



SONTRONICS APOLLO 2 USER GUIDE

Thank you for choosing our APOLLO 2 microphone and welcome to the SONTRONICS family!
We hope you enjoy your new purchase and we invite you to take a moment to register your mic for our LIFETIME WARRANTY (see below).

We have provided this guide to help you fully understand your microphone and get the best from it.
PLEASE READ THIS GUIDE CAREFULLY before using your APOLLO 2 as it also contains important information for your safety and for the longevity of your new microphone.

For more information on all our microphones and accessories, and about SONTRONICS in general, visit www.sontronics.com

**SONTRONICS
LIFETIME
WARRANTY
ON ALL OUR MICS**

Email us your serial number and date/place of purchase and we'll activate your Lifetime Warranty. See full Terms & Conditions at www.sontronics.com/warranty.htm

ABOUT YOUR APOLLO 2

Our British-made and designed SONTRONICS APOLLO 2 is based on our groundbreaking APOLLO, which has become a must-have for studios, composers, venues and sound stages all over the world.

The APOLLO 2 utilises two ribbon motors set in X-Y Blumlein formation (named after English electronics engineer Alan Blumlein who invented stereo recording techniques in the 1930s) in addition to a British-made circuitboard of our proprietary design and a custom-wound transformer made here in SONTRONICS' hometown of Poole.

The delicate ribbons combined with the APOLLO 2's high sensitivity, super-low self-noise and the unique design of the seamless, laser-welded British stainless steel grille allow the mic to soak up every detail of whatever is being recorded, capturing a truly stunning and superbly accurate three-dimensional image.

APOLLO 2 is ideal for use as an overhead room microphone and gives sublime results on orchestra, choir and chamber ensembles, grand and upright piano in studios or in live environments. It gives natural, expansive results with perfect detail and clarity in the high frequencies and a balanced depth and fullness to the mids and lows.

APOLLO 2 is also perfect for using as an overhead microphone for drums and percussion or smaller instrument and vocal ensembles, and it can be used to great effect as a room or ambient mic, whether you're recording in a church, an opera house, on a live stage or in a home studio set-up. You can also use APOLLO 2 as a mono ribbon microphone by isolating one ribbon motor (using just one XLR cable) and turning the mic so that the live ribbon is facing the source.

Supplied with its shockmount and Y-cable in a sturdy flightcase, APOLLO 2 is an absolutely stunning addition to any mic collection.

APOLLO 2 KEY FEATURES

- Phantom-powered stereo ribbon mic
- Two ribbons in X-Y Blumlein formation
- Made in the UK
- Incredibly open, natural sound
- Captures every intricate detail
- Rich mid & low frequencies
- Covered by Lifetime Warranty
- Ideal for piano, orchestral, choral, chamber or opera recordings, in studio or live environments

TECHNICAL SPECIFICATIONS

Polar pattern: Figure-of-eight x2

Frequency response: 20Hz - 15kHz

Sensitivity: 18mV/Pa -33dB \pm 1.5dB

(0dB = 1V/Pa @ 1,000Hz)

Impedance: \leq 150 Ohms

Equivalent noise level: 10dB (A-weighted)

Max SPL (for 0.5% THD @ 1kHz): 125dB

Power: Phantom power 48V required (x2)

Connector: 6-pin to two 3-pin Neutrik® XLR-M connectors (cable supplied)

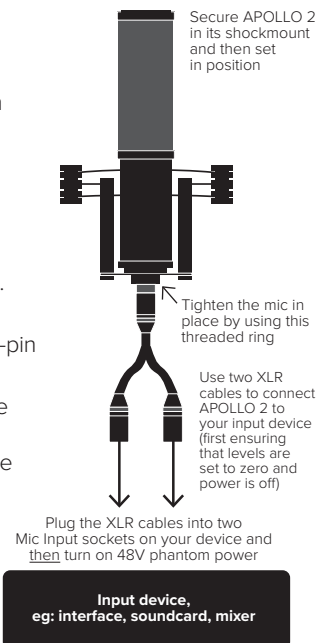
Dimensions: 260 x 65 x 65mm

Weight: 2020g (2605g with shockmount)

