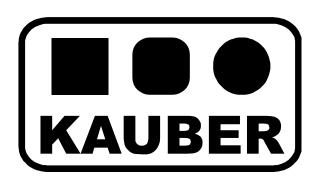
# IN-CEILING PROJECTION SCREEN INSTALLATION MANUAL



## **INCEILING XL**



KAUBER InCeiling is a premium-class electrical projection screen designed for installation in suspended ceilings. Its versatile aluminium housing has been designed to facilitate installation. In the *Tensioned* version, the screen is additionally equipped with a special system improving flatness of the projection surface. The InCeiling series was created for suspended ceiling installations in both conference rooms and home-cinema applications.

### IMPORTANT!!! INSTALLATION AND APPLICATION GUIDELINES

- 1. One of the wooden blocks protecting the content of the package is a template for installation holes do not dispose of it before completion of the assembly and installation works.
- 2. The housing and lower beam of the screen are protected against mechanical damage with polyurethane foam. Do not remove the main housing protection before step 9 and the lower beam protection before step 11 of this assembly and installation manual.
- 3. The screen shall be installed away from humidity and direct source of strong sunlight.
- 4. Use a soft damp cloth to clean the screen. Do not use active cleaning chemicals. Protect the screen assembly from penetration of water or other liquids inside the housing. Carefully wipe the screen dry after cleaning, to remove any moisture.

Content of the set:	Qty.
Projection screen	1
Side panels	2
Mounting bracket	2
Wooden template for installation holes	1
Template for the screen slot	1
Hole marker	1
Threaded rods	4
M8 nut	12
Ø10 rawlplug	10
Screen limit position adjustment key	1
Box spanner No.13	1
Wall-mounted control switch panel (accessible for screens without built-in wireless controller)	1
Protection gloves for installation works	2 pairs

#### **INSTALLATION**

- 1. Carefully unpack the contents of the box with particular attention for the wooden blodks protecting the contents of the package. Remember that one of them is a template for drilling installation holes do not dispose of it before completion of the installation works!
- 2. In the location chosen for installation of the screen, apply the foil template for the main screen slot and then draw around its perimeter with a pencil (**Figure** 1). Remove the foil template and carefully cut the ceiling slot along the pencil line.

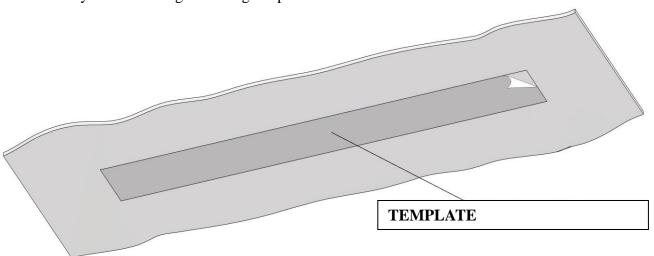


Figure 1

3. On each of the two sides of the slot, apply one of the wooden blocks protecting the contents of the package in a way to aim the arrow (printed on the block) towards the outer edge of the slot (**Figure 2**, **Figure 2a**).

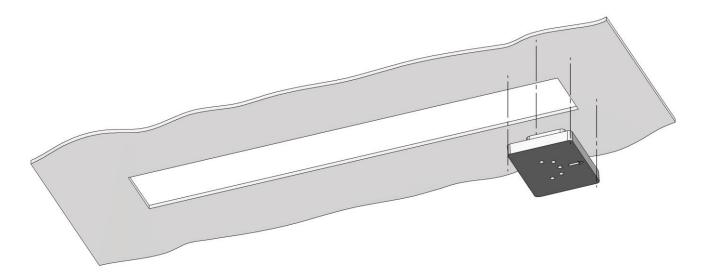


Figure 2

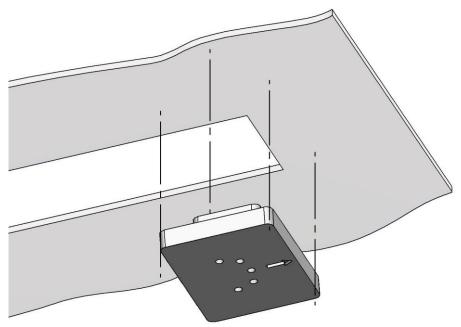


Figure 2a

4. Hold the template and then pass the marker through the holes in the block and mark the hole drilling points on the fixed (primary) ceiling (**Figure 3**).

