

# Triac/ELV Dimmer Series



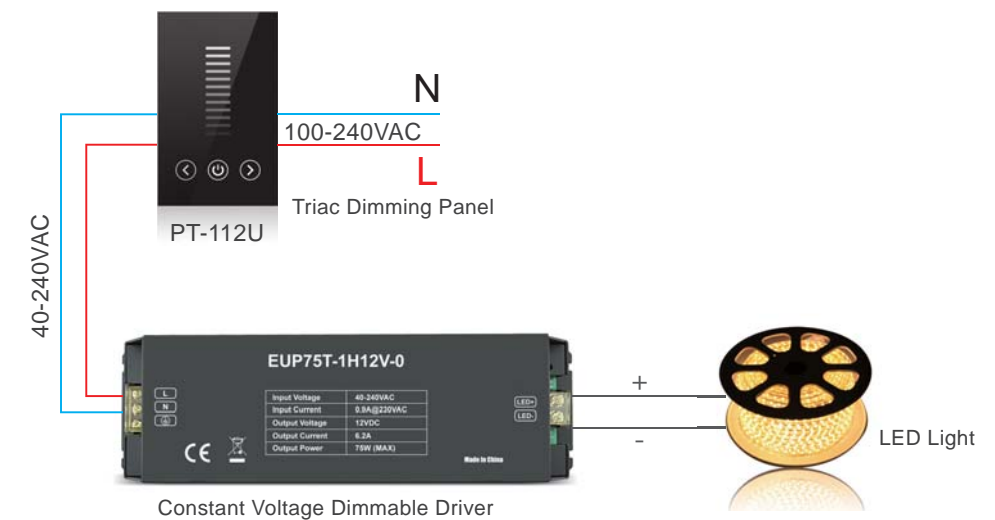
Leading edge dimmer usually uses thyristor as a switching device, so it is also known as Triac dimmer. It starts working from a 0-phase AC voltage, waiting for the trigger to be turned on. Then the AC voltage will be delivered to the load. Changing sine wave by adjusting the conduction angle of each AC half-wave, thereby changing the effective value of the alternating current, in order to achieve the purpose of dimming.

Leading edge dimmer has low costs and is compatible with existing lines, no need of rewiring. So it dominates the market. Most manufacturers also use this type dimmer.

Trailing edge dimmer turns on immediately after a half-wave of the AC voltage begins, when the half-wave voltage reaches the set conduction angle, device shuts down immediately. Similar to Leading edge dimmer, Trailing edge dimmer achieves the purpose of dimming by adjusting the conduction angle. Trailing edge phase cut dimmer usually uses MOSFET as a switching device but not thyristor, because device won't shut down immediately but have to wait until the half-wave voltage pass through zero.

Trailing edge phase control dimmer is composed with the trailing edge phase controller, an active switch, zero-crossing detection circuit and overload protection circuit. It can dim incandescent lamps and adapt the electronic transformer load very well. It works very stably and can be widely used. Compared to Leading edge phase cut dimmer, Trailing edge can theoretically better match with LED sources because there is no minimum current requirement.

## Wiring Diagram



## Triac/ELV Panel Series

### PT-112U

#### Feature

- ▶ Support Trailing edge(ELV) Dimmer
- ▶ Single channel output, the max current is up to 1A
- ▶ Using tempered glass material, stylish appearance
- ▶ Controlled by touchable buttons, easy to learn and use



#### Description

Single loop smart lighting control panel, replace traditional dimming knob, can be applied to small space of lighting control.

#### Parameter

SELV RoHS CE

| Item No. | Input Voltage | Output Current | Output Voltage | Output power | G.W.(g) | Size(mm)  |
|----------|---------------|----------------|----------------|--------------|---------|-----------|
| PT-112U  | 100-240VAC    | 1A*1Channel    | 40-240VAC      | 220W         | 240     | 120*74*42 |

# Triac/ELV Master Controller Series



## DIM105 DIM105L

### Constant Voltage Dimmer Series

#### Feature

- ▶ 0-100% brightness control, the smooth dimming curve, no flicker
- ▶ Power LED to indicate current status
- ▶ Over current and short circuit protection
- ▶ Dimming curve difference can be adjusted by adjustable resistance

#### Parameter

RoHS CE

| Item No. | Input Voltage | Output Current | Output Power | Dim Mode  | Dimming Voltage | G.W.(g) | Size(mm)  |
|----------|---------------|----------------|--------------|-----------|-----------------|---------|-----------|
| DIM105   | 12-24VDC      | 15A*1Channel   | 180-360W     | Triac/ELV | 40-220VAC       | 115.5   | 167*52*24 |
| DIM105L  | 12-24VDC      | 15A*1Channel   | 180-360W     | Triac/ELV | 40-110VAC       | 115.5   | 167*52*24 |



