SMART-ZONING TRANSFORMER(Wi-Fi VERSION) SPECIFICATION AND INSTALLATION INSTRUCTION MANUAL

Read instructions carefully before installation. Retain for future use.

- **General Specifications**

Stainless steel enclosure and removable door(please make sure latch is locked when moving the transformer to another location)

RATED WATTAGE OPTIONS: 150W,300W

(The power supply has the ability to deliver full output load on one zone or distrib -uted across all zones)

INPUT VOLTAGE: 120V AC
MAXIMUM INPUT CURRENT: 2.5A
OUTPUT TAPS IN EACH ZONE: 2 taps of 12V or 13V or 15V
COMMON TERMINALS: 2 COMS in each zone
Wi-Fi REQUIRED: 2.4GHz(4G Wi-Fi network)

This power supply unit can be operated via Tuya/Smart Life on smart cell phone, please scan QR code below to install the APP/APK or you can find it in Google Play or Apple Store.

Overload and Short Circuit Protection are available.

CAUTIONS

SHOCK HAZARD:
Disconnect power at main breaker/fuse box BEFORE & DURING installation.

WARNING:
Installation must comply with the National Electrical Code (NEC) and all local codes. If unfamiliar with codes, use a certified electrician. Non-compliance may cause severe injury, property damage, and voids warranty.

FOR LOW-VOLTAGE USE ONLY:
Use only with low-voltage landscape luminaires/fittings. Not for swimming pool/spa lighting.

DO NOT ENERGIZE:
until system installation is complete.

INPUT VOLTAGE:
Connect ONLY to 120V, 60 Hz supply.

DO NOT SUBMERGE:
power supply.

DO NOT CONNECT:
multiple power supplies in parallel.

MOUNT NEAR OUTLET:
Do not use an extension cord.

SUITABLE:
for indoor or outdoor use.

WARNING:
Install only on a GFCI-protected circuit to reduce shock risk.
Minimum distance from pools, spas, or fountains:
Outdoor: 5 ft (1.5 m)

INSTALLATION & WARNING SUMMARY

Low-voltage transformers are devices that reduce a higher input voltage to a lower output voltage.The SMART-ZONING transformer operates at 12/13/15 volts AC.

The Sizing:

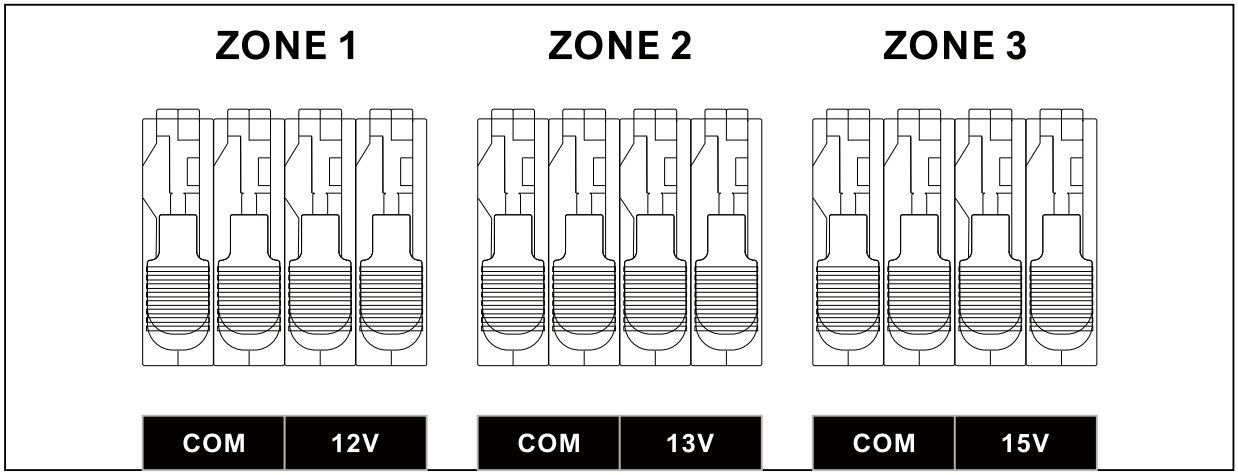
Total load = Sum of all fixture wattages

Example: 15 fixtures × 16VA (VA per fixture)= 240VA → Use 300VA transformer

- Never exceed rated capacity. Split loads if overloaded.