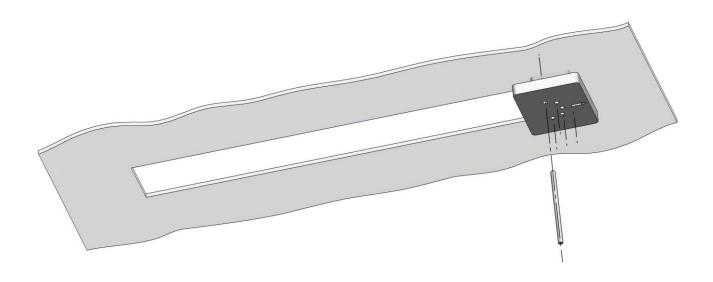


Figure 3

5. Using a Ø10 drilling bit, drill rawlplug holes in the marked points. Holes shall be drilled in specific sequence, starting from number 1 (as marked on the template block) (**Figure 4**). After drilling whole number 1 move to drilling holes 2 and 3. Then drill holes number 4 and 5. Repeat the sequence on the other side of the slot.

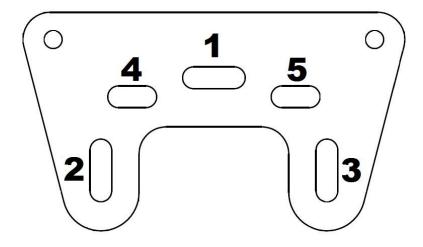
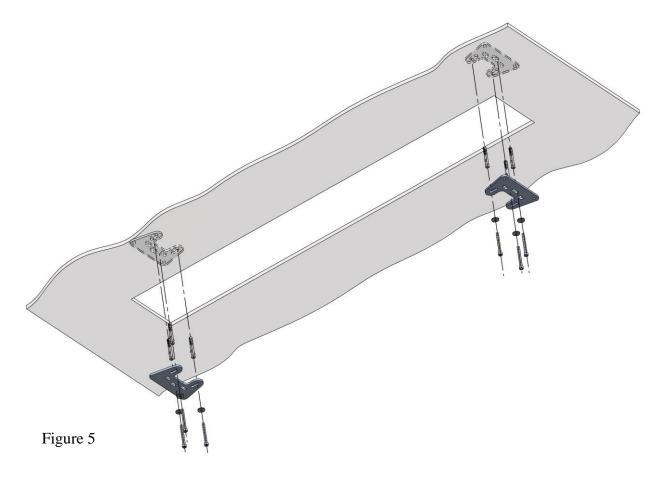


Figure 4

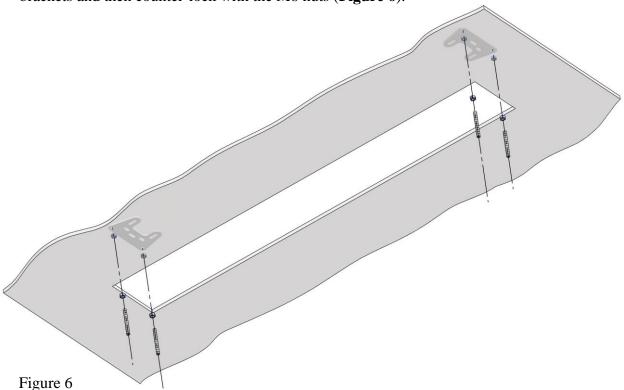
- 6. Using the rawlpugs and screws included in the package fix the mounting brackets to the primary ceiling (**Figure 5**).
- 7. **NOTE!** The rawlplugs and screws supplied in the installation kit can only be used for structural ceiling materials (concrete, Suporex or other similar materials). Shall the screen be mounted on other types of material, choose appropriate plugs and screws.



