GE Sol Product User Manual

Function Instruction

- 1. Sol itself: On/Off, Dimming (5%-100%), CCT
- 2. Scheduling: Set up scheduling (or later smart control features), include time, brightness, CCT, fade, trigger.
- 3. Administrator Control:
 - a. Sol can connect and control CbyGE devices include C-life/C-Sleep/BR30/Sensors/Swtiches, etc.
 - Sol can set up group/scene/schedule settings with other CbyGE bulbs (C-life/C-Sleep/BR30) and sensors.
- 4. Voice Control: Compatible with Amazon Voice Service (AVS), use CbyGE Smart Lights skill which base on Amazon smart home skill.
 - a. Activation: Say "Alexa" or press the activation button on panel
 - b. Voice Command List:

"Alexa, turn on (C by GE bulb name)"
"Alexa, set (C by GE bulb name) to%"
"Alexa, turn off (Echo/Alexa group name)"
"Alexa, dim (Echo/Alexa group name) (by25%)"
"Alexa, brighten (Echo/Alexa group name) (by 25%)"
"Alexa, change (C by GE bulb name) to shade of white"
"Alexa, make (C by GE bulb name) warm white"
"Alexa, set (C by GE bulb name) to daylight"

- c. The AVS will interpret the voice and send command to Sol.
- d. During voice control phase, the inner ring as indicator will on.
- 5. Voice Service: Support all Amazon Voice Service. For example, shopping, playing music, call Uber, etc
- 6. Tele control (Out of home control): Allow App to control Sol & bulbs & sensors even if the phone and CbyGE devices are not in the same LAN. (Ensure Sol keep connected to internet, Sol & other CbyGE devices in same mesh network.). For example, the user is in office, can use App to turn on/off the CbyGE device at home. But voice control will not support far field control.
- 7. OTA: The firmware package will store in cloud, and check the update once per day. If there is an update, App will remind users.
- 8. Inner speaker: Include one speaker internally, users can control the volume up/down/mute by press the button on panel or voice control.
- 9. Timer: Inner ring indicates the last minute and remind time up.
- 10. Clock: Inner ring indicates rough time, missing at base part.

Appearance:



Buttons

Microphone Off:

Stop the microphone to capture voice, it will keep off status when the Sol restart until press the button again to recover.

Volume:

Slide the volume adjust area to turn up/down the volume.

Press the +/- icon to turn up/down the volume

Press middle point for 1 second to quickly swtich to 25%/50%/75% volume Voice control the vloume

Dimming:

Slide the dimming area to turn up/down the brightness.

Press the +/- icon to turn up/down the brightness

Press middle point for 1 second to quickly swtich to 25%/50%/75% brightness

Voice control the brightness

Activation:

Short press to activate the AVS

Long press 5 seconds to clear the router configuration and enter set up mode.

Ring switch:

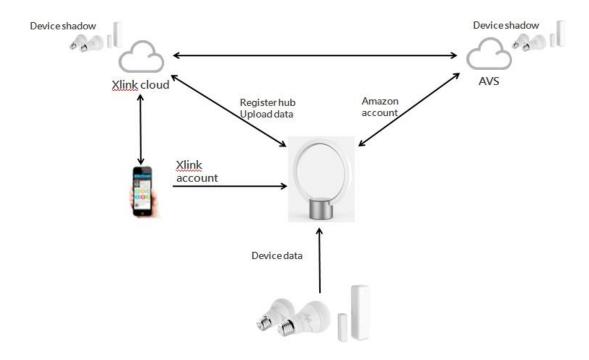
Short press switch to turn on/off the outer ring

Long press 10 seconds when microphone off status, it will close the inner ring.

Combination—Activation + Microphone off:

Long press for 20s to factory reset.

