
Kessil
Join The Spectral Revolution
WiFi Dongle
Kessil

TABLE OF CONTENTS

01 INSIDE THE BOX, SPECIFICATIONS, WARNING 1

02 SAFETY INSTRUCTIONS, FCC STATEMENT 2

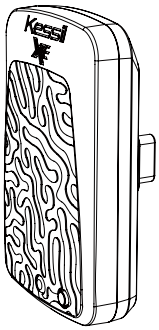
03 SET UP 3

04 AP9XE TO NEPTUNE APEX 4

05 CONNECTION TOPOLOGY, INDICATOR STATES 5

06 RESET, TROUBLE SHOOTING GUIDE 6

INSIDE THE BOX



WiFi DongleXE



Type-C Adapter
(Use only with AP9X)

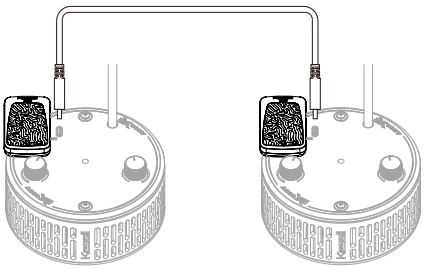


QR Code Stickers
(This code is used in the fixture link process. SAVE THESE STICKERS)

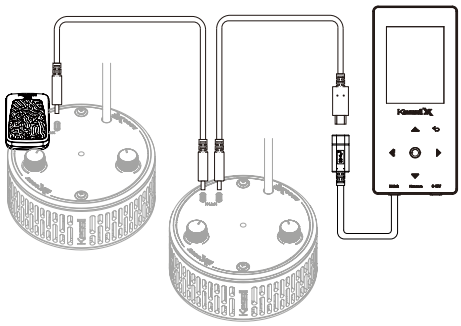
SPECIFICATIONS

Dimensions	2.08” x 1.26” x 0.67” (5.28cm x 3.2cm x 1.7cm)
Weight	0.04lb / 0.02kg
Rating	5V ⎓ 400mA
Operating Frequency	IEEE 802.11 g/n (2.4GHz)
Network Encryption Type	WPA-PSK / WPA2-PSK (Does not support WEP, WPA-Enterprise, WPA2-Enterprise, and Monitor Mode.)

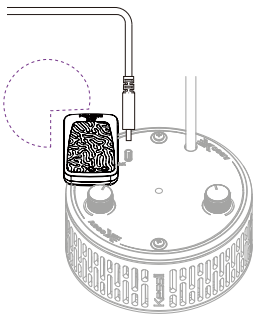
WARNING



DO NOT connect two light fixtures together if both are using a WiFi DongleXE.



Do NOT combine a WiFi DongleXE with a Spectral Controller X.



The built-in antenna is in the top-left corner. Keep this area clear of metallic objects, as metal will degrade wireless performance.

SAFETY INSTRUCTIONS

- DO NOT SHIELD THE UNIT OR COVER WITH ANY OBJECT FOR OPTIMAL PERFORMANCE.
- DO NOT USE OUTDOORS. THIS UNIT IS INTENDED FOR INDOOR USE ONLY.
- DO NOT EXPOSE UNIT TO AN EXTREMELY HUMID ENVIRONMENT OR SUBMERSE UNIT IN WATER. THIS MAY LEAD TO UNIT FAILURE.
- DO NOT USE THE UNIT NEAR FUEL OR CHEMICALS OR IN ANY PROSCRIBED AREA SUCH AS SERVICE STATIONS, REFINERIES, HOSPITALS AND AIRCRAFT.
- DO NOT USE THE UNIT FOR OTHER THAN INTENDED USE.