Comes with: shockmount, flightcase, 6-pin to two 3-pin XLR-M cable

APOLLO 2 QUICK START GUIDE

- Attach the supplied shockmount on to a microphone stand. Make sure you are using a sturdy stand with a weighted boom arm in order to support the weight of the APOLLO 2 safely.
- Sit APOLLO 2 in the shockmount and secure firmly in place by turning the threaded ring at the base of the mount (not by turning the microphone).
- Position APOLLO 2 at the ideal distance and angle from the source(s) being recorded (see opposite for Placement Advice).
- Connect the six-pin end of the supplied Y-cable to the base of APOLLO 2, and then connect two XLR cables to the two three-pin connectors at the end of the Y-cable.
- Ensure that all input, output and EQ levels on your input device (eg, mixer, interface, soundcard) are set to ZERO and phantom power is switched OFF before connecting the male ends of the two XLR cables to two 'Mic In' sockets on your device.
- Connect your input device to your computer and make sure it is communicating with your DAW program, ensuring that all up-to-date drivers have been downloaded.
- Turn on phantom power and adjust the levels as required and you are now ready to go!



HOW YOUR APOLLO 2 WORKS

SONTRONICS ribbon microphones feature an extremely thin strip of corrugated aluminium suspended between two powerful magnets. When sound pressure reaches the ribbon, its subsequent movement within the magnetic field induces an electrical current. This signal passes through a custom-wound transformer and is then further amplified by the internal preamp circuit.

The polar pattern of a ribbon microphone is naturally figure-of-eight; the ribbon only picks up signal from the front and rear and nothing at all from the sides. Our ribbon mics (including SIGMA 2 & DELTA 2) give a very intimate reproduction of sung vocals or instruments, and are perfect for use in spaced stereo recording applications where rejection of sound from the off-axis positions is critical. A figure-of-eight mic can also be used in combination with a cardioid mic for mid-side stereo technique.

Ribbon mics have a very specific frequency response, reproducing less high-frequency output and capturing few ambient frequencies ('less air'), which leads to an authentic, natural-sounding result. Traditional ribbon mics were renowned for having extremely low sensitivity and required lots of gain to boost the signal in the mix, sometimes resulting in unwanted distortion and noise. However, SONTRONICS ribbon mics include a 48V-powered preamplified circuit, resulting in much higher sensitivity and making them more versatile and much easier to use than traditional, unpowered predecessors.

SONTRONICS' new ribbon mics –SIGMA 2, DELTA 2 and APOLLO 2 – also uniquely feature RFI (radio frequency interference) filters in their circuits, which greatly reduce the possibility of the microphone picking up radio signals, making them even more suitable for using in a live or stage environment.

USING YOUR APOLLO 2

- **Front & back:** Each of APOLLO 2's ribbon motors has a figure-of-eight pickup pattern and, as is usual for all ribbon mics, you will notice slightly different tonal characteristics when recording from the front or from the rear. This is quite normal and can actually be very useful.
- **Stereo recording techniques:** APOLLO 2 can be used for various recording techniques, most obviously for overhead and room recording where you might otherwise use a condenser microphone with an omni pattern, the difference being that APOLLO 2 gently limits the high-frequency response and delivers a more natural, intimate reproduction.
- **Instrument miking:** APOLLO 2 can also be used for closer-miking of instruments positioned either in its normal X-Y position (the front of the mic, with the logo, facing the source) or in mid-side position, where the mic is turned 45° so that one of the ribbons is facing the source and the other is facing left to right.
- **Mono recording:** You can use APOLLO 2 as a mono ribbon microphone by isolating one of the ribbon motors, by connecting just one XLR cable to either the UPPER or LOWER connector on the supplied Y-cable.
- **Frequency response:** Ribbon microphones do not have an accentuated high-frequency response and this can result in a very intimate recording when using on instruments.
- **Suggested use:** APOLLO 2 gives beautiful results as an overhead mic (either on its own or in a multiple-mic arrangement), on orchestra, choir, instrument ensembles, church organ and drumkit. It also gives beautiful results on grand or upright piano, harp, acoustic guitar, guitar amps, vocals, solo instruments (in stereo or mono), and as a room or ambient mic in addition to any other multiple mic set-up.

PLACEMENT ADVICE

NB: Take care not to place APOLLO 2 too close to any loud source as the delicate ribbon elements can be overloaded or damaged by high pressure levels. NEVER BLOW DIRECTLY INTO APOLLO 2!

APOLLO 2's high sensitivity and open grille design allows it to be placed up to five or ten metres (15 to 32 feet) or more away from the instrument(s) being recorded and yet it will still capture all the detail of the instruments or voices as well as all the ambience of the space you are recording in. This makes APOLLO 2 perfect for capturing the natural acoustics of any room, from a cathedral to a home studio.