Zoning:

- 3 independent zones (2 commons +2 of 12 or 13 or 15V taps each zone)
- Supports full load on single zone or distributed



PIC.1

Refer to Manual:
for mounting, wiring, grounding, servicing, and secondary circuit cable specifications.

Mounting Height:
Minimum 1 ft (30 cm) above ground.

Extension Cords Prohibited:
Do not use with cord-connected systems.

Concealed Wiring:
NEC requires conduit for wiring through walls or concealed spaces.

FIRE RISK - SPECIAL WIRING:
If routing wire through structures, consult a qualified electrician for approved methods.

FIRE RISK - TERMINALS:
Do not place insulation under terminal plate. Verify connections after installation.

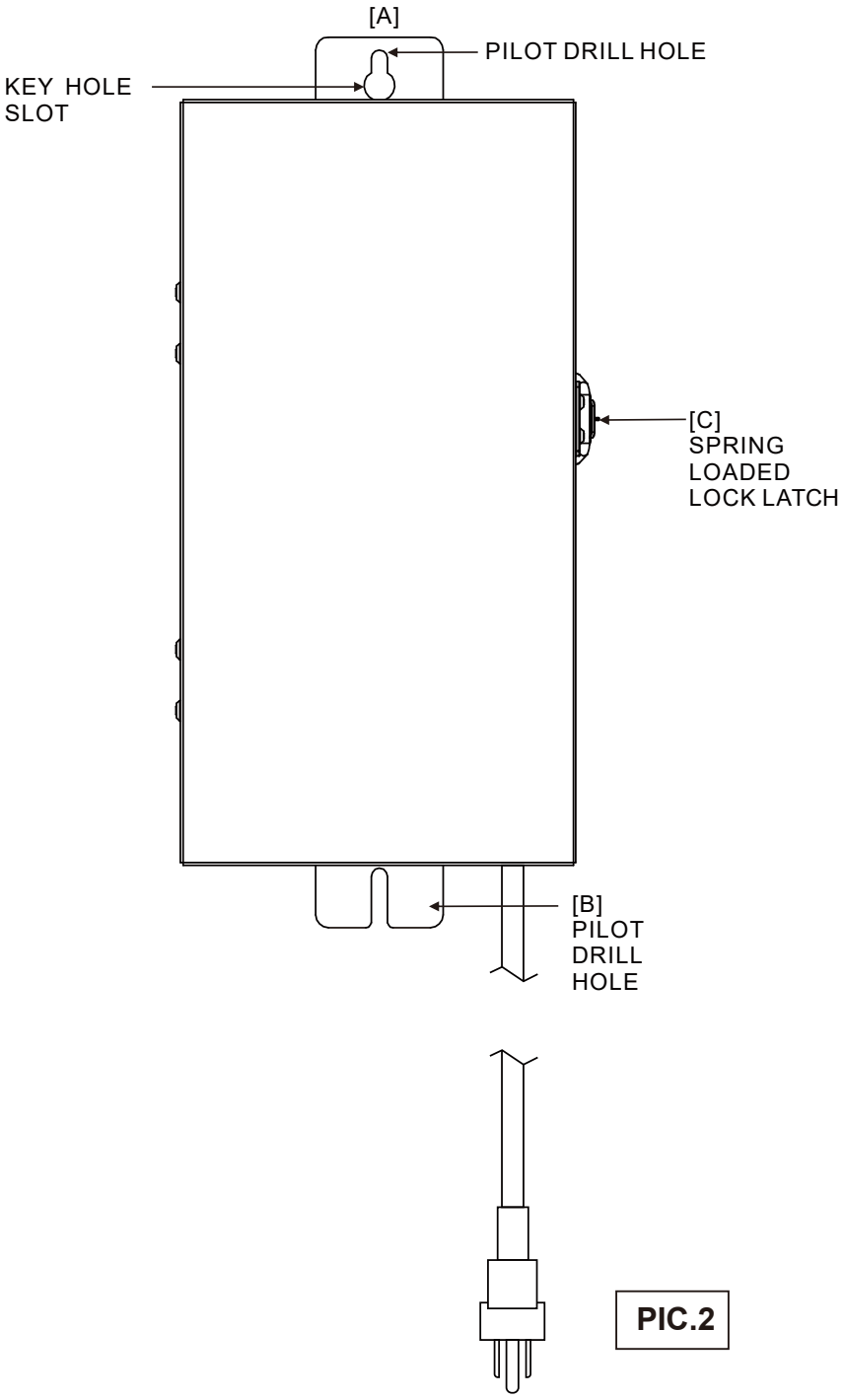
COVER REQUIREMENT:
Keep cover securely closed during operation.

