



MMA-A

Digital Audio Interface

User's Manual

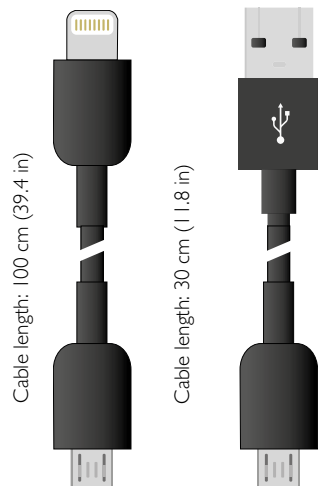
The MMA-A Digital Audio Interface is a high-quality dual-channel microphone preamplifier and A/D converter. It allows you to capture crystal-clear audio via your favorite recording / broadcasting apps. The MMA-A can be used with most DPA microphones.

**d:screet™**  
Miniature Microphones

**d:fine™**  
Headset Microphones

**d:dicate™**  
Recording Microphones

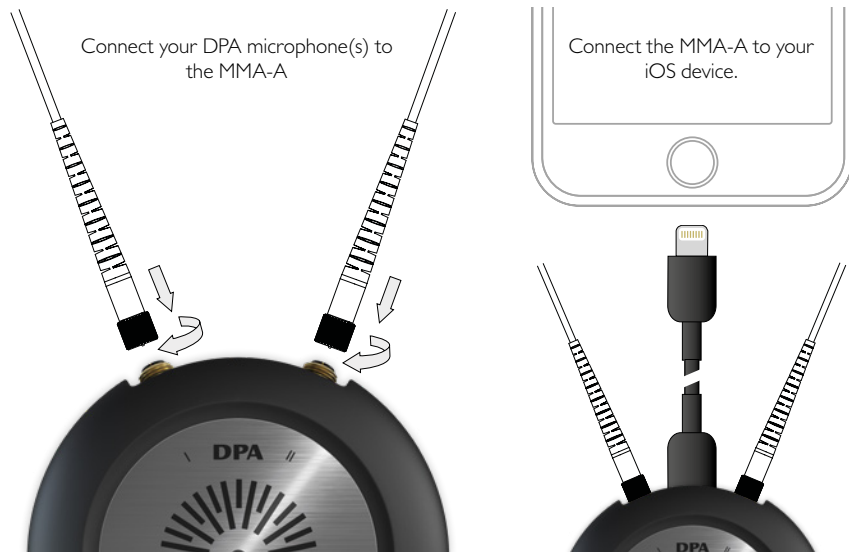
**d:vote™**  
Instrument Microphones



Two cables are supplied with the MMA-A:  
One Micro USB-B to iOS (Lightning)  
One Micro USB-B to PC / Mac (USB-A).

### Getting started

Connect your DPA microphone(s) to the MicroDot input(s) on the MMA-A, denoted I and II.  
(If only one mic is connected to either input, the signal will be interpreted as MONO and automatically sent to both output left and right.)

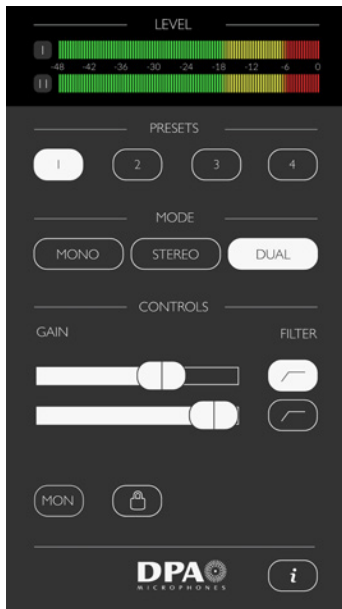


## Download the App

Download and install the MMA-A App from the Apple App Store.



Please note that the MMA-A will work with most 3<sup>rd</sup>-party apps and therefore can be used in various situations including live broadcasts, as well as audio and video recordings.



The MMA-A can be used right out of the box but to take full advantage of it, please refer to these instructions to get started using the MMA-A App.

### GAIN

Use the GAIN slider to adjust input levels. Slide to the right to increase amplification, to the left to decrease. Make sure to keep an eye on the level meters when you are adjusting gain. The meters should stay in the green and yellow areas.

### FILTER

The FILTER button (low cut) cuts out unwanted, low-end frequencies (rumble) that can decrease the intelligibility of your recorded audio. In most cases we suggest using the FILTER button and if, for example, you are recording outside near a road with traffic, this setting is essential.

