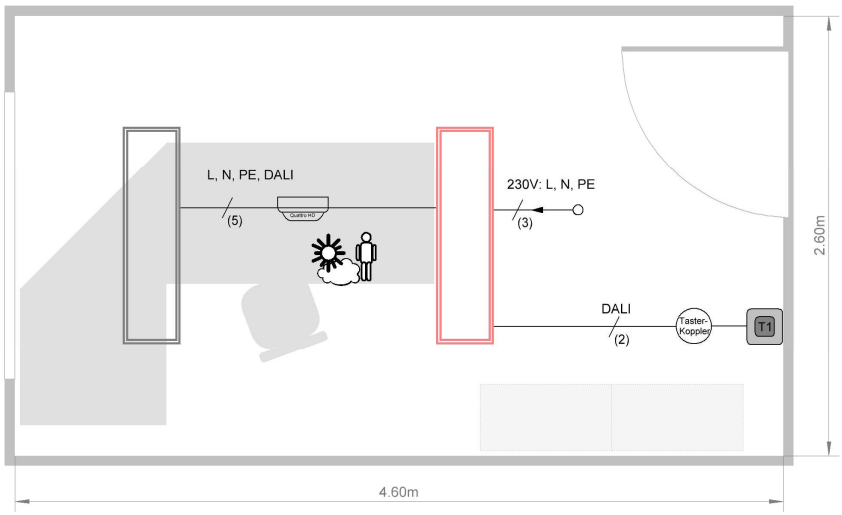
Light control for a 1-person office

Light management system LiveLink with DALI control gear units and external sensor in Use Case "Small Office".



- Daylight-dependent control of one luminaire group
- Presence detection
- Push button control ON/OFF/DIM
- Addressing of lighting via iOS or Android tablet

Use Case “Small Office”
The Use Case “Small Office” features the luminaire groups “Work”, “Meeting” and “Additional”. Additionally, there is a sensor in charge of daylight-dependent light control and presence detection.
General information on Use Cases: Use Cases should be updated regularly on your tablet in the LiveLink Install App. Use Cases can be updated in the LiveLink Install App in the menu item “Use Case Management”.

Preset luminaire groups

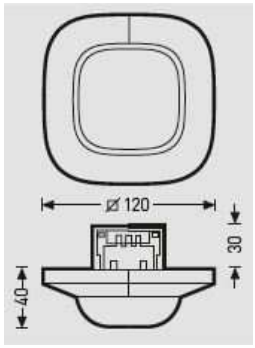
Luminaire Group	Function
Work	• Presence detection • Daylight-dependent control
Meeting	• Presence detection
Additional e. g. for accent lighting	• Presence detection

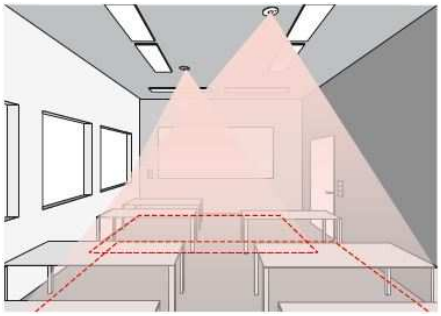
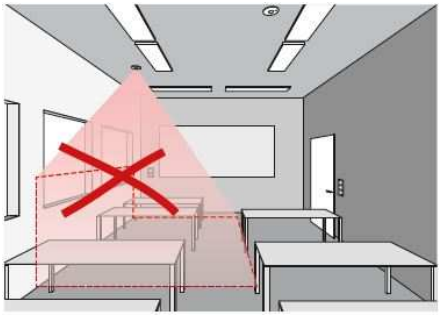
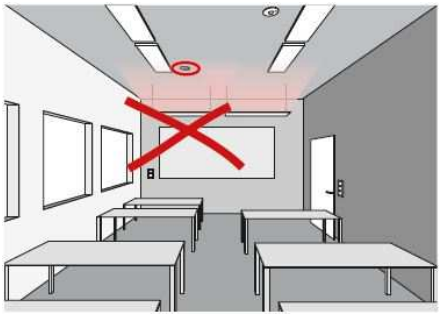
Preset scenes

