

ST2300

TRANSFORMER



INSTALLATION GUIDE

ABBA LIGHTING USA

ST300

TRANSFORMER



Thank you for choosing our high-quality product. To ensure the best possible experience, please take a moment to carefully read and follow all instructions before assembly, installation, and use. Doing so will not only guarantee proper function and safety but also help you maximize the full potential of this exceptional product. We truly appreciate your business and are honored to be your trusted provider of top-notch products!



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

WARNING

TO REDUCE THE RISK OF FIRE OR INJURY TO PERSONS:

- ✓ For safety reasons, we recommend that only a qualified professional install this electrical product.
- ✓ Before attempting to install this unit, ensure all power connections are off for your own safety.
- ✓ Fixture(s) must be installed in accordance with all local codes and ordinances.
- ✓ Do not instal within 10 feet of a pool, spa or fountain
- ✓ **DO NOT DISASSEMBLE**
- ✓ To ensure proper functionality and safety, it is important to refrain from connecting two or more transformers in parallel. It is advised to maintain individual electrical circuits for each transformer rather than attempting to combine their outputs. By adhering to this guideline, you can prevent potential complications and optimize the performance of each transformer.
- ✓ For optimal performance and safety, it is recommended not to utilize this device in conjunction with a dimmer switch. Avoid connecting the device to any dimming mechanism as it may lead to undesirable consequences or malfunctioning. It is advisable to operate the device without the use of a dimmer to ensure its intended functionality and prevent any potential risks.
- ✓ To ensure the highest level of safety, it is recommended to directly plug the transformer into a Ground Fault Circuit Interrupter (GFCI) outlet. By utilizing a GFCI outlet, you enhance protection against electrical shocks and minimize the risk of electrical hazards.
- ✓ To maintain optimal performance and safety, it is strongly advised against using an extension cord with this device. It is recommended to directly connect the device to a properly grounded power outlet. Using an extension cord may introduce electrical inefficiencies, increase the risk of overheating, or compromise the device's functionality. It is best to avoid extension cords and ensure a direct and secure power connection for the device.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

WARNING

TO REDUCE THE RISK OF FIRE OR INJURY TO PERSONS:



It is important to note that the maximum output capacity of this transformer is 300 Watts. To ensure safe and optimal operation, it is crucial to avoid exceeding this specified limit. Overloading the transformer by drawing power beyond its maximum capacity can lead to overheating, reduced efficiency, and potential damage to the device. It is highly advised to carefully monitor the power requirements of your equipment and ensure they fall within the specified limits of the transformer to maintain its performance and longevity.

WARRANTY

- We stand behind the quality of our product and offer a 3 Year warranty. Kindly ensure that you keep the proof of purchase as it will be required for any warranty claims.
- Warranty will be void if there is any damage due to improper usage or modification to the fixture.
- Failure to comply with the instruction in this manual may increase the risk of damage or injury and will void warranty.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

CAUTION:

FIXTURE(S) MUST BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.

DO NOT INSTALL WITHIN 10 FEET OF A POOL, SPA OR FOUNTAIN

PRODUCT OVERVIEW

STS2300 – 300W 2-Zone Digital Stainless Steel Transformer

The STS2300 300W Digital Stainless Steel Transformer is a high-performance power supply designed for outdoor low-voltage lighting systems. Constructed with durable stainless steel and equipped with advanced digital technology, this transformer ensures reliable and efficient operation for both residential and commercial applications.

VOLTAGE OUTPUT (12V TO 15V):

Offers selectable 12V and 15V outputs, providing flexibility to accommodate various lighting fixtures and cable lengths.

2-ZONE INDEPENDENT CONTROL:

Allows for separate control of two distinct lighting zones, enabling customized lighting schedules and effects across different areas.

BUILT-IN PHOTOCELL SENSOR:

Automatically turns lights on at dusk and off at dawn, enhancing energy efficiency and convenience.

INTEGRATED DIGITAL TIMER:

Provides programmable on/off scheduling, allowing for precise control over lighting operation times.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

CAUTION:

FIXTURE(S) MUST BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.

DO NOT INSTALL WITHIN 10 FEET OF A POOL, SPA OR FOUNTAIN

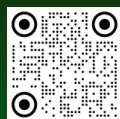
RUGGED STAINLESS STEEL HOUSING:

Crafted from corrosion-resistant 304-grade stainless steel, this transformer is built to endure harsh outdoor conditions while maintaining a clean, professional appearance.

