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FC

US

Luminaire



Instructions to assemble, install and use



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# 1 INTRODUCTION

N.B.:

The operators appointed to assemble and install CoeLux products must read the entire contents of this manual very carefully not only before assembling, installing and starting the unit, but also before carrying out any maintenance.

This manual must always be used and kept safely for any future eventuality. It is forbidden to remove, tear or arbitrarily modify its parts.

The illustrations and drawings are to be used only for general reference and do not necessarily provide every precise detail. The images and technical specifications in the manual are not binding and may be changed without prior warning.

This manual consists of a total of 35 pages + attachments.

# 1.1 CONVENTIONAL SYMBOLS USED IN THE MANUAL



### WARNING!

This indicates that the operator must take the utmost care not to cause injuries to the personnel and/or damage, breaks, fires to the unit.



#### CAUTION:

This indicates the operator must take the utmost care to avoid disturbing personnel and/or causing possible damage to or malfunctioning of the unit.



### N.B.:

This indicates special technical guidelines or highlights important information.



This indicates a link to parts of the manual or its attachments, or the need to read other separate documentation.

Other additional symbols may also be used as required.

### 1.2 ABBREVIATIONS

- Chap. = chapter
- Para. = paragraph
- Pag. = page
- Fig. = figure
- Tab. = table

# 1.3 UNITS OF MEASUREMENT

Unless stated otherwise, the units of measurement are those set by the International System (SI).

# 1.4 OPERATORS' QUALIFICATIONS

Logo	Meaning	Function
Î	General operator	Operator without specific skills, capable of carrying out only simple tasks under the orders of qualified technicians.
<b>¶</b> 4	Electrician	Qualified technician, capable of operating the unit, trained to carry out all electrical interventions to adjust, maintain and repair. Capable of operating on live parts inside electrical cabinets and junction boxes.
<b>ņ</b>	Qualified Technician or Operator	Technician qualified by CoeLux s.r.l. to carry out operations of extraordinary maintenance, even under special conditions. He possesses mechanical and/or electrical and/or electronic skills, depending on the case.

#### Tab. 1Operators' qualifications

### N.B.:

A single person may be able to cover more than one role given in the table, subject to adequate training.

It should be noted that the term "OPERATOR" refers generically to the personnel appointed to operate, adjust and clean the unit.

The term "EXPOSED PERSON" refers to a person, whose presence in any area inside and/or near a machine constitutes a risk for his security, health or safety.

# 2 SPECIFICATIONS

# 2.1 PRODUCT DESCRIPTION

CoeLux<sup>®</sup> ST is a built-in luminaire: partially hidden by the false ceiling, it can simulate natural sunlight, even in a completely closed space.

CoeLux<sup>®</sup> ST consists of a LED light source and optic components, housed in a single polyurethane structure. CoeLux<sup>®</sup> ST must be installed in the false ceiling.

# 2.2 TECHNICAL DATA AND SPECIFICATIONS

Specifications	Unit of measurement	Value
MECHANICAL		
Product dimensions (without louvre and	mm	571 x 500 x h352
without support bars)	in	22.5 x 19.7 x 13.85
Dimensions of the artificial window (without	mm	530 x 300
louvre)	in	20.9 x 11.8
Product weight (without <i>louvre</i> and without	kg	11
support bars)	lb	24.25
ELECTRIC		
Supply voltage (frequency)	V (Hz)	100 – 240 (50/60)
Power supply connection	-	Phase + Neutral + Earth
Maximum (typical) absorbed power	W	50 (45)
Insulation class	IEC Definition	Class I
Mark		CE (PN 74-00030-01), FCC, UL (PN 74-00054-01)
ENVIRONMENTAL		
Operating temperature	°C	-10 / 40
Maximum operating relative humidity	%	95 (non-condensing)

Tab. 2 Product data and specifications

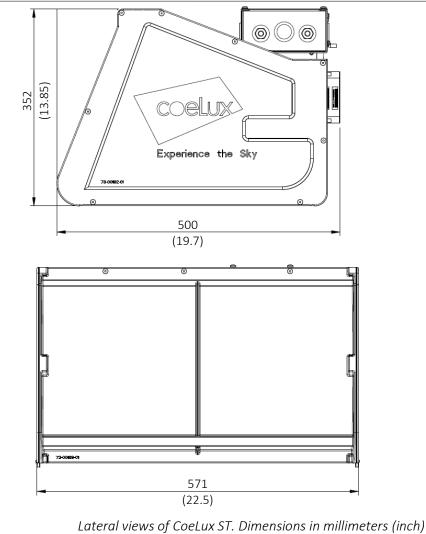
CoeLux<sup>®</sup> ST has an external, black, polyurethane structure.. It can also be installed on surfaces, which are normally inflammable.

Contact CoeLux S.r.l for further product details and clarifications.

CoeLux<sup>®</sup> ST can be programmed and controlled according to the DALI standard (IEC62386-102(2.0), IEC62386-207). Furthermore, brightness can also be adjusted using the SwitchDIM interface (only in case of single system installation, Paragraph 6.3).

Instructions to assemble and install

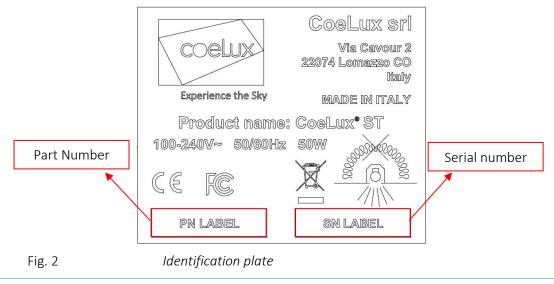




# 2.3 PRODUCT IDENTIFICATION

Fig. 1

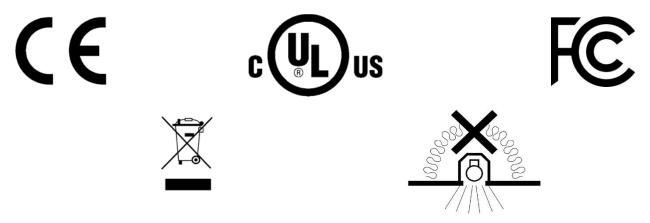
The rating plate with the serial number (SN) and the Part Number (PN), among other things, can be found on the top of the case, next to the metal connection box: please give CoeLux S.r.l. these codes for any request.