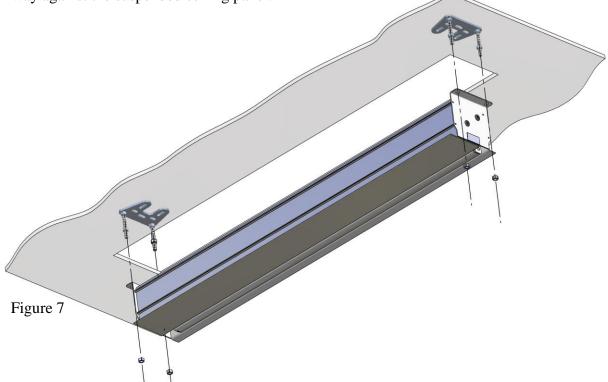
8. Cut the threaded rods to the right length (calculated using the formula below):

Rod length = Distance between the primary ceiling and the bottom edge of the suspended ceiling - 10 cm

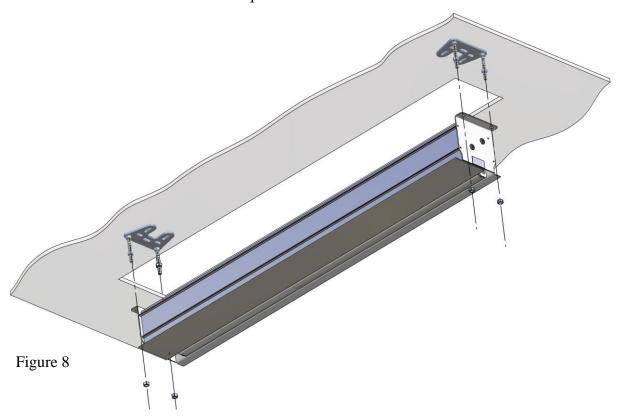
9. After cutting the adequate lengths of the rods, screw them into the sockets in the mounting brackets and then counter-lock with the M8 nuts (**Figure 6**).



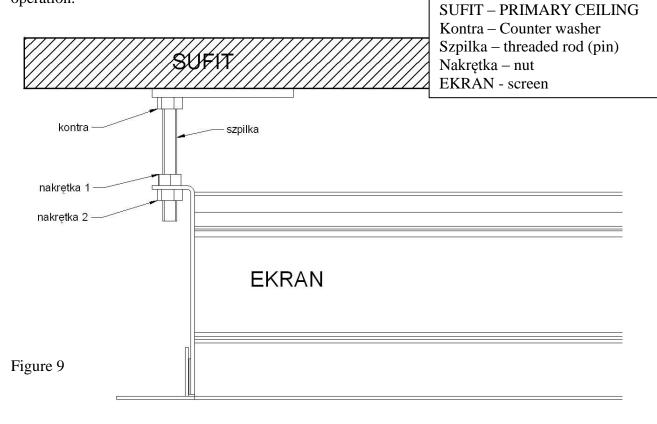
10. Fit an M8 nut on each of the rods (to a distance of approximately 5-6 cm from the bottom end of the rod) and then match the screen housing. If needed, adjust the nut position in a way to rest the screen housing mounting brackets on the nuts, with the bottom plate of the housing pushed all the way against the suspended ceiling panel.



11. After connecting the power supply (see page 11), slide the screen housing on the rods and use the box wrench to tighten each of the M8 nuts. Check for stability of the entire assembly (**Figure 8**). A correctly installed screen shall be levelled in all planes. Adjust the position by turning the installation nuts in or out on the adequate threaded rods.

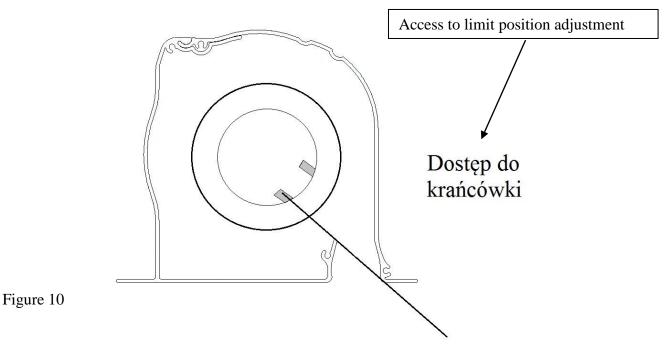


A correctly installed screen is shown below (**Figure 9**). All the screw and nut fitments shall be countered. Such an assembly ensures protection against vibration and potential resonance. Moving nuts 1 and 2 allows accurate levelling of the screen, required to ensure its smooth and flawless operation.

