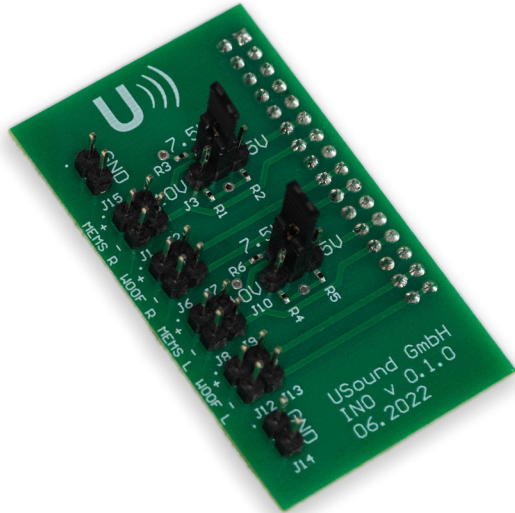


ADAPTER BOARD

INO UJ-A1010 | QUICK USER GUIDE

U))) SOUND



The Ino UJ-A1010 is an adapter board for the Helike 1.0 UA-E3010 development board with an integrated voltage divider to provide several DC voltage offsets to drive the Conamara series MEMS speakers.

FEATURES

- Adjustable DC output voltages (5 V, 7.5 V, 10 V)
- Fast voltage configuration through included headers
- Matches Helike 1.0 UA-E3010 speaker outputs

PACKAGE CONTENT

- Ino UJ-A1010 adapter board

SETTING UP THE SYSTEM

- Select the desired audio source on Helike 1.0 UA-E3010 (USB audio, SD card, or digital input) via the DIP switches as described in the Helike 1.0 UA-E3010 user manual.
- Connect the Ino UJ-A1010 to Helike 1.0 UA-E3010, as shown in Figure 1.
- Choose the suitable DC offset for the MEMS speaker to be measured from Table 1.
- Set the DC offset voltage by inserting the jumper into the corresponding position. Refer to Table 2 for the options.
- Use the DIP switches on Helike 1.0 UA-E3010 to select the correct Filter settings for the connected MEMS speaker. More details can be found in the Helike 1.0 UA-E3010 user manual.
- Connect the Carme kit UJ-E1040C05 or UJ-E1040C06 to the related headers marked on Ino UJ-A1010. More details can be found in the compatible products section of this quick user guide.
- Connect the Helike 1.0 UA-E3010 to a Power-supply (USB, External 5 V or external 36 V) as described in the Helike 1.0 UA-E3010 user manual.

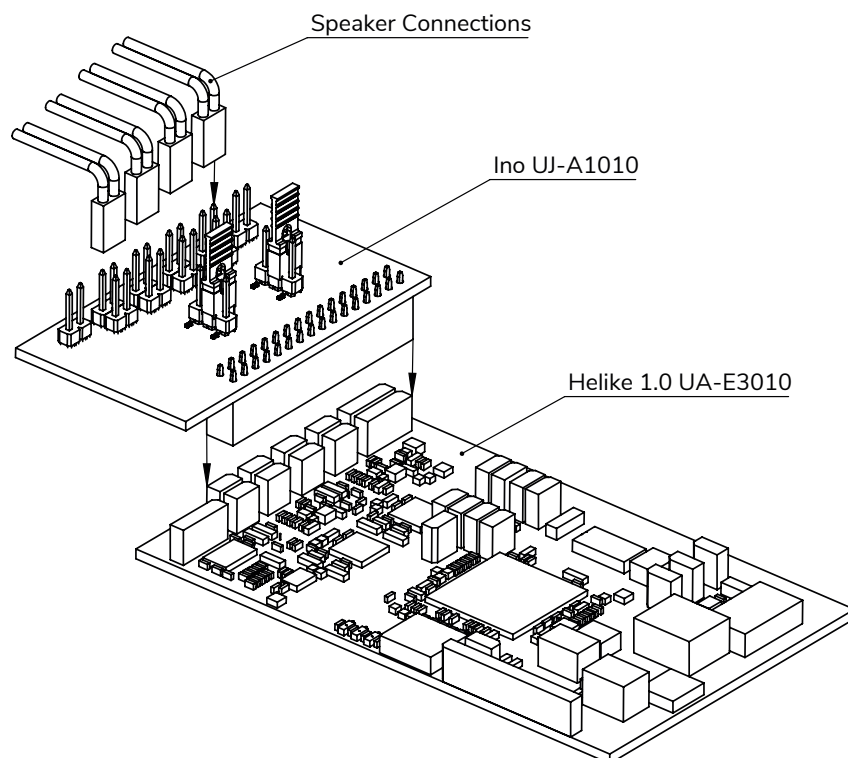


Figure 1: Connecting the Ino UJ-A1010 adapter board to the Helike 1.0 UA-E3010 development board.

PERFORMANCE REQUIREMENTS

The required DC offset and maximum input level for the Conamara MEMS speaker series (UA-C0501-2T, UA-C0601-2T, UA-C0601-2F) are shown in Table 1.

DC offset	Max input [dBFS]	-6dB [dBFS]	-12dB [dBFS]
5 V	-19	-25	-31
7.5 V	-15.5	-21.5	-27.5
10 V	-13	-19	-25

Table 1: DC offset, max digital input for Conamara USound MEMS speakers

DC offset			
5 V	7.5 V	10 V	15 V*

Table 2: Jumper Positions for different DC offset values

*Note: Pass through original 15 V_{DC} offset must be used only with Ganymede MEMS speakers.

RELATED DOCUMENTATION[Helike 1.0 UA-E3010 User Manual](#)[Helike 1.0 UA-E3010 Datasheet](#)[Helike 1.0 UA-E3010 Product brief](#)[Conamara UA-C0501-2T Datasheet](#)[Conamara UA-C0601-2T Datasheet](#)[Conamara UA-C0601-2F Datasheet](#)[Carne kit UJ-E1040C05, UJ-E1040C06 – Product brief](#)[Carne kit UJ-E1040C05, UJ-E1040C06 – User manual](#)**COMPATIBLE PRODUCTS**

Product Name	Description
Helike 1.0 UA-E3010	Development board for evaluating, rapid prototyping, and designing audio solutions using USound MEMS speaker technology.
Carne kit UJ-E1040C05, UJ-E1040C06	A speaker evaluation kit for testing the acoustic performance of the Conamara MEMS speaker series.

REVISION HISTORY

October 2022: First release

IMPORTANT NOTICE AND DISCLAIMER

USound GmbH (“USound”) makes no warranties for the use of USound products, other than those expressly contained in USound’s applicable General Terms of Sale, located at www.usound.com. USound assumes no responsibility for any errors which may have crept into this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No license to patents or other intellectual property rights of USound are granted in connection with the sale of USound products, neither expressly nor implicitly.

In respect of the intended use of USound products by the customer, the customer is solely responsible for observing existing patents and other intellectual property rights of third parties and for obtaining, as the case may be, the necessary licenses. For more information about USound patents visit <https://www.usound.com/patents/>.

Important note: The use of USound products as components in medical devices and/or medical applications, including but not limited to, safety and life supporting systems, where malfunctions of such USound products might result in damage to and/or injury or death of persons is expressly prohibited, as USound products are neither destined nor qualified for use as components in such medical devices and/or medical applications. The prohibited use of USound products in such medical devices and/or medical applications is exclusively at the risk of the customer.