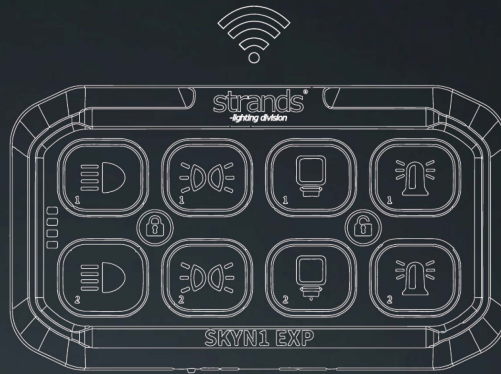


SKYN1 EXP WIRELESS CONTROLLER



INDEX:

- Page 1-3: Important information before you begin and Pairing/Unpairing information
- Page 4: Step by Step quick guide with example for SKYN1 EXP lighting connection
- Page 5: Additional information and FAQ
- Page 6: Warranty and regulation information

SKYN1 EXP Controller - Instructions, Please read the following instructions carefully before use.

❖Compatibility:

The SKYN1 EXP Controller only works with lights that have the EXP system and a SKYN1 Bluetooth device built in. Only part numbers ending in "S1" are compatible with this controller system.

Check our website for the full list of EXP-compatible products before purchasing a light, to make sure it is compatible with this controller.

❖Charging:

A USB-C to USB-A/C cable is included in the package. Always charge using the original cable, and do not exceed the recommended charging voltage/current (e.g. "5V/2A"). The controller can be used wirelessly, as it has a 500mAh Li-ion battery. Charging Port Type C for controller.

Power Switch: Use the bottom switch to power the controller off when not in use, to save battery. See page 3 for full battery instructions.

❖Reset:

The reset pin hole is located on the bottom of the controller. See page 3 for detailed reset instructions.

❖Mounting controller:

The controller can be mounted either vertically or horizontally. There are two ways to mount the controller: either with a magnet or fixed mounting using 3M tape with a mounting plate.

Extra sticker labels (horizontal, vertical, and plain) are also included. These are easy to peel off and can be swapped on the controller as needed.

❖Pre-installation testing is mandatory: Always pair and test each light with the controller before final mounting, to confirm functionality and avoid disassembly later.

❖Bluetooth pairing and connection:

Each controller has a unique Bluetooth address code. The button's background light will remain off until the light is paired.

For wiring details of lights, always check the specific light's manual. In general, the EXP system requires connecting the positive and negative cables to battery. For driving lights and LED bars, an additional signal cable is provided for the High-beam signal and CAN bus solution. Make sure to connect all wires before you start pairing the wireless controller with the lights. Both the controller and the lights have Bluetooth connectivity, and the lights will only turn on using this controller after pairing successfully. If the connection is loose, the light might not connect, so make sure the connection is correct.

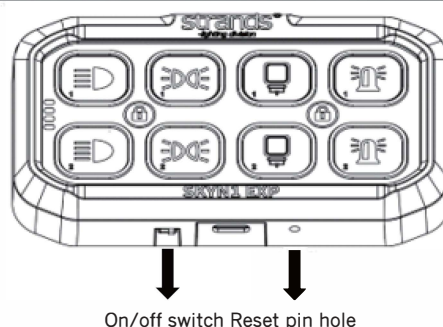
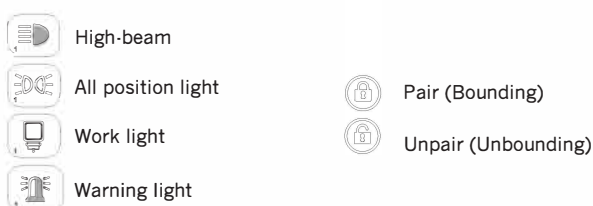
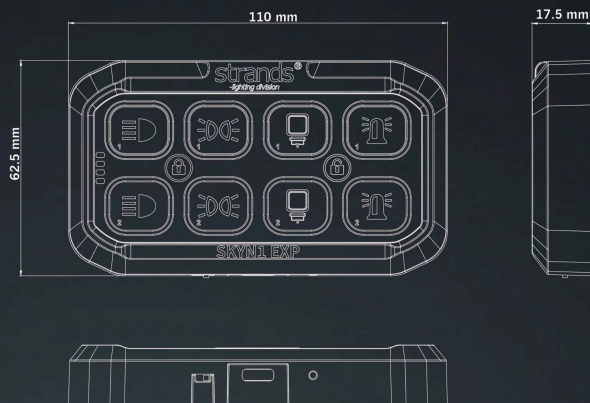
*After pairing, for changing modes, all button presses on the controller must be done while the background light is on or the corresponding function is active. If a button is off and you try to press it, no action will occur. Please keep this in mind when operating the controller. While pairing lights, make sure to have the controller as close as possible during the pairing process.

