PRE-COMMISSIONING CHECK LIST

Thorlux Lighting

Smart

A digital version of this document is available to download and submit online at **www.thorlux.com/commissioning**

To secure your preferred commissioning date please complete this form and email to **siteservices@thorlux.co.uk**

Alternatively fax it to the Site Services Department on **01527 584177**

CANCELLATIONS

If the commissioning date is cancelled at under five working days notice a charge of £250 will be made

SITE DETAILS

PROJECT	
COMPANY	
TELEPHONE	
E-MAIL	
ADDRESS	
POST CODE	

SITE CONTACT

NAME	
TELEPHONE	

DETAILS OF WHO IS REQUESTING COMMISSIONING

This information is important so that we know who to contact to advise visit dates, give progress reports/report issues to and successful completion of our visit. Please complete all sections. Failure to do so will result in a delay booking your visit.

NAME	
JOB TITLE	
COMPANY	
TELEPHONE	
MOBILE	
E-MAIL	
ADDRESS	
POST CODE	

PRE-COMMISSIONING CHECK LIST

COMMISSIONING PRE-REQUISITES

- All Smart luminaires must be powered at least 24 hours before the date of commissioning
- It will be necessary to vacate the areas with Smart luminaires to allow the movement detection function to be tested *(If this is not possible during normal working hours and an out of hours visit is required, this will be chargeable)*
- In order to commission the maintained illuminance feature on internal luminaires, the final floor coverings and furnishings must be fitted and must not be covered with any protective material *(If floor coverings are not fitted then daylight sensors will be set to a high illumination level reducing efficiency and increasing energy consumption)*
- Curtains or blinds may be used to reduce the amount of daylight entering the room, ensuring daylight sensors can be set during normal working hours. If the daylight contribution cannot be reduced to an acceptable level, then a chargeable out of hours visit may be required.

SITE INFORMATION

Preferred commissioning date

Are the final floor coverings and furnishings fitted?

YES NO

Are blinds/curtains fitted in the areas to be commissioned?

YES NO

What is the floor to ceiling height?

FROM TO

What are the site working hours?

FROM TO

Is special permission to work beyond these hours required?

YES NO

If YES, how is this authorised?

Have lighting layout drawings been supplied by Thorlux?

YES NO

If NO, a clean copy of the as-installed drawings will be required by the Commissioning Engineer for notation and record keeping purposes

Is parking available on site?

What is the site handover date?

Is a site safety induction briefing required?

YES NO

If YES, how is this arranged?

PERSONAL PROTECTION EQUIPMENT REQUIRED ON SITE

- Hard hat
- Ear defenders
- High visibility jacket
- Safety boots
- Eye protection
- Gloves

Other

INTERNAL BASIC PARAMETERS

PARAMETER	DESCRIPTION	RANGE OF SETTINGS	FACTORY DEFAULT SETTINGS
LIGHT LEVEL	Enter the required illumination level for the room/ area. If no value is recorded, the level will be set in accordance with the CIBSE Lighting Guide.	Range 1-100 (dimming for maintained illuminance) or MAX (no dimming)	70 (circa. 500 lux depending on luminaire output, spacing and room finishes)
TIME DELAY	Sets the period the luminaires will remain on after the last detected movement before dimming down and switching off.	The luminaires will switch off after an absence period of 10 minutes. Other time delays which may be set are:- 10h, 9h, 8h, 7h, 6h, 5h, 4h, 3h, 2h, 1h, 45, 30, 20, 15, 10, 5, 3, 2mins. 1min and 30secs. Alternatively a 'continuous' setting may be selected.	10 minutes
SECURITY LEVEL	This allows the user to set a level that the luminaire dims to, following the time delay period (dependent upon ballast dimming range capability)	1-100%	10%
IF VACANT	Switches the luminaires off when the TIME DELAY (see above) expires. If set to any other value, luminaires go to the SECURITY LEVEL setting (see above) for the programmed period.	Off, 30 seconds, 1, 2, 3, 5, 10, 15, 20, 30 and 45 minutes. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 hours, or Constant. If Constant is set, the luminaire will not switch off, but will remain at the Security Level until the next time movement is detected.	OFF
PIR	Provides conventional PIR control (i.e. luminaires dim/switch off when area is vacated and raises light level/switch on when area is re-occupied).	ABSENCE DETECTION/OFF ONLY = Luminaires are dimmed/switched off but NOT switched on again when area is re-occupied. A 'push-to-make' switch or scene plate will be required to switch luminaires on. PRESENCE DETECTION = Luminaires are dimmed and switch off and switched on again when area is re-occupied. INACTIVE = PIR functions are deactivated.	Active
PIR SENSITIVITY	The PIR sensitivity can be adjusted to suit each area.	Min / 1.5 / Max	4
BRIGHT-OUT	Defines what happens when the daylight level is high and the luminaire has dimmed to its minimum setting.	YES/NO YES: When the illuminance level exceeds the maintained illuminance level by 50% for 10 minutes the luminaires will switch off. When the illuminance level falls below the maintained illuminance setting the luminaires will switch on. NO: When bright-out is set to NO, the luminaires will dim but not switch off.	Yes
POWER UP	Switches luminaires back on after power is restored due to a mains power interruption. Luminaires then switch off as per PIR programming.	ON May be set to OFF but the luminaires will only switch on only when presence is detected after power restoration.	ON
HOLD OVERIDE	After the time delay has expired and new presence is detected the luminaire will revert to automatic mode and ignore any manual override that had been set (using Smart Remote or Scene Control).	YES: If changed to YES, manual override settings will be retained permanently. NO	NO
MIN LAMP	Sets the minimum dim level for the Smart Luminaire.	1-100% (dependent upon ballast/ driver range capability)	10%