Scene	Function
Automatic	• 5 minutes switch-off delay • Fully automatic operation for the group “Work” • Daylight-dependent control active

Meeting	• Constant dimming levels for all groups:
	  • Work 50 %
	  • Meeting 100 %
	  • Additional 20 %
	• 10 minutes switch-off delay

Service	• Constant dimming level for all groups at 100 % • 10 minutes switch-off delay
Night lighting	• Constant dimming level for all groups at 20 % • No automatic switch-off
Off	• All groups off

Sensor Quattro HD	
Technical data	
Characteristics	• Room-typical square detection range • Especially high sensitivity and range
Sensor type	• Passive infrared presence sensor (PIR) • Light sensor
Dimensions	
Place of operation	• Indoor
Sensor technology	• 13 detection levels • 4,800 switching zones
Light value setting	• 10-1000 lx
Protection rating	• IP20 (IP54 with AP box)
Safety class	• II
Temperature range	• 0 °C to +40 °C
Number of DALI devices	• 3
Mounting height (ceiling mounting)	• 2,5 m – 10 m
Detection angle/square	• Presence: max. 8 x 8 m (64 m²) • Radial: max. 8 x 8 m (64 m²) • Tangential: max. 20 x 20 m (400 m²)

Sensor placement	
Detection range • The sensor's detection range must be considered (see sensor product specification sheet). The sensor should cover working and movement areas in the room, but also – if possible – the entrance, so that the light can be switched on in good time. If the detection range is insufficient, a greater number of sensors must be arranged. • When using high-frequency or radar sensors, it is important to consider that detection may occur even through thin walls. Furthermore, the narrow detection range (see product specification sheet) must be considered.	
Light sensor For daylight control functions it is important that the light or combined presence and light sensor is placed in a suitable position. • The light sensor should not be placed too close to window surfaces, but also not too far inside the room. • The sensor should be placed in a position where it is exposed to average daylight intensity, for example in the middle of the room or close to work stations for which the light control is calibrated. • The light sensor should be placed above a suitable surface, if possible. Ideally, this surface should also be used as a reference surface for lighting intensity calibration. It should have a medium reflectance value. Well-suited surfaces are desktop surfaces or light grey path surfaces. • It is important to observe that no objects which might impact sensor functions are placed underneath the sensor, e.g. palettes or taller pieces of furniture.	
Sources of interference Avoid placement near any of the following sources of interference: • Ventilation systems or sources of heat, e.g. heaters or video projectors • Sources of light interference, e.g. luminaires with an indirect light component that directly hits the sensor • Daylight reflection, e.g. from mirrors • Radio or WLAN emitters at a distance of circa one metre	
Further sensor information	
For further detailed sensor information and data please refer to the system manual or the sensor specification sheet.	

Functional description
Daylight-dependent control
The luminaires are controlled depending on daylight and switched off when daylight is sufficient. When movement is detected and light levels are below the nominal value, lighting is switched back on. The sensor should be installed centrally between the luminaires.

Presence detection
This application example applies to the operating mode AUTOMATIC. In this case, the entire lighting is switched off automatically after a switch-off delay of 5 minutes once a room is left empty. Automatic switch-on is only effected when movement is detected.

App download
The system is set up with the app “LiveLink Install”. System requirements are either an iOS or an Android tablet. The apps can be found in the Apple App Store or the Google Play Store. www.trilux.com/livelink-app Laden im App Store ANDROID APP BEI Google play