❖Safety Notice!

If the controller is lost or damaged, you will not be able to operate the light. For this reason, we recommend installing a safety fuse switch as a backup. Also, make sure to use a fuse before each connection if the light does not have a built-in fuse in the wiring. If a fuse is not used and the light is damaged, it may void the warranty.

You can purchase a new controller it will work normally, but will need to be re-paired with the light already mounted on your vehicle.





BUTTON OPERATION: Make sure to pair button first to operate it.

HIGH-BEAM OR E-MODE (DRIVING LIGHT/LED BAR):

- Single press: Turn the light on/off
- Double press: Switch between Xperience / E-mode

(High and low intensity button background light according to mode: E-mode will have low-intensity white light, and Experience mode will have high-intensity white light.)

POSITION LIGHT (POS. LIGHT WHITE/AMBER/RED):

- Single press: Turn the light on/off
- Double press: Switch Pos. light colors

(If the amber position light is selected, the background light will change to amber; the same applies when white is selected, the background light will be white.)

WORK BEAM (WORK LIGHT):

- Single press: Turn the light On/Off (Only white background light)

WARNING LIGHT (DIRECTIONAL WARNING LIGHT/ROOF BAR/ROTATING BEACON):

- Single press: Turn the light on/off
- Double press: Change flash patterns
- Triple press: Steady mode
- Quadruple press: Toggle between synchronized/asynchronous modes (Only for directional warning light)*
- Press and hold for 3-5 seconds, then release: Switch the warning light between daytime and nighttime modes
- Press and hold for more than 5 seconds: Reset the warning light to the first flashing pattern and return to day mode

(Amber light only. For pattern rotation, for example, if all three types of lights are connected, the light with the highest pattern number will show the rotation accordingly on button background light. The other two will not show it in the same way. As all three lights are connected in same button.)

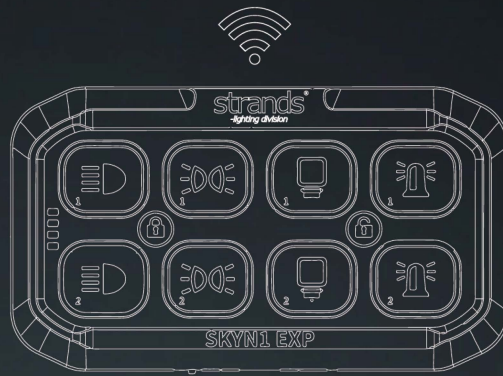
For the best experience, connect the warning light types in different rows accordingly.

Pairing (Bind) Instruction: Press the Lock button (pair) + Row 1, Button 1 at same time together for 2 sec group all Skyn1 EXP lights that are connected to the battery and need to be assigned as Group 1. They will be assigned to all four buttons in the first row. All light types will automatically be assigned to their designated button: Driving light → Row 1, Button 1; Position light (whether from an LED bar or driving light) → Button 2; Work light → Button 3; and Warning light → Button 4. Currently, these are the product categories it supports, so the system will automatically find and pair each light type accordingly.

Each Bluetooth light requires 7-10 seconds to complete pairing. The more lights in the same group, the longer the process will take. Once a light is successfully bound, its main specific light will flash to indicate success, and if Group 1 is successfully bound, the first button in Row 1 will flash amber. Once a light is bound, it cannot be bound again unless it is unbound first.

If a light fails to pair during a group pairing operation, you may retry the pair 2-3 times until it is successful. (if it still fails, reset light by flashing 8 times on positive terminal)





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The same process applies to Row 2. Connect your Group 2 lights to the battery and follow the same steps as above. But press Row 2, Button 1 + lock button(pair) at same time.

We recommend connecting lights in groups if you have specific requirements for mounting lights in different configurations. When a light receives power, it will automatically connect to its designated group - so make sure that only the lights for that specific group are powered on during pairing, while all other lights remain disconnected. This prevents interference during the bounding process.

Once Group 1 is successfully connected, power on your Group 2 lights to bound them to Row 2. This way, each group will be directed to its own row, allowing you to operate Group 1 (Row 1) and Group 2 (Row 2) independently. Read example connection instruction on page 4.