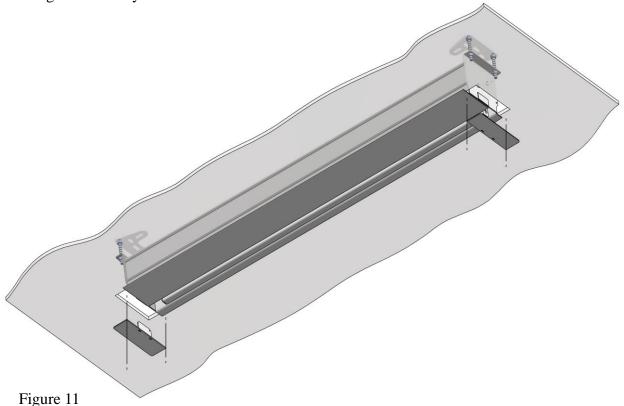


12. Upon delivery, the screen is preset to limit positions specified in the order. Shall the screen positions be too low or too high, the end positions can be adjusted using the special key provided in the installation package.

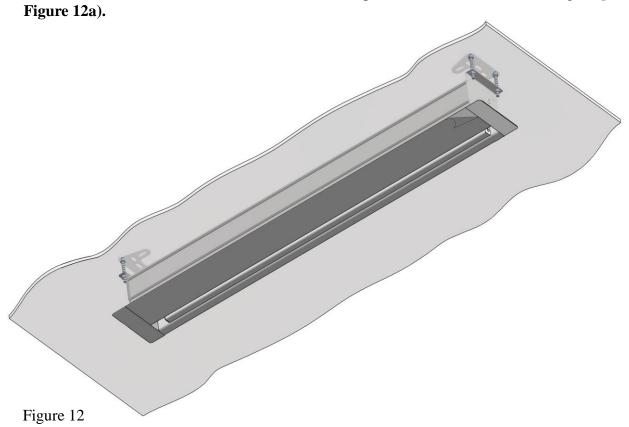
**NOTE!** Only qualified persons may perform the end-position adjustments. All adjustments made shall be the sole responsibility of the user. Non-qualified adjustment of the mechanical settings may cause damage to the screen and shall void any guarantee claims.



13. After final inspection of the entire installation, mount the side blends (magnet fitment on both sides of the housing) (**Figure 11**). In the case of side-tensioned screens, unwind the entire screen surface. Need being, adjust the tensioning with the control screws on both sides of the lower bar) using an Allen key.



14. After installation of the screen, remove the scratch protection foil from the housing (**Figure 12**,



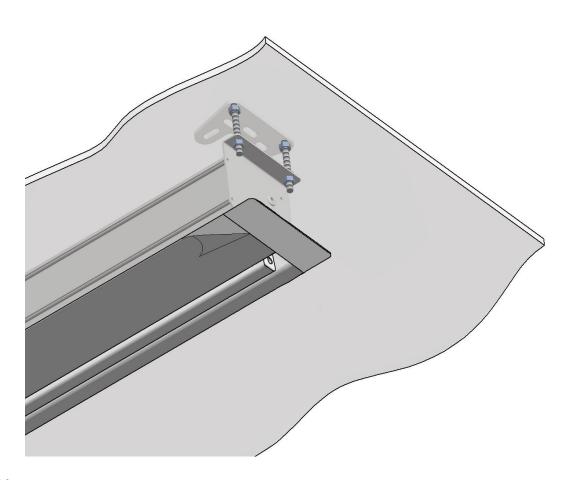


Figure 12a

#### NOTE!

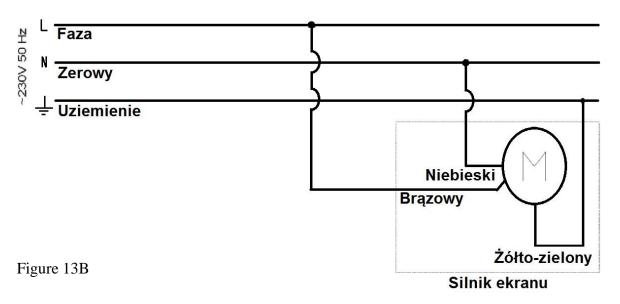
Only certified electricians shall be allowed to make the electrical connections of the screen.

Before installing the main housing of the screen, route the power supply cable to the installation point and then connect it to the screen following wiring diagram A (Figure 13A) or wiring diagram B in case of screens with built-in wireless control modules (Figure 13B).

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#### **DIAGRAM A** Faza 230V 50 Hz Zerowy Uziemienie Czarny Niebieski Brązowy Żółto-zielony Silnik ekranu Faza - Hot wire Zerowy – Neutral wire Uziemienie – Grounding Przełącznik klawiszowy – Switch panel Czarny – black Przełącznik Niebieski – Blue klawiszowy Brązowy – Brown Zółto zielony – Yellow/Green Figure 13A Silnik ekranu – Screen motor

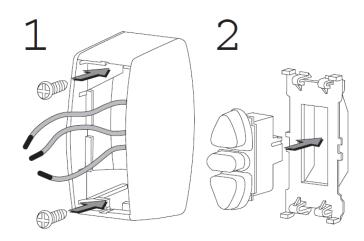
#### **DIAGRAM B** (built-in wireless controller)

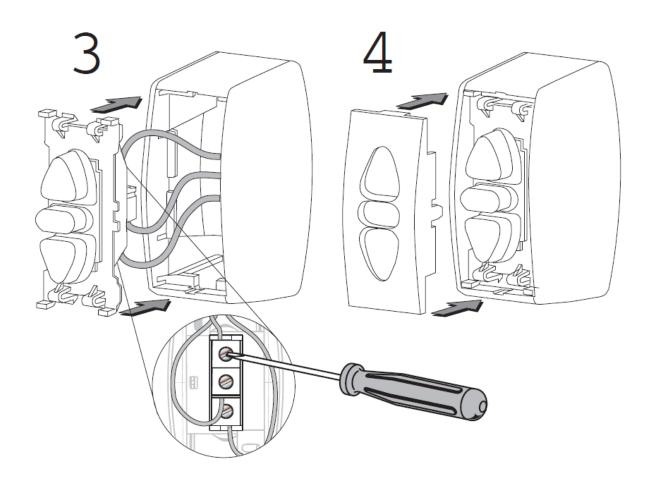


#### Wiring of the control switch panel (provided in the kit)

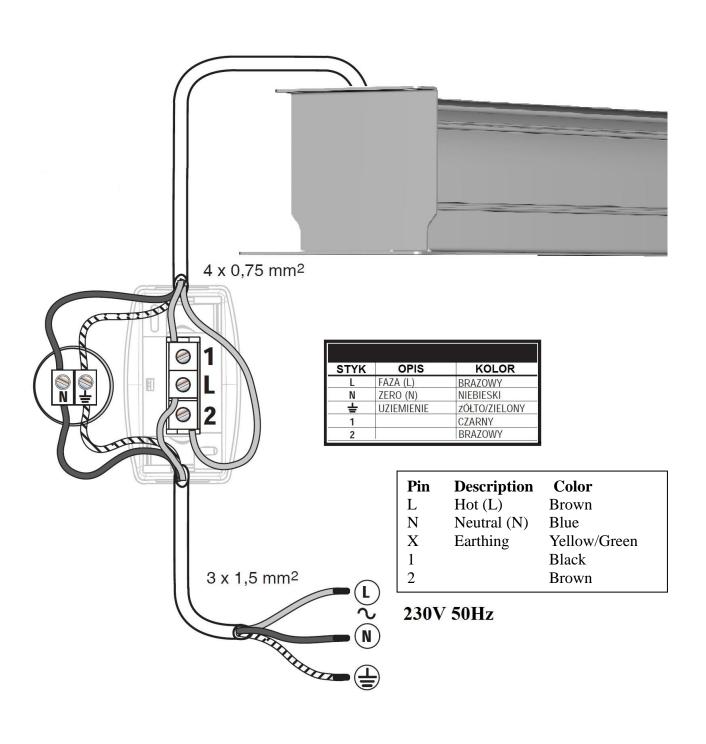
(Control switch panel provided in the screen installation kits without wireless controller)