# 2.4 LEGISLATIVE FRAMEWORK

CoeLux<sup>®</sup> ST (PN 74-00030-01) complies with the essential requisites of the Directives 2014/35/EU, 2014/30/EU, 2011/65/EC, 2012/19/EU, the required standards of which have been applied. CoeLux<sup>®</sup> ST (PN 74-00054-01) is FCC certified in accordance with CFR 47 part 15 – Subpart B-15.107 and 15.109.

CoeLux<sup>®</sup> ST (PN 74-00054-01) also holds UL certification for Canada and the U.S.A. (File E476417).



# 2.5 GENERAL CAUTIONS AND SAFETY WARNINGS



#### WARNING!

To avoid accidents or injuries, follow the procedures described in this manual to install and use the unit. Read the entire manual, as it contains important information to install and operate the unit correctly. If you do not follow the instructions and warnings given in this manual, the guarantee will no longer be valid.

Furthermore, CoeLux S.r.l. will not accept any liability for any damage to objects, people and animals, which may arise from the failure to comply with the instructions and warnings given in this manual. CoeLux S.r.l. will not be held liable for installation and/or assembly, which is incorrect or does not comply with what is described in the installation manual.



#### WARNING!

The cabling for the system to the electricity mains must be carried out only by an electrician.

### N.B.:

Some details regarding how to switch on the product or how to operate it in general may depend on the choices made during installation.

- The product is not a toy and must be kept out of children's reach! Install the product where children are unable to reach it.
- Take care not to leave the packaging material unguarded, as it could be dangerous for children to play with it.
- The product can be installed and used <u>only</u> in closed, dry, internal rooms, which are not exposed to condensation and damp.



• Do not install the equipment in dirty (dusty) rooms where there is or may be gas, steam or dust!



- Do not cover the system with thermal insulation materials: In particular, the distance between each product surface and any insulating material present in the ceiling must exceed 76 mm (3 in) to maintain UL certification.
- If you think it is unsafe to operate the product, you must switch it off at the mains and prevent any incorrect actions. Ask expert personnel to supervise. You should consider use is impossible when:
  - the product is visibly damaged;
  - the product does not work or does not work correctly (flickering light, release of smoke or bad smell, audible crackle, discolouring of the product or the surrounding surfaces);
  - the product has been stored in unsuitable conditions (see paragraph 3.3);
  - the product appears worn or damaged after transport.
- To maintain UL certification, the product is classified: "For use in non-fire-rated installation only" and "Not for use in environmental air-handling spaces" <u>only</u> for installations in the USA and Canada.
- If you have any further questions, please do not hesitate to contact CoeLux S.r.l (see last page in this manual).

#### 2.5.1 PROHIBITED OPERATIONS

- Do not make any modifications, even partial to the unit or to its parts, unless explicitly agreed with the manufacturer; failure to comply with the aforementioned prohibition relieves the manufacturer from any liability arising from it; interventions to modify the product also invalidate the guarantee and certification;
- Do not open the case before disconnecting from the mains supply;
- Do not use inflammable liquids near the equipment;
- Do not Install or repair without using qualified personnel;
- Do not walk on the system, lean on it or hang on to it.

# 3 HANDLING, UNPACKING AND STORAGE

# 3.1 HANDLING

The unit is shipped adequately protected and packed inside a cardboard box together with the support bars, whereas the selected louvre will be supplied in a separate package. Due to some of the parts being particularly delicate, you must take great care when loading/unloading the packages from the transport vehicle and subsequently during handling. We advise operators to use adequate personal protective equipment (PPE), such as gloves, safety shoes, etc.



#### N.B.:

The drawings and instructions accompanying the unit are and remain the exclusive intellectual property of CoeLux S.r.l., which holds all the rights, prohibits their reproduction and also prohibits even partially sharing with third parties.

# 3.2 UNPACKING

As the contents are fragile, we recommend you take maximum care.

- 1 Check the material delivered corresponds with what is indicated in the shipping documents. If anything is missing or incorrect, contact CoeLux S.r.l. immediately.
- 2 Proceed to carry out a careful, scrupulous general check to identify any damage to the unit during transport. All damage must be immediately notified in writing to the haulier and the manufacturer; do not continue to unpack until you are authorised to do so by CoeLux S.r.l.



- 3 Proceed with the assembly as indicated in Chapter 5.
- 4 Save all the packaging material and dispose of in compliance with the measures of the laws in force.

### 3.3 STORAGE

If the unit is not used for any length of time, it (or its parts) must be stored in a closed room, protected from bad weather and under the following environmental conditions:

- Temperature between -20°C and +50°C.
- Relative humidity below 30% at 40°C and 90% at 20°C and, in any event, non-condensing.
- Atmosphere with clean air, no acids, corrosive gases or salts, etc.

It is mandatory to use protective covers for the unit to be accurately protected from dust and sunlight and placed out of reach of possible accidental impacts.

# 4 INSTALLATION

# 4.1 PERMITTED APPLICATIONS

CoeLux<sup>®</sup> ST is a furnishing accessory to be recessed in the false ceiling. It was designed to be installed in interior rooms.



### CAUTION:

CoeLux ST occupies a 40 cm-high space in the false ceiling. Therefore you must check the minimum height permitted of the false ceiling in every room.

If CoeLux<sup>®</sup> ST is used in environments subject to specific legislation (undergrounds, tunnels, etc.), an assessment must be made by competent personnel. Contact CoeLux S.r.l. to receive guidelines for any specific project.

# 4.2 DESIGNING THE SPACE

CoeLux<sup>®</sup> ST lights space very differently compared to traditional lighting and imitates a permanently sunny window.

To use the product correctly, we advise you to ensure the artificial lighting is compatible with the natural light the space in question is exposed to (from any windows, skylights, etc.).