EASY PLUG-AND-PLAY SETUP:

Includes a 6-foot, 3-prong plug-in cord, making installation fast and flexible for indoor or outdoor use.

Specification	Detail
Model	STS2300
Power Capacity	300W
Input Voltage	120V AC
Output Voltage	12V to 15V AC
Zones	2 Independent Zones
Housing Material	304 Stainless Steel
Photocell Sensor	Yes
Digital Timer	Yes
Plug Type	6' 3-Prong Plug-in Cord
Certifications	ETL Listed, UL Listed
Indoor/Outdoor Use	Yes
Dimensions (L x W x H)	5" x 5" x 12.25"



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



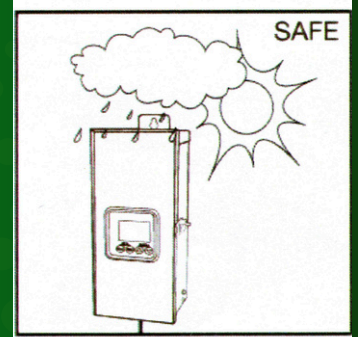
ABBALightingUSA@gmail.com



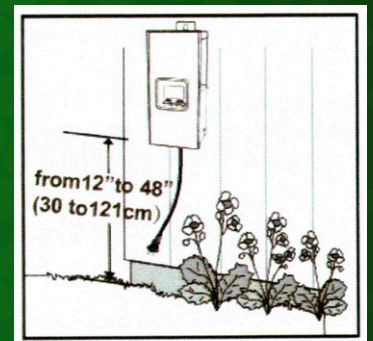
7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

We assure you that this transformer is designed with utmost consideration for safety, making it suitable for both indoor and outdoor applications. You can confidently utilize this transformer in various environments without any concerns about compromising safety standards. Moreover, it is essential to note that this transformer is specifically engineered to be weatherproof, offering enhanced protection against the elements. This means that you can rely on its performance and durability even when exposed to challenging weather conditions. Whether you are working on a project indoors or venturing into outdoor settings, this transformer provides a secure and dependable solution for your electrical needs.



To ensure proper installation of the transformer, it is essential to position it at a level where the controls are readily visible and easily accessible. This ensures convenient operation and maintenance of the transformer. When selecting the installation location, carefully consider factors such as line of sight and ergonomic accessibility. By placing the transformer at an appropriate level, you will be able to monitor and adjust its settings with ease, facilitating efficient and effective usage. Prioritizing the visibility and accessibility of the controls when installing the transformer contributes to a user-friendly and ergonomic setup.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



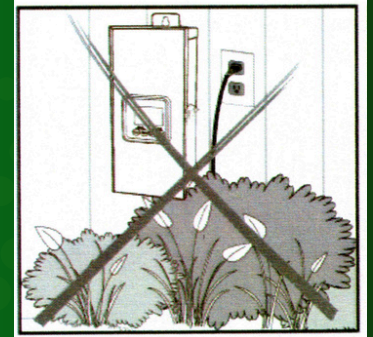
ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

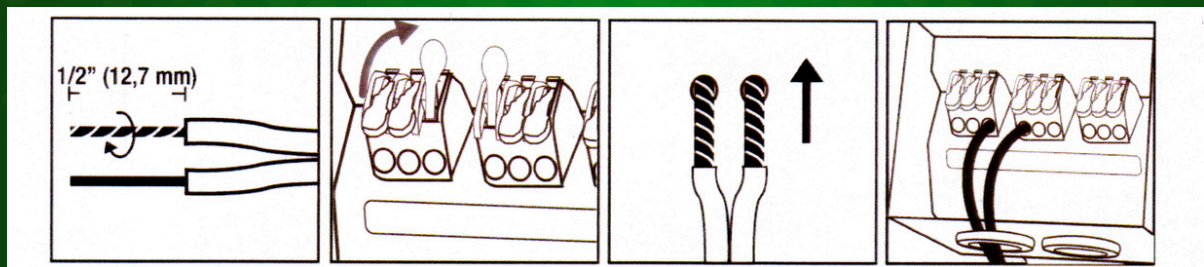
It is crucial to avoid installing the transformer in a position that obstructs or blocks the sensor responsible for the dusk-to-dawn mode. When choosing the installation location, be mindful of the sensor's line of sight and ensure that it remains unobstructed. Placing the transformer in a position that allows the sensor to function optimally ensures the proper operation of the dusk-to-dawn mode, which automatically adjusts the transformer's functionality based on ambient light levels. By preventing any obstructions to the sensor, you guarantee the reliable and accurate performance of this mode, enhancing the overall efficiency and effectiveness of the transformer's operation.



