OPA

FM SOUND SHIELD

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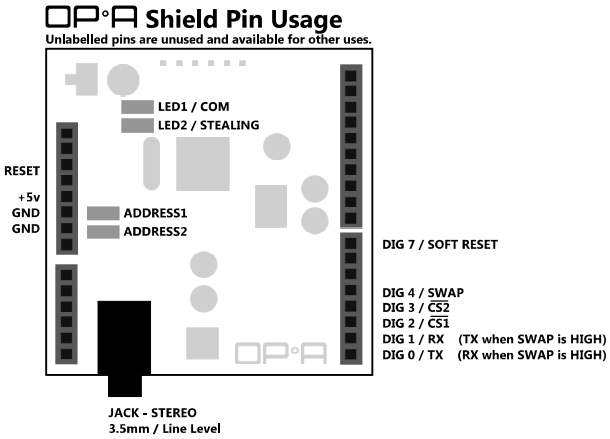
(c) Frédéric Meslin
(c) Thomas Hopper - 2015 / 2016



Thank you for choosing OPA

You now own a capable FM synthesizer shield for all your Arduino based projects.

The OPA shield has been designed with care to be fun, inspiring and easy to use. We hope you will enjoy it.

Also, this project was made possible through our backers support. Many thanks to them.

Package contents:

- OPA shield in ESD protection box
- Quick start manual

Electrical requirements:

The ESD protection box is meant to protect your shield from electrostatic discharges. When not in use, your shield should be stored in its special box.
OPA is compatible with +5V and +3V3 logic levels and needs a +5V power supply.

Software setup:

To make sounds with OPA you need to get:

The Arduino IDE
https://www.arduino.cc/en/Main/Software

OPA Sound Editor
https://github.com/Marzac/OPA-Editor

OPA Arduino Library (& examples)
https://github.com/Marzac/OPA-Library

Once downloaded,

a) **Install the Arduino Software IDE**
run the setup and follow the instructions

b) **Extract & copy the OPA Editor**
store the software with your other apps

c) **Import the OPA Library in the IDE**
the Library can be downloaded as a zip archive and directly imported
https://www.arduino.cc/en/Guide/Libraries

Hardware setup:

Before inserting an OPA shield on an Arduino like board, make sure the pinout and voltages are compatible. Refer to last page.

Remove carefully the shield from its package check its orientation and insert it gently without bending the pin headers.

When using multiple shields, verify the address jumpers so each shield has a unique address.

Attach the stereo audio jack output to a powered speaker system or a mixing desk.

Connect your Arduino like board to the computer with a USB cable and power it up.
The OPA control LEDs should shortly light on.

Making sounds:

You can now open the Arduino Software IDE and transfer one of the example programs from the OPA Library. You should quickly get some sounds.