

USER MANUAL

A1 / Audio output

Impedance: **100 ohm**
 Output level: **3.9Vpp** (max)
 Pinout:
 1 - Left channel
 2 - Analog Ground
 3 - Analog Ground
 4 - Right channel

A3 / Analog power out

Max current:
20 mA
 Pinout:
 1 - +5V DC
 2 - Analog Ground

A2 / Audio input

Impedance: **60K ohm** (min)
 Input level: **3Vpp** (max)
 Pinout:
 1 - Left channel
 2 - Analog Ground
 3 - Analog Ground
 4 - Right channel

BL

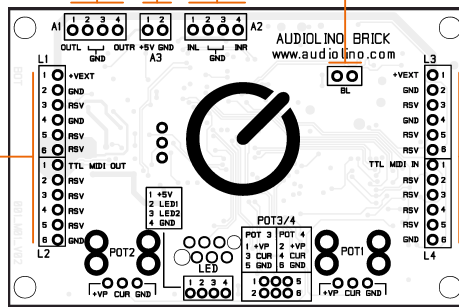
Short BL pads during boot to force boot mode. This should be used if for any reason the application is corrupted. In boot mode you can run firmware upgrade.

L1-2 / Link Out

Pinout:
 L1.1 - +VEXT power output
 L1.2 - Ground
 L1.3 - Reserved for chain connection
 L1.4 - Ground
 L1.5 - Reserved for chain connection
 L1.6 - Reserved for chain connection
 L2.1 - **MIDI Out** 3.3V @ 31250 bps
 L2.2 - Reserved for chain connection
 L2.3 - Reserved for chain connection
 L2.4 - Reserved for chain connection
 L2.5 - Reserved for chain connection
 L2.6 - Ground

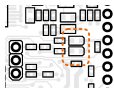
L3-4 / Link In

Pinout:
 L3.1 - **+VEXT** power input (**9 to 15V DC**)
 L3.2 - Ground
 L3.3 - Reserved for chain connection
 L3.4 - Ground
 L3.5 - Reserved for chain connection
 L3.6 - Reserved for chain connection
 L4.1 - **MIDI In** 3.3V to 5V @ 31250 bps
 L4.2 - Reserved for chain connection
 L4.3 - Reserved for chain connection
 L4.4 - Reserved for chain connection
 L4.5 - Reserved for chain connection
 L4.6 - Ground



On board LEDs (components side)

RED
 Blinks on error
 Always on in boot mode
GREEN
 Active during normal operation



LED / External LED outputs

Pinout:
 1 - 5V output (**max 20mA**)
 2 - LED1 (signal level - PWM)
 3 - LED2 (signal clip)
 4 - Ground
Do not draw more than 5 mA from LED1 / LED2 pins

POT 1-2-3-4 / On board and/or external pots

Resistance: **5K to 10K ohm**
 Pinout:
 +VP - Pot+
 CUR - Cursor
 GND - Ground

DIP switch / MIDI channel select

(components side)
 OFF,OFF,OFF,OFF: 1 (default)
 ON,OFF,OFF,OFF: 2
 ...
 ON,ON,ON,ON: 16



USB (components side)

USB port can be used to power the board and to control it over MIDI-USB.
Each board without any additional load draws a current of about 100mA.



Included potentiometers can be soldered on POT1 or POT2 pads. You can use top or bottom layer. Firmware handles polarity. POT4 can be configured as program switch to select one of the first 4 internal programs.

Chain connection

To use chain connection you need to connect L1/2 of one board to L3/4 of the next board. You can use the included 12 pin connectors. Use female header on L1/2 and male header for L3/4. In order to use chain connection each board must have a different MIDI channel. Set it using the on-board DIP switch. You can power the chain by supplying power to the first board only via USB or via +VEXT power input. For MIDI connection in chain mode use the USB port connected to the first board only, or use L4.1 (MIDI IN) of the first board and L2.1 (MIDI OUT) of the last board connected to an external microcontroller.

Audiolino hardware and software is provided "as is" with no warranties.

It is intended for prototyping use only. The manufacturer disclaims all liability for improper use.

All specifications are subject to change without notice.