Please ensure that you do not exceed the capacity of the transformer as it can lead to overheating and overload, potentially reducing its lifespan. It is recommended to utilize only up to 85% of the transformer's capacity.

To mitigate voltage drops effectively, it is advisable to employ the 15V block. This particular device ensures a stable and consistent voltage supply, minimizing any potential reduction in voltage levels throughout the electrical system. By utilizing the 15V block, you can maintain a reliable power flow and prevent any undesirable fluctuations that could impact the performance or functionality of connected devices.

INSTALLATION INSTRUCTION



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

To prepare the landscape wire for connection, follow these simple steps:

- Strip 1/2 inch of insulation from both wires.
- Twist the exposed ends of the wires together tightly.

To connect the wires to the transformer, please carefully follow these instructions:

- Locate the "COM" block terminal on the transformer. This terminal is designated for the common wire connection.
- Take the first wire and insert it into the "COM" block terminal. Ensure that the wire is fully inserted and securely positioned within the terminal.
- Identify the "12V" block terminal on the transformer. This terminal is intended for the connection of the other wire.
- Insert the second wire into the "12V" block terminal, ensuring a secure and complete insertion within the terminal.
- Using gentle pressure, push the levers down to secure the wires in place. Confirm that the levers are fully engaged and that the wires are firmly held within the block terminals.

After connecting the wires to the terminal blocks, it is vital to verify that they are securely and properly positioned. Follow these steps to ensure a secure connection and complete the installation:

1. Carefully inspect the terminal blocks to confirm that the wires are fully inserted and tightly secured within their respective terminals. Make sure there are no loose or exposed wires.
2. Gently tug on each wire to ensure it is firmly held in place and does not come loose. This step helps verify the stability of the connections.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

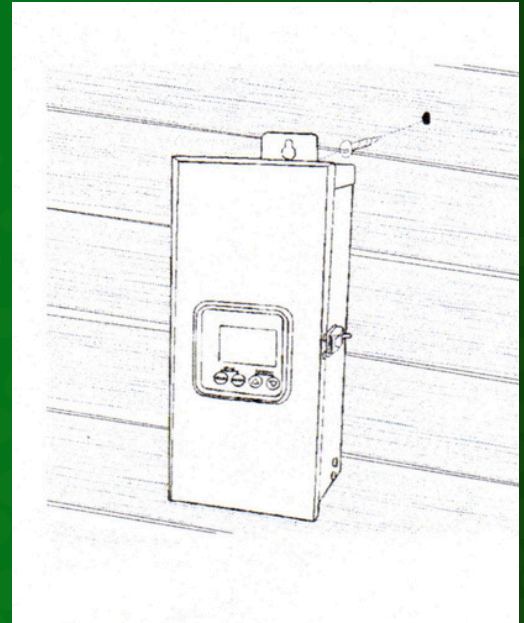
3. Once you have confirmed the secure placement of the wires, proceed to close the casing of the transformer. Align the casing properly with the unit.

4. Double-check that the casing is closed securely and there are no gaps or openings.

By following these instructions, you will guarantee that the wires are securely placed within the terminal blocks, minimizing the risk of disconnections or electrical issues. Additionally, closing the casing properly provides protection to the internal components of the transformer.

MOUNT THE INSTALLATION

- Choose a suitable location on the wall near the electrical outlet where you intend to install the transformer. Ensure that the chosen spot allows for easy access to the outlet and is appropriate for the weight and size of the transformer.
- Hold the transformer against the wall at the desired mounting height. Position it in a way that aligns with the electrical outlet and any necessary connections.
- With a pencil or marker, mark the spots on the wall where the screw holes of the transformer will align. These marks will serve as a guide for secure mounting.
- Obtain appropriate screws that are compatible with the wall material and the transformer's mounting holes. Generally, wall anchors may be necessary for mounting on drywall or other fragile surfaces. If unsure, consult a hardware store or professional for suitable mounting hardware.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

- Using a suitable screwdriver or drill, carefully insert the screws through the mounting holes of the transformer and into the marked spots on the wall. Ensure that the screws are driven straight and fully into the wall, providing a secure hold.
- Once the screws are tightly secured, verify that the transformer is firmly mounted on the wall by giving it a gentle tug or shake. Ensure that it does not move or feel loose.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



[\(800\) 360-2960](tel:8003602960)



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

RUN THE LANDSCAPE WIRE (SOLD SEPARATELY)