When you are preparing to install CoeLux<sup>®</sup> ST, you must envisage an access trapdoor in the false ceiling (minimum dimensions 600x600 mm) and the relevant space above it to permit maintenance operations (see Paragraph 6.2)

### 4.3 GENERAL INSTALLATION GUIDELINES

CoeLux<sup>®</sup> ST consists of a LED light source inserted inside a polyurethane case, together with an aluminium, curved mirror, a PMMA sheet and a light diffuser (louvre). The structure must be fastened to the flat roof using safety cables in proportion to the product weight (11 Kg). Procedures to assemble, raise, fasten and start up CoeLux<sup>®</sup> ST must comply with the instructions

in this manual. and they must also comply with the legislation in force on safety in the place of installation.



#### WARNING!

The installer is responsible for fastening CoeLux<sup>®</sup> ST to the existing structure and NOT CoeLux S.r.l. This manual (Chap.6) gives instructions on how to do this which, if not followed correctly, will invalidate the guarantee.

# 5 ASSEMBLY

The CoeLux<sup>®</sup> ST assembly kit consists of:

- a box containing the main case, the support bars and cable glands for the electrical connection
- a box containing the louvre selected by the customer

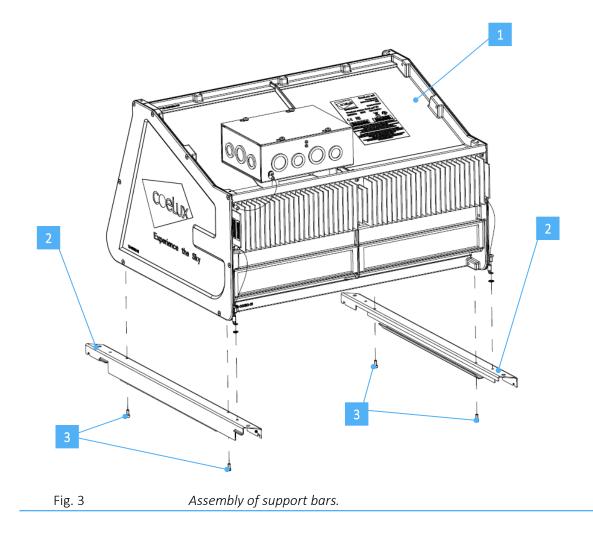
Follow the various assembly procedures in the correct order and pay close attention to the suggestions and details in the following paragraphs.



#### N.B.:

Depending on the false ceiling and type of fastening, CoeLux<sup>®</sup> ST must be assembled before or after the operations given in Chapter 6.

# 5.1 ASSEMBLY OF SUPPORT BARS





- A. Remove the main case [1] (PN 74-00030-01) and the support bars [2] (PN 73-00216-01) from the box.
- B. Use the M4 screws supplied [3] and the holes indicated in Figure 4 to assemble the support bars [2] on the main case [1] (Figure 3).

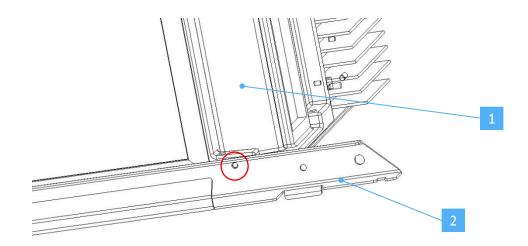
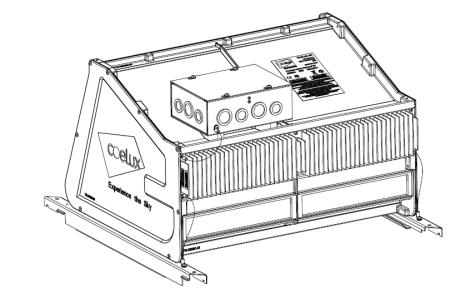


Fig. 4Detail of the support bars [2] for CoeLux ST (seen from below).Red circle: hole to fasten bars to the main case [1].



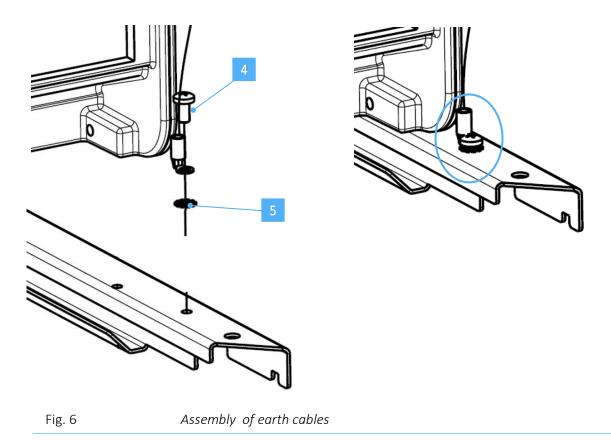


CoeLux ST support bars assembled



# 5.2 CONNECTION OF EARTH CABLES

Use the screws [4] and the M5 cogged washers [5] supplied to assemble each of the two earth cables from the heatsink to one of the support bars (Figure 6).



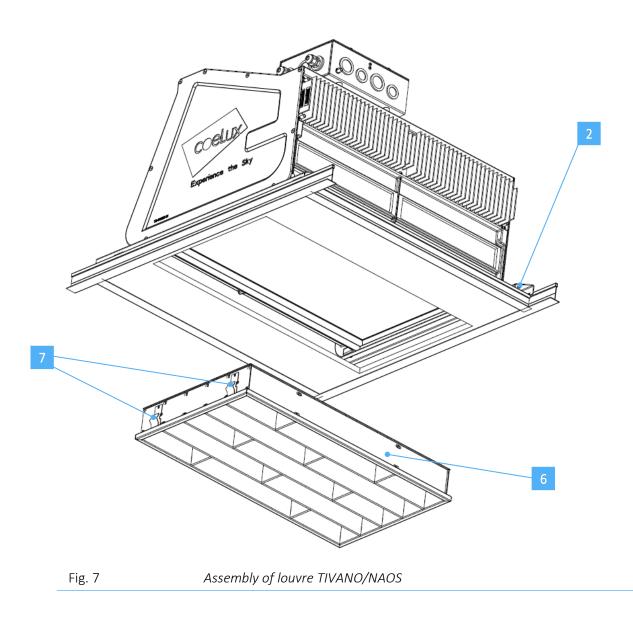
# 5.3 ASSEMBLY OF LOUVRES

# ▶ <u>N.B.:</u>

Weight of TIVANO and NAOS louvres: 0.9Kg Weight of IBLA louvre: 6 Kg

#### TIVANO AND NAOS LOUVRES

- A. Install the system in the false ceiling as indicated in Chapter 6.
- B. Remove the protective film and use any ordinary window cleaning product (e.g. "Glassex") to clean the CoeLux<sup>®</sup> plastic panel.
- C. Take the louvre selected by the customer out of its box.
- D. Raise the louvre [6] (Figure 7) and push it towards the panel until the 4 springs [7] clip on to the support bars [2] (detail in Figure 8).