Cleaning:
▸ POWER OFF FIRST!
· Use soft damp cloth only
· No harsh chemicals

CHOOSE LOCATION:

► See "CAUTIONS" section requirements

Choose desired moutning location. Ensure the SMART-ZONING transformer is installed within 100ft of your router, and that the router has a working internet connection.



PIC.2

WIRE CONNECTION

Voltage drop in low-voltage systems results from run distance, total wattage, and wire gauge, causing lower voltage at distant fixtures.

1.Use thicker wire (lower gauge number) to reduce voltage drop.
2.Recommended: 10/2 or 12/2 cables.
3.Cable constants:

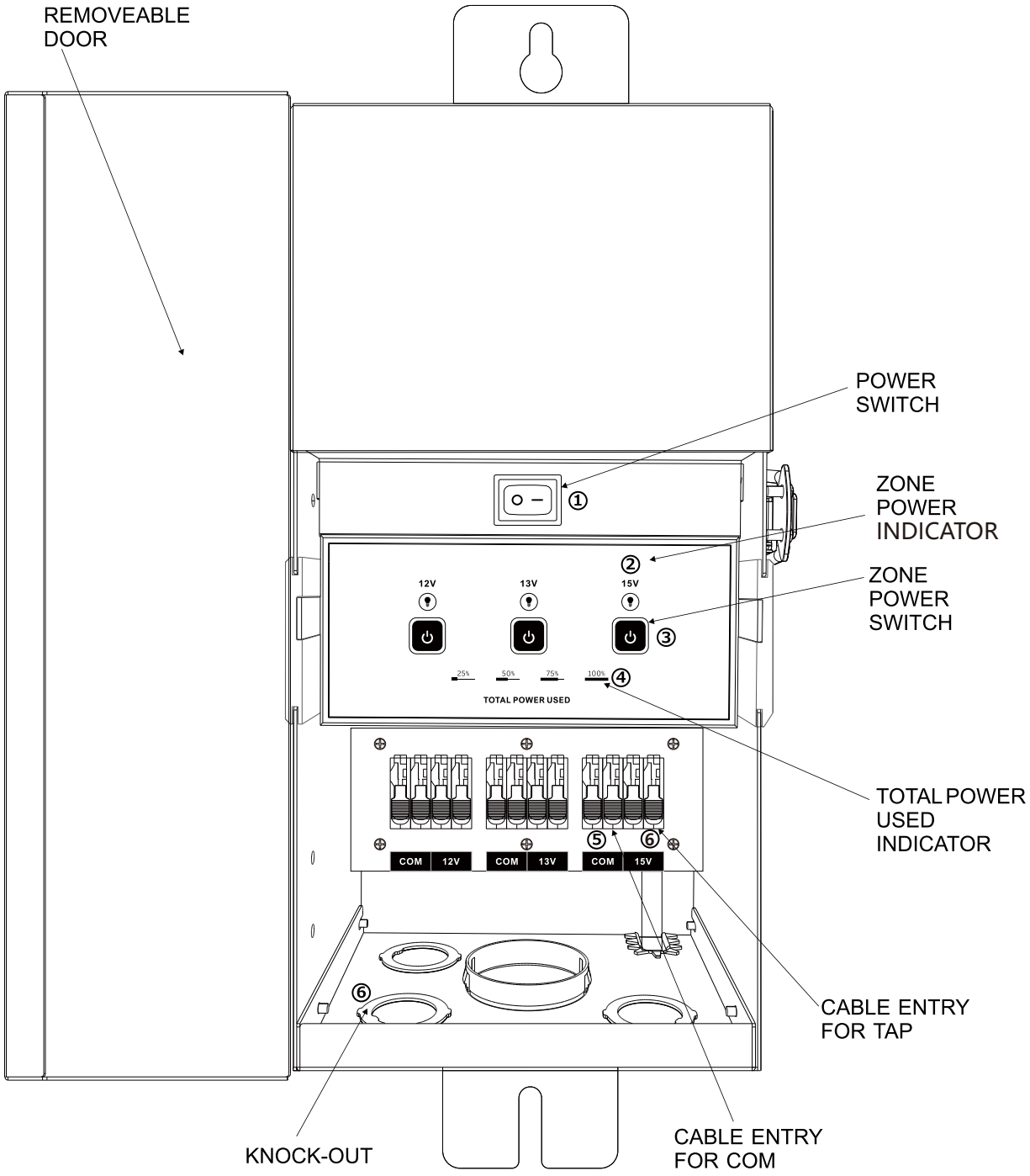
Gauge	#18/2	#16/2	#14/2	#12/2	#10/2	#8/2
Cable Constant	1,380	2,200	3,500	7,500	11,920	18,960