To ensure proper installation of the landscape wire, please follow these guidelines:

- When running the landscape wire, make sure it extends directly from the transformer to each light without any cuts or interruptions. This uncut wire connection helps maintain a consistent and reliable electrical flow throughout the lighting system.
- Exercise caution and avoid running the wire within a proximity of 10 feet (3 meters) to any pools, spas, or fountains. This safety measure prevents any potential hazards associated with water and electrical components. It is important to prioritize the safety of individuals and the proper functioning of the electrical system.
- In the event that the landscape wire is longer than needed, you may need to trim it to the appropriate length. To cut the wire, use a cable cutter specifically designed for this purpose. Ensure that the cable cutter is suitable for the wire's gauge and thickness. Following the manufacturer's instructions, carefully cut the wire to the desired length.
- By adhering to these instructions, you will ensure the integrity and safety of the landscape wire installation. The wire should remain uncut as it runs from the transformer to each light, while maintaining a safe distance from pools, spas, or fountains. If necessary, use a cable cutter to trim the wire to the required length.

When selecting the cable gauge, consider the distance between the transformer and the lighting fixtures. It is crucial to choose an appropriate gauge to ensure efficient power transmission and minimize voltage drop.

Please note that this chart provides general recommendations, and it is essential to consider specific factors such as the power requirements of your lighting system and any local electrical codes or regulations that may apply. Consulting with a qualified electrician can provide further guidance and ensure the proper selection of cable gauges for your specific installation.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

HOW TO CHOOSE THE RIGHT LOW VOLTAGE WIRE:

Feet	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Watts																				
40	16	16	16	16	16	16	16	14	14	12	12	12	12	12	12	12	12	12	10	10
60	16	16	16	16	16	16	14	14	14	12	12	12	12	12	12	12	12	10	10	8
80	16	16	16	16	14	14	14	14	14	12	12	12	12	10	10	10	10	10	8	8
100	16	16	14	14	14	14	14	12	12	12	10	10	10	10	10	10	10	8	8	8
120	12	12	12	12	12	12	12	12	12	12	10	10	10	10	10	8	8	8	8	8
140	12	12	12	12	12	12	12	12	10	10	10	10	10	8	8	8	8	8	8	8
160	12	12	12	12	12	12	12	10	10	10	10	8	8	8	8	8	8	8		
180	12	12	12	12	12	12	10	10	10	10	8	8	8	8	8	8				
200	12	12	12	12	12	12	10	10	10	8	8	8	8	8	8					
220	12	12	12	12	12	12	10	10	8	8	8	8	8							
240	12	12	12	12	10	10	10	8	8	8	8	8								
260	12	12	12	12	10	10	8	8	8	8										
280	12	12	12	10	10	8	8	8	8											
300	12	12	12	10	10	8	8	8	8											
320	12	12	10	10	8	8	8	8												
340	12	12	10	10	8	8	8	8												
360	12	10	10	8	8	8	8													

1. LOWER GAUGE WIRES ARE THICKER AND CONTAIN MORE COPPER. THEY HAVE A GREATER CURRENT CARRYING CAPACITY FOR LONG RUNS

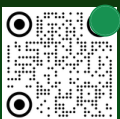
2. ITS BEST TO NOT EXCEED MORE THAN 80% OF YOUR LANDSCAPE WIRE CURRENT CAPACITY TO ENSURE THERE IS NO VOLTAGE DROP

EXAMPLE: IF YOUR TOTAL WATTAGE OF YOUR LANDSCAPE LIGHTS IS 40 WATTS, THEN YOU CAN RUN 200 FEET OF 12 GAUGE WIRE WITHOUT VOLTAGE DROP.

To test the fixtures please follow these instructions:

- Take the plug of the transformer and insert it into the GFCI plug. Make sure it is fully inserted and securely connected.
- Once the transformer is plugged into the GFCI plug, you can proceed with testing the fixtures. Turn on the power to the transformer.
- Set the mode switch to the "ON" position. This will activate the fixtures and provide a continuous power supply.