### MONITOR

Use the MON button to send audio to your headphones so you can hear what you are recording. Please note that a headphone must be connected to the iOS device, otherwise the button will not activate and you'll be prompted

to connect a headset. If the headset includes a microphone it **must** be connected prior to connecting the MMA-A via the Lightning connector. This is due to the iOS 'last entry active' nature of operation. (We recommend using a wireless headset when using an iPhone 7 and beyond. Please note that this adds additional latency due to the bluetooth connection.)

### LOCK

Use the LOCK button to block 3rd party apps from controlling gain. Gain settings can be controlled and saved on the MMA-A for use in your favorite recording / broadcasting apps. The lock button also controls the setting of the low cut / high pass filter. Saved locked settings are automatically activated the next time you connect to the MMA-A. The lock also stays active when connecting the MMA-A to a PC or Mac.

## MONO

If only one microphone is connected to either input I or II, MONO is chosen automatically. The mic input will be routed to both left and right output. Only one GAIN slider and FILTER button will be available in this mode.

## STEREO

Use STEREO when you need to capture sound sources in stereo. Both microphones are controlled with one GAIN slider. Example: Ambiance sounds can be recorded in stereo using two mics that have the same sensitivity.

Important: When using STEREO, you must use two mics that are optimized for stereo recording, for instance the specially-selected d:screet™ 4060 pair included in the SMK-4060 Kit.

Other available kits include: ST4006\*, ST4011\*, ST2006\*, ST2011\*

\* Must be used with DPA MMP-G amplifiers for connection to MicroDot.

## DUAL

Use DUAL when the gain must be set individually for input I and II (for example, with two different microphone types or in situations where two people with different voice levels are to be recorded). The FILTER buttons are also individual in this situation.

## SUM

Use SUM to make a mix of the two input channels. When two microphones are connected, the MONO button changes to SUM. This means that the two inputs will be sent to both output channels. Individual gain can be set for each input.

## PRESETS

Presets store your preferred settings for specific microphone(s) and make your set up easier. After choosing your settings, create the preset by pushing the numbered preset button of your choice for three seconds. The next time you plug in the same mics, push your preset button and you are ready to go – no adjustments necessary.

## For use with PC / Mac

Connect the MMA-A to the USB input on your PC / Mac. It will now work as a normal external soundcard and you can use your regular programs to record or broadcast the audio from the connected microphones.



## Cleaning

The black surface of the MMA-A is fairly scratch resistant, but is sensitive to detergents. Avoid using solvents (such as: gasoline, acetone, alcohol, turpentine, etc) for cleaning purposes. A damp cloth with warm water is recommended.

## Microphone placement and usage

Please refer to the manual(s) for the specific microphone included within the package.

## Compatible with

Mac / PC / iOS

## Requirements

iOS version: 10 or later

Connection / Power: Lightning & USB 2.0

## Made for

iPhone 7 Plus, iPhone 7, iPhone 6s, iPhone 6, iPhone 5, iPad Pro (12.9-inch), iPad Air, iPad Air 2, iPad mini 4, iPod touch (6th gen).

# MMA-A

## Digital Audio Interface

## Specifications

### Noise floor

-114 dBFS, A-weighted

### Frequency range

20-22 kHz  $\pm 0.2$  dB ( $F_s = 48$  kHz)

20-40 kHz  $\pm 0.2$  dB ( $F_s = 96$  kHz)

### Total harmonic distortion (THD)

THD < -100 dB, 0.001% @ 1 kHz @ -10 dBFS

### Dynamic range

Typ. 114 dB

### Full Scale Output

1 Vrms @ 0 dB Gain

### Supported sample rates

44.1, 48 (default), 88.2, 96 kHz

Sample rates can be set by 3<sup>rd</sup>-party app

### Resolution

24 bit

### Filter (low cut / high pass)

2. Order @ 80 Hz, individual per channel

### Weight

50 g (1.8 oz)

### Diameter

56 mm (2.2 in)

### Temperature range

0°C to 45°C (32°F to 113°F)

### Current consumption

<100 mA

(The MMA-A gains power via the apparatus it is connected to.

This equates to approx. 6-7 hours of audio capture tested on a new iPhone 6 or 7.)

### Service & repair

If you are not satisfied with the characteristics exhibited by this product, please go to [dpamicrophones.com/service](http://dpamicrophones.com/service) for instructions.

### Warranty

The MMA-A Digital Audio Interface is covered by a two-year limited warranty.

### CE marking

This product conforms to all relevant directives approved by the European Commission.