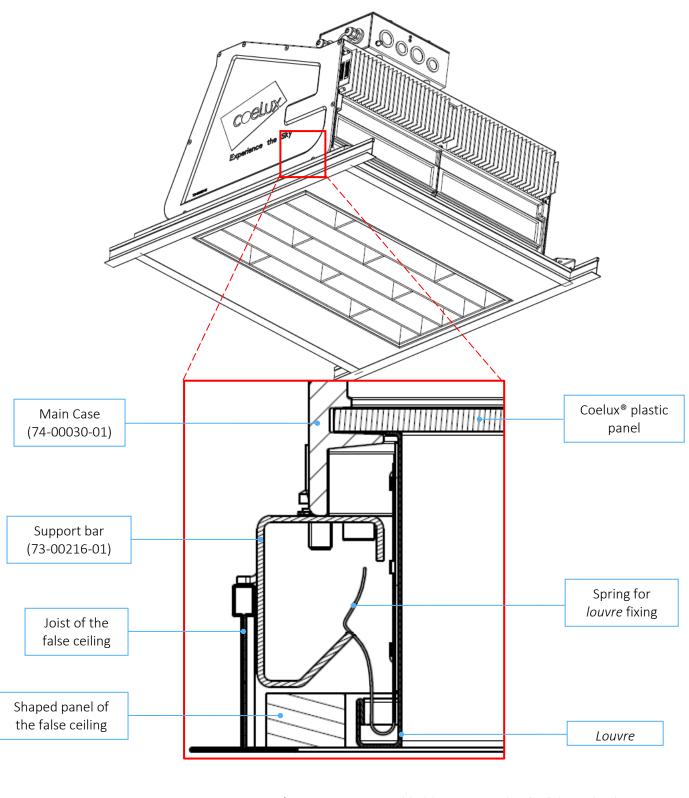


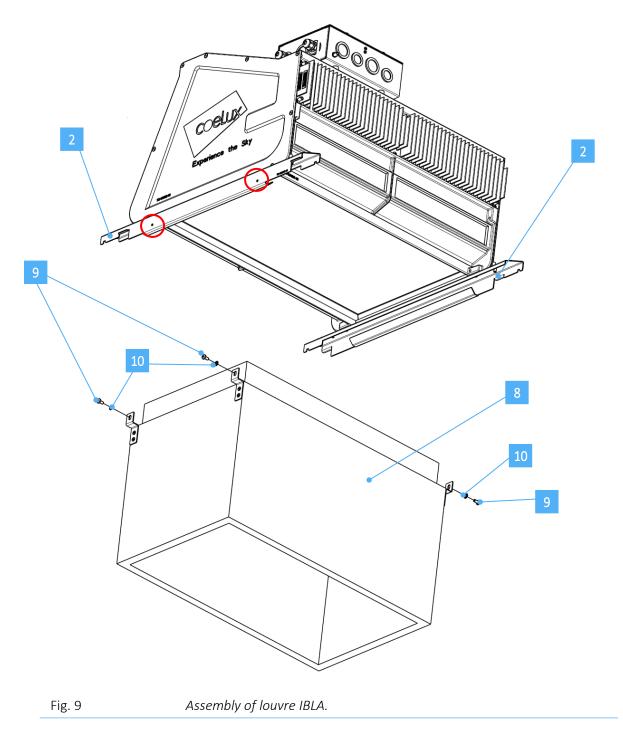
Fig. 8

TIVANO/NAOS Louvre assembled (in an example of a false ceiling). Detail: louvre spring fastening in final position.



#### **IBLA LOUVRE**

- A. Take the *IBLA louvre* [8] (PN: 73-00035-01) out of the box and use the self-threading screws
  [9] and M5 washers [10] supplied to fasten it to the support bars [2] (the holes on the support bars have already been prepared, as highlighted by the red circles in Figure 9).
- B. Remove the protective film and use any ordinary window cleaning product (e.g. "Glassex") to clean the CoeLux<sup>®</sup> plastic panel.
- C. Fasten the product to the ceiling or to the load bearing false ceiling, as you prefer.



# 6 MOUNTING, VOLUMES, CONNECTIONS AND CHECKS

#### WARNING!

The installer is always responsible for fastening CoeLux<sup>®</sup> ST to the existing structure. It must be carried out by specialised personnel, who follow the instructions in this chapter and <u>who comply</u> with the safety measures in force in the place of installation. Failure to comply with the instructions in this chapter will immediately invalidate the guarantee.

# 6.1 MOUNTING

This paragraph shows three different examples of how to mount CoeLux ST (with three different types of false ceiling). Other solutions may be used, provided CoeLux ST is always mounted on the support bars.

<u>CoeLux S.r.l.</u> only supplies the support bars and relevant screws for assembly to the main case: any other material shown in this paragraph is NOT supplied by CoeLux S.r.l. and the installer will be responsible for obtaining it.



#### WARNING!

If you wish to anchor CoeLux ST to the false ceiling, always use the load bearing structure of the false ceiling itself: always check it can support the weight of the system (12 Kg + louvre).



#### N.B.:

Weight of TIVANO and NAOS louvres: 0.9Kg Weight of IBLA louvre: 6 Kg



#### WARNING!

Take special care not to scratch the CoeLux<sup>®</sup> panel when lifting, positioning and fastening into place.