## Walldim105 (Triac) Walldim106 (ELV)

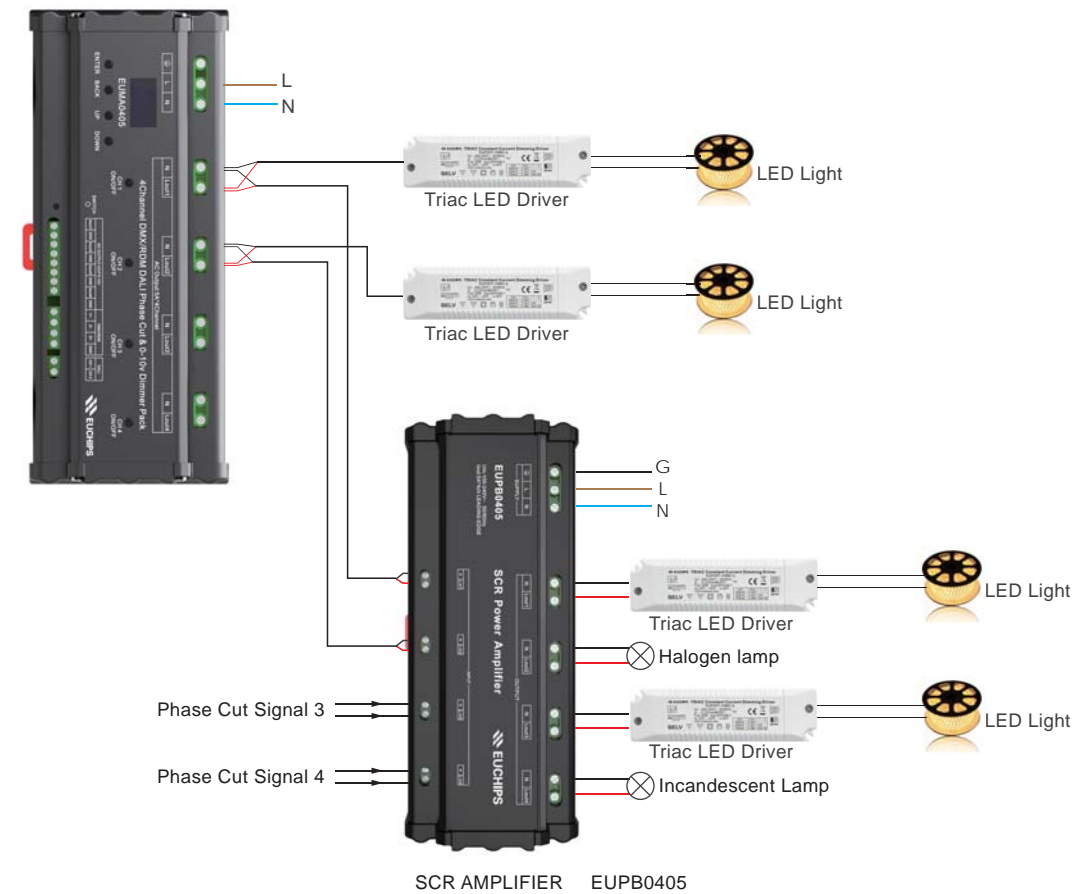
### Triac / ELV Dimmer

#### Feature

- ▶ Support leading edge for Walldim 105
  - ▶ Support trailing edge for Walldim 106
  - ▶ Suitable for phase cut dimming power supply, incandescent lamp, etc.
  - ▶ High flame retardant material, high temperature resistance impact
  - ▶ Elegant, easy to operate, with fashionable and elegant appearance
- Can directly replace the existing wall switch

| Item No.   | Input Voltage | Standby loss | Load range | G.W.(g) | Size(mm) |
|------------|---------------|--------------|------------|---------|----------|
| Walldim105 | 200-240VAC    | < 0.1W       | 4-500W     | 110     | 86*86*50 |
| Walldim106 | 200-240VAC    | < 0.1W       | 4-400W     | 110     | 86*86*50 |

## Wiring Diagram



## Triac Bleeder Pro

#### Feature

- ▶ Active compensation circuit
- ▶ With over temperature protection
- ▶ Load compensation for thyristor controlled silicon

#### Parameter

RoHS CE

| Item No.          | Input Voltage   | Power ( Typical )          | Current                        | G.W.(g) | Size(mm)  |
|-------------------|-----------------|----------------------------|--------------------------------|---------|-----------|
| Triac Bleeder Pro | 110VAC – 240VAC | 4W@110VAC<br>/ 3.4W@220VAC | 44mA@110VAC<br>/ 31.5mA@220VAC | 245     | 144*63*40 |