Working Architecture:



Setting:

- 1. Phone Setting:
 - a. Create/Log-in account on CbyGE App
 - b. Pair the Wi-Fi inside the Sol to the LAN, home router network
 - c. Log-in Amazon account on Cbyge App -- Start AVS directly
 - d. Enable the CbyGE skill on Alexa App and link the CbyGE account Start CbyGE voice control
- 2. Phone Control:
 - a. Add Sol first, then add other lights or accessories
 - b. Set group, scene, schedule, all include in Sol
 - c. Status feedback to phone
- 3. Communication between phone and Xlink Cloud (CbyGE cloud): account info and configurations
- 4. Communication between Sol and AVS
 - a. Sol capture the voice command and upload to AVS.
 - b. AVS get the device status feedback and send back to Sol for speak out.
- 5. Communication between AVS and Xlink cloud (CbyGE cloud)
 - a. AVS interpret the voice command to text, then go through Lambda function transfer to Json command, and send to Xlink cloud.
 - b. Xlink cloud send back the device status to Lambda and AVS with text.
- 6. Communication between Xlink Cloud and Sol
 - a. Find the objected device in the cloud and send complete control command to Sol.
 - b. Sol has all the device list and status, and send back to Xlink cloud.
- Sol control the bulbs and interact with other accessories: The Wi-Fi module handle every command and send command through BLE mesh. Bulbs send back status to Sol.

Parameter:

产品型号	SOL		
Rated Voltage	100-120V		
Rated Power	25W		
Outer Ring Power	≤10W		
Outer Ring LED	2000K 6501m CRI>70 3000K 6001m CRI>80 6500K 3501m CRI>80		
Dimming	5%-100%		
Inner Ring Power	≪6W		
Buttons	5(Base Top): Microphone off Activation		

Volume slider Brightness slider			
			Ring switch
Microphone off (red)			
Ring switch (white)			
0°C∼40°C			
-20°C∼70°C			
IP20			
Yes			
No			
Yes			
No			
Yes			

Ring Indication:

RING INDICATION					
Object	Status	Light Color	Light Dynamic	Detail	
Outer Ring	Booting up	CCT 6500K	Spin slow		
Inner Ring	Idle:LED off	Off			
Inner Ring	Idle:Mic mute	Red	0n		
Ring	Idle:clock	hour:green minute:blue	Outer:1 LED/min Inner:1 LED/hour		
Inner Ring	Booting up	Blue, Green	Green:spin slow Blue:spin fast	Blue LEDs on, green LED spot spin until OK. Then blue LED off from middle to 2 end	
Inner Ring	WiFi Setup mode	Orange	Spin slow	Spot	

Inner Ring	Wake up	Blue	Spin fast	LED on, from 2 end to up
Inner Ring	Listening	Blue	50ms/cycle	Alternately flash of 50% brightness of the whole & 100% brightness of top 11 LEDs
Inner Ring	Thinking	Blue, White	Blink fast,spin	Whole ring
Inner Ring	Talking	Blue, White	Blink slow	Whole ring
Inner Ring	Privacy mode on	Red	0n	
Inner Ring	Privacy mode	Off		
Inner Ring	Exception	Yellow	Blink slow	Whole ring, 3 times
Inner Ring	volume +/-	White	0n	White LED length show the volume, clockwise
Inner Ring	Network error	Red	Blink slow	Whole ring, 10 times
Inner Ring	Mute by voice	White	Blink fast	Top 11 LEDs, 3 times
Inner Ring	Reset router info	Orange	Spin slow	Spot
Inner Ring	Reset SOL	Green	Blink slow	Whole ring,6 times
Inner Ring	Timer	white	1 LED/s	When the last minute, whole LEDs is on for 5 seconds, then turn off 1 LED/s, anticlockwise

Remark:

The cycle of blink (slow):1s

The cycle of blink (fast) $:400 \mathrm{ms}$

The speed of spin circles (slow) :45ms/spot, clockwise

The speed of spin circles (fast):20ms/spot

The brightness of LED in dark circumstance: 50%

The brightness of LED in bright circumstance: 100%

When convert the switch of outer ring, the time of LEDs gradual change: 3s

When the spot spin, each spot contain 2 LEDs; moving only one LED at every time.

CCT of inner ring:5000k

FCC statement

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 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 exposure warning

• This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.