

## Hubitat Installation Instructions

<b>Note</b>	These instructions are based on a manual installation from the GitHub Site. A pdf copy of these instructions are contained at the GitHub location: "https://github.com/DaveGut/Hubitat-TP-Link-Integration"
<b>Important</b>	You must first install the device using the TP-Link Kasa Application. That is the only way to connect the device to the local LAN.
<b>1</b>	Load the Application and Data Files onto your Hubitat System.
	a. Hubitat Package Manager: * Search By Keyword: "Kasa". * Package: Kasa Device Integration (the other package is deprecated and available for updates)
	b. Go to GitHub Site and manually download files (see below) Link: <a href="https://github.com/DaveGut/HubitatActive/tree/master/KasaDevices">https://github.com/DaveGut/HubitatActive/tree/master/KasaDevices</a>
	* Integration Application: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/Application/KasaIntegrationApp.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/Application/KasaIntegrationApp.groovy</a>
	* Plug Switch Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/Plug-Switch.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/Plug-Switch.groovy</a>
	* Energy Monitor Plug Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/EM-Plug.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/EM-Plug.groovy</a>
	* Dimming Switch Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/DimmingSwitch.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/DimmingSwitch.groovy</a>
	* Multi Plug Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/Multi-Plug.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/Multi-Plug.groovy</a>
	* Energy Monitor Multi Plug Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/EM-Multi-Plug.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/EM-Multi-Plug.groovy</a>
	* Color Bulb Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/ColorBulb.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/ColorBulb.groovy</a>
	* Color Temperature Bulb Driver: <a href="https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/CTBulb.groovy">https://raw.githubusercontent.com/DaveGut/HubitatActive/master/KasaDevices/DeviceDrivers/CTBulb.groovy</a>
	* Mono Bulb Driver: <a href="https://github.com/DaveGut/HubitatActive/blob/master/KasaDevices/DeviceDrivers/WhiteBulb.groovy">https://github.com/DaveGut/HubitatActive/blob/master/KasaDevices/DeviceDrivers/WhiteBulb.groovy</a>

Hubitat Driver File Nomenclature				
TP-Link Model Examples			Command Group	Driver File
HS-100	HS-103	HS-105	1	TP-LinkPlug-Switch(Hubitat).groovy
HS-200	HS-210	KP-100		
HS-107	KP-400	KP-200	1	TP-LinkMulti-Plug(Hubitat).groovy
HS-220			2	TP-LinkDimmingSwitch(Hubitat).groovy
HS-110	KP-115		3	TP-LinkEM-Plug(Hubitat).groovy
HS-300			3	TP-LinkEM-Multi-Plug(Hubitat).groovy
KB-100	LB-100	LB-110	4	TP-LinkWhiteBulb(Hubitat).groovy
KL-110	LB-200	KL-50		
LB-120	KL-120		5	TP-LinkCTBulb(Hubitat).groovy
KB-130	LB-130	KL-130	6	TP-LinkColorBulb(Hubitat).groovy
LB-230				
2	"Select Add User App" and select the app "Kasa Integration" from the list.			
	a. Use Alternate Lan segments. This is for when your LAN is set up where the Hubitat is on one LAN segment and the devices on another. NOT NORMALLY USED.			
	b. Interface to Kasa Cloud. DO NOT USE unless you want to use the slower, less private Kasa Cloud communications. This is for some users who have updated Kasa firmware that eliminated the LAN communications capability.			
	c. Install Kasa Devices / Update Kasa Devices. Normal selection. * The next page will take several seconds to load while the search is completed. * The search process can miss devices. If some are missing, try again. * Note the Note on drivers to insure are installed. If you do not have a driver, the install fails. * In the drop-down, select the devices to install, then select "Next" * After selecting Next, the devices will be installed and the app will return to the main page. * <b>CRITICAL: Select DONE on the main page or the installation will be messed up.</b>			
	d. Go to the Hubitat Device's page and check that each device installed and is working per your expectations.			
Command Reference				
With reference to the device table above and the column Command Group, the functionality of each device described below.				
Commands		Input	Note	
On/Off			Groups: All.	
setPollInterval		5 s to 30 min	Groups: All. Polling gets current system status, including energy monitor data (if available)	
Set Level		Level (percent)	Groups: 2, 4, 5, 6.	
Start Level Change		up / down	Groups 4, 5, 6. Change level by 2% every 1/2 second.	
Stop Level Change			Groups 4, 5, 6.	
Set Circadian			Groups 5, 6. Starts bulb-internal Circadian Program which sets the Color Temperature to match natural daylight (sort of).	
Set Color Temperature		Color Temp	Groups 5, 6. Sets the color temperature. Group 5 range: (2700 to 6500) Group 6 range: (2500 to 9000)	
Set Color		hue, saturation, level (percent)	Group 6.	
Set Hue		hue (percent)	Group 6. Changes hue while maintaining current level and saturation	
Set Saturation		saturation (percent)	Group 6. Changes saturation will maintaining current level and hue	
Attributes				

Attribute	Value	Note
switch	on/off/OFFLINE	Groups: All. OFFLINE, if persistent, indicates a device or device IP problem that should be resolved.
level	percent	Groups 2, 4, 5, 6
commsError	true/false	All groups. If true, there is a communications error active.
communications	LAN / CLOUD	All Groups. If not present, will cause comms to fail.
circadian State	normal / circadian	Groups 5, 6
colorTemperature	Range of command	Group 5, 6
color	hue, saturation, level	Group 6
colorMode	CT / RGB	Group 6.
colorName		Group 6. Programmed color or color temperature name.
power	Watts	Group 3, 4 ,5, 6.
energy	Kilo-watt Hours	Group 3, 4 ,5, 6. Energy used today.
currMonthTotal	Kilo-watt Hours	Group 3, 4 ,5, 6. Total as of end of previous day.
currMonthAvg	Kilo-watt Hours	Group 3, 4 ,5, 6. Total divided by days in month minus 1
LastMonthTotal	Kilo-watt Hours	Group 3, 4 ,5, 6.. Last month total hours.
LastMonthAvg	Kilo-watt Hours	Group 3, 4 ,5, 6. Last month total/days. Will be low for incomplete months.
<b>Preferences</b>		
Enable Energy Monitor		Groups 3, 4, 5, 6. If true (blue) the energy monitor functions are active. Default is false (white)
30 minutes of debug logging		Groups: all. 30 timed minutes of debug logging.
Enable Information Logging		Groups: all. Enable information text logging.
Default Transition time (seconds)		Groups 4, 5, 6. Period of time for a bulb to fade on or off.
High Resolution Hue Scale		Group 6. Used to define if a controlling application uses high resolution hue, vice the bulb low resolution.
Kasa Cloud Binding		Groups: All. If LAN connected, allows you to disconnect your device from the Kasa Cloud. To connect your device to the Kasa Cloud requires that "Interface to Kasa Cloud" is selected in the APP. You can also connect a disconnected device using the Kasa phone app.
Use Kasa cloud for device control		Groups: All. Only appears if Kasa Cloud Binding is true (blue). If true, changes communications to use the Kasa Cloud.
Led Status		Groups: 1,2,3. Allows changing the devices Led display to on or off.
Reboot Device		Groups: All. Reboots the device. For multiplugs it reboots the entire power strip.