CONSIGNES DE SÉCURITÉ

- NE PROTÉGEZ PAS L'APPAREIL ET NE LE RECOUVREZ D'AUCUN OBJET POUR OBTENIR DES PERFORMANCES OPTIMALES.
- NE PAS UTILISER À L'EXTÉRIEUR. CET APPAREIL EST CONÇU POUR UNE UTILISATION EN INTÉRIEUR UNIQUEMENT.
- NE PAS EXPOSER L'APPAREIL À UN ENVIRONNEMENT EXTRÊMEMENT HUMIDE NI L'IMMERGER DANS L'EAU. CELA PEUT ENTRAÎNER UNE PANNE DE L'UNITÉ.
- N'UTILISEZ PAS L'APPAREIL À PROXIMITÉ DE CARBURANT, DE PRODUITS CHIMIQUES OU DANS DES ZONES RÉGLEMENTÉES TELLES QUE LES STATIONS-SERVICE, LES RAFFINERIES, LES HÔPITAUX ET LES AÉRONEFS.
- NE PAS UTILISER L'APPAREIL POUR UN USAGE AUTRE QUE CELUI PRÉVU.

FCC STATEMENT

WiFi Dongle XE | Compliance Information

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.
2) This device must accept any interference received, including interference that may cause undesired operation.

Class B Digital Device Notice
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.

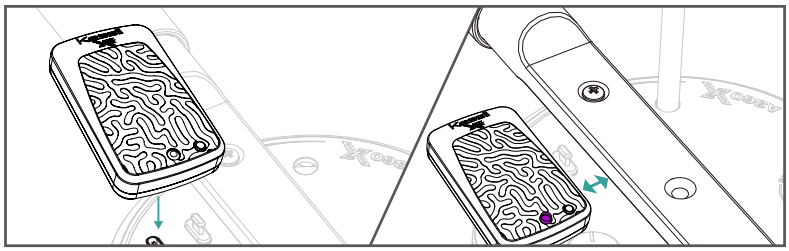
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment 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 the 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.

FCC Caution
Modifications: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
Transmitter Positioning: This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

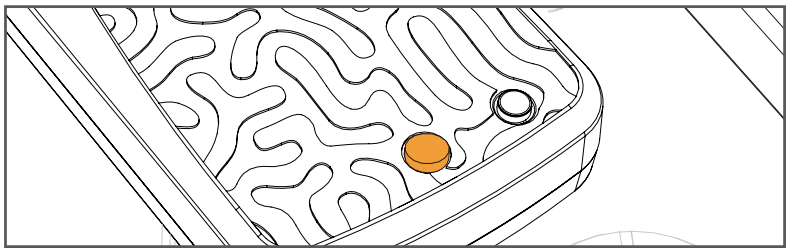
Radiation Exposure Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To ensure safety, this equipment should be installed and operated with a minimum distance of 20cm (8 inches) between the radiator and your body.

SET UP



Step 1 Plug in the WiFi DongleXE

Plug in the WiFi DongleXE to the K-Link port, avoid close contact with Mounting Arm or gooseneck bracket, then power on the fixture. Keep plastic covers for K-Link ports plugged in when the ports are not in use.



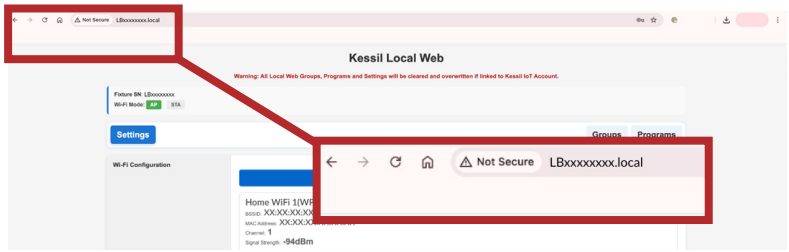
Step 2 Wait for Startup

Wait for the status indicator to turn solid orange. The WiFi DongleXE Status Indicator will first show purple and then turn to orange.