Observe the connected fixtures to verify that they are illuminated and functioning correctly. Check for any signs of flickering, dimness, or malfunctions.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

SETTING UP THE TRANSFORMER



SMARTLIFE



TUYA

1. Download the APP to your smart phone
2. After downloading onto your phone, follow the App to register a user account.
3. Open the “Smart Life” or “Tuya” app on your phone.
3. Make sure the Wi-Fi indicator icon on the transformer is blinking quickly. If it is not blinking, press and hold the selection button on the timer for approximately 3 seconds until the Wi-Fi icon begins blinking rapidly.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



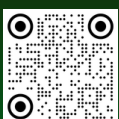
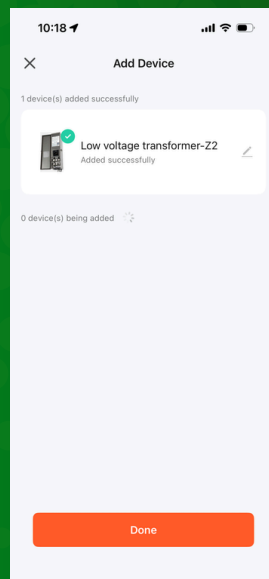
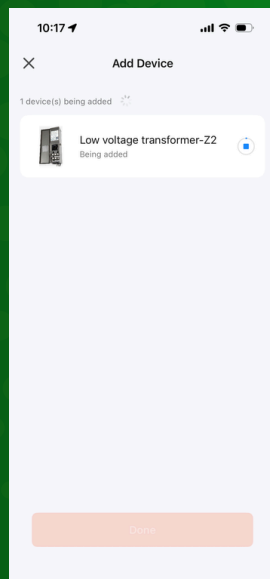
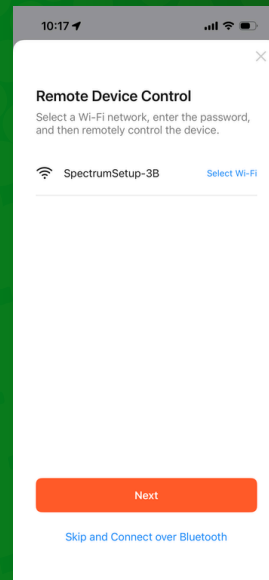
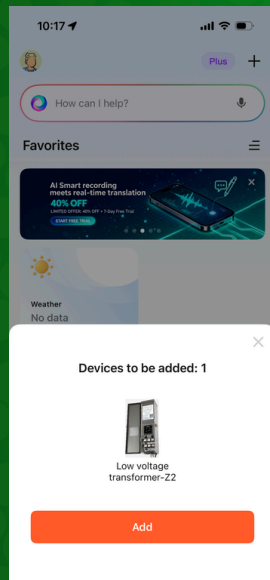
ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

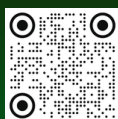
4. On the app, select “Add Device” and wait for the automatic search, click on the device you need to add, and then select it Wi-Fi 2.4GHz, select your wifi name/password to connect with the transformer, after connecting Click Edit to change the name of the transformer, and click Done to enter the main control interface (Follow the steps below)



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300



Press this button to turn the transformer ON or OFF. This is the main power switch used to control the transformer's power.

Press this button to turn Zone 1 ON or OFF.

Press this button to turn Zone 2 ON or OFF.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

There are three available operating modes:

- 1.Timer Mode
- 2.Schedule Mode
- 3.Astronomical Timer Mode

Timer Mode allows you to set a timer to turn the transformer ON or OFF after a selected amount of time. This is useful when you want the lights to operate temporarily without creating a full weekly schedule. Simply choose the desired countdown time in the app, and the transformer will automatically turn ON or OFF when the timer is complete.

Schedule Mode allows you to create a customized ON/OFF schedule for the transformer. You can select the specific days of the week you want the lights to turn ON and OFF, and you can also choose the exact time for each ON and OFF setting. After setting your preferred days and times, save the schedule in the app so the transformer will automatically operate according to your selected settings.

Astronomical Timer Mode allows the transformer to automatically turn the lights ON or OFF based on sunrise and sunset times. This feature uses your location to adjust the lighting schedule automatically throughout the year as daylight hours change.

To use Astronomical Timer Mode, select the Astronomical Timer option in the app, confirm the correct location or time zone, then choose whether you want the lights to turn ON at sunset, turn OFF at sunrise, or follow a customized sunrise/sunset-based schedule.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960