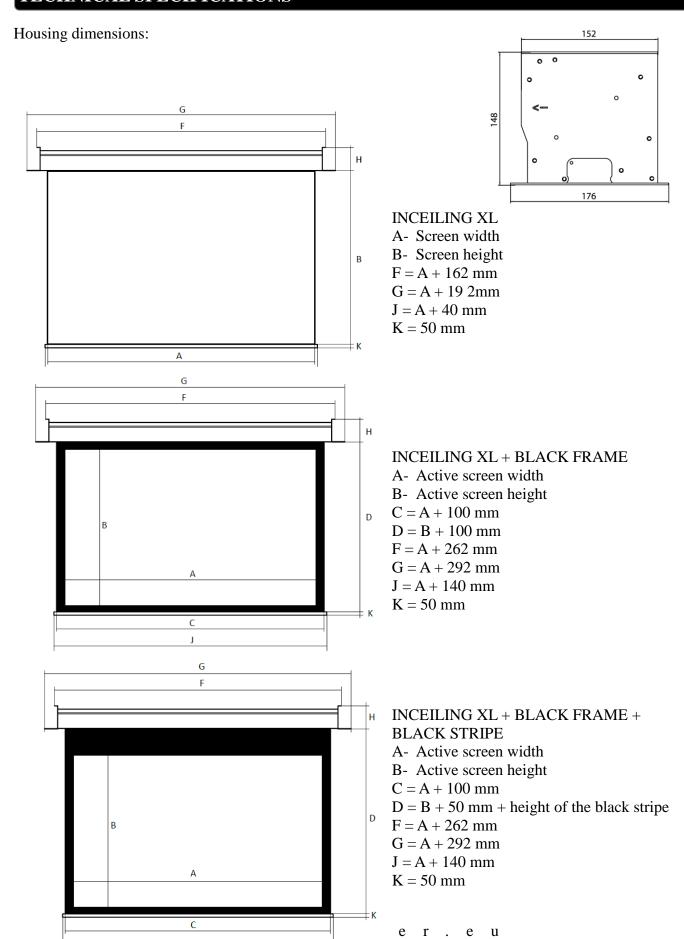


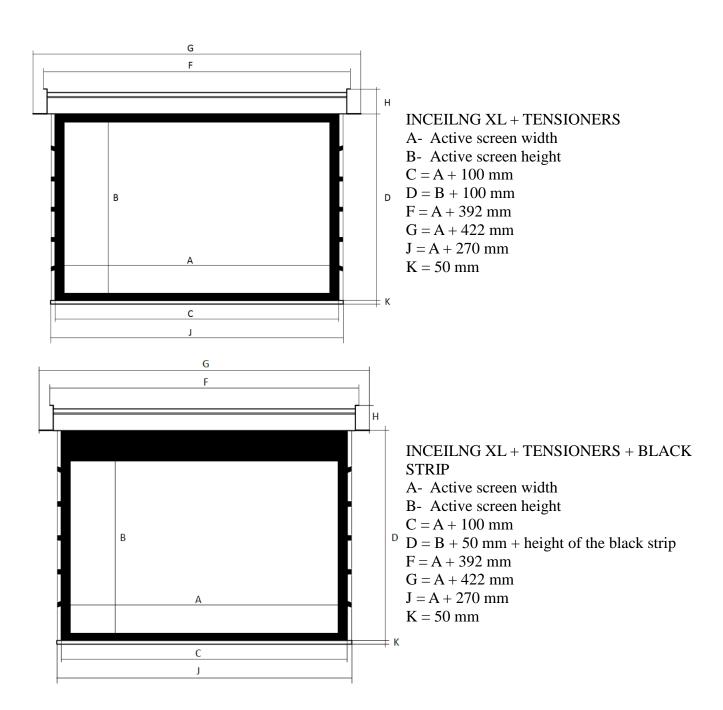


#### Wiring of the switch control panel to the screen



#### TECHNICAL SPECIFICATIONS





#### **Technical specification:**

Supply: 230V, 50Hz

Power rating: 140 W – screen without wireless control system

160W – screen with built-in wireless control system

Thank you for choosing a KAUBER screen Feel free to purchase other products of the KAUBER brand