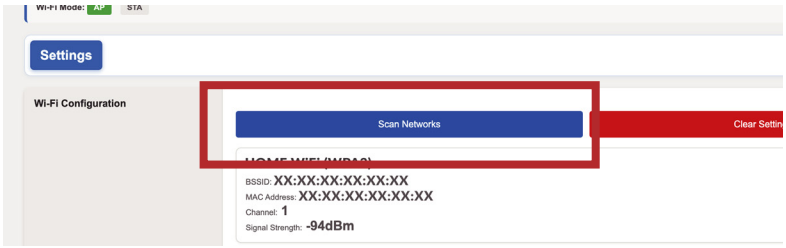
Step 3 Connect to WiFi Dongle XE Network

Join the “WiFi DongleXE” network on your phone or PC.
Wi-Fi network: LBxxxxxxxx
Default Password: xxxxxxxxBL
(SN backwards, all caps)
Once connected, the light will turn blue.



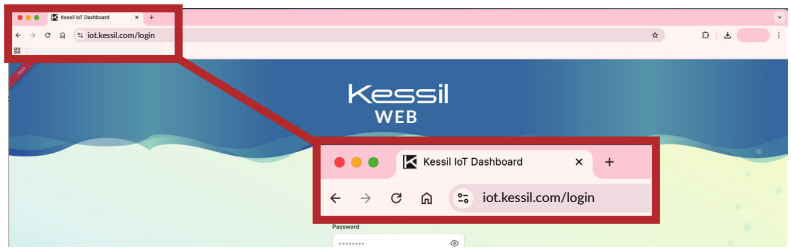
Step 4 Open Setup Page

Open a web browser and enter
LBxxxxxxxx.local
(Replace '*LBxxxxxxxx*' with your specific serial number.)
But if this does not work, type
http://192.168.1.1 into your browser



Step 5 Connect to Home Wi-Fi

Tap “Scan Networks”, select your home Wi-Fi, and enter the password.

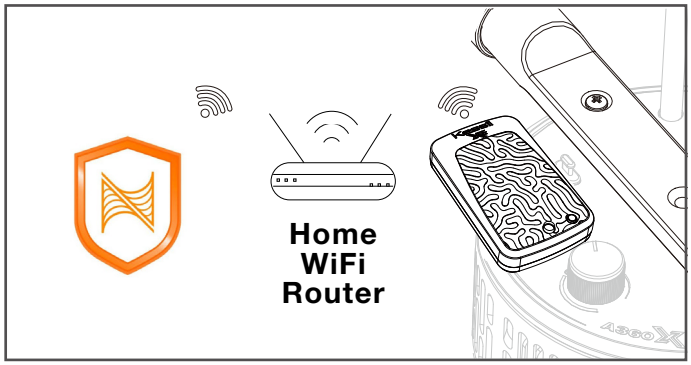


Step 6 Link Fixture

When the status indicator turns solid green, log into the Kessil IoT webpage.
https://iot.kessil.com/login
Go to Settings > Link Fixture and scan the QR code included in the package.

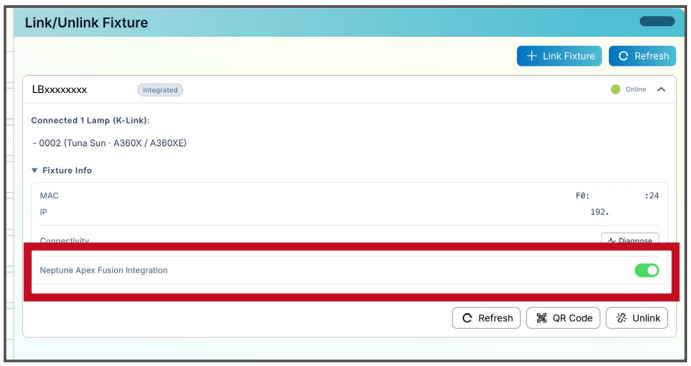
AP9XE TO NEPTUNE APEX

***Complete the initial WiFi DongleXE Wi-Fi setup and link your fixture to the Kessil IoT portal before enabling Neptune Apex integration.**