Calculate drop: (Run ft × total Watts of fixtures in one run × 2) ÷ Cable Constant
Example: A 45 ft.run with 250W load in one run using 12/2 wire
Voltage Drop=(45×250x2)÷7500=3V.
3V+12V（operating voltage of lamps or fixutures）=15V(TAP voltage)
This means that a 15V tap is needed to deliver 12V to the final fixture on the run.
Minimize drop by:
a. Splitting loads to multiple runs
b. Optimizing wiring paths
c. Using thicker wire with low gauge number

4.Split 3" (76mm) of 12/2 or 10/2 direct burial cable Strip 1/2" (12mm) insulation per wire.
5.Remove knock-out(s) ⑦in PIC.3 on the bottom tray, use conduit(s) and adaptor(s) to accomodate the wire and run the wire through the conduits.
6.Select a zone with a proper outlet voltage(voltage-drop due to long distance between transformer and fixtures and gauge of your wire should be concisdered)
7.Lift the lever and insert wire conductor(s) into "COM" ⑤in PIC.3 and "TAP" ⑥in PIC.3 hole in one zone, release the lever, make sure the wires are secured in the lever terminal block hole.

► Max conductors in one hole: See chart below

Wire Gauge Size	Max.number of conductors
#10	1
#12	2
#14	3
#16	5
#18	6



PIC.3

8. Connect the direct burial cable with lead wire of the fixtures, water proof wire connectors are needed.
9. Plug power supply cord into standard 120 volt receptacle.
10. NOTE:The power supply cord must be plugged into a weather tight receptacle equipped with a Ground Fault Interrupter (GFCI).

START APP SETUP INSTRUCTIONS

NOTE:Wi-Fi must be used for initial app setup and registration.

