## RF Constant Current LED CCT Driver

## Model No．：PT－12A－2



## Features

－Dimming interface：RF Wireless，AC Push－Dim
－Match with RF 2．4G color temperature remote control，one RF LED driver accepts up to 10 remote controls
－Universal AC input／Full range
－Flickerfree
－ 2 channel constant current output，configurable current via DIP switch
－Built－in active PFC function：0．92 Typ
－Auto－transmitting function：LED driver automatically transmit signal to another LED driver with 30 m control distance
－Synchronize on multiple number of LED drivers
－Fade in and out effect selectable
－ 3 levels color temperature（MW，NW and CW）selectable by continuous power off and on operation
－Over－heat／Over－load／Short circuit protection，recover automatically
－Full protective plastic case
－Suitable for indoor LED lighting application
－ 5 Year， $50,000 \mathrm{hr}$ warranty

## Mechanical Structures and Installations

LED indicator $\qquad$
$\qquad$
$\square$ 37 mm $\square$

Technical Parameters

| Output | Output Voltage | 10～45VDC |
| :---: | :---: | :---: |
|  | Output Current | $2 \times(150 \sim 500) \mathrm{mA}$ |
|  | Output Power | Max．12W |
|  | Max Output Voltage | 48VDC |
|  | Dimming Range | 0～100\％ |
|  | PWM Frequency | 8000 Hz |
|  | Current Accuracy | $\pm 5 \%$ |
|  | Ripple\＆Noise | ＜ 120 mV |
| Input | Input Vollage Range | 100～240VAC |
|  | Frequency Range | 50／60Hz |
|  | Efficiency | ＞77\％ |
|  | Allemating Current | 0．166A Max． |
|  | Anti Surge | L－N： 1.2 KV |
|  | Startup time | 1S／230VAC |
|  | Power Factor | ＞0．97／110VAC，$>0.92 / 230 \mathrm{VAC}$ |
|  | THD | ＜8\％ |
|  | Inrush Current | Cold start 7．4A at 230VAC |
|  | Leakage Current | $<0.5 \mathrm{~mA} / 230 \mathrm{VAC}$ |
|  | No Load Power | $<2 \mathrm{~W}$ |
| Protection | Over Load Power | When $\mathrm{O} / \mathrm{P}$ voltage exceed its range， $\mathrm{O} / \mathrm{P}$ current declines，auto recovers when the load is reduced． |
|  | Short Circuit | Shut down automatically if short circuit occurs，auto recovers． |
|  | Over Temperature | Intelligently adiust or turn off the output current if the PCB temp $>100^{\circ} \mathrm{C}$ ，auto recovers． |
| Environment | Woking Temperature | $-30^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$ |
|  | Tcase Max | $80^{\circ} \mathrm{C}$ |
|  | Working Humidity | 20\％$\sim 90 \%$ RH，non－condensing |
|  | Storage Temp／Humidily | $-40^{\circ} \mathrm{C} \sim 80^{\circ} \mathrm{C}, 10 \% \sim 95 \% \mathrm{RH}$ |
|  | Temperature Coefficient | $\pm 0.03 \% /{ }^{\circ} \mathrm{C}(0-50 \%)$ |
|  | Vibration Resistance | $10-500 \mathrm{~Hz}$ ， $2 \mathrm{G}, 6 \mathrm{~min} / \mathrm{cycle}, \mathrm{X}, \mathrm{Y}, \mathrm{Z}$ axes $/ 2 \mathrm{~min}$ |
|  | IP Rating | IP20 |
| Safety\＆EMC | Security Specifications | IEC／EN61347－1，IEC／EN61 347－2－13 |
|  | Wilhstand Voliage | 1／P－O／P：3750VAC |
|  | Insulation Resistance | 1／P－O／P： $100 \mathrm{M} \Omega / 500 \mathrm{VDC} / 25^{\circ} \mathrm{C} / 70 \% \mathrm{RH}$ |
|  | EMC Emission | EN55015，EN6 1000－3－2 Class C，IEC61000－3－3 |
|  | EMC Immunily | EN61000－4－2．3．4．5．6．8．11，EN61547 |
|  | Certications | CE，EMC |

## LED Current Selection：

# ON 个 $\quad$ 回圆 Uout $10-42 \mathrm{~V}$ <div class="inline-tabular"><table id="tabular" data-type="subtable">
<tbody>
<tr style="border-top: none !important; border-bottom: none !important;">
<td style="text-align: left; border-left: none !important; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">OFF $\downarrow$</td>
<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">Iout</td>
<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">150 mA</td>
<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">200 mA</td>
<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">250 mA</td>
<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">300 mA</td>
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<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">450 mA</td>
<td style="text-align: left; border-right-style: solid !important; border-right-width: 1px !important; border-bottom-style: solid !important; border-bottom-width: 1px !important; border-top-style: solid !important; border-top-width: 1px !important; width: auto; vertical-align: middle; ">500 mA</td>
</tr>
</tbody>
</table>
<table-markdown style="display: none">| OFF $\downarrow$ | Iout | 150 mA | 200 mA | 250 mA | 300 mA | 350 mA | 400 mA | 450 mA | 500 mA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |</table-markdown></div> 

## Applications

－Suitable for downlight，spotlight and decorative applications
－Office／Commercial／Domestic Lighting，Hotels，Classrooms，Warehouse，Health care，Retail and Display －Use for retrofit upgrades \＆new luminaire designs．

## Wiring Diagram



Note: Continuously switch off and on the power supply two times rapidly

$$
\text { It will change } 3 \text { levels color temperature (WW, NW and CW) in sequence. }
$$

## Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

## Use Match key

Match:
Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zon remote) of the remote.

## Delete:

Press and hold match key for 5 s to delete all match, The light blinks 5 times means all matched remotes were deleted.

## Use Power Restart

Match:
Switch off the power, then switch on power, repeat again Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful Delete:
Switch off the power, then switch on power, repeat again Immediately short press on/ off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

## 2. AC Push-Dim connection



[^0] (momentary) wall switchs.

- Short press

Turn on or off light.

- Long press (1-6s):

Press and hold to step-less dimming,
With every other long press, the light level goes to the opposite direction

- Dimming memory:

Light returns to the previous dimming level when switched off and on again, even at power failure

- Synchronization:

If more than one LED driver are connected to the same push switch, do a long press for more than 10 s, then the system is synchronized and all lights in the group dim up to $100 \%$.
This means there is no need for any additional synchrony wire in larger installations.
We recommend the number of LED drivers connected to a push switch does not exceed 25 pieces, The maximum length of the wires from push to LED driver should be no more than 50 meters.

## Fade in and Fade out Setting

Long press match key 5 s, then short press match key 3 times
The lighting effect will be set to the fade in and fade out in 3 s , the indicator light of LED controller blinks 3 times -ong press match key 10 s , restore factory default parameter, the light on/off time restores to 0.5 s .

## Dimming Curve




[^0]:    The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching

