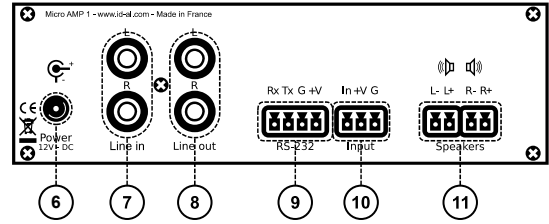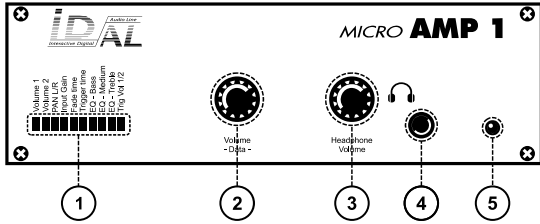# ID-AL Micro AMP 1

Quick Start Guide V1.1

1 Introduction

This guide explains how to quickly start up the Micro AMP 1 for a first use. **For further information, see the support page of the Micro AMP 1 on www.id-al.com.**
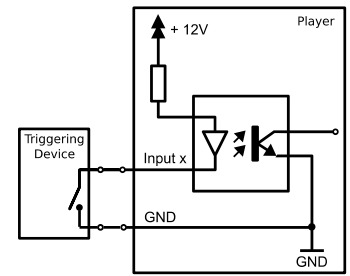
The Micro AMP 1 is a compact and versatile audio-level selector and amplifier for speakers, with a built-in audio signal processing. Two different volume levels can be applied depending on the state of a dedicated input or using the serial link.
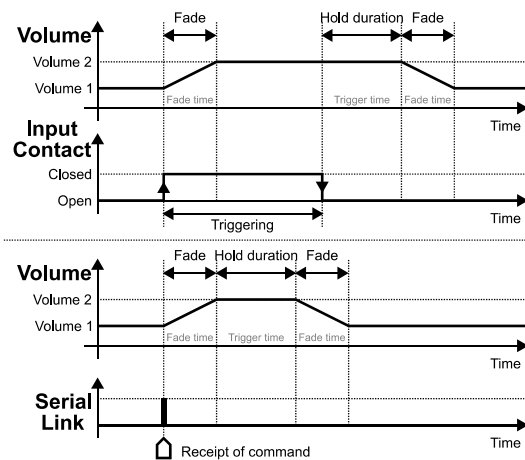
1 Selected parameter indicators
2 Clickable knob (volume and other settings)
3 Volume knob for the headphone output
4 Headphone stereo audio output, standard 3.5 mm (TRS) jack
5 Power indicator
6 External DC power supply chassis socket
7 Unbalanced line-level stereo audio input, standard RCA connectors

8 Unbalanced line-level stereo audio output, standard RCA connectors
9 RS-232 serial link, 3.81 mm pluggable terminal block
10 Opto-isolated input contact on a 3.81 mm pluggable terminal block
11 Unbalanced line-level stereo audio output, standard RCA connectors
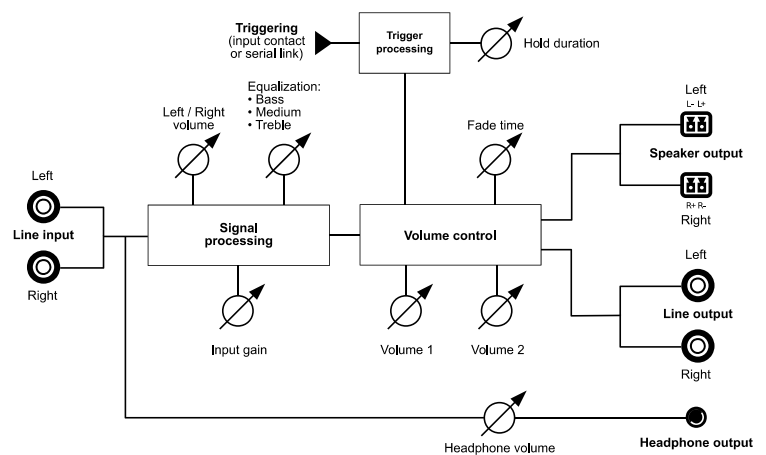
2 Input Contact and Volume Selection

