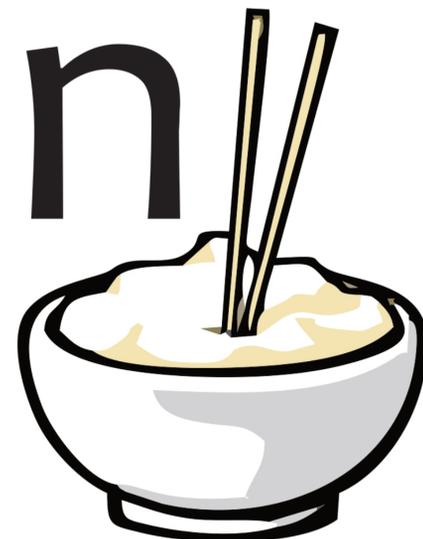


chowmain

software & apps



Yeelight Bulb and LED Strip control

Installation and Usage Guide



YEELIGHT

Revision: 20180416

Date: Thursday, April 19, 2018

Author(s): Richard Mullins

Contents

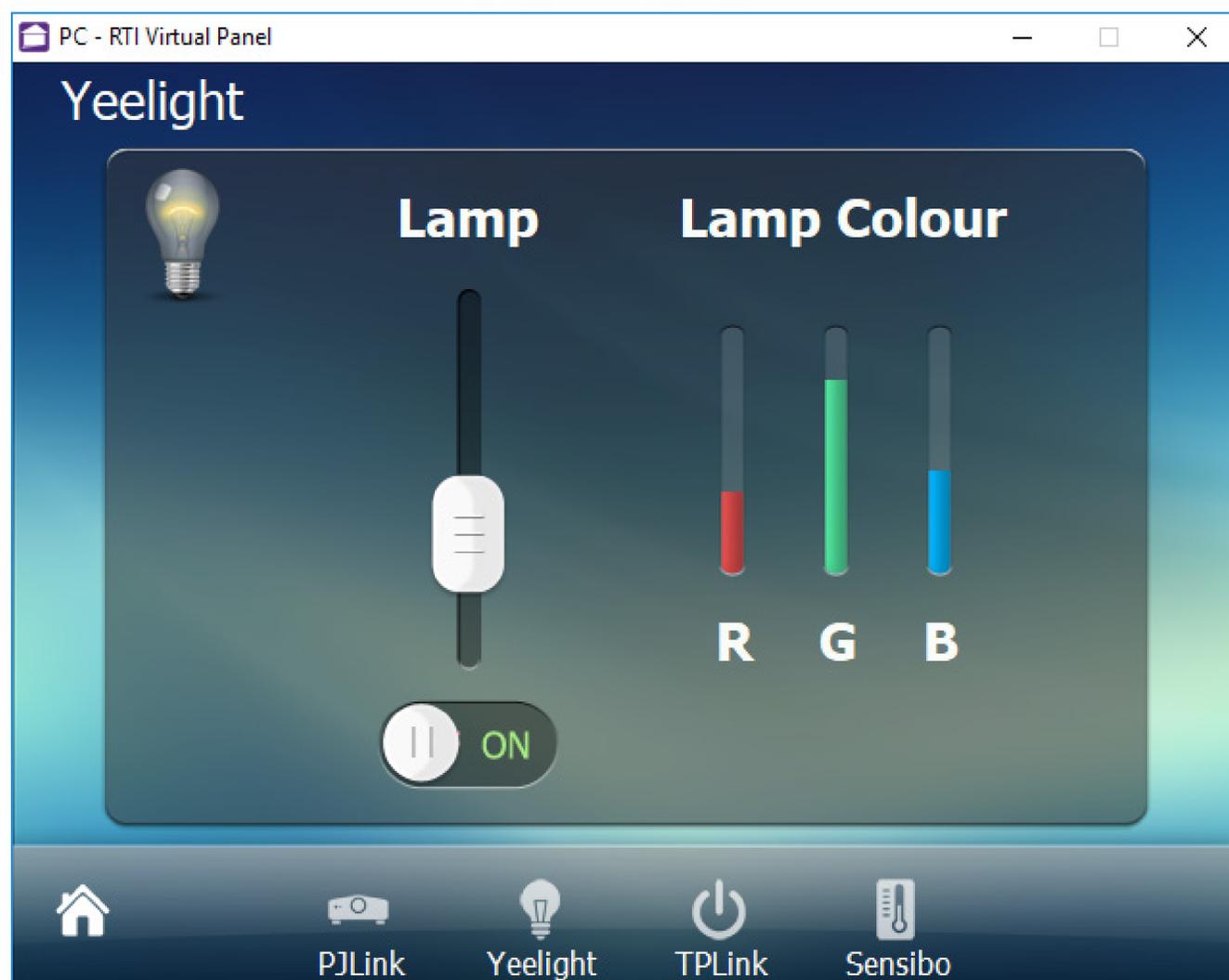
Overview	2
Installation	3
Add the RTI driver to your project	3
Driver Configuration	4
Add licence to driver	4
Driver configuration	4
App configuration	4
Driver Variables	5
Driver Commands	6
Power Control	6
Brightness	6
Set RGB	6
Refresh State	6
Driver History	7

Overview

The Yeelight driver can be used to control the Xiaomi Yeelight range of WiFi bulbs, Ceiling lights and LED light strips. The driver offers RGB colour control for capable lights.

The lights can be controlled via a touchscreen interface for power, brightness and RGB colours or programmatically.

The driver requires only the IP address of the light you wish to control.



Installation

Add the RTI driver to your project

The zip file that included this documentation has the rtidriver file you will need to add. The first step is to download and extract the driver from the zip file. It doesn't matter where you store the file but we advise keeping them together.

The default location is Documents\Integration Designer\Control Drivers

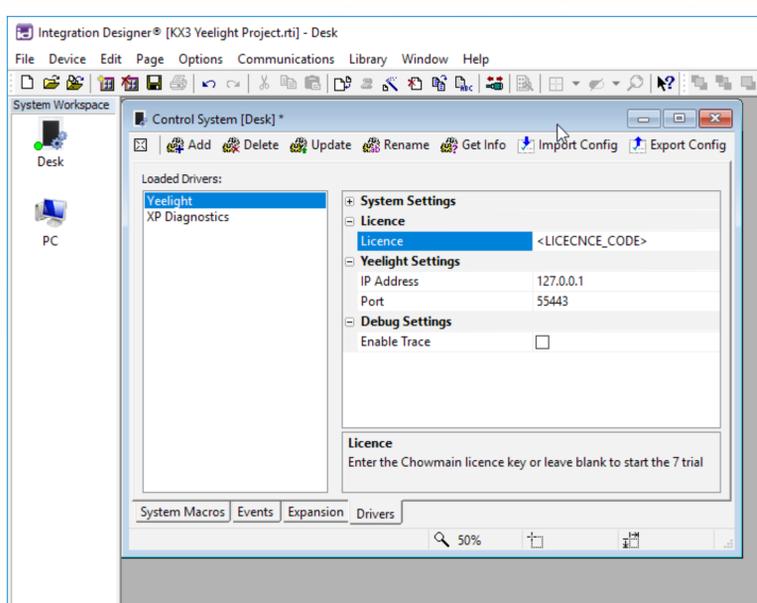
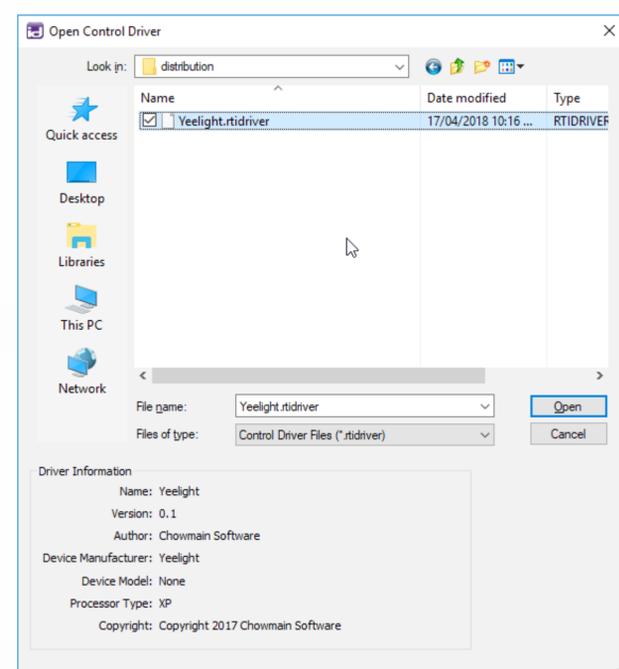
Select your processor from the System Workplace sidebar and select the Drivers tab at the bottom of the window (If you are using a KX3 in control mode then you might need to select 'Switch UI / Control Processor Mode' from the Device menu).



Click the Add button at the top of the driver window.

Find the rtidriver file that you extracted from the zip file above.

Click on Open when you have found the correct file.



The driver is now ready to configure for use.

Driver Configuration

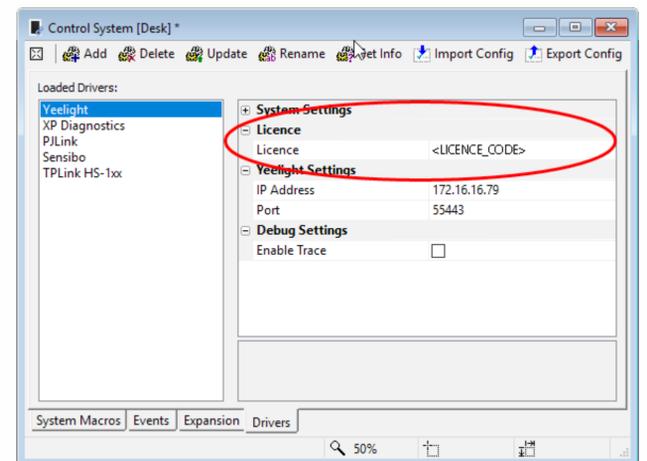
Add licence to driver

The driver will work without a licence for 7 days, automatically entering the trial phase if you don't enter a licence key.

To keep using the driver after the trial has expired you will need to purchase a licence key.

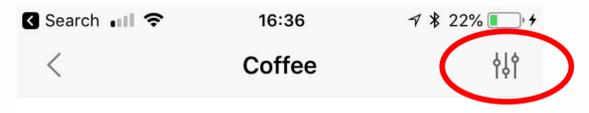
Once you have your key it should be entered Licence field of the config settings for the driver.

Enter the licence into the field show to the right.



Driver configuration

The Yeelight driver requires only two configuration settings. The first setting is the ip address of the light you wish to control. You can check the ip address from the Yeelight app by selecting the light, clicking on the settings button (shown to the right). From the settings menu select Device Info and you will find the IP address listed on this next page. The driver also requires a port number but this can be left at the default - 55443.



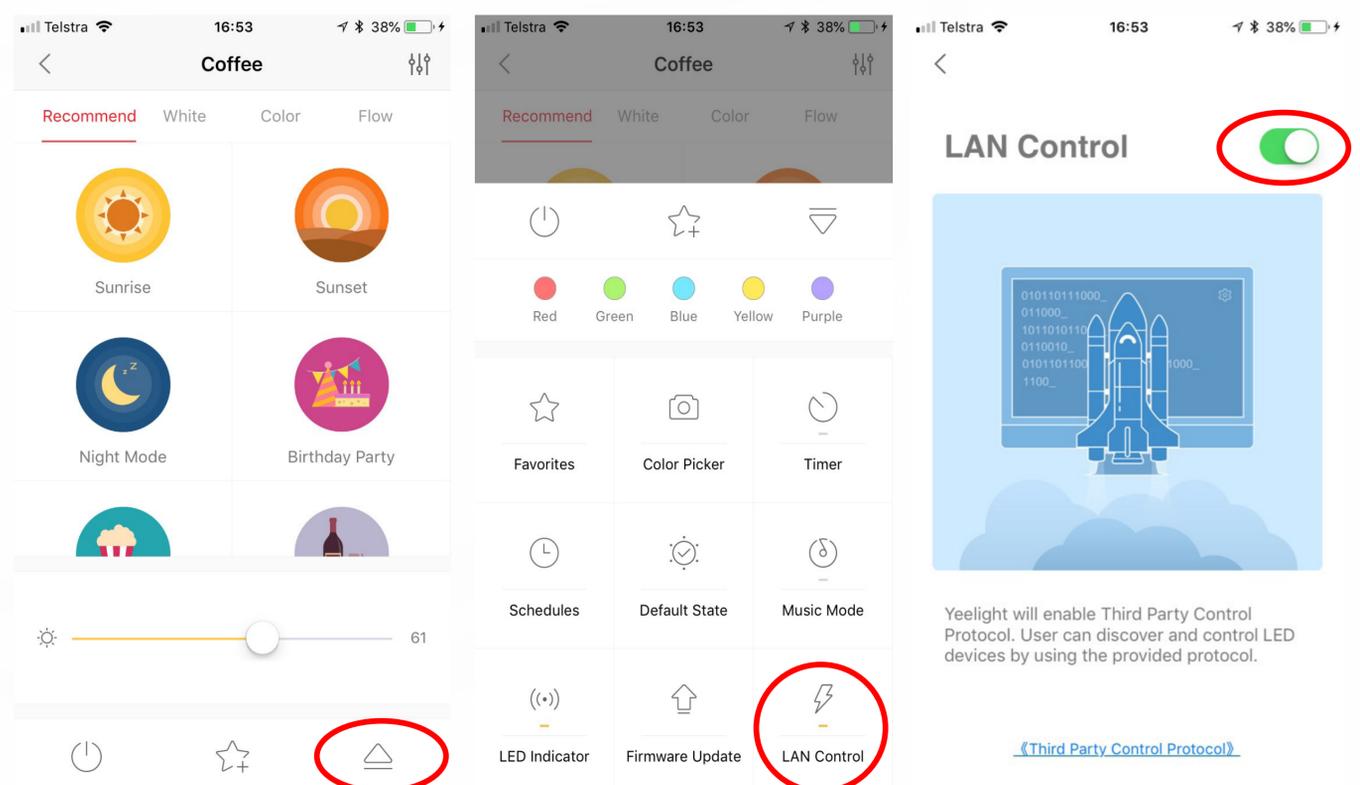
App configuration

The app also requires setup to be able to communicate with the light. Select the light and scroll to the bottom of the page.

- Click on the options button

- Select Lan Control

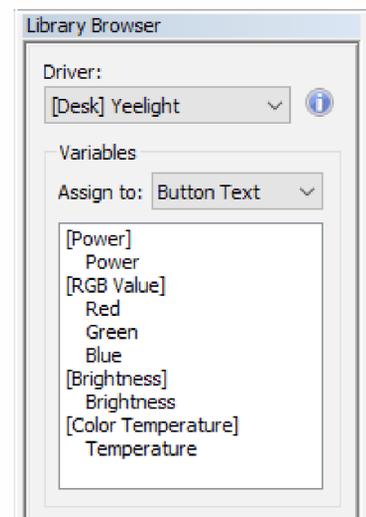
- Make sure Lan Control is turned on.



Driver Variables

The Yeelight driver has several variables you can use in your project.

VARIABLE	TYPE	DESCRIPTION
POWER	BOOLEAN	Power state - on or off.
RED	NUMBER	Red percentage for RGB lights
GREEN	NUMBER	Green percentage for RGB lights
BLUE	NUMBER	Blue percentage for RGB lights
BRIGHTNESS	NUMBER	Brightness percentage
TEMPERATURE	NUMBER	Colour temperature in Kelvin



Driver Commands

The Yeelight driver has four commands, Power Control, Brightness, Set RGB and Refresh state.

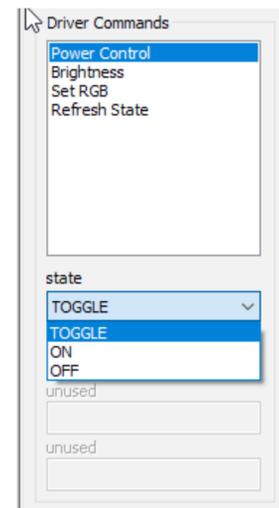
Power Control

The power control driver command has three possible states, the states are toggle, on and off.

Use ON for a discrete power on button.

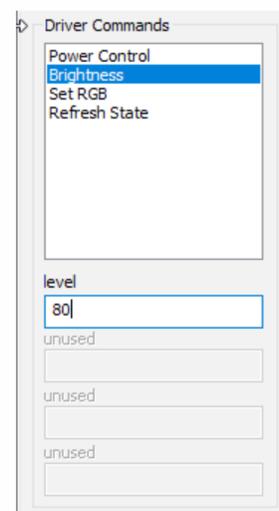
Use OFF for a discrete power off button

Use TOGGLE if you have a single button and you want to change between on and off.



Brightness

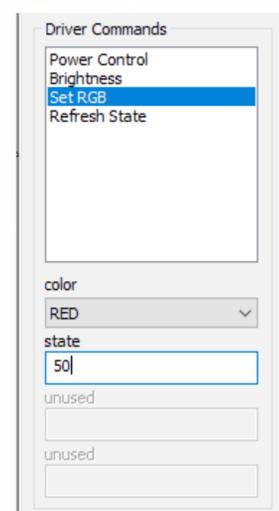
The brightness command takes a volume from 0 - 100 that represents the brightness percentage. Change the light to the brightness you need by setting this value or attach it to a slider on your touchscreen.



Set RGB

The Set RGB command can be used to set the RED, GREEN or BLUE colours of the light directly.

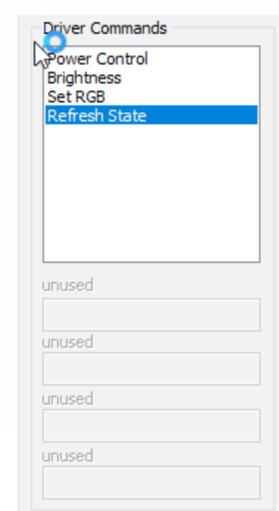
TO use this command select the color you wish to change from the pull down and then enter a level you wish to change to in the level field. You can also attach this to a slider on your touchscreen.



Refresh State

The Set RGB command can be used to set the RED, GREEN or BLUE colours of the light directly.

TO use this command select the color you wish to change from the pull down and then enter a level you wish to change to in the level field. You can also attach this to a slider on your touchscreen.



Driver History

Version 20180416

- Initial release