# iStar Manual

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# **FLED-ISCNTR**

S.R.Smith *iStar Controller* for <u>White Only</u> and <u>Color Changing</u> iStar compatible light sources

Intended for use on 110- 240VAC 50/60Hz applications Rated for 100-264VAC, 50/60Hz input, 100 Watt max. Installation Instructions: Read these instructions in their entirety before performing any installation work.

FOR OUTDOOR USE WITH POOL, SPA, & WATER FEATURE LIGHTING PRODUCTS



**ETL PENDING** Conforms to UL STD XxXx; Certified to CSA STD C22.2 XxXx



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The <u>FLED-ISCNTR</u> S.R.Smith LED, low voltage light control and power center consists of the following parts:



Designator	Descriptions	Notes
1	Power Switch	
2	Antenna	
3	Digital Tube	
4	Mode Button	
5	Brightness   Pair Button	
6	LED Light Cable Output	
7	Power Input	
8	Replay	

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## **IMPORTANT SAFETY INFORMATION**

Basic safety precautions should be observed when operating the FLED-ISCNTR product and other associated equipment.

- 1. A qualified electrician must install the FLED-ISCNTR in accordance to the National and Local Electrical Codes.
- 2. The FLED-ISCNTR must not be less then 5 feet (3 meters in Canada) from inside edge of pool. ONLY USE COPPER CONDUCTORS.
- 3. Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
- 4. The FLED Series Underwater Luminaires and CLS-2 Water Feature light sources intended for use with this controller are Article 680 of the National Electrical Code compliant and do not need to be bonded due to their all polymeric design.
- 5. This device should never operate equipment that could cause property damage, bodily injury, or death should it be activated unexpectedly.
- 6. Never allow children to operate the FLED-ISCNTR unsupervised.

## FCC WARNING

1. 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off

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and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

RF Remote frequency = 915MHz Bluetooth frequency = 2.4Mhz

#### **RF Exposure Statement**

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

### **IC Statement**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference,

(2) this device must accept any interference, including interference that may cause undesired operation of the device."

Le présentappareilest conforme aux CNR d'Industrie Canada

applicables aux appareils radio exempts de licence.

L'exploitationestautoris é aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareildoit accepter tout

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For Safety reasons, a GFCI protected circuit must be used to power the FLED-ISCNTR. An outdoor rated, outlet style, GFCI circuit breaker rated at 15A @ 120VAC, with weather proof cover may also be used to connect the FLED-ISCNTR to source line power. To use with an external type GFCI breaker, punch out the GFCI

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knockout on the right side panel and install with appropriate hardware (not included). Connect the GFCI load Hot to FLED-ISCNTR Hot input terminal. Connect the GFCI load Neutral to FLED-ISCNTR Neutral input terminal.

Output: Each of the iStar output channels is rated up to 0.75A @ 12V rms. or 9W max.

Do not exceed the maximum electrical ratings of all the FLED-ISCNTR output ports combined (9W x 10 ports = 90W).

#### WARNING

- TURN OFF INCOMING POWER BEFORE SERVICING EQUIPMENT.
- ALL INSTALLATION AND MAINTENANCE WORK MUST BE PERFORMED BY QUALIFIED ELECTRICAL PERSONEL ONLY.
- VERIFY ALL ELECTRICAL RATINGS BEFORE INSTALLATION IS COMPLETE

# **FIXATING INSTRUCTIONS**

Remove the upper cover of iStar Control Box as illustrated:

1. Unscrew 6 screws in the upper cover of iStar Control Box with a screwdriver.

2. Open the cover as illustrated.

3. Detach the ribbon cable that connects the digital data tube to the main board from main board.

4.Screw anticlockwise the connector

of antenna cable off the SMA connector on the main board

5. After disconnecting the ribbon cable

from the antenna cable, place the cover aside.



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6. Install the outer plastic coated antenna: screw clockwise firmly the antenna

on the antenna connection receptacle 7. As shown in the illustration, firmly connect 2 output lines of each group of LED light to the connector and then to the power connector of iStar Control Box, and check the short circuit.

8. Screw clockwise firmly the antenna cable of iStar Control Box on the SMA connector of the main circuit board and ensure the correct connection.