## Triac Bleeder TB01

#### Feature

- ▶ Active compensation
- ▶ Wide input voltage of 100VAC ~ 240VAC
- ▶ Suitable for TRIAC circuit load compensation

| Item No.           | Input Voltage   | Power ( Typical )          | Current                      | G.W.(g) | Size(mm) |
|--------------------|-----------------|----------------------------|------------------------------|---------|----------|
| Triac Bleeder TB01 | 100VAC – 240VAC | 3W@115VAC<br>/ 1.5W@230VAC | 37mA@115VAC<br>/ 24mA@230VAC | 75      | 73*36*29 |

## Triac/ELV Master Controller Series

### EUPB0105

#### SCR AMPLIFIER

#### Feature

- ▶ Single channel output of 5A
- ▶ Accept leading and trailing edge signal,output leading edge
- ▶ Standard 35 mm din rail, convenient installation
- ▶ Suitable for use with TRIAC dimming driver, incandescent, low voltage, neon and selected fluorescent fixtures.



#### Parameter

| Item No. | Input Voltage | Output Current | Output power | G.W.(g) | Size(mm)        |
|----------|---------------|----------------|--------------|---------|-----------------|
| EUPB0105 | 100~240V      | 5A*1Channel    | 1100W        | 380     | 121.5*96.5*65.5 |

### EUPB0405

#### SCR AMPLIFIER

#### Feature

- ▶ Single channel output of 5A
- ▶ Accept leading and trailing edge signal,output leading edge
- ▶ Standard 35 mm din rail, convenient installation
- ▶ Suitable for use with TRIAC dimming driver, incandescent, low voltage, neon and selected fluorescent fixtures.



#### Parameter

| Item No. | Input Voltage | Output Current | Output power | G.W.(g) | Size(mm)        |
|----------|---------------|----------------|--------------|---------|-----------------|
| EUPB0405 | 100~240V      | 5A*4Channel    | 4400W        | 950     | 222.5*96.5*65.5 |

### EUCS0405

#### Power sensor

#### Feature

- ▶ AC input terminal voltage, current, power, power factor
- ▶ Sampling accuracy 5%
- ▶ Standard 35 mm din rail, convenient installation



#### Parameter

| Item No. | Input voltage range | Input current sampling range | Output Current | G.W.(g) | Size(mm) |
|----------|---------------------|------------------------------|----------------|---------|----------|
| EUCS0405 | 0-277VAC            | 0-5Aac                       | 10A*4Channels  | TBD     | TBD      |

## Constant Voltage Dimmable Driver Series

#### Feature

- ▶ Support Leading edge (TRIAC) and Trailing edge (ELV)
- ▶ Indicator light of power supply
- ▶ Output short-circuit protection, over load protection, over current protection
- ▶ Smooth dimming curve, no flicker

#### Description

Suitable for various constant voltage indoor LED lightings, such as LED strip light, LED flood light, etc. Widely used in hotel, market, office, home, etc.



#### Parameter

| Item No.          | Input Voltage | Output Current | Output Voltage | Output Power | Dim Mode  | G.W.(g) | Size(mm)    |
|-------------------|---------------|----------------|----------------|--------------|-----------|---------|-------------|
| EUP12T-1W12V-1    | 200-240VAC    | 1A*1Channel    | 12VDC          | 12W          | Triac/ELV | 85      | 73*36*29    |
| EUP40T-1W12V-0    | 200-240VAC    | 3.3A*1Channel  | 12VDC          | 40W          | Triac/ELV | 210     | 137*82*31   |
| EUP40T-1W24V-0    | 200-240VAC    | 1.67A*1Channel | 24VDC          | 40W          | Triac/ELV | 210     | 137*82*31   |
| EUP75T-1H12V-0    | 200-240VAC    | 6.2A*1Channel  | 12VDC          | 75W          | Triac/ELV | 380     | 204*54*33   |
| EUP75T-1H24V-0    | 200-240VAC    | 3.1A*1Channel  | 24VDC          | 75W          | Triac/ELV | 380     | 204*54*33   |
| EUP75T-1H12V-0E1  | 200-240VAC    | 6.2A*1Channel  | 12VDC          | 75W          | Triac/ELV | 300     | 210*57*34   |
| EUP75T-1H24V-0E1  | 200-240VAC    | 3.1A*1Channel  | 24VDC          | 75W          | Triac/ELV | 300     | 210*57*34   |
| EUP75T-1H12V-0WP  | 200-240VAC    | 6.2A*1Channel  | 12VDC          | 75W          | Triac/ELV | 462     | 188 *52*35  |
| EUP75T-1H24V-0WP  | 200-240VAC    | 3.1A*1Channel  | 24VDC          | 75W          | Triac/ELV | 462     | 188 *52*35  |
| EUP120T-1W12V-0   | 200-240VAC    | 10A*1Channel   | 12VDC          | 120W         | Triac/ELV | 515     | 196*75*40   |
| EUP120T-1W24V-0   | 200-240VAC    | 5A*1Channel    | 24VDC          | 120W         | Triac/ELV | 670     | 196*75*40   |
| EUP150T-1H12V-0   | 200-240VAC    | 12.5A*1Channel | 12VDC          | 150W         | Triac/ELV | 842     | 260*78.3*45 |
| EUP150T-1H24V-0   | 200-240VAC    | 6.25A*1Channel | 24VDC          | 150W         | Triac/ELV | 842     | 260*78.3*45 |
| EUP300T-1H12V-0WP | 200-240VAC    | 25A*1Channel   | 12VDC          | 300W         | Triac/ELV | 1500    | 307*70*44   |
| EUP300T-1H24V-0WP | 200-240VAC    | 12.5A*1Channel | 24VDC          | 300W         | Triac/ELV | 1500    | 307*70*44   |
| DIM106H-12        | 200-240VAC    | 12.5A*1Channel | 12VDC          | 150W         | Triac/ELV | 612     | 200*98*39   |
| DIM106H-24        | 200-240VAC    | 6.25A*1Channel | 24VDC          | 150W         | Triac/ELV | 612     | 200*98*39   |
| DIM107H-12        | 200-240VAC    | 8.5A*1Channel  | 12VDC          | 100W         | Triac/ELV | 566     | 200*98*39   |
| DIM107H-24        | 200-240VAC    | 4.5A*1Channel  | 24VDC          | 100W         | Triac/ELV | 566     | 200*98*39   |