It is absolutely forbidden to fasten the false ceiling to the polyurethane case.



#### N.B.:

Before you mount CoeLux ST and always before you connect it to the mains supply, assess whether there is sufficient space in the false ceiling to carry out the operations to cable the system (Paragraph 6.3).

# 6.1.1 RECOMMENDED MOUNTING FOR LOADBEARING FALSE CEILING WITH 60X60 MODULES (with 38 or 32 mm-high load bearing/cross joists).



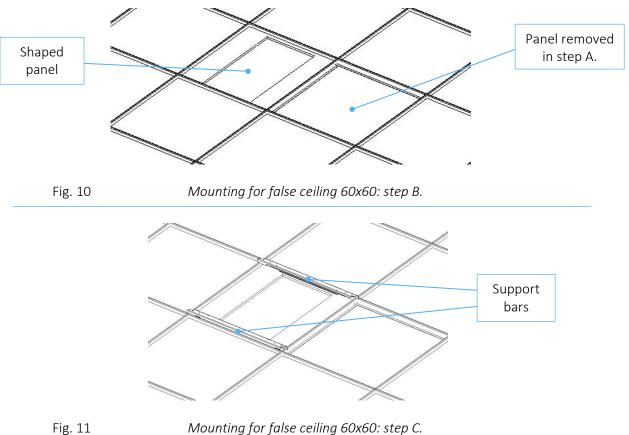
#### N.B.:

For this type of mounting, you must assembly the system after you have completed the steps given below.

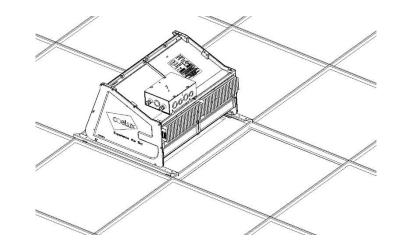
- A. Remove two panels next to the false ceiling.
- B. Shape one of these into a window (in the centre of the panel) measuring 552x332 mm and replace it in the module chosen (Figure 10).



C. Position the support bars [2] and slot them into the load bearing structure of the false ceiling (Figure 11).



D. Pass the main case [1] through the other opening in the false ceiling and place it above the support bars (Figure 12).





Mounting for false ceiling 60x60: step C.

- E. Continue to assemble as described in Chapter 5.
- F. Complete the electrical connections (if you haven't already done so) and use the appropriate panel to shut the other opening in the false ceiling.

#### 6.1.2 RECOMMENDED MOUNTING FOR PLASTERBOARD (LOAD BEARING) FALSE CEILING

- A. Complete the assembly steps described in paragraphs 5.1 and 5.2 and, if required, the installation of the IBLA louvre (Paragraph 5.3).
- B. Make a trapdoor (recommended size 800x800 mm) with a 13mm-thick window 552x322 mm (563x333 mm for the IBLA LOUVRE), and fasten it to the support bars (Figure 13).

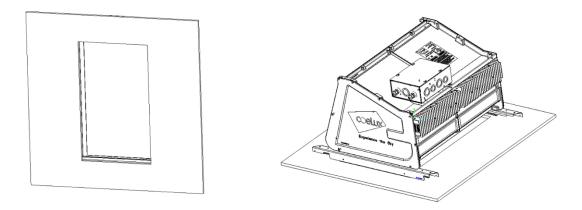


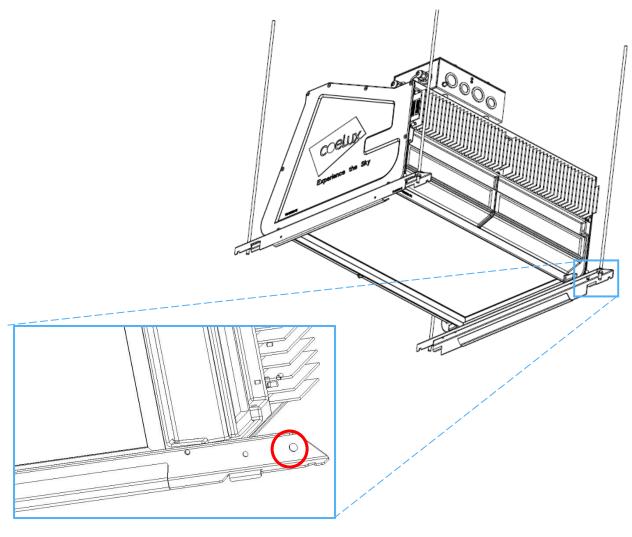
Fig. 13 Mounting for plasterboard false ceiling: step B.

C. Install the trapdoor in the false ceiling and continue to assemble your chosen louvre.

#### 6.1.3 SUSPENSION FROM A STRUCTURAL CEILING

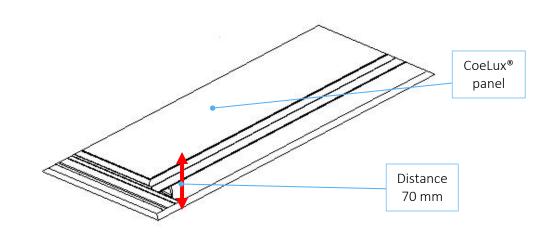
- A. Complete the assembly steps described in paragraphs 5.1 and 5.2.
- B. Fasten 4 M6 threaded bars to the corners of a 566 mm-sided square on the ceiling (above the final system installation site). Screw an M6 nut to each bar for the top fastening (NONE of these parts are supplied by CoeLux S.r.l.).
- C. Slide the 4 threaded bars into the holes on the support bars [2] (red circle in the detail in Figure 14) and use another 4 nuts and 4 M6 washers to block them. Use the bottom nuts to adjust the BOX position: once you have established the correct position, also tighten the top nuts to lock the system into position.
- D. Then proceed to ensure the lower surface of the false ceiling is 70mm from the CoeLux<sup>\*</sup> panel, as shown in Figure 15 (this distance can vary for installations using an IBLA louvre). The false ceiling opening for the window must measure 552x322 mm (563x333 mm for the IBLA *louvre*). Prepare a trap door to allow for maintenance and to be able to dismantle the system (recommended solution: 800x800 trapdoor with central window and squared up to the system).
- E. Continue to assemble the louvre (Chapter 5).