9. If required, install a relay, which should be connected to the relay socket

10. Switch off the AC input, connect the input power cord to the power supply connector of iStar Control Box.

Install the removable cover and fix firmly six screws with a screwdriver.

12. Fix 4 crews in the base at the same time and keep the base of iStar Control Box in the same plane.

13. Check the short circuit carefully before switching on the AC input14. Turn on the Power switch of iStar Control Box, the digital tube displays"OK" if they are correctly connected.







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# OPERATING INSTRUCTIONS

There are 3 pieces of control hardware, control box panel buttons, RF remote, and smart phone Apps. In terms of these 3 different units, detailed description as follow.

- I. Direct manual operation on the control box panel.
- 1) Shown in Page. 2, the large rocker switch (1) is the master power switch. Use it to turn on or off the main AC power. When the power is on, the red LED indicator beneath the switch will light up.
- 2) The left one (4) is used to pair the remote and the Bluetooth, and to step up the brightness. Press and hold for 3 seconds will start RF remote pairing process. Simultaneously, the LED panel will display RF showing RF pairing in progress. The RF remote must be paired prior to use.
- 3) Press and quick release will step up the brightness in one fifteenth step. After the max 15 is reached, press the button will recycle.
- 4) The right one (5) is used to change the display mode. Every time the button is pressed and released, the lamp will increment the display mode number once. As the max 8 number is reached, it will recycle. These 8 display modes are preset in the lamp.

#### II. RF remote controller.

- 1) Press the power switch, the power will be cut off and the control box will cut off the power of the LED indicator; the control box will go to standby and the digital tube displays "OFF". When the control box is in the standby mode, the LED light connected to the control box will illuminate when pressing the power switch again. The digital tube displays "On"
- 2) The mode code progressively increases when users press the Mode button once, and the control box will control the LED light to execute 8 preset scenarios in turn. The digital displays the numerical code of current mode.
- 3) Slid the touch area of the color ring, the control box will change the color of the control LED light into the selected color in the corresponding color ring.
- 4) Touch the central area of the color ring, the color of the control LED light will change into white.
- 5) Slid the touch area of the brightness bar of the remote control to adjust the current brightness of the LED Light; slid the touch area of the brightness from right to left to adjust light levels down and vice versa. 4 levels each increase or decrement; the digital tube displays the current status value of the brightness.
- 6) The remote is water-proof. If accidently dropped in swimming pool, it will float.

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- 7) The battery life is at least one year for proper operation.
- III. Smart Phone controller.

Installation and use of iOS device App Compatible hardware is listed below iPhone 3,iPhone 3GS,iPhone 4,iPhone 4S,iPhone 5,iPhone 5S,iPhone 5C iPod Touch 4,iPod Touch 5 iPad 1,iPad 2,New iPad,iPad 4,iPad Air iPad Mini,iPad Mini 2 Compatible iOS versions: iOS 5,1,2 or above

1) [Set iOS Bluetooth] Select iOS device Main Page >setting>Bluetooth, set Bluetooth On

iPod	16:01	* 🖿	iPod	下午5:07	) <b>Ed</b>
S	Settings		Settings	Bluetooth	
Airplane	Mode	OFF	Bluetoot	th	
🛜 Wi-Fi		Off >	Devices		
Bluetoot	h	On >	Searchir	ng	Star Strate
				•	

- 2) [Bluetooth Scan]iOS device Bluetooth starts to scan the available Bluetooth peripherals near it, and the iStar options are displayed in the Bluetooth list
- 3) [Bluetooth Pair]click, users will receive the pop-up page of Enter Pin, enter " 0000" or " 1234" or other password

iPod	16:03 Enter PIN	* ===>	iPod	16:03 Enter PIN	* ••••
Cancel	Headset	Pair	Cancel	Headset	Pair
PIN			PIN	••••	
1	2 ABC	3 DEF	1	<b>2</b> АВС	3 DEF
<b>4</b> 6HI	5 JKL	6 MNO	<b>4</b>	5 JKL	6 MNO
7	8	9	7	8	9

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[Remark]In device list, if users receive the page as follow after clicking iStar the pairing or connecting failed, check whether the power of iStar Control Box is on, or whether iOS device or iStar Control Box are out of the feasible distance; click iStar again to begin paring again after checking. In the first connection, make sure that iOS device and iStar Control Box are within the feasible distance of 25m in an open environment.

Pod 🗟	16:28	i 🍽 i Pod 🗇	16:27	2 MC	
Settings	Bluetooth	Settings	Bluetooth	_	
Bluetoot	h 🤇	ON Bluetod	oth		
Devices	and a second sec	Devices	s 🖑		
iStar	Not Connec	ted 📀 iStar		Not Paired	
Conn Make su	nection Unsucces ure "iStar" is turned o in range.	sful on and "iStar"	Pairing Unsuccessful Pairing took too long. Make sure "iStar" is turned on, in range, and is ready to pair.		
-	ок		ок		

4) [App Install]In a successful procedure, iOS device will give a pop-up prompt " App not install"; select App Store, automatically enter the installation page of iStar App of App Store, click "install" to begin to install iStar automatically.



[Remark] If iStar App has been installed in your iOS device, in a successful procedure, you will receive the prompt " iStar App started, click "Allow" to start iStar App and "Cancel" to quit.

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- 5) [App operation]After starting iStar App, users will receive a prompt Device connected, indicating the successful connection between control box and iOS device, then enter the main control page of iStar.
- 6) [Power ON Off control]Tap and select Power ON/Off button, Power On will be switched to Power Off, Control box will cut off the power of LED Light, and users cannot make any operation for the light, and they will receive a prompt "The lights are off, this operation cannot be completed, please turn lights on before selecting a color or mode."



- 7) [Mode Control] Click Mode button once, the Mode No. will progressively increase, Control box will control Light to execute the preset 8 scenarios in turn
- 8) [Light Color Control] Drag + in the color ring, Control box will make the light emit the selected color light.
- 9) [White Light Control] Click the central ring of the color ring, Control box will make the light emit white light.
- 10)[Light Brightness Control ]cursor, Control box controls the current light brightness. Drag the brightness bar from right to left to adjust lightness levels down and vice versa.
- 11)[Port Status Display] Click Port button to enter Port Status window, the page displays the status of all the lights that are currently connected to Control box , including color light and white light

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[Remark] when iOS device is out of the feasible distance, the Bluetooth icon of iStar will be grayed out, and users cannot make any operation for the Light and they will receive the prompt "You are disconnected from the iStar Controller, please reestablish Bluetooth connection". A connection will be automatically established when users enter the feasible distance.



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#### Installation and use of Android App Compatible Android mobile phone hardware products: Compatible hardware: Android mobile phone with Bluetooth 2.1 or above Android 4.0 1 above is recommended for OS.

- Installation of App
- 1) Make the Android mobile phone to be normally connected with the Internet; open the browser.
- 2) Enter the home page of Google, select and click the button Play to enter the Play page, type the keywords of iStar in the search field and click the Search button.
- 3) The App logo of iStar is displayed in the App page



4) Select and click the icon iStar App to enter iStar page, click the Install button to install iStar App on the Android device.



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- 5) Select Start the App. In the process, App gives the prompts, such as start Bluetooth or enter the pairing password (caused by Android OS transformation), follow the prompts until the main screen is displayed.
- [App operation]
- 1) After starting iStar App, users will receive a prompt Device connected, indicating the successful connection between control box and iOS device, then enter the main control page of iStar
- [Power ON Off control]Tap and select Power ON/Off button, Power On will be switched to Power Off, Control box will cut off the power of LED Light, and users cannot make any operation for the light,
- 3) [Mode Control] Click Mode button once, the Mode No. will progressively increase, Control box will control Light to execute the preset 8 scenarios in turn
- 4) [Light Color Control] Drag + in the color ring, Control box will make the light emit the selected color light.
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- 6) [Light Brightness Control ]Control box controls the current light brightness. Drag the brightness bar from right to left to adjust lightness levels down and vice versa.
- 7) [Port Status Display] Click Port button to enter Port Status window, the page displays the status of all the lights that are currently connected to Control box , including color light and white light



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(Remark) when the Android device is out of the feasible distance, the Bluetooth icon of iStar App will be grayed out, and users cannot make any operation for the light. A connection will be automatically established when users enter the feasible distance.