

5643 Node D4i R44

The ActiveAhead Node D4i R44 is a member of the truly intelligent wireless lighting control solution Helvar Active-Ahead®. It combines radio for connecting to the ActiveAhead mesh network and processor for running ActiveAhead lighting control logic. This product follows the Zhaga Book 20 mechanical dimensions for a rectangular unit which suits to a 44x17 mm slot on a luminaire.



The Node D4i design allows for multiple mounting options within a luminaire and excellent radio communication in all directions. Configuration can be easily completed using the ActiveAhead mobile app.

The Node D4i works with D4i LED drivers as well as other standard DALI-2 and DALI LED drivers. It offers addressed local DALI control line which allows individually set light output levels for the connected DALI LED drivers. The Node D4i is powered by the DALI bus.

The front side of the Node D4i R44 IP variant is IP65 rated allowing it to be used in applications such as parking garages.

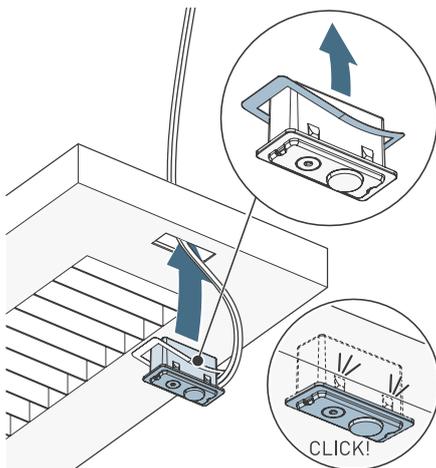
Key Features

- Small D4i node for wireless Helvar ActiveAhead luminaires
- Certified D4i control device
- Fits to a standard Zhaga Book 20 based rectangular 44 x 17 mm luminaire slot
- IP variant offers IP65 rated front side

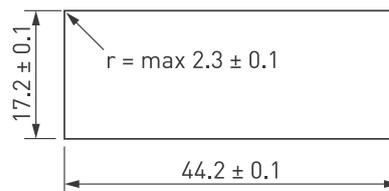
Mounting

The Node D4i R44 can be mounted to a luminaire in three ways:

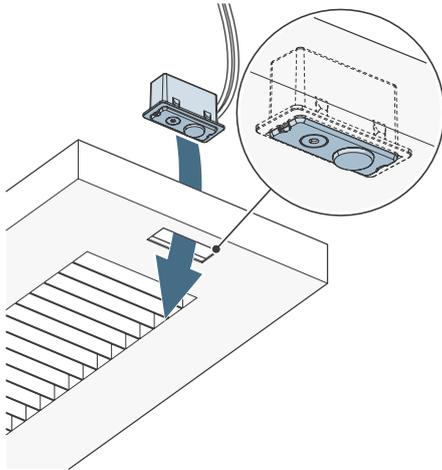
- 1) When mounting from outside in, carefully push the unit into the cutout until it 'clicks' into place and sits flush with the luminaire casing.



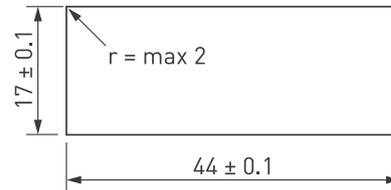
Cutout dimensions (mm)



2) When mounting from inside out, ensure the face of the unit sits level with the luminaire casing and secure the unit in place. The supported luminaire frame thickness in the range $0.4 \leq d \leq 1.5$ mm.

