

COMPLETE CONTROL!

Congratulations! You have purchased a first in landscape lighting - the **Justin JSST Bluetooth LE controlled multi-circuit solid state transformer**. Your new transformer comes from the factory programmed for sunset to sunrise operation based on Pacific Standard Time. Wherever you are, follow these simple step-by-step instructions below to add any custom program for automatic control of your new lighting system.

DEVICE REQUIREMENTS

JSST requires an Apple or Android device that supports Bluetooth Low Energy (also called Bluetooth LE, BLE or Bluetooth 4.0). running iOS 7 or Android 4.4 or newer.

Supported devices:

Apple: iPad (Air, Mini, 3rd & 4th gen), iPhone (6, 6+, 5s, 5c, 5 & 4s), iPod touch (5th gen).

Android: You can find a list of supported Android devices here:

<http://www.bluetooth.com/Pages/Bluetooth-Smart-Devices-List.aspx>

INSTALLING THE JSST IOS / ANDROID APP

Search the App Store (iOS) or Play Store (Android) for "**Justin JSST**". Install on mobile device (free).

INITIAL CONNECTION AND SETUP

Internal Override Switch (see below) Must be set to "App".

1. Make sure your **JSST** transformers and fixtures are properly mounted and fully wired (see MOUNTING INSTRUCTIONS, behind transformer front panel). Apply 120V input power to only one transformer in the installation (if multiple). Your lights may flash as the transformer initializes. Open the **JSST App** on your device. When loading the App for the first time, make sure to answer ALLOW (prompt) to the question USE YOUR LOCATION? This will send and store the correct time to your transformer according to your device and location.

2. Stand close to the transformer and open your App. Via Bluetooth 4.0 technology, you should see one or more locations appear. Each signal strength bar represents one single or dual circuit transformer. Tap on the top location to connect. In rare cases, multiple taps may be required.

3. For iOS, if provided, tap "A" or "B" at the top of the screen. The circuit being set will highlight. For Android, tap the menu icon at upper right and select "A" or "B". In order to easily identify fixture locations and transformers on a job, the circuit name may be changed in settings, along with the name of each transformer.

4. The connected transformer name ("**JSST**" from factory) will be displayed at the top of your screen.

For **iOS** devices, tap on the **Control** tab at the bottom and tap **ON**. For **Android** devices, tap the **LIVE CONTROL** tab at the top of your screen, then tap the right side of the Brightness slider. Your fixtures will light.

During initial connection to your transformer, if you answered "dual circuit" in the opening screen of the app, your fixtures will light according to the transformer circuit selected. When facing your transformer, A represents the left side terminal output, B the right side. On one circuit transformers, select 'Single Circuit' in the opening screen of the app. Both pairs of output terminals are then controlled by the app. If 'Single' or 'Dual' was initially selected in error, the 'Erase Existing Programming' button at the bottom of the settings screen can be used to reset your transformer to factory defaults. Warning: Any saved programing will be erased!

5. Tap on the **Settings** tab. Scroll down to **Rename selected side** or **Rename transformer** and tap on it. If desired, enter a new name for the location of the fixtures connected to this transformer circuit, e.g. "Front Yard". Save the new name for iOS by tapping **Done**. For Android, tap **OK**.

7. Under **OTHER SETTINGS**, choose your voltage **Output Level** as required, and **Lamp Type**. Separate lamp types are offered due to varying dimming performance when using LED's. When Halogen is selected for an LED string, unexpected dimming results may occur.

8. Turn the **Use DST** switch off or uncheck the box if you live in an area that does not observe Daylight Savings Time, such as Arizona or Hawaii.

Note: If a second circuit is provided in this transformer, select Side B within the app and repeat the above process. With more than one transformer on the job, the initial set-up process can be simplified by connecting 120V input to one transformer at a time.

LIVE CONTROL

You can control and check the function and brightness of your lights in real-time from the **Live Control** tab.

Brightness Lock

Normally when you disconnect or switch from a location, the lighting schedule for the disconnected location will run immediately. For example, if it is nighttime and you connect and turn the lights off and then disconnect, the lights should immediately turn on because they are programmed to be on at night. If you would rather the lights stay where you set them after you disconnect, use the **Brightness Lock** feature. You can keep the lights at the custom brightness you set for day or night for a period of time or until the next event (scheduled program and/or brightness change).

SETTINGS

You can change the on/off/dim times of your lights

from the **Settings** tab. The **BRIGHTNESS** control for **Lights On** refers to the initial brightness of your lights when they first turn on.

Note: Dimming levels may vary if different lamp types are combined in the same circuit.