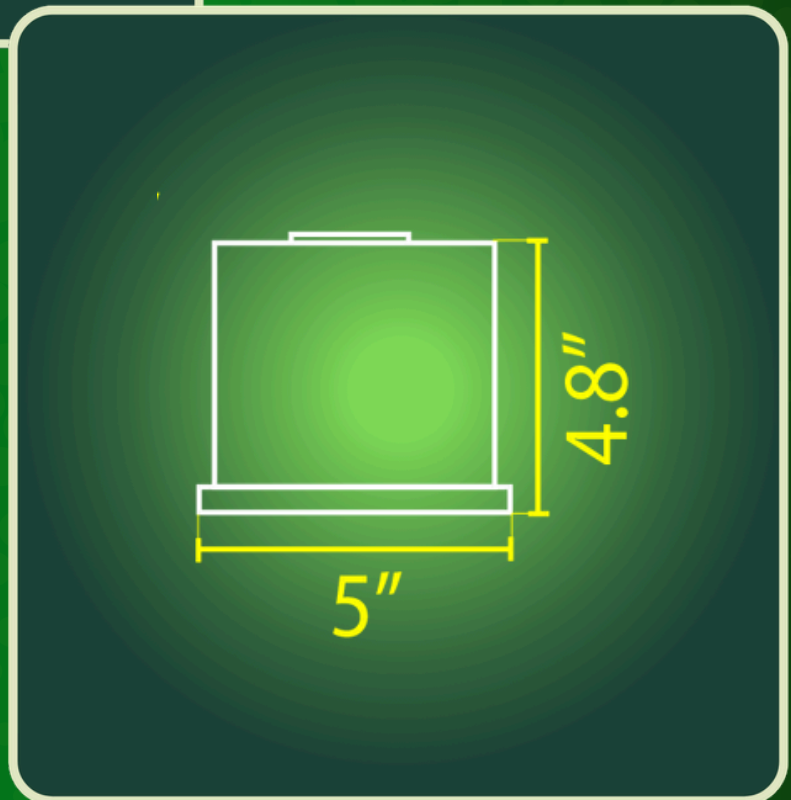
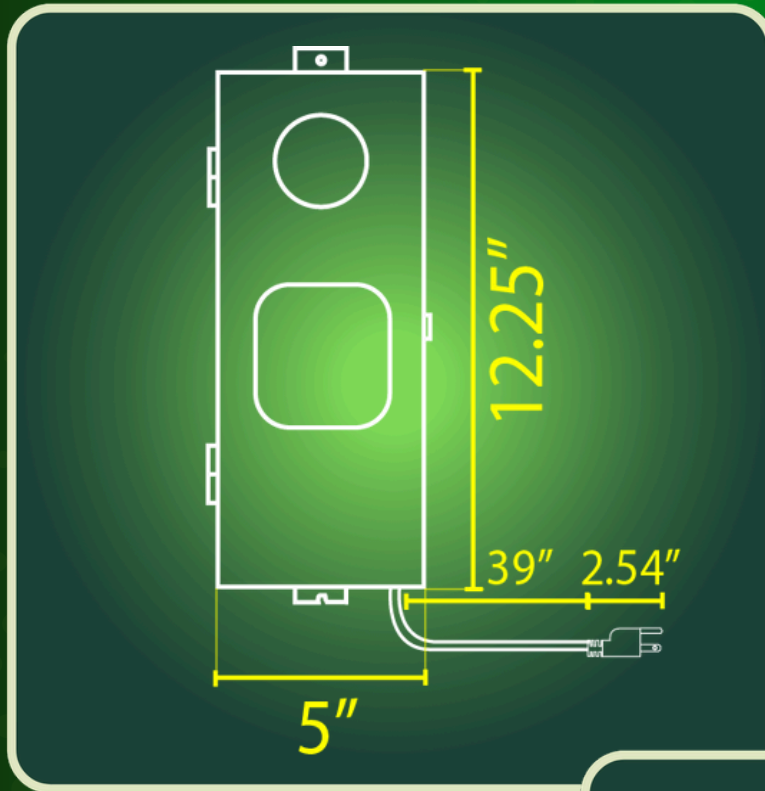


ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



(800) 360-2960



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

INSTALLATION GUIDE FOR STS2300

TROUBLE SHOOTING TIPS

If you are having difficulty connecting:

- Make sure the Wi-Fi network is a 2.4 GHz network. Transformer will not connect to a 5 GHz network.
- Test your Wi-Fi network with other devices such as your phone to make sure it is operating properly.
- The Wi-Fi connection may not have good coverage during setup. Try moving the Transformer closer to your Wi-Fi router.
- Your Wi-Fi network password is case sensitive, make sure you are entering correctly.

Please also check the App User Guide for more information.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



YOUTUBE VIDEO
INSTALLATION GUIDE



WEBSITE



CATALOG



[\(800\) 360-2960](tel:8003602960)



ABBALightingUSA@gmail.com



7701 Alabama Ave, Canoga Park, CA 91304

STS2300

TRANSFORMER