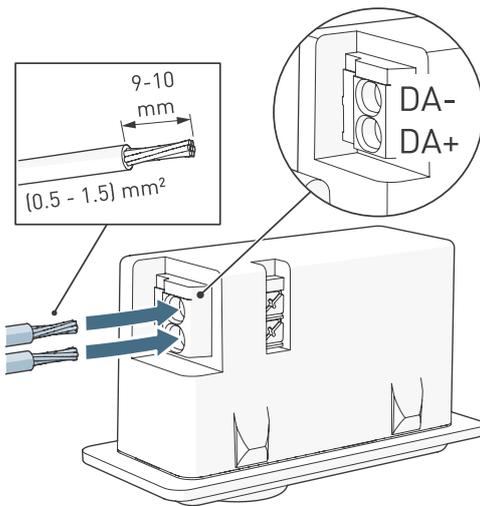


Cutout dimensions (mm)

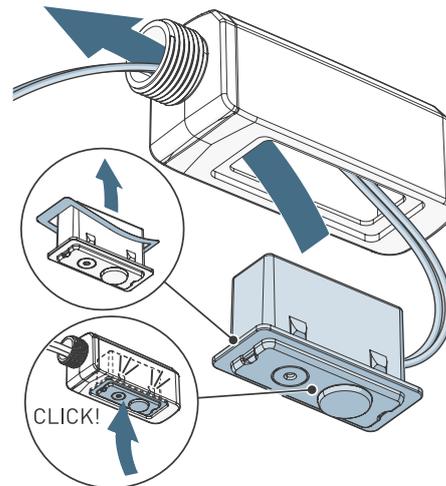


3) Using a 5695G - Holder Batten R44 accessory (sold separately).

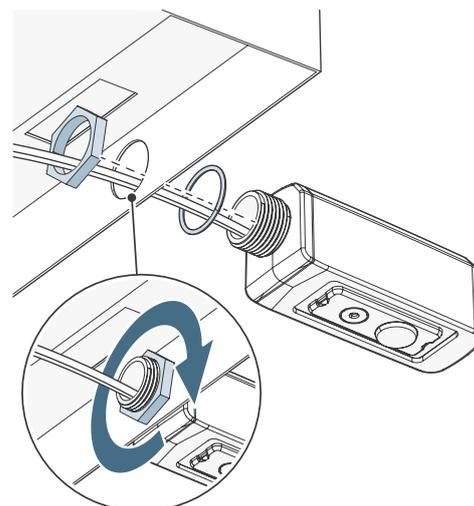
1. Connect the DALI cables.



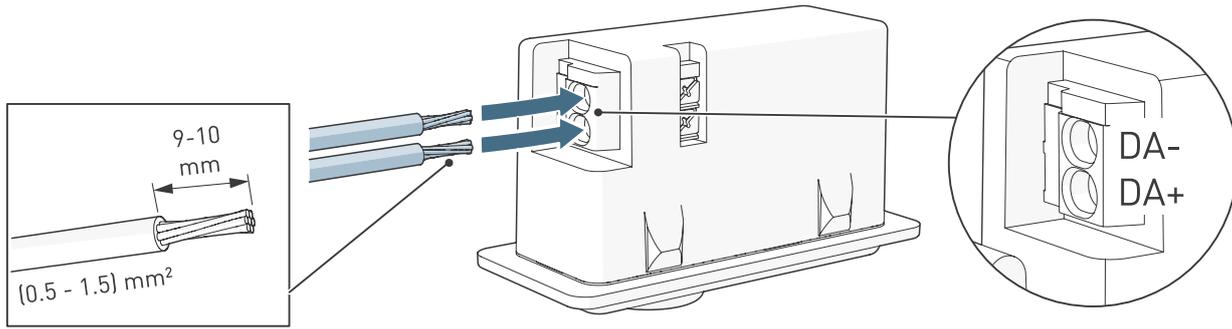
2. Remove the tape liner and feed the cable through the holder. Push the unit into the holder.



3. Feed the cable through the hole in the luminaire. Connect the cable to the Node. Fasten the holder to the luminaire using the O-ring and a M20 nut.