## Constant Voltage Dimmable Driver Series



## Constant Current Dimmable Driver Series

### Feature

- ▶ Multi-current selection
- ▶ Support Leading edge (TRIAC) and Trailing edge (ELV) Dimmer
- ▶ Smooth dimming curve
- ▶ Output short circuit protection and over current protection

### Description

Suitable for various constant current indoor LED lightings, such as LED down light, COB spotlight, ceiling light, panel light, etc. Widely used in hotel, market, office, home, etc.



### Parameter



| Item No.         | Input Voltage | Output Current           | Output Voltage | Output Power | Dim Mode  | G.W.(g) | Size(mm)    |
|------------------|---------------|--------------------------|----------------|--------------|-----------|---------|-------------|
| EUP6T-1H350C-0   | 200-240VAC    | 350mA*1Ch                | 11-17VDC       | 6W           | Triac/ELV | 60      | 94*30*21    |
| EUP6T-1H700C-0   | 200-240VAC    | 700mA*1Ch                | 6-9VDC         | 6W           | Triac/ELV | 60      | 94*30*21    |
| EUP12T-1HMC-0    | 200-240VAC    | 180/240/300mA*1Ch        | 3-42VDC        | 12W          | Triac/ELV | 130     | 150*43*29   |
| EUP15T-1HMC-0    | 200-240VAC    | 350/500/700mA*1Ch        | 3-42VDC        | 15W          | Triac/ELV | 130     | 150*43*29   |
| EUP18T-MC-0      | 200-240VAC    | 350/500/700mA*1Ch        | 3-48VDC        | 18W          | Triac/ELV | 140     | 102*66*30   |
| EUP20T-1HMC-0    | 200-240VAC    | 350/500/700mA*1Ch        | 9-40VDC        | 20W          | Triac/ELV | 130     | 153*41*28   |
| EUP30T-1HMC-0    | 200-240VAC    | 600/700/900mA*1Ch        | 3-55VDC        | 30W          | Triac/ELV | 120     | 150*43*29   |
| EUP30T-MC-0      | 220-240VAC    | 350/500/700/1050mA*1Ch   | 3-40VDC        | 30W          | Triac/ELV | 175.8   | 137*81.5*31 |
| EUP45T-1WMC-0    | 200-240VAC    | 500/700/900/1050mA*1Ch   | 33-65VDC       | 45W          | Triac/ELV | 225     | 137*81.5*31 |
| EUP60T-1HMC-0    | 200-240VAC    | 900/1050/1200/1400mA*1Ch | 24-85VDC       | 60W          | Triac/ELV | 240     | 137*81.5*31 |
| EUP60T-1HMC-0WP  | 200-240VAC    | 1050/1200/1400mA*1Ch     | 9-89VDC        | 60W          | Triac/ELV | TBD     | 178 *52*35  |
| EUP100T-1HMC-0WP | 200-240VAC    | 1400/1700/2100mA*1Ch     | 20-90VDC       | 100W         | Triac/ELV | TBD     | TBD         |