Unpair (Unbind):

Press the Unlock button (Unpair) + Row 1, Button 1 at same time for 2 seconds to unbind all Skyn1 Experience lights connected to Group 1 on the battery. All lights will be unbound and will flash to indicate successful unpairing. Follow the same steps for Row 2, Button 1 + Unlock button. To reconnect the lights again, follow the instructions for pairing. If there are a large number of connected lights, you may not be able to remove all bindings at once. Similar to the bounding process, tap 2 to 3 times repeatedly.

Information for controller

Background light: White and amber

Sleep/wake instruction:

When there is no button operation for 30 seconds, the Control will enter sleep mode. Pressing any button will wake it up; however, the button's function will not be triggered at this time. Button functions are only triggered when the Control is in normal working state. The controller has a memory function and will remember the last used mode.

On/Off switch: Slide to the left to turn it on, Slide to the right to turn it off.

Reset controller: Press with pin in reset hole and hold for 5 seconds to restore factory default settings. (this will remove all paired lights and erase all data stored in the controller). All function buttons will flash red backlight three times, and after waiting for 5 seconds, the remote control will automatically shut down to indicate that the factory reset is complete.

Reset lights: Touch the light's positive wire to the positive battery terminal 8 consecutive times (wait at least 0.5 seconds after each touch, repeating for a total of 8 consecutive times, make sure to complete reset within 40 sec) to reset the light and remove it from the network. (Note: Do not touch too fast or too slow, otherwise the reset will not be successful. if you touch less than 0.5s it won't be successful.

Battery indicator level:

The battery level indication is divided into 5 levels based on percentage:

0%-20%: The first red LED flashes.

20%-40%: The first red LED stays solid.

40%-60%: Two yellow LEDs are lit.

60%-80%: Three blue LEDs are lit.

80%-100%: Four blue LEDs are lit.

Discharging current: 140mA; White backlight: 30mA; Amber backlight: 15mA. Each additional button backlight adds the corresponding color's discharge current.

Discharge time: When pressing once per second interval, the usage time is approximately 3.5 hours, corresponding to about 11,340 presses. So it depends on individual usage.

Charging time: It takes around 50 minutes to reach over 80% battery capacity, and around 1.5 hours to reach over 90%.

- Bluetooth mesh network (Max. 32 light can be connected in V1)
- 500mAh Li-ion battery (Replaceable battery) | Battery voltage 3.7V, Charging voltage 5V DC
- Range for controller is around 80m (Depending upon surrounding)
- While pairing lights, make sure to have the controller as close as possible during the pairing process.
- IP30, CE-RED AND SIG APPROVED

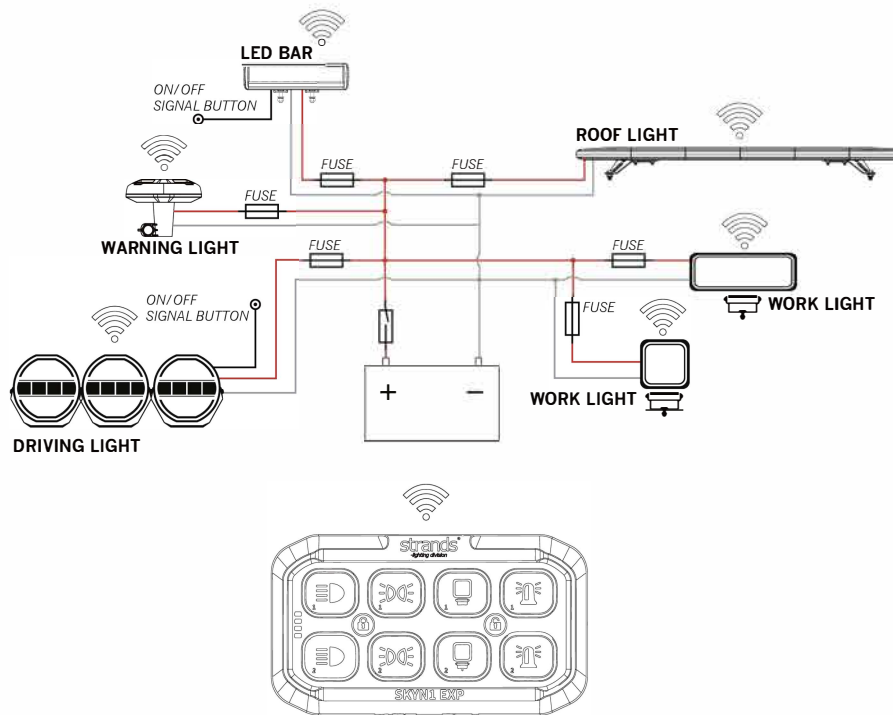
DO NOT PLACE THE CONTROLLER IN A VERY HOT OR VERY COLD PLACE. ALWAYS PROTECT THE CONTROLLER PROPERLY.