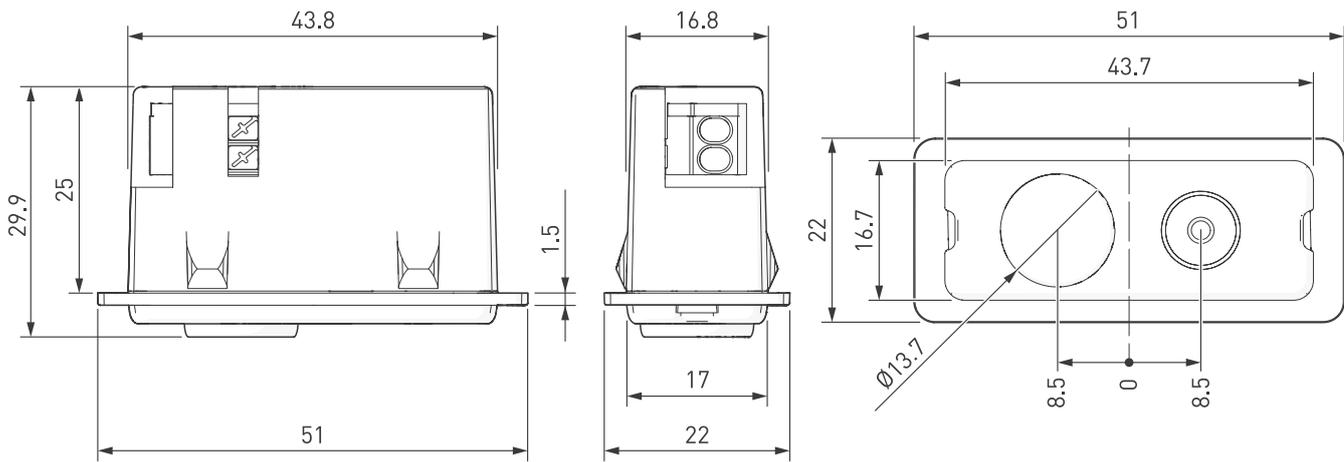


Connections



Note: To remove DALI wiring, press down the release buttons.

Dimensions (mm)



Technical Data

Supported DALI device types

- DT1: Self-contained emergency control gear
- DT6: LED lamp control gear
- DT7: Switching (relay) control gear
- DT8: Colour control gear (colour temperature Tc only)
- Part 301 Push buttons
- Part 303 Occupancy sensors
- Part 304 Light sensors

Connections

- DALI:** Push-fit terminals for the DALI wires
- Wire section:** 0.5–1.5 mm² solid or stranded
- Cable rating:** All cables must be mains rated.

Electrical data

- DALI supply input:** 12.0–22.5 V
- DALI consumption:** Max. 25 mA

Wireless Connectivity

- Frequency:** 2.4 GHz
 - Technology:** Bluetooth® Mesh
 - Antenna Pattern:** Omnidirectional
 - Max distance between Nodes:** 15 m in free space
- Note:** To ensure proper operation the mesh network must consist of a minimum 10 ActiveAhead Nodes.

Order Codes

- 5643000 Node D4i R44 White
- 5643001 Node D4i R44 Black
- 5643013 Node D4i R44 IP Grey

Accessories (sold separately)

- 5695G Holder Batten R44 Grey

Operating and storage conditions

- Number of connected DALI devices:** Max 8 addresses or the DALI power supply limit
- Note:** There must be only one ActiveAhead Node on one DALI line.

- Operating temperature:** 5643000, 5643001: 0 °C to +50 °C
5643013: -20 °C to +50 °C

- Relative humidity:** Max. 85 %, noncondensing
- Storage temperature:** -20 °C to +70 °C

Mechanical data

- Dimensions:** 51 x 22 x 29.9 mm
- Material (casing):** Fire-retardant PC/ABS blend
- Colour:** 5644000: White (RAL 9003)
5644001: Black (RAL 9005)
5644013 Grey (RAL 7035)
- Weight:** 14 g
- IP rating:** 5643000: IP30
5643001: IP30
5643013: IP65 front, IP30 back

Conformity and standards

- Conformity:** 
- EMC emission / immunity:** EN 55015 / EN 61547
- RED:** EN 300 328, EN 301 489-1, EN 301 489-17
- Safety:** EN 61347-2-11
- DALI:** IEC 62386, Part 351
- Environment:** Complies with WEEE, RoHS and REACH directives.