Gefahr: Das Gerät enthält spannungsführende Bauteile!

Für Reparaturen suchen Sie bitte Ihren Händler oder einen qualifizierten Fachbetrieb auf.

Auf keinen Fall dürfen Sie selbst das Gehäuse öffnen!

NOTA: All'interno dell'alimentatore del K2 non ci sono parti riparabili dall'utente ma ci sono invece tensioni pericolose! Se l'alimentatore non funziona correttamente dovete consultare il rivenditore presso il quale avete acquistato il microfono oppure un tecnico elettronico qualificato.

NON APRITE in ogni caso l'unità in quanto pericoloso!

AVERTISSEMENT: N'enlevez pas le capot de l'alimentation, sous risque d'électrocution. Si l'alimentation ne fonctionne pas correctement, consultez votre revendeur, ou un technicien qualifié. **Vous ne devez sous aucun prétexte ouvrir**

l'alimentation

vous-même!

NOTA: No manipule internamente la fuente de alimentacion del K2, puesto que el alto voltaje puede ser perjudicial en caso de sufrir una descarga.

Si se apreciara un funcionamiento incorrecto de la fuente de alimentacion, debera consultarlo en el establecimiento donde adquirio la unidad, solo puede ser manipulado por un servicio tecnico cualificado.

Bajo ninguna circunstancia abra VD. la unidad.

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 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

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Anywhere except Australia, the United States and Puerto Rico,
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