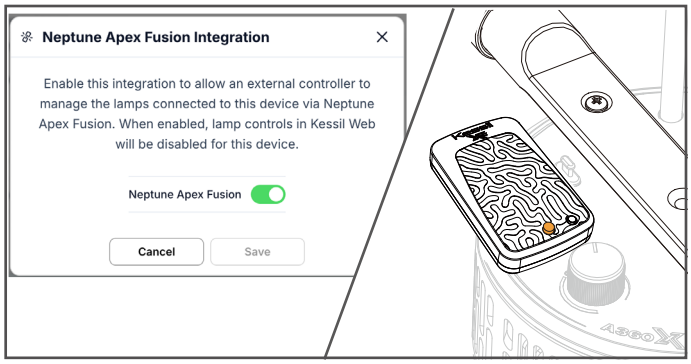
Step 1 Connection

- Make sure both the WiFi DongleXE and the Neptune Apex controller are connected to the same 2.4 GHz Wi-Fi network.



Step 2 Enable Apex Integration

- Log into your Kessil IoT web dashboard and navigate to Settings > Link/Unlink Fixture from the left navigation panel.
- Click your device card to expand Fixture Info.
- Locate the Neptune Apex Fusion Integration toggle switch and switch it to ON.

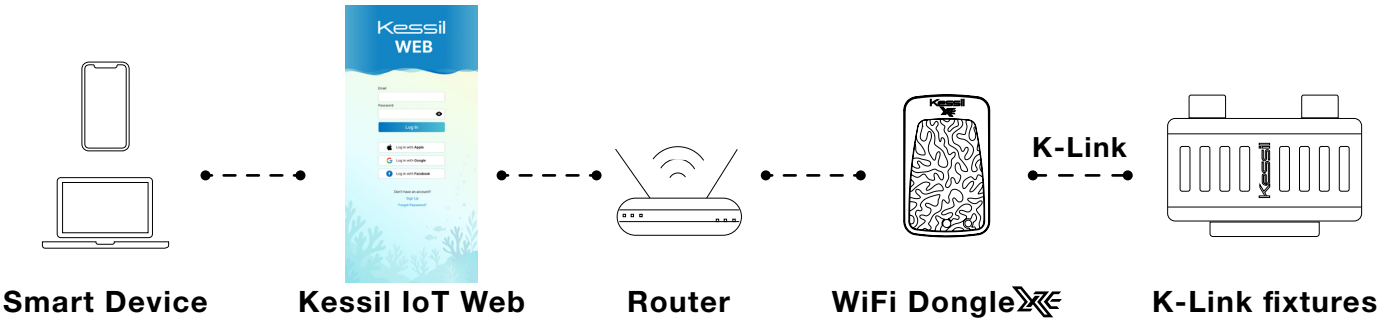


Step 3 Confirm Integration

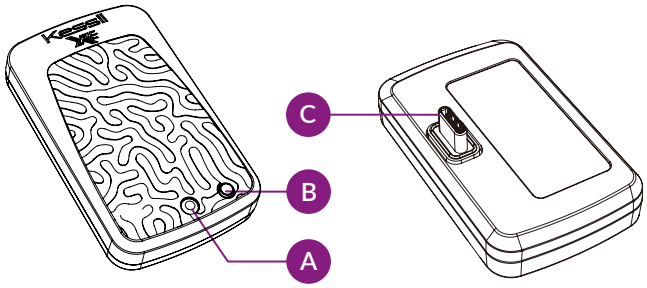
- When the confirmation dialog appears, verify that local control will shift to Apex and click save.
- Mode LED indicator Solid Blue: Apex Integration is OFF (controlled via Kessil IoT).
- Mode LED Solid Orange: Apex Integration is ON (controlled via Neptune Apex).
- Complete the IoTa Setup Task in Apex Fusion to finalize pairing.

For more Neptune Apex IoTa control, see *kessil.com/support/downloads.php*

CONNECTION TOPOLOGY



INDICATOR STATES



A Status Indicator
B Reset Button
C K-Link Connector

During initial setup or restart, indicator states will proceed in the following order:

	AP Mode *Connect your phone or PC directly to the WiFi DongleXE*	Action
Solid Purple	Booting	Device is starting up *(Takes 5 seconds)*
Solid Orange	Standby/No connection	Ready to be connected
Solid Blue	Connected	Connected by device, ready to configure home Wi-Fi

Configure your settings by entering **your serial number local address (e.g., LBxxxxxxx.local)** in your browser. If this does not work, type **192.168.1.1** instead, the LED light will show solid red for about 20 seconds as the device switches to STA mode, transition to blinking green while connecting to Wi-Fi, and finally turn solid green when connected to your home network.