INTERNAL BASIC PARAMETERS REQUIRED

AREA / ROOM	ILLUMINATION LEVEL		MAIN SETTINGS				
	REQUIRED	ACHIEVED	TIME DELAY	SECURITY LEVEL	IF VACANT (MINS)	PRESENCE OR ABSENCE DETECTION	BRIGHT OUT (Y/N)
EXAMPLE	300 lux		15	20%	5	PRESENCE	Y

INTERNAL SMART TOUCH AND SMART SCENE OPTIONS

For each programmable scene, individual luminaires may be set to go to any fixed lamp power level from off through 1 to 100%, or to adjust their commissioned (working plane) maintained lux level from 10 to 200% of its setting.

For example, in a classroom, upon activating scene 1 the luminaires closest to a teaching wall may be turned off or dimmed to a low level, whilst the rest of the room remains at a higher level to allow the pupils to take notes. Alternatively, scene 1 may adjust the luminaires nearest the whiteboard to maintain 50 lux whilst those further away continue at their setting of 300 lux.

Smart Sensor factory pre-set scenes are set to:
Scene 1 = fixed 50% / 2 = fixed 25% / 3 = off

Smart Hub factory pre-set scenes are set to:
Scene 1 = ON / 2 = ON / 3 = OFF

When a particular scene is no longer required another scene can be selected, or by pressing the ECO (automatic) button the system will revert to automatic mode. Alternatively, the system reverts to automatic mode when presence is no longer detected and the time delay has elapsed.

SCENE PARAMETERS

SCENE TYPES

In rooms equipped with scene plates, each luminaire can be set to respond in a unique way to create a specific lighting scene. Two types of scene are available, and each has its own range of levels.

FIXED SCENE

Each luminaire is set to give a fixed output relative to full output (100%). For example - a luminaire set to 50% will go to half-power, and the output will not change.

AUTOMATIC SCENE

The set point for maintained illuminance is altered and the luminaire will alter its output to maintain that level. The base line (100%) is the normal maintained light level, and a scene can be set between 10% and 200% of the normal level. For example, if the normal level is 300 lux, an automatic scene of 50% will maintain 150 lux.

WHITEBOARD SCENE

Typically set to fixed 0% at whiteboards, increasing to 100% automatic.

SCENE PARAMETERS REQUIRED *(This section is only needed if Smart Scene Setting Plates or Handsets are installed/used.)*

If individual luminaire lux levels are required please include a sketch or marked drawing to show where luminaires are located in the room (If no settings are requested the commissioning engineers discretion will be used).