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SKYN1 EXP LIGHTING SYSTEM

* Example connection diagram



Step-by-step guide (Group1- Row1)

1. Make sure all lights wire are connected to the battery or power source and wire from group 2 should be disconnected.
2. Press and hold the Lock button (Pair) + Row 1, Button 1 together at same time at least for 2 sec.
3. Wait till each light takes 7-10 seconds to pair. If you have multiple lights, this may take longer.
4. Watch for confirmation:

--Each light's main light will flash once it's successfully bound.
--When all lights in Group 1 are bound, Row 1, Button 1 will flash amber.

5. Lights will auto-assign by type:

- Driving light/Led bar → Button 1 (3pcs x 270948S1 SKYLORD EXP DRIVING LIGHT 9" | 1pcs x 902001S1 SKYLORD LED BAR 20")
- Position lights → Button 2 (WHITE/AMBER POS. LIGHT FROM LED BAR AND DRIVING LIGHT)
- Work light → Button 3 (1pcs X 906011S1 SKYLORD EXP QB WORK LIGHT | 1pcs x 906012S1 SKYLORD EXP DUO REVERSE)
- Warning light → Button 4 (1pcs x 905022S1 SKYLORD EXP WARNING LIGHT BEACON POLE MOUNT | 1PCS x 906012S1 SKYLORD EXP DUO WARNING LIGHT FUNCTION)

If a light isn't bound, simply retry 2-3 times until successful.

Note: A light that's already bound must be unbound first before it can be paired again.

(Group 2 - Row 2)

1. Make sure all lights wire are connected in group 2 to the battery and Group 1 remain connected as those lights are already pair.
2. Press and hold the Lock button (Pair) + Row 2, Button 1 together at least for 2 sec.
3. Wait till each light takes 7-10 seconds to pair. If you have multiple lights, this may take longer.
4. Watch for confirmation:

--Each light's main light will flash once it's successfully bound.
--When all lights in Group 2 are bound, Row 2 Button 1 will flash amber.

5. Lights will auto-assign by type:

- Warning light → Button 4 (1pcs x 905513S1 SKYLORD EXP WARNING LIGHT ROOF BAR 1500mm)

BOTH GROUPS ARE READY.
READY TO USE THE CONTROLLER.

Note: Safety fuse switch is not included in package. Make sure to use fuse for each connection.



FAQ and troubleshooting for SKYN1 EXP system as below:

Q: I'm planning to mount multiple lights. What should I be careful about?

A: When mounting multiple lights, ensure each light is connected to the correct group and button during the pairing process. Always follow the pairing steps carefully for each light before mounting. When working in a workshop, make sure not to pair many controllers at the same time, as this can cause interference. If a light has power, it might connect to a different wireless controller box instead of the intended one.

Q: What should I do if a light is broken and needs to be replaced?

A: If a light is broken or not able to pair, mount the new replacement light and pair it again following the same pairing procedure used for the original light. Make sure the old, broken light is unbound from the system before pairing the new one.

Q: Can I test a light without the controller?

A: No. Lights cannot be tested without the controller. You must pair the light with the controller first and test it to confirm it is working correctly before mounting it permanently. This helps avoid the need for rework after installation.

Q: How many lights can I mount, and how are they arranged?

A: You can mount max 32 pcs in total any sort of light to the two available rows (Row 1 and Row 2), as long as each light is correctly paired to its designated group and button. If mount more than that connection will be unstable. You can also purchase another controller and connect rest of the light accordingly.

Q: What happens if a light is not connected/paired?

A: If a light is not connected or paired, its corresponding button on the controller will not light up. Only buttons with successfully paired lights will illuminate.

Q: If I only connect one type of light (e.g., only a warning light) to Row 2, will all buttons on Row 2 work?

A: No. Only the button corresponding to the connected light type will work. For example, if Row 2 only has a warning light connected, only the warning light button will illuminate and function, The remaining buttons on that row will not activate, since no lights are paired to them.

Q: Can I customize which button controls which light type?

A: No. The Skyn1 EXP system follows a fixed protocol where each button is pre-assigned to a specific light type (e.g., Driving light, Position light, Work light, Warning light). This assignment cannot be modified or customized, The system must be used as defined.

Q: Can I still choose where to mount specific light types?