Mounting to the structural ceiling: step C. Detail: seen from below.





Mounting to the structural ceiling: step D.

# 6.2 SAFETY DISTANCE AND VOLUME

You must ensure access to the luminaire and to the connection box to enable the electrical part of the system to be serviced. You need to make an adequately sized trapdoor or opening in an opportune position (for any type of installation).



#### CAUTION:

For the system to operate at its best, the heatsink thermally coupled to the LED source needs to exchange air with the surrounding environment: we recommend leaving an empty space in the false ceiling around the CoeLux ST. Under no circumstances must the product be covered (in contact) with the thermal insulating material (symbol in Figure 16).



#### WARNING!

Please note that to maintain UL certification, the distance between each surface of the product and any insulating material present in the ceiling must exceed 76 mm (3 in). UL certification will become invalid if this distance is not complied with (TYPE NON-IC INSTALLATION).



Fig. 16

*Symbol on product label: do not cover the luminaire with thermal insulating material (in contact).* 

# 6.3 ELECTRICAL CONNECTIONS



The user is responsible for preparing the mains power supply cable to the unit, and only specialised technicians can make the connection.

#### WARNING!

Before you commence the electrical connections, you must check the supply cables and any other cable you intend to connect to the unit terminals are not live. First, check that the rating plate data for the unit is compatible with the existing power supply.



#### WARNING!

The user must place an adequate, 16A, automatic, differential, magnetothermal switch above the power supply line, which personnel can easily access to disconnect only the luminaire for service and maintenance operations; the switch must comply with the laws in force in the country of use. Pay special attention when you connect the earth of the protection cable.

The user is prohibited from autonomously making any subsequent modifications to the electrical system.

When the electrical connection is complete, check the connection cable is in place and cabled correctly, that it is not squashed or compressed, and is placed so it will not hinder the operators.



#### CAUTION:

Preserve "BASIC" insulation between power supply cables and DALI signal cables, dimensioned for 240V. Maintenance of this insulation barrier can also be dependent on other external components/products connected to the same control bus. This is responsibility of the control system designer, not the luminaire manufacturer.

A product cabling kit is supplied inside the box containing the main case. It is mandatory to use this kit for CB certification. For this purpose, see chapter 9.

#### 6.3.1 MAINS SUPPLY CONNECTIONS

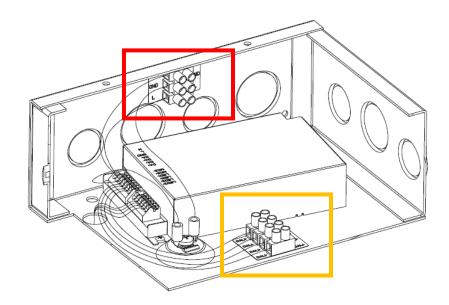
- A. Open the lid of the junction box above the product, alongside the label. You will find the power supply unit and two screw terminal boards, as shown in Figure 17. Figure 18 shows the connections diagram.
- B. Open the knock-out opening shown by the red circle in Figure 19 and pass through the external supply cables.
- C. Connect the external supply cables to the appropriate terminal, as shown in Figure 20 and close the junction box lid.

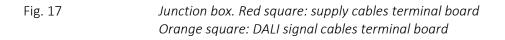


#### 6.3.2 DALI/SwitchDIM CONNECTIONS

- A. Open the knock-out opening shown by the red circle in Figure 19 and pass through the external cables for the DALI/SwitchDIM signal in the same way as for the supply cables.
- B. Connect the external cables for the DALI/SwitchDIM signal to the appropriate terminal, as shown in Figure 20 of the final cabling diagram.

You can use a pair of DA+ and DA- ports (from the terminal board shown by the orange rectangle in Figure 17) for the SwitchDIM (<u>alternative to DALI only in case of single system installation</u>) to connect in series two additional phase (L) and neutral (N) lines, respectively, and add a switch to one of the two lines, which enables the ON/OFF function and the light intensity to be varied (Figure 21).







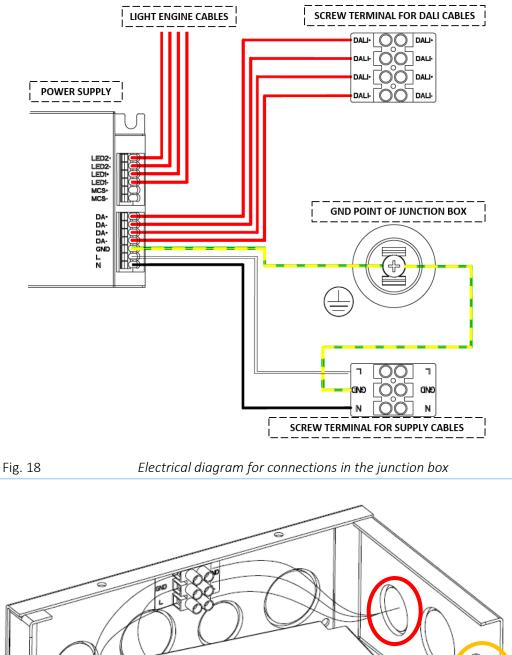


Fig. 19

*Junction box. Red circle: exit for supply cables Orange circle: DALL signal cables exit* 