	STA Mode *Connected to your home/office router.*	Action
Solid Purple	Booting	Device is starting up *(Takes 5 seconds)*
Blinking Purple	Updating	Firmware update in progress. Do not unplug.
Solid Red	Standby/No connection	Ready to connect/ Connection failed *(If it lasts >3 mins, perform a Wi-Fi Reset)*
Solid Green	Connected to IoT website	Successfully connected to your router *(Slave)*
Blinking Green	Connecting to home Wi-Fi	Trying to connect home Wi-Fi

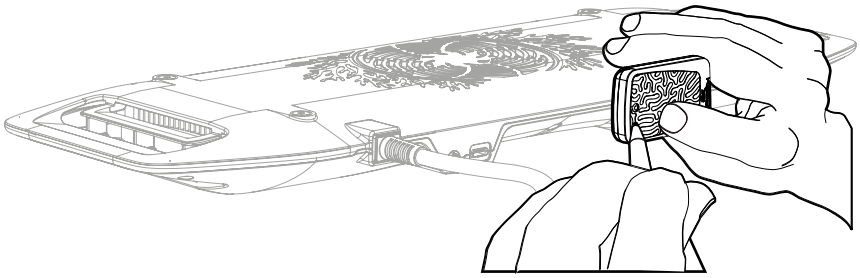
*Once the device is configured in STA mode, it will remain in STA mode across subsequent power cycles.

*If you turn the power off (either via the AC outlet or by unplugging the device), please wait at least 15 seconds before turning it back on.

When connected to APEX, the LED indicators function as follows:

Indicator States	Status	Function
Solid Green	Successfully connected to APEX	Device can be control by APEX

RESET



AP9X Only:
Hold the unit with one hand and press the Reset Button (B) with the other. This ensures controlled pressure and prevents internal damage.

Press and hold the Reset button until the indicator displays the designated color, then release it to trigger the corresponding function.

Indicator State	Press Duration	Action	Result
Light Off	1 second	Reboot	Restarts the device and keeps all settings.
Solid Red	3 seconds	Wi-Fi Reset	Clears Wi-Fi info and switches to AP Mode (Start up).
Blinking Red	10 seconds	Factory Reset	Wipes all data and returns to original settings.

TROUBLESHOOTING GUIDE

Please make sure to perform maintenance before doing any troubleshooting.

Problem	Cause/Solutions
LED light unknown or device unresponsive	Failed to connect to the IoT cloud server, but local network connection is successful. • Verify your home Wi-Fi is active. • Reset the Wi-Fi connection on the WiFi DongleXE. Press and hold the reset button for 3 seconds. The indicator light will turn orange, signaling standby mode. • If the connection to the IoT website still fails, restart your home router.
Connected Light Fixture Doesn't Turn ON	Ensure the light fixture is plugged into an outlet matching the correct electrical specifications (and all cable connections are secure).
	Ensure electrical power is active at the AC outlet.
	If connected to the IoT website, check your online dashboard to ensure this fixture's group is toggled ON and also at INT > 0.
	Also check that the fixture actually is connected: Settings - Link/Unlink Fixture - Check for "Online"
Connected Light Fixture is Flickering	Ensure the light fixture is operating within the specified temperature range.
	Ensure the light fixtures cooling fan is operating properly.
	Antenna interference: The built-in antenna is located in the top-left corner. Keep this area clear of metallic objects, as metal degrades wireless performance.
	Daisy-chaining: Ensure only one dongle is used to control a daisy chain.
	Control conflict: Use either a WiFi DongleXE or a Spectral Controller X—do not combine them.