A: Yes. While the button-to-light-type assignment cannot be changed, you can choose how to distribute the same light type across the two rows based on your mounting needs. For example:

Left work light → Row 1

Right work light → Row 2

The same flexibility applies to other light types, such as roof lights and grille lights. You can decide their row placement according to your choice.

Q: What should I do if a light or the system isn't working properly?

A: Maybe the Bluetooth mesh network has interruption and due to that some light may have an issue so simply touch the light's specific wire to the positive battery terminal 8 consecutive times, with each touch ≥ 0.5 seconds (Must be between 0.5sec to 0.8sec), Try pairing that same light again with the controller. If the issue persists after resetting and re-pairing the light, check all wiring and follow reset method carefully

If above solution not solve the issue then reset the controller as well, and repeat the full pairing process from the start. Make sure to never disconnect the wire from a light after it has been paired. Always unbind the light first, then disconnect it. Otherwise, the light will not pair again until it has been reset. Always unbound a light if you do not want to use it or if you plan to replace it.

Q: Can I mix light types within the same row?

A: No. Each row's four buttons are fixed to specific light types (Driving, Position, Work, Warning) as defined by the Skyn1 EXP protocol. You cannot reassign a button to a different light type.

Unbound before replacement: When replacing a broken light, always unpair the old light first (if still bound) to prevent conflicts before pairing the new one.

*More FAQ will be updated on our strands website. Please also visit our YouTube channel for the operation video.

SKYN1 EXP lighting voltage protection information:

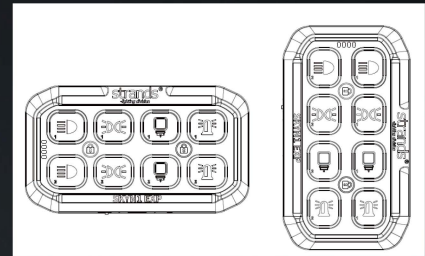
1. When the SKYN1 EXP wireless box controls the switching of lights, it will notify all lights in the system of the current state whether some lights are on or all lights are off.
2. When all lights in the system are off and the detected voltage is below 12.4V, a timer automatically starts counting down for 2 hours before entering low-power mode. (If any Bluetooth light is on, the system will not enter low-power mode, in order to avoid affecting normal user commands.)
3. If, during the countdown, a Bluetooth light is turned on or the voltage rises above 12.4V, the timer will be cleared and the timing process will exit. The system will then wait until all lights are off again and the voltage drops below 12.4V before restarting a new round of timing.
4. As long as any light detects a voltage above 12.4V, low-power mode is deactivated.

Note: Based on our new circuit test, when the lights are off and have not entered low-power mode, the current consumption is approximately 12mA



INCLUDED IN PACKAGE:

- 1 pc wireless controller
- 1pc 2 in 1 USB type A/C to C cable (1000mm)
- Mounting plate with 3M tape
- Extra button stickers (Horizontal, vertical and plain)



EXP

READ ALL THE INSTRUCTIONS AND STUDY THE DIAGRAMS BEFORE INSTALLING NEW LIGHT!

LEGAL MOUNTING

- Please check state and local laws for proper usage and mounting. Strands will not be responsible for products mounted incorrectly or in violation of local laws (e.g., ECE R48 regulation for the EU)

PRODUCT CARE

- Clean the product with lukewarm water and an alkaline degreaser. Avoid strong chemicals; rinse immediately if exposed. Do not use a pressure washer for cleaning.
- Take care if your light has a breather. Ensure it is protected against rain and dust, especially if it has a sticker breather. Damage to the breather due to incorrect installation will void the warranty.
- Internal moisture is normal and will dissipate through the breather vent after several days of use.
- We do not recommend painting the product housing. If paint is still applied, please ensure the breather is protected and an oven is not used for curing the paint. Otherwise, the warranty might be void.

INSTALLATION

- Ensure power is turned off during installation.
- Do not cut the connector cable to less than 50 cm. If the original cable is already shorter than 50 cm, leave it as is. Otherwise, the warranty will be void.
- Make sure to use only the correct accessories included in the package. Installation errors may void the warranty.
- Tighten screws, washers, and nuts to prevent them from loosening or chafing. Do not overtighten screws to avoid damaging the product's protective components.
- Use a watertight solution for wiring connections.

WARNING!

- For safe operation, use only the voltage specified in the product description. This light becomes hot under continuous use. Do not remove or touch the casing for at least 30 minutes after turning the lamp off



Contact us if you need support: support@strands.se or +46(0)320-450450
Please also refer to the FAQ section on our website for more information.

www.strandseurope.com



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