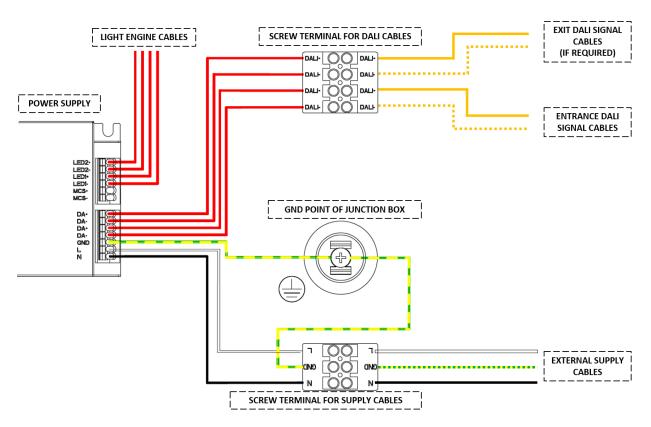
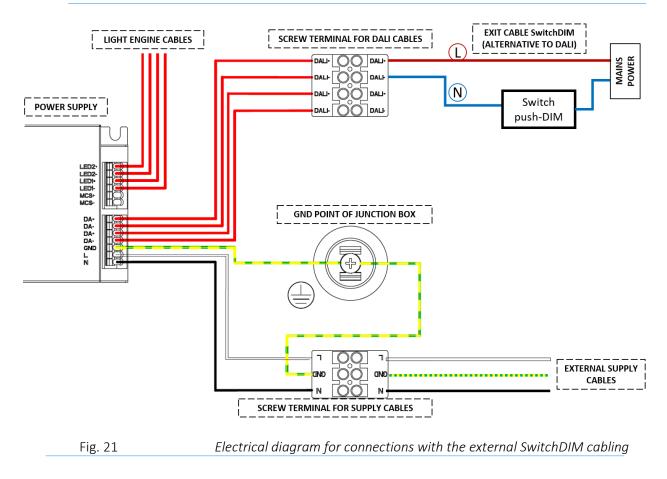


Fig. 20 Electrical diagram for connections with the external supply cabling and DALI.





#### 6.3.3 CHECKS

Once installation is complete, and <u>before installing the louvre (not for IBLA)</u>, you must carry out some checks to ensure the equipment is working.



#### WARNING!

To avoid being dazzled, do NOT look inside the window when the unit is being switched on.

Switch on the unit and visually check:

- for any dirt on the CoeLux<sup>®</sup> panel. If necessary, use a cloth and window cleaning product (e.g. "Glassex<sup>®</sup>) to clean it again.
- that the CoeLux<sup>®</sup> panel is entirely and evenly lit and that there are NO dark areas on it (Figure 22 on the previous page). If this is not the case, contact your dealer for assistance (<u>http://www.coelux.com/en/store-locator/index</u>);



Fig. 22

Photo of a panel NOT evenly lit.

# 7 HOW TO OPERATE AND USE

CoeLux<sup>®</sup> ST is an innovative luminaire. It uses a LED source, an optical system and the CoeLux<sup>®</sup> panel to produce an artificial window, to light the room naturally as though it were a real sunlit window.

Read the technical sheet and information provided by CoeLux S.r.l. to exploit the product potential to its best.



#### WARNING!

If you look directly at the LED light source, you may be dazzled (this is temporary and not hazardous). To avoid being dazzled, you are advised NOT to look inside the window when the unit is being switched on and when you use the dimmer to vary light intensity.

If installed correctly, CoeLux<sup>®</sup> ST is not hazardous for the human eye and eyesight, either with or without the louvre.



#### CAUTION:

The LED light source is classified as RG1 unlimited according to the IEC/TR 62778 standard, due to the blue light it emits. However, no hazard signs are required according to the IEC/TR 62471-2 standard. To prevent any irritating reactions (dazzling, after image, etc.) which are, nevertheless, temporary and normal, we recommend you do not stare at the light source for a long time, and do not allow people with limited cognitive ability or mobility (children, the elderly, disabled, bedridden, etc.) to do the same.

# 7.1 LIGHT INTENSITY CONTROL

Once connected and switched on, the CoeLux<sup>®</sup> ST system is set to provide 100% of the permitted light intensity. The light intensity of CoeLux<sup>®</sup> ST can be controlled via a DALI signal or via a *SwitchDIM*.



#### N.B.:

Only the intensity and not colour of the light can be changed in any way.

#### 7.1.1 DALI

Two cables for the DALI signal can be connected via the terminals inside the junction box (shown in paragraph 6.3.2). Furthermore, thanks to the presence of two groups of DA+ and DA- ports, the product can be connected in daisy-chain with other network systems controlled by the DALI. To avoid any discomfort, CoeLux recommends setting the fade-time for the change in intensity to over 2 sec.

# 7.1.2 SwitchDIM: push dimming with memory functions (as an alternative to DALI only in case of single system installation)



As anticipated in paragraph 6.3.2, light intensity can be controlled via the SwitchDIM function and a switch only in case of single system installation (it is not possible to control more systems with a single switch).

By pressing the switch briefly (<0.6s), the system will switch on or off, and will memorise the intensity set at the time it was switched off. By holding down the switch for longer (>0.6s), it is possible to vary the light intensity of the system.

If several CoeLux<sup>®</sup>ST systems are connected together and controlled by a single switch, by holding down the switch for 10s, all the systems will (simultaneously) set the light intensity to 50% of the maximum level.



#### CAUTION:

It is mandatory to insert a switch on the main supply line to enable power to the system/s to be switched off during maintenance. This switch also allows you to reset the SwitchDIM memory.

# 8 MAINTENANCE

#### WARNING!

- Before carrying out any regular servicing or extraordinary maintenance, you must switch off the unit from the mains power supply.
- To access the top parts of the device, use suitable equipment for the operations to be carried out.
- Operators are reminded they must use all the personal protective equipment and comply with the safety measures.
- Do not stand on the parts of the unit, as they are delicate and are not designed to support a person's weight.
- Never leave tools, equipment or other improper material on the unit.
- Each time a maintenance operator is required to work in areas, which are not visible from the ON/OFF switch, you are warmly advised to have a second person to check carefully that the switch is not used. If this proves impossible, a warning sign must be placed very clearly on the switch.

CoeLux declines any responsibility for any breach of the instructions and warnings listed here. The guarantee becomes invalid, if the regular servicing and extraordinary maintenance operations are not carried out in compliance with what is described in this section of the manual. The guarantee will not be given unless orginal spare parts are used, or if repairs or modifications have been made by unqualified personnel and/or not duly qualified by CoeLux.