AREA / ROOM	SCENE 1 DEFAULT SETTING = 50% FIXED		SCENE 2 DEFAULT SETTING = 25% FIXED		SCENE 3 DEFAULT SETTING = OFF (FIXED 0%)	
	FIXED OR AUTOMATIC	LEVEL	FIXED OR AUTOMATIC	LEVEL	FIXED OR AUTOMATIC	LEVEL
EXAMPLE	Automatic	170%	Fixed	10%	Fixed	0%

EXTERNAL BASIC PARAMETERS

PARAMETER	DESCRIPTION	RANGE OF SETTINGS	FACTORY DEFAULT SETTINGS	CANOLUX LED FACTORY PRESET
LIGHT LEVEL	Sets the threshold at which the luminaire switches on.	6 - 200 lux	70 lux	200 lux
TIME DELAY	Sets the period the luminaires will remain on after the last detected movement before dimming down and switching off.	30s to 10hrs or continuous	10 min	5 min
SECURITY LEVEL	Sets the DALI level at which the luminaire will remain for the 'If Vacant' period set below.	1 -100% DALI	10%	30%
IF VACANT	Determines what happens at the end of the Time Delay set above. If Vacant luminaire can be set to switch off, remain at the security level for a preset period, or remain on continuously.	Off or at minimum for between 30s and 10hrs or continuous	10 min	Continuous
PIR	Sets the PIR for the luminaire. Normal setting is active. May be set to inactive or Off only to avoid nuisance switching. (Off only needs a Motionline connection to switch the light On).	Active / In-Active / Off only	Active	Active
PIR SENSITIVITY	May be adjusted to suit local conditions, and reduce nuisance switching.	Min / 1 to 5 / Max	5	5
BRIGHT-OUT	Determines whether the luminaires are switched off during the day or operate at all times. If set to Yes, the luminaire will switch off if the measured light level is above the Bright-Out Threshold for more than 10mins. If set to No, the luminaires will never switch off as a result of increased light level.	Yes / No	Yes	Yes
BRIGHT-OUT THRESHOLD	Sets the level at which the luminaires will switch off. It is set as a percentage of the Light Level setting. (Default setting requires there to be greater than 140 lux for more than 10 minutes before the light will switch off).	100% - 400% in increments of 50%	200%	400%

EXTERNAL BASIC PARAMETERS REQUIRED

AREA	TIME DELAY	SECURITY LEVEL	IF VACANT	BRIGHT OUT (Y/N)	BRIGHT OUT THRESH-OLD
EXAMPLE	10 mins	20%	1 hour	Y	200%

NOTE: Default parameters gives a dusk/dawn operation where the fittings will say on at 10% permanently under no detection and increase to maximum output % on detection. These will turn on and off using the photocell at <>80 lux average.

PRE-COMMISSIONING CHECK LIST

FAULTY FITTINGS

It is not possible for our engineers to carry spares for every luminaire in our range. Please list below the quantity, catalogue number and the nature of fault (i.e. no operation) so that we can bring the exact spare/items required.

CAT. NO.		CAT. NO.		CAT. NO.	
QUANTITY		QUANTITY		QUANTITY	
FAULT		FAULT		FAULT	

DELIVERIES

Please list outstanding items.

CAT. NO.		CAT. NO.		CAT. NO.	
QUANTITY		QUANTITY		QUANTITY	

CHECKLIST

- Motionline is polarity sensitive
- Sensor with a red flashing LED is an indicator that there is a crossed polarity on the Motionline (communications pair) within the circuit.
- The fittings will dim down or switch off if enough daylight is present. This would be shown as a flashing green LED on the PIR.
- Please ensure all pre-made leads are fully secured during installation.

SMART SENSOR & HIGH LEVEL SENSOR INDICATOR

EVENT	DEFAULT BEHAVIOUR
Bright-out	Green LED - fast flash (1 second ON, 1 second OFF)
IR Remote Control receive	Red LED - flashes twice
IR Programmer receive	Red LED - flashes 3 times
Motion detection	-
Motionline short circuit	Red LED - fast flash (1 second ON, 1 second OFF)
100 hour burn in	Red LED - permanent ON

PLEASE BE ADVISED IF OUR ENGINEERS ATTEND SITE AND ARE UNABLE TO COMPLETE THEIR TASKS DUE TO INCOMPLETE INSTALLATIONS, DAMAGED FITTINGS OR CONTROLS, ALL ADDITIONAL VISITS AND/OR COMPONENTS WILL BE CHARGED FOR