The input is used to select the volume of the device according to previously defined settings. A triggering device can be connected to this input (e.g.: push-button, presence sensor, relay, PLC, SensoPad, IRPad, etc.). The device must behave like open or closed contacts between an input and the ground of the device. By default, the main volume setting (`Volume 1`) is applied. When the input contact is closed or the command to activate the volume change is received on the serial link (see the section RS-232 Serial Link), the secondary volume setting (`Volume 2`) is applied (see the Volume 2 triggering diagram below).

Input contact diagram

Volume 2 triggering diagram

Audio diagram

3 First Start

1. Make sure that the device is off (mains adapter unplugged).
2. Connect the audio input to the audio installation source.
3. Connect the audio outputs (line level, speakers, headphones) to the audio installation according to the needs.
4. Connect the input contact according to the needs. See the section Input Contact and Volume Selection.
5. Turn the device on by plugging the mains adapter.
6. Use the front panel user interface to configure the device. See the section Front Panel User Interface.
7. The device is operational.

4 Front Panel User Interface

The front panel features 10 indicators and a clickable knob aimed at viewing the device state and configuring it. Press the knob to select a setting and turn the knob to adjust its value. The following states are available:

Indicator	Valid Values	Default Value	Resolution	Description
Volume 1	- 56 to 0 dB	- 40 dB	1 dB	Main volume.
Volume 2	- 56 to 0 dB	- 35 dB	1 dB	Secondary volume.
PAN R/L	- 72 to 0 dB	0 dB (left) / 0 dB (right)	1 dB	Volume levels of the left and right channels.
Input Gain	0 to +30 dB	0 dB	2 dB	Input gain level.
Fade time	0 to 9 seconds	0 seconds	1 second	Fade time between the different volume settings.
Trigger time	0 to 45 seconds	0 seconds	5 seconds	Hold time of the secondary volume after triggering.
EQ - Bass	- 14 to +14 dB	0 dB	2 dB	Equalization level of the bass.
EQ - Medium	- 14 to +14 dB	0 dB	2 dB	Equalization level of the medium.
EQ - Treble	- 14 to +14 dB	0 dB	2 dB	Equalization level of the treble.

Indicator	Description
Trig Vol 1/2	Triggering status from the input contact or the serial link.

Note: the flashing speed of the `Fade time` and `Trigger time` indicators is relative to the duration set, from "solid red" (0 seconds) to "very slow blinking" (maximum value).

5 RS-232 Serial Link

This link allows the device to receive commands and to send status information. By default, it is configured as follows (can be changed from the reception protocol of the serial link):

Baud Rate (bauds)	Start Bit(s)	Data Bit(s)	Parity Bit(s)	Stop Bit(s)	Handshake
19200	1	8	0	1	None

The reception protocol is based on a 3-byte frame: "Status", "Command", and "Data":

Status	Description	Command	Description	Data	Description
80h	All the devices.	03h	Volume control.	00h to 38h	Value of the default volume (Volume 1).
		04h	Information request.	40h	General settings and information of the device.
		08h	Baud rate setting of the serial link (bauds).	30h	4800 Bd
81h to FFh	Only the device with the ID from 1 to 127.			31h	9600 Bd
				32h	19200 Bd
		09h	Triggering of volume change.	01h	Triggering of the secondary volume (Volume 2).
		7Fh	ID setting of the serial link.	01h to 7Fh	ID value of the serial link.

6 Factory Reset

Start the device by pressing the front panel clickable knob. After 3 blinks of the `Volume 1` indicator, release the clickable knob and let the device boot up.