AUSTRIAN AUDIO

OC818 Large-Diaphragm Condenser Microphone with Multiple Polar Patterns

Owner's Manual

Introduction and Safety Instructions



Please read, understand, and follow all instructions in this manual before using this product.

This product was made for professional users and we ask you to follow a few restrictions to guarantee a hassle-free workflow for you, and to keep the product in perfect working condition:

- Please do not operate this product in other than the intended use cases.
- Do not use if the product is defective
- Always keep and operate the product in a dry and safe place
- Do not expose it to excessive heat (for example, do not leave it in your car parked in the sun)
- If you need to bring the product inside from the cold, please give it time to reach adequate temperature before use (allowed storage temperature range: -25°C to 60°C).
- Do not operate outside the intended operating temperature range: 0°C to 55°C
- Do not use this product in a wet or in humid environment
- Do not drop
- When used upside down (for example in the OCH8 or OCS8) make sure that a tight fit is achieved and do not operate it upside down right above personnel
- Only connect the back output of the OC818 to an OCR8 Bluetooth® dongle or the OCC8 mini XLR cable. Do not connect that output to any other devices
- This product requires a phantom power source of 48V (+/-4V), max draw is 4mA (with OCR8 connected).
- Please keep this product away from small children and persons who are not able to operate professional audio equipment (some sound technicians with gray pony-tails included)
- If you need to clean the product, do this only with a soft dry cloth
- Please do not use any third-party accessories unless otherwise stated
- Do not disassemble the product, as there are no user-serviceable parts inside (but plenty of components to mess up)
- The length of the XLR cable must not exceed 30m.
- Do not remove the sticker

Thank you for reading the instructions so far, and thank you for putting your trust in Austrian Audio.

How to Operate the OC818:

The OC818 requires phantom power, so please make sure that you are supplying it according to P48 (48V +/- 4V). Peak current consumption is below 4 mA (OC818 with OCR8 connected). Almost all state-of-the-art professional mixing consoles, preamps and audio interfaces provide enough power, however some battery driven, or older devices may fail to do so!

Setting up the OC818:
For optimum performance, do not cover the grill of the OC818, and always ensure a secure fit in the OCH8 (holder) or OCS8 (suspension).

Always place your sound source to face our beautiful logo!
If you record in figure-8, then you can also use the rear side. Or if you record in Omnidirectional, then it does not matter at all. Or if you pick up a Leslie cabinet and are experimenting with the phase-shifting-effects. But otherwise: Please face the logo!

Adjusting the Polar Pattern:
The OC818 provides 4 default directional characteristics: figure-8, supercardioid, cardioid and omnidirectional. The 5th setting (•) is called “Preset Mode”. If you own an OCR8 Bluetooth dongle you can program your custom pattern to this position. Factory setting (before you change the pattern by an OCR8) for this position is broad-cardioid without High Pass Filter and Pad Switch – those are inactive in Preset Mode.
Switch the polar pattern selector to the desired pattern. Please note that the microphone needs a few seconds to adapt to the new pattern, especially if you switch all the way from figure-8 (left) to omni (right) or vice versa (this gives any sluggish electrons time to catch up).

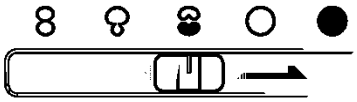
High Pass Filter:
The high pass filter is a powerful tool to reduce unwanted low frequencies, like stage noise, handling, or your Uncle Albert’s singing.
''0'' means not active
''40'' is a high pass 2nd order filter at 40 Hz
''80'' is a high pass 2nd order filter at 80 Hz
''160'' is a high pass 1st order filter from 160 Hz to 80 Hz, and a high pass 2nd order filter below 80 Hz.

Pad Switch:
The Pad switch reduces the sensitivity of the microphone and prevents overloading the microphone in loud environments.
''0'' means not active
''-10'' means that the microphone is 10 dB less sensitive
''-20'' means that the microphone is 20 dB less sensitive
''-30'' means you may need to see an optician, as there is no “-30” position.

Note: The -10dB position reduces the bias voltage of the capsule, so the microphone can take 10dB more input (I am looking at you there, trombone jockey), whereas the -20db Setting reduces the gain by another 10 dB to protect your mixer preamp from overload.

Dual Mode and PolarDesigner:

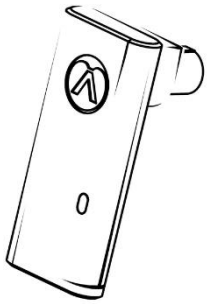
The second output on the rear side of the microphone can deliver the signal of the back membrane, while you get the front capsule from the regular XLR plug.
Just plug in the OCC8 mini XLR cable supplied with your OC818, and set the polar pattern switch to the position showing the 2 cardioids. The OC818 will now work in dual mode, with both capsule membranes being transmitted independently.



In dual mode, you may record the two signals to two tracks and use our PolarDesigner plugin later to modify the polar pattern in post-production. Polardesigner lets you even choose the polar pattern for up to five different frequency bands.

Note: Make sure phantom power (P48) is provided to the main (3-pin) XLR output also in dual mode. The second (rear) output can be operated with or without feeding phantom power.

How to Operate the OCR8 (sold separately):

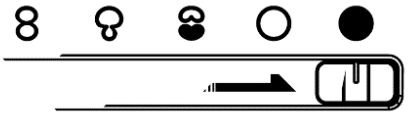


The OCR8 connects your OC818 microphone to your smart device (Smartphone or Tablet) via Bluetooth.

Download the App

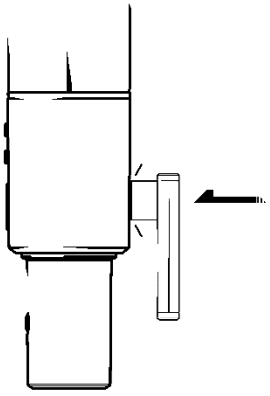
Download the Austrian Audio App (containing PolarPilot) from the Apple™ App Store™ or the Google Play™ Store.
Please make sure that your device is running the latest version of its operating system.
The minimum requirement at the time of the initial release, is: iOS™ 11 or Android™ 5. Also, the device must support BLE (Bluetooth Low Energy also called Bluetooth LE or Bluetooth Smart). Current mobile devices are commonly released with hardware and software for Bluetooth Low Energy, and almost all devices running these operating systems will be compatible.
As the App is using Bluetooth, please ensure that Bluetooth is switched on. Some devices may ask you to allow the Austrian Audio App access to your location information. This information is used by the Bluetooth protocol only – we are not processing or tracking any kind of personal data.

Preparing the OC818



Switch the pattern selector to ''•'' (= Preset Mode - all the way to the right)

Power (to) the OCR8



The OCR8 is powered by the phantom power from the OC818, so please make sure that you are supplying the OC818 according to P48 (48V +/- 4V).

You may either connect the OC818 to phantom power first, or plug the OCR8 into the OC818 first. Once you have completed both steps, the OCR8 will automatically switch into “pairing mode” and the blue LED will flash fast. Now it is time to open the Austrian Audio App.

Establishing the Bluetooth connection

After you open the app, click on “search for new devices” to connect to the OCR8. Enter the 6 digits of the serial number (please include the “0” digits) that can be found on the sticker of the OCR8. This is the password to identify that you have the right to connect to this device. (You do not want that nerdy guy in the first row to connect to your microphone with his smartphone).

You can now start to work with the App’s PolarPilot, which will give you full wireless control over the OC818.

Tips for working with PolarPilot

We suggest you name your microphones first, especially if you own more than one (lucky you)!

Polar pattern:
You can change the polar pattern with the slider below the graphic. For small changes, you can also use the ''-'' or ''+'' buttons. Please note that the microphone needs a few seconds to adapt to the new pattern, especially if you switch all the way from figure-8 (left) to omni (right) or vice versa (this gives any sluggish electrons time to catch up). Please also note that if you are using the slider, the polar pattern will only start to adjust once you have released the slider!

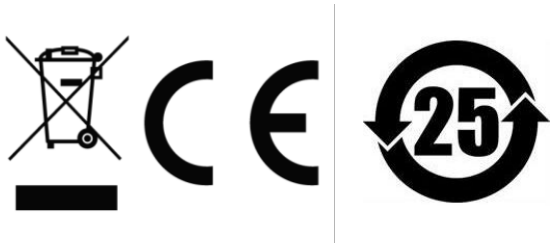
High Pass Filter and Pad Switch:
The high pass filter and the pad switch can be remote controlled as well and work the same way as the physical switches on the OC818. The physical switches on the OC818 are always inactive in Preset Mode!

Override/Overload monitor:
At the bottom of the screen you will see the overload monitor. It will show an angry red bar if the signal is too loud to be properly picked up by the microphone. In this case, you should use the “-10” Pad Switch to resolve this issue. This will reduce bias voltage to the capsule and protect the mic’s internal circuitry from clipping.

Save Function:
You can save your favorite settings to easily retrieve them or program them into another OC818. Please note that this setting is stored locally on your smart device.

Preset Mode:
If you unplug the OCR8, the OC818 will keep the latest pattern settings and store them in the “•” (= Preset Mode) position. By setting the microphone to this position, you can always retrieve the stored setting at any time, including Pad and High Pass settings.
Note that the hardware controls for Pad and High Pass on the microphone are overridden in Preset-Mode and only become active again once you switch to another polar pattern position.

Using the PolarPilot as a Monitor:
If you do not switch the OC818 into the “•” (= Preset Mode) position and connect the OCR8, you can still use PolarPilot as a monitor to see the pattern, pad and filter settings, as well as watching the override monitor. Please note that you cannot make any adjustments unless you switch to “•” (= Preset Mode) on the microphone.



Made in Austria
This product conforms to the standards listed in the Declaration of Conformity and can be found at http://austrian.audio/OC818

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