Zennio®

AudioInRoom

KNX controller for audio with Bluetooth ® and auxiliary input - 4 outputs

ZMU-AUIR   **TECHNICAL DOCUMENTATION**

FEATURES

- External 24 VDC power supply

- Auxiliary audio line input

- Bluetooth connection with up to 2 paired devices

- Bluetooth version 4.2 supported

- Two amplified mono or stereo outputs

- Total data saving on KNX bus failure

- Integrated KNX BCU (TP1-256)

- Dimensions 165 x 44 x 23 mm

- Surface-mounted inside non-metallic panels or boxes

- Conformity with the CE, UKCA directives (marks on the front side)
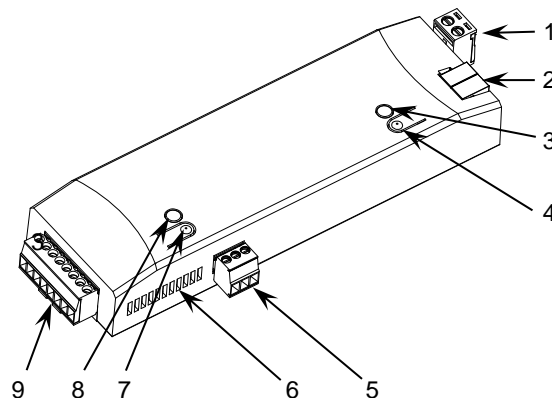
Figure 1: AudioInRoom

1. External supply	2. KNX connector	3. Programming LED	4. Programming button
5. Auxiliary audio input	6. Ventilation opening	7. Test button	8. Test LED	9. Amplified outputs

Programming button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode.

Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash.

Test button: Long press to enter the Bluetooth pairing mode.

Test LED: KNX bus failure (red flashing), Bluetooth pairing mode (green) and device on with Bluetooth active (blue). Red light can be combined with other colors if both indications are active at the same moment.

GENERAL SPECIFICATIONS

CONCEPT			DESCRIPTION	
Type of device			Electric operation control device	
KNX supply	Voltage (typical)		29 VDC SELV	
	Voltage range		21-31 VDC	
	Maximum consumption	Voltage	mA	mW
		29 VDC (typical)	3.2	92.8
		24 VDC[1]	10	240
	Connection type		Typical TP1 bus connector for 0.8 mm Ø rigid cable	
External power supply			24 VDC / 2.5 A	
Operation temperature			0 .. +55 °C	
Storage temperature			-20 .. +55 °C	
Operation humidity			5 .. 95%	
Storage humidity			5 .. 95%	
Complementary characteristics			Class B	
Protection class			III	
Operation type			Continuous operation	
Device action type			Type 1	
Electrical stress period			Long	
Degree of protection			IP20, clean environment	
Installation			Independent device to be surface-mounted inside non-metallic electrical panels or boxes. The installation is also possible in false ceiling.	
Minimum clearances			Ventilation opening must not be blocked.	
Radio coverage Bluetooth			Up to 25m [2]	
Response on KNX bus failure			Data saving according to parameterization	
Response on KNX bus restart			Data recovery according to parameterization	
Operation indicator			The programming LED indicates programming mode (red). The Test LED indicates KNX bus failure (red flashing), Bluetooth pairing mode (green) and device on with Bluetooth active (blue). Red light can be combined with other colors if both indications are done at the same moment.	
Weight			103 g	
PCB CTI index			175 V	
Housing material			PC FR V0 halogen free	

[1] Maximum consumption in the worst-case scenario (KNX Fan-In model).
[2] The presence of obstacles, surfaces or walls could modify or reduce the coverage distance.

INPUT SPECIFICATIONS AND CONNECTIONS

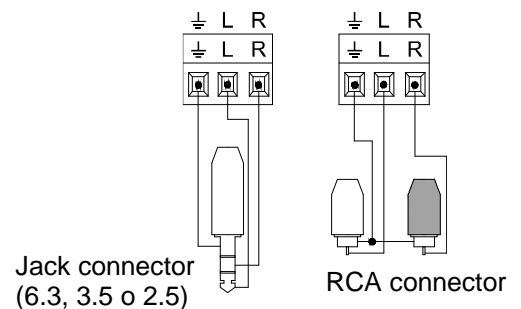| CONCEPT		DESCRIPTION
Power supply protection fuse	Voltage/ Current	24 V / 5 A
	Response type	F (Fast acting)
Maximum current[3]		2.5 A
Connection method		Pluggable screw terminal block (0.4 Nm max.)
Cable cross-section		0.5-2.5 mm² (IEC) / 28-12 AWG (UL)

[3] Power supply ZPS-AUX1 is recommended

AUX INPUT SPECIFICATIONS AND CONNECTIONS

CONCEPT	DESCRIPTION
Input type[4]	Asymmetric input (stereo)
Connection method	Screw terminal block (0.2 Nm max.)
Cable cross-section	0.2-1.5 mm² (IEC) / 30-16 AWG (UL)
Maximum cable length	30 m

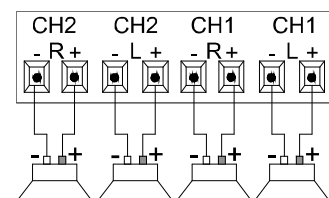[4] Voltage of the auxiliary input must be lower than 1 Vpp

AMPLIFIED OUTPUTS SPECIFICATIONS AND CONNECTIONS

CONCEPT	DESCRIPTION
Channels quantity and type	2 stereo or mono channels
Output type[5]	Amplified output
Minimum loudspeaker power (RMS)	10 W @ 4 Ω / 5 W @ 8 Ω / 2.5 W @ 16 Ω
Overload protection	YES
Overvoltage protection	YES
Connection method	Screw terminal block (0.2 Nm max.)
Cable cross-section	0.2-1.5 mm² (IEC) / 30-16 AWG (UL)
Maximum cable length	30 m

[5] Loudspeaker ZAC-LS3 or ZAC-LS4 is recommended

AUX INPUT CONNECTION

Jack connector
(6.3, 3.5 o 2.5)

RCA connector
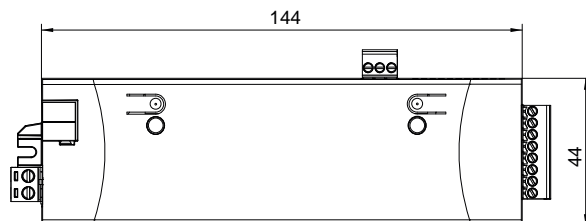
AMPLIFIED OUTPUT CONNECTION

INSTALLATION INSTRUCTIONS

- To make an appropriate use of the device, it must be properly screwed to the surface to be installed by using two screws.
- The installation of this device must ensure that the ventilation slots are faced upside or sideways, never downside.
- The screws (not included) must be fixed in the designated areas (marked on the scheme on the left).
- The screws have the next characteristics:
  - Metric: M3 or M4.
  - Countersunk: 5.5–7.5 mm.
  - Length: 15 mm minimum (it may be necessary to use anchors, depending on the wall's material).

DIMENSIONS (mm)

⚠ SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to https://zennio.com/licenses.