Darkness Periods

When **These Settings Apply** is set to **Nightly time**, your lights will turn on/off/dim at the same times every night of the week. You can also select different darkness periods (a period of darkness beginning at noon of one day and ending at noon of the following day). For example, when **Tue/Wed** is selected for **These Settings Apply**, on/off/dim times you configure only apply to the Tue/Wed darkness period and other periods are unaffected. **Exactly at Sunrise** and **Exactly at Sunset** times automatically adjust according to the timezone of the last device connected. Be careful to correctly move the "AM" and "PM" scroll for each desired on/off/dim time.

Presets

After configuring your schedule settings the way you want, you can save them for later use by tapping the **Save Settings to Preset** button or **Presets** button. This will save your schedule settings (only on/off/dim times/brightness and nothing else) to your iOS or Android device so you can load a copy of those settings to other locations later with the Load Preset button. When multiple circuits are set for identical ON/OFF times, it is normal for the ON/OFF function to vary slightly between circuits in a transformer, or among transformers on a job.

If your transformer becomes disconnected from 120V input power for any reason, a backup battery within the transformer control module will maintain your time and programmed settings. The battery will not need service during the life of the unit.

OVERVIEW

Use overview to test your settings as needed. It is a sped up way to see how your lights will act during each night period. The **BRIGHTNESS** bar is only an indicator. When satisfied with your entries, be sure to tap save to run your settings nightly.

INTERNAL OVERRIDE SWITCH

You will find a three position rocker switch inside the transformer cover next to the output terminals. It can be set according to the legend below. Your transformer comes from the factory in the APP position. On dual circuit transformers, the switch controls both circuits at once.

ALL ON	ALL OFF	APP
left position	center position	right position

TRANSFORMER INPUT/OUTPUT

1. Connect transformer to 120V source. Ensure the RED POWER LED inside the transformer near output terminal is lit.
2. With low voltage fixtures disconnected, test transformer output by switching 3-position switch (see picture) to ON. Green output LED(s) should light. Return switch to APP for Bluetooth connected operation.



IF THE ABOVE STEPS TEST OK, IN MOST CASES, YOUR TRANSFORMER IS WORKING PROPERLY. IF PROBLEMS PERSIST, FOLLOW THE STEPS BELOW.

BLUETOOTH CONTROL AND SETTINGS

3. Ensure 3-position switch is in the APP position. When connected through the app, ensure transformer's internal green LED(s) light when control "ON" is selected for either circuit.
4. Try the app with a different smartphone/tablet. If you are having issues with Android, try an iOS device, and visa-versa, to see if you get better results. We want to isolate transformer issues by eliminating the connecting device.
5. Make sure your JSST app and device operating system software is the latest version from the App Store/Google Play Store. When in doubt, you can always delete and re-install the app. When using iOS, go to SETTINGS, iTunes & App Stores and always enable "Updates" under the AUTOMATIC DOWNLOADS section. Android devices should update automatically – no action necessary.
6. Try unplugging the transformer, waiting a few seconds, and plugging it back in.
7. Power your smartphone/tablet completely off and back on again (reboot). This can fix certain Bluetooth-related and app settings issues.
8. Try the Erase Existing Programming button at the bottom of the settings screen in the app.

Important Notes and Latest JSST Control updates:

MEMORY - All changes made to your JSST transformer settings, when saved, become permanent (non-volatile) part of memory inside the transformer. In the event of a power outage, settings do not get erased. Changes to settings are only possible with connection via the app.

AUTO PLAY - The Auto Play demo in the app only works on one side at a time, not both. When on the overview screen and either running through the schedule with the Auto Play button or by scrubbing through manually, the Brightness bar applies only to the side that is selected up at the top. The same applies to the lamps connected to the transformer: only the lamps connected to the side that is selected at the top of the screen will update their brightness as the sliders move around. The other side that is NOT selected will remain frozen where ever it was when it became un-selected. You can switch back and forth between the two sides while auto play is running.

CLOCK ACCURACY - The "Timezone" section under settings in the app displays your current timezone. This allows you to verify that location services are turned on for your device and that your location is correct. If your device asks, always answer "allow" to the question "use current location?". Location data is required for your transformer to calculate sunrise and sunset times. The local time used by the transformer firmware will always be correct either until there is an unlikely drift in accuracy over time or there is a 120v power outage. In the event of a power outage, the transformer's RTC (real-time clock) time will be maintained via transformer's internal battery. When power is restored, vPRO time will be corrected by RTC time. Transformer firmware is set to synchronize with the external RTC once per week, or, when connected to the app, the time will be updated automatically from the connected device.