1. Download the Tuya/Smart Life App on the Apple App Store or on Google Play.
2. App Setup
- Open the Tuya/Smart Life app
- First-time users: Register an account

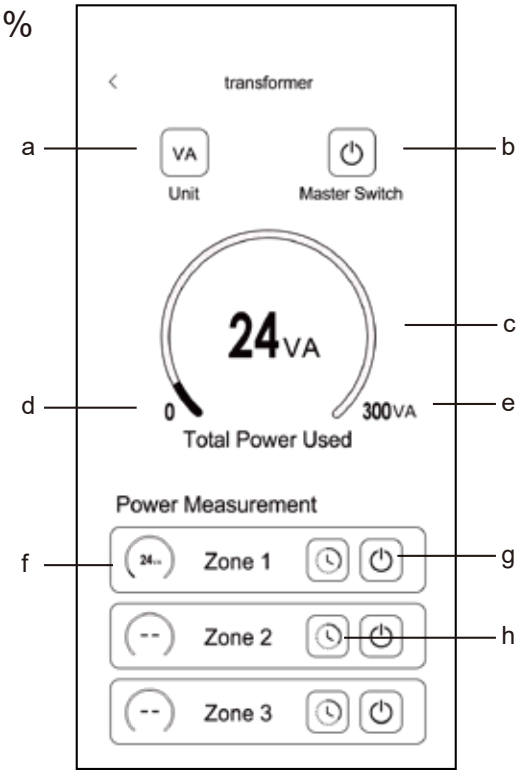
3. Connectivity Preparation
- Ensure your phone's Wi-Fi is enabled
- Make sure your divice is within range of your Wi-Fi router
- Ensure power switch on front of the transformer is on”-”

4. Pairing and Add Device in App
- For the initial pairing, once the transformer is powered on, 3 indicators beside the output voltage wording “12/13/15V” ②in PIC.3 should be on and “TOTAL POWER USED” indicators ④in PIC.3 shoule be blinking.
  The icon of the transformer should pop up in Tuya/Smart Life automatically, tap”Add” on your device to add the transformer. If not, please tap (+) or select "Add Device"

5. Select your 2.4GHz Wi-Fi network. Enter Wi-Fi password → Tap "Next"
6. Optional: Rename device using the pencil icon
7. Confirm with "Done"

DEVICE OPERATION & SCHEDULING

a - Unit Toggle: Switch between VA / Load %
b - Master Switch, tap this icon to stop power suply to all zones
c - Real-time Total Load
d - Total Load Meter (Red part indicates load level)
e - Rated Power (VA)
f - Load Monitoring Per Zone
g - Zone Power Switch
h - Timer



PIC.4

Now your SMART-ZONING transformer is ready to use.
Tap the"Zone Power Switch" (g) to control the power suply of your landscape lighting and tap the "Timer" (h) to set your preffered schedule.

MANUAL MODE

If Wi-Fi connectivity is lost, you can still turn your lights on and off without an app:
To turn on all lights connected to the transformer, pressing the "Zone Power Switch" ③in PIC.3 of each zone manually.

To stop power supply to the transformer by pressing"Power Switch" on front of the transformer

TROUBLE SHOOTING

WHEN OVERLOAD HAPPENS

If overload occurs (load per zone or total load exceeding rated power), overload protection will shut off power supply to all zones in 30 seconds. Disconnect the transformer's power supply and reduce fixture quntity/load until total load or load per zone is below rated power. Then tap "Zone Power Switch" ②in PIC.3 on your phone or on front of the transformer to restore the power supply.

WHEN SHORT CIRCUIT HAPPENS

During short-circuit events—such as accidental contact between COM and 12/13/15V outputs or fixture burnout causing extreme instantaneous current—the transformer automatically cuts off output. After resolving circuit faults, Turn POWER SWITCH ①in PIC.3 on the front of the transformer "Off" ⊙− then "on" ⊙▬ to restore normal operation. Consult a certified electrician if needed.

HOW TO PUT THE TRANSFORMER IN PAIRING MODE

If the TOTAL USED WATTAGE ④in PIC.3 indicator is not blinking. Please press and hold any one of the 3 zone power switch ③in PIC.3 for 5 seconds then release. The transformer will be in pairing mode.