### 8.1 GENERAL GUIDELINES

CoeLux<sup>®</sup> ST was designed for continual use over a long period of time and requires minimum supervision. Under adequate operative conditions and in compliance with the environmental conditions specified in Table 1, it requires minimum maintenance. The intervals between regular maintenance by qualified personnel will depend above all on the environmental conditions of where CoeLux<sup>®</sup> ST is installed.

Always contact CoeLux S.r.l. or an authorised installer for assistance and repairs.

### 8.2 REGULAR AND PROGRAMMED SERVICING AND MAINTENANCE

To minimise the need for maintenance, keep the room as clean as possible by following standard procedures.

Restrict sharp changes in temperature and a rise in humidity. Condensation of humidity, even once installation is completed, will facilitate dirt, which cannot always be removed, and invalidate the guarantee.

Clean the CoeLux<sup>®</sup> panel once a month (if necessary).

In the event of any visible water infiltrations, switch off from the mains immediately, dry all the accessible, wet components and request the assistance of an electrician.

# 8.3 EXTRAORDINARY MAINTENANCE



#### CAUTION:

Any extraordinary maintenance carried out without the prior authorisation of CoeLux S.r.l. will invalidate the guarantee.



#### CAUTION:

The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

If the product is contaminated:

- switch off the equipment from the mains supply;
- take care that cables or electrical parts do not come into contact with water or detergent;
- Carry out the following, if necessary:
- Clean the CoeLux<sup>®</sup> panel.
- Check the suspension system.
- Remove any internal dirt.
- Replace the luminaire.
- Replace the power supply unit.
- Replace the CoeLux<sup>®</sup> panel.

Restart the product in the same way as the initial start-up.

### 8.4 TROUBLESHOOTING

Symptom	Possible cause	Recommended action
The product does not emit light.	Power supply blackout.	Check the power supply to the product is correct.
	The ambient temperature is too high.	Allow air to circulate to enable the light source and power supply unit to cool.
	For other cases.	Contact CoeLux S.r.l. for a replacement.
e e e e e e e e e e e e e e e e e e e	The ambient temperature is too high.	Check the ambient temperature is within the permitted limits, otherwise contact CoeLux S.r.l.

Tab. 3 Troubleshooting

# 8.5 REINSTALLATION AND REUSE

To assess the possibility and advantages of reinstalling and reusing the product, contact CoeLux S.r.l.



### 8.6 DEMOLITION AND DISPOSAL

CoeLux ST complies with the Directive 2012/19/EU, regarding electric and electronic equipment waste and disposal management.

When the product comes to the end of its life cycle, it shall not be disposed of with ordinary mixed urban waste. Municipalities organise differentiated waste collection centres for electrical and electronic equipment, to which you can hand over the product free of charge, when you have finished using it. If the user purchases a new, equivalent luminaire, he may return the used unit to the seller, who will collect and transport it free of charge to the differentiated collection centres. We recommend scrupulous compliance with the norms on the use and disposal of the product to avoid the dispersion of hazardous substances in the environment, which could have negative effects on the environment and human health. Compliance with the norms on the use and disposal also encourages sustainable reuse of material resources.

The symbol of the crossed-out refuse bin  $\stackrel{\wedge}{\longrightarrow}$  indicates that CoeLux ST is subject to separate recycling and collection of electrical equipment.

For more detailed information on the processing, recovery and recycling of this product, contact your municipal office, your local waste sorting service or the distributor from whom you purchased the product.

The packaging is completely recyclable and is marked with the recycling symbol. Keep the packaging material (plastic bags, polystyrene, etc.) out of reach of children and animals, as it is a potential hazard.

# 9 ASSEMBLY OF CABLE GLANDS (mandatory for CB certification)

Inside the box containing the main case (74-00030-01) is provided a bag with:

- N° 2 M16 cable glands (one for the supply cables, the other for the DALI cables) for cables with a diameter between 4 and 8 mm
- N° 4 M16 galvanised washers
- N° 2 M16 nylon nuts



#### WARNING!

The supply cables inside the junction box must always be kept at least 6.4 mm apart from the DALI signal cables: <u>the use of a single cable gland (pressure opening) for both types of cables</u> will invalidate the CB (ULK) certification for the product. Breach of this instruction will immediately invalidate the guarantee.

- A. Open the lid of the junction box.
- B. For each cable gland, press open <u>only one</u> of the openings shown in Figure 19 (if you are not using the DALI/SwitchDIM functions, only press open the supply opening).
- C. Fasten the cable gland to the junction box as shown in Figure 23.

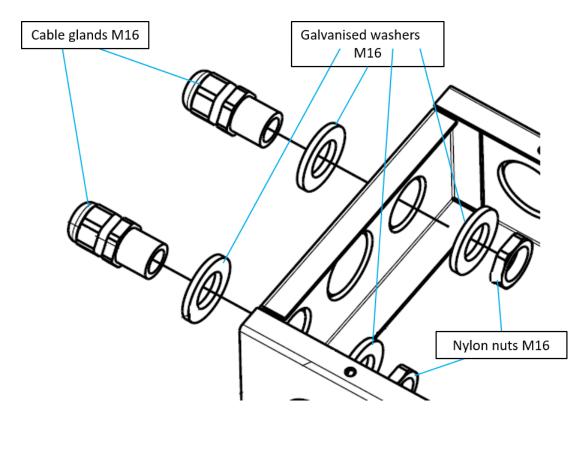


Fig. 23

CoeLux<sup>®</sup> ST installation diagram Dimension

Dimensions in millimetres (inch)



- D. Insert the cables inside the cable gland and fasten them to the terminals as instructed in Paragraph 8.3.
- E. Slide the cables inside the cable gland and fold them to shorten them inside the junction box. Block them by tightening the cable gland screw cap: <u>make sure you keep the minimum</u> <u>distance (6.4 mm) between the supply cables and the DALI signal cables inside the junction</u> <u>box.</u>
- F. Close the junction box.



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# **11 CHRONOLOGY OF THE EDITIONS**

Date	Edition	Notes
30/01/2017	01	First draft of the document
20/02/2017	A0	First issue of the document
04/07/2017	BO	Switch-DIM correction

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