OUTDOOR LED LIGHTING CONTROL TRANSFORMER

Transformer Features and Specifications

TRANSFORMER CHARACTERISTICS

- Available Power Rating: 75 - 300 Watts
- Primary Voltage: 120 Volts (Also available in 240V, 50 or 60 cycle - special order only.)
- Secondary Voltage: Full range remote dimming control included, user selected 12 or 15 Volts.
- Solid State Power supply.
- Downloadable app allows control by any approved Bluetooth enabled device.
- Astronomic timing and programming with multiple on/off and dimming.

1. Stainless Steel Enclosure

Type 304 Alloy, Mill Finish

2. Removable Front Panel

The door can be removed for access to wiring compartment during installation.

3. Installation Instructions inside panel

Refer to these instructions for information on wiring the transformer.

4. Mounting Flange

For mounting transformer to flat surfaces.

5. Input/Output power LED indicators

Indicators light when power is supplied to the transformer and when power is available at the terminals.

6. Terminal Strip, Extra Large

0 - 15 volts AC Low Voltage Connection

7. Internal Override Switch

For manual transformer control

8. Large Double and 1/2" KO's

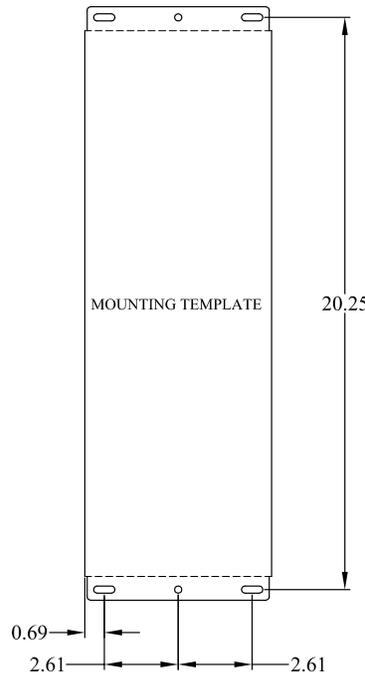
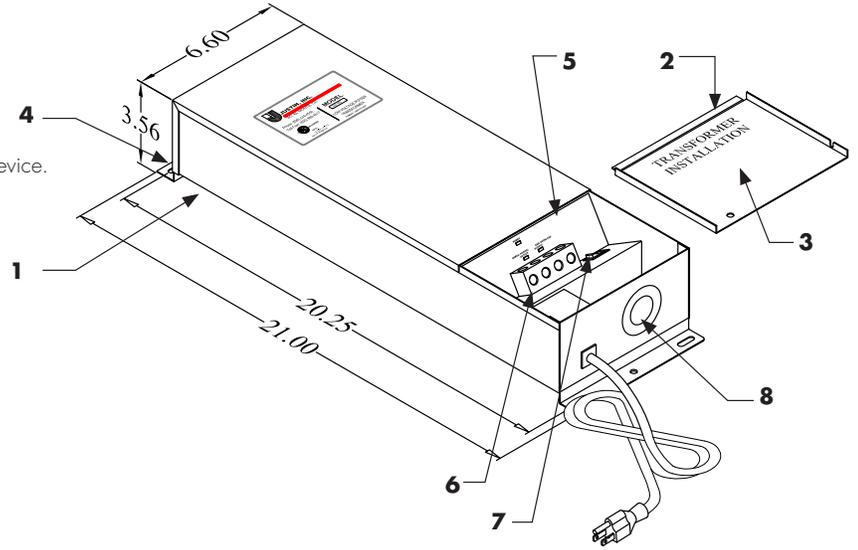
For conduit and accessory mounting.

Line Voltage Wiring

6-foot, heavy-gauge, grounded, water-resistant power cord with integrally molded plug

Certification

UL listed to U.S. and Canadian safety standards for landscape lighting transformers (UL 1838).



TRANSFORMER ORDERING INFORMATION

TRANSFORMER MODEL	DESCRIPTION	ENCLOSURE
SST75 1-RC	120 TO 0-15 VAC 75 watt, single circuit	Stainless Steel, Mill Finish
SST15 1-RC	120 TO 0-15 VAC 150 watt, single circuit	
SST752-RC	120 TO 0-15 VAC 75 x 2 - 150 watt, dual 75 watt circuits	
SST152-RC	120 TO 0-15 VAC 150 x 2 - 300 watt, dual 150 watt circuits	

If you have a concern or issue with any Justin Inc. product, please contact factory technical department at (800) 989-4517 between 8:00 am and 4:30 pm PST, Monday through Friday.



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