When recording grand piano, we would advise that the lid is propped open securely at its fullest position and for APOLLO 2 to be positioned just inside the lid, about halfway down the soundboard. The mic should be at 45° from upright, pointing towards the piano. You can also experiment with moving the microphone closer into the soundboard right under the lid for an even more detailed and intimate sound.

If using the APOLLO 2 in mono mode for solo instruments or vocals, turn the mic 45° so that the ribbon you are using is facing the source. When recording vocals or wind instruments, use a pop filter such as the SONTRONICS ST-POP to protect the mic from air blast and moisture and to reduce plosives and sibilance.

ABOUT OUR MICS

All our microphones are designed and developed here in the UK by **SONTRONICS'** founder and designer Trevor Coley. We spend a long time creating and crafting our microphones with extreme care and attention, and all our new models are beta-tested with top artists, musicians and producers (including the engineers at Abbey Road Studios) before they go into production.

Each circuitboard is constructed using the highest quality components to ensure that your microphone delivers you many years of worry-free use.

The capsules in our condenser microphones are diligently hand-made using gold-sputtered Mylar film which is no more than 6 microns thick (seven times thinner than a human hair) and then artificially pre-aged to ensure stability and to also give each microphone its specific characteristics

Our ribbon microphones employ a microscopically thin strip of corrugated aluminium ribbon and the most powerful rare-earth magnets to achieve class-leading sensitivity and audio reproduction. They are built with British-made circuitboards, CNC-engineered metal parts and precision-moulded grilles made from

British stainless steel mesh. The APOLLO 2 stereo ribbon mic uses a top-quality Mogami® cable with premium Neutrik® connectors.

SONTRONICS valve microphones (ARIA & MERCURY) also employ UK-made circuitboards and utilise hand-selected, European-made (or vintage British-made), dual-triode vacuum tubes chosen for their consistency in delivering a balanced frequency response without over-colouring the original signal.

Our ribbon, dynamic and valve microphones are hand-built in our UK headquarters, where our experienced engineers put all of our mics through several levels of quality control tests using specialist laboratory equipment to ensure they meet (and surpass) a series of strict performance targets.

In-depth audio tests are also carried out to ensure each mic is working perfectly.

You can be sure that your microphone has been lovingly crafted, expertly put through its paces, stringently tested and hand-packaged so that you can simply plug it in and start making professional-quality recordings straight out of the box. We hope you enjoy your microphone!

IMPORTANT CARE & SAFETY INFORMATION

As with all sensitive electrical equipment, **your APOLLO 2 microphone should be treated with care and respect at all times.** Here are a few tips to help extend the life of your mic and keep it working at its best...

- When you're not using your microphone, always keep it in its protective flightcase.
- Keep your microphone away from moisture, liquid, naked flame, direct heat or powerful light sources, and take care to avoid any knocks or bumps. Do not place hot or cold drinks near your microphone, in case of spillage or heat transfer.
- Avoid transferring the microphone from cold to warm environments as this can lead to condensation forming inside, which will adversely affect its performance. Should condensation occur, leave the microphone to reach room temperature before using it again.
- When recording vocals, **ALWAYS use a popshield** to help prolong the life of the ribbon element.
- **Do not turn on phantom power before the mic is plugged in** as this can lead to damage to the sensitive components inside the microphone. Similarly, when you've finished using your mic, **turn off the phantom power BEFORE disconnecting the mic.**
- Use a soft cloth to clean your microphone after use (especially when recording vocals or wind instruments). Do not use any solvents, thinners, chemical cleaners or aerosols as they could cause damage to the mic body.
- Due to its mechanical nature, the ribbon element will naturally stretch over time (and the ribbon motor itself is not covered by our warranty). If you notice the sound of your microphone becoming distorted or duller than usual, contact us to arrange for a non-warranty ribbon replacement.
- If subjected to sudden impact or a sudden loud sound source, the ribbon may break or disintegrate completely, resulting in no signal at all. Please contact us to arrange for a new ribbon to be fitted.
- **Under no circumstances should you attempt to open or service the microphone yourself.** There are no user-serviceable parts to the microphone and it will invalidate your warranty and may result in danger to you and to the mic. Contact us or your local stockist or distributor for advice and help if you need it.
- If your mic exhibits any unusual behaviour, noise, smell or smoke, **STOP USING IT IMMEDIATELY**, disconnect it from any other device and contact us or your local stockist/distributor for advice as soon as possible.