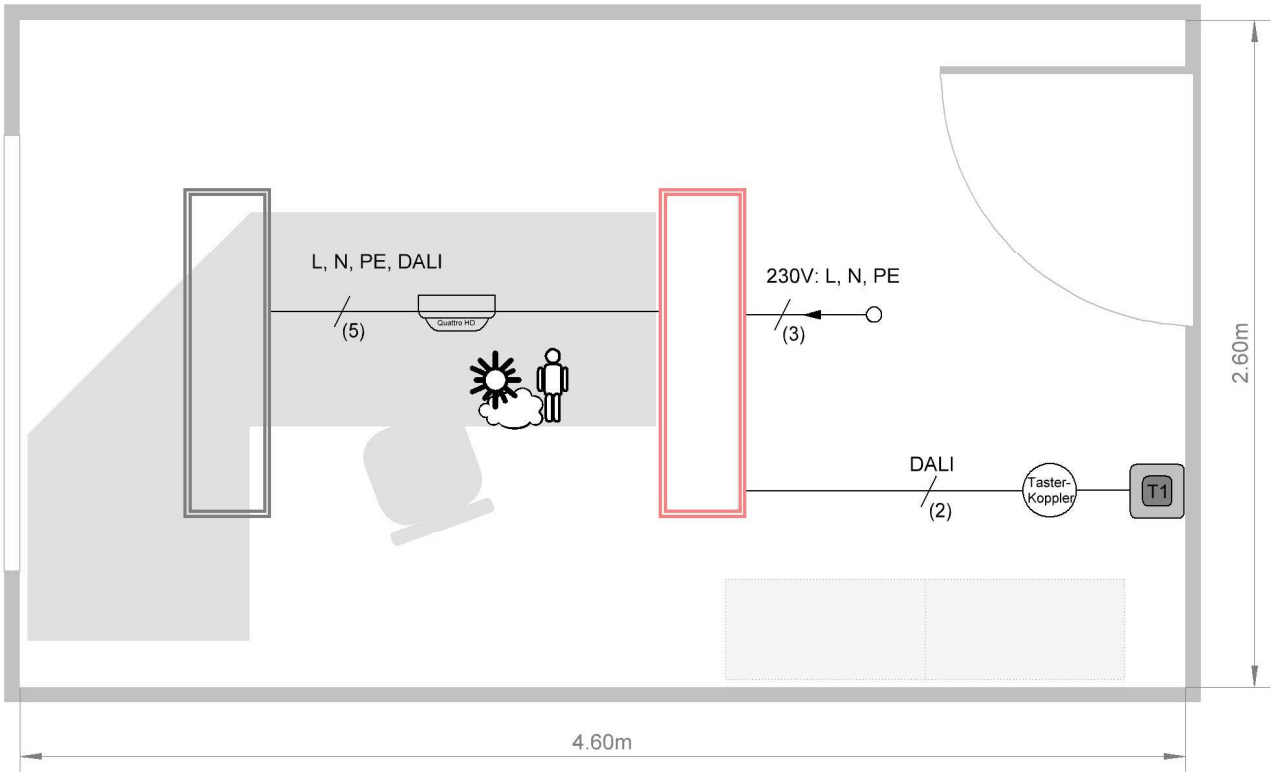
Commissioning
Commissioning LiveLink is done in next to no time – thanks to a simple graphic user interface featuring intuitive and comfortable operation. For this purpose, the control unit sets up its own secure WLAN. From that point on, the user communicates directly with the system through the commissioning app “LiveLink Install” on a tablet. LiveLink Install guides the user through commissioning step by step. Intelligent control and feedback functions give the installer a maximum of security. When luminaires and sensors are tapped in the app, they flash. Mix-ups are impossible. Configuration is done via drag & drop. All steps are intuitively comprehensible, even for first-time users. For help during commissioning, we provide you wth our LiveLink system manual which is enclosed with every LiveLink system. You can also find the system manual on our homepage www.trilux.com/livelink.

Push button assignment
Push buttons are connected to a light scene or a luminaire group. When a light scene is assigned to a push button, said light scene is later activated at the press of the button. When a luminaire group is assigned to a push button, said luminaire group is later dimmed or switched on at the press of the button (Touch Dim function). One push button can only be occupied by one single light scene. In the Use Case Small Office, the push button should be programmed as a luminaire group push button as depicted in the plan.

Luminaire group push button functions (Default scene)		
Push button operation	**Function**	**Note**
T1		
Short button press	ON/OFF	When switching on, room lighting always starts up in the Default scene; with Standard Use Case settings in daylight-dependent standard operation.
Long button press	Dimming	Dimming automatically switches over to manual operation and the set artificial light level remains consistent. Presence detection remains active.
Push button coupler note: A maximum of 4 commercially available push buttons with one normally open contact can be connected to each push button coupler. If more than 4 push buttons are required, more push button couplers can be integrated. (1 push button coupler = 1 DALI device)		

List of components			
Pcs.	**Reference**		**Note**
2	Luminaire	5041RPX-L 4000-830 ETDD +LLWC 01 (example luminaire)	Master luminaire with DALI control gear unit and LiveLink controller
2	Luminaire	5041RPX-L 4000-830 ETDD (example luminaire)	Luminaire with DALI control gear unit
1	Sensor	LiveLink sensor IR Quattro HD	Steinel sensor Quattro HD with DALI connection
1	Push button coupler	LiveLink DALI PB4	TX DALI push button coupler

General plan:



Luminaire with DALI control gear unit and LiveLink controller

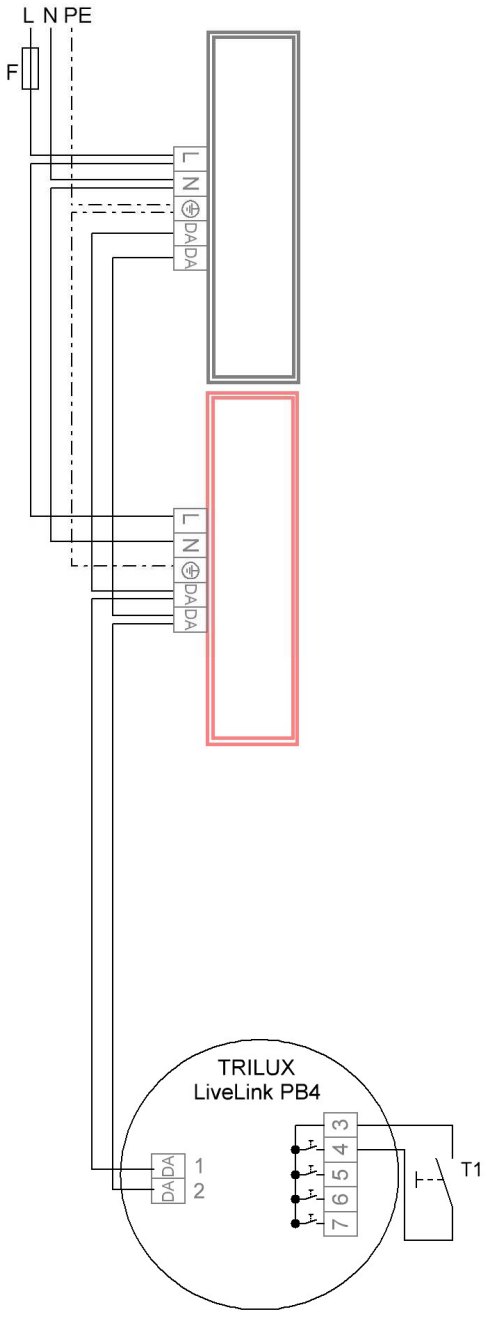
Luminaire with DALI control gear unit

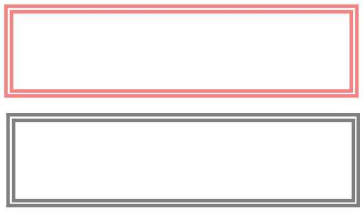
T1 Wall push button

Taster-Koppler Push button coupler LiveLink DALi PB4

Quattro HD Sensor LiveLink Sensor IR Quattro HD

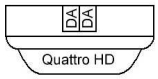
Wiring plan:



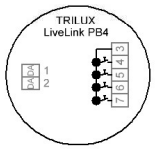


Luminaire with DALI control gear unit and LiveLink controller

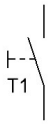
Luminaire with DALI control gear unit



Sensor
LiveLink Sensor IR Quattro HD



Push button coupler
LiveLink DALi PB4



Wall push button