LDT-RF-A10-AC-DIM-2A

RF, 0/1-10V & Push AC Phase-Cut Dimmer

Control compatible dimmable mains lighting from an RF remote, a 0/1-10V dimming signal or a momentary AC push switch. The analogue terminals are control inputs; the lighting output is phase-cut AC.

Model specifications

Supply voltage	100-240 VAC
Output type	1-channel AC phase-cut dimming
Maximum output current	2 A
Nominal output power	200-480 W; load-type limits apply
Dimmable LED load	150 W at 110 V / 300 W at 220 V
Control inputs	RF 2.4 GHz + 0/1-10V + AC Push-Dim
Analogue input types	0-10V, 1-10V, 10V PWM or resistance input; active/passive supported
Phase-cut selection	Leading or trailing edge via DIP switch
Dimming	0-100%; 256 levels
Published RF distance	Up to 30 m, unobstructed
Minimum brightness setting	5%, 10%, 15%, 20%, 25% or 30%
Operating temperature	-30 to +55 °C
Maximum case temperature	+85 °C
IP rating	IP20
Body dimensions	175 x 45 x 27 mm

This is a mains-output phase-cut dimmer, not a 0/1-10V output converter. Observe 2 A, the lower LED-specific load limits and starting surge limits together.

The following technical-reference pages retain the complete diagrams, dimensions, settings and installation instructions. Select the lighting variant stated on this cover; family diagrams may also illustrate other variants.

Triac

RF + 0/1-10V + Push AC Triac Dimmer

- RF + 0/1-10V Push AC phase-cut dimmer, 1 channel output.
- To dim and switch single color dimmable LED lamps, traditional incandescent and halogen lights.
- Compatibility with RF 2.4G single zone or multiple zone dimming remote control.
- Compatible with active or passive 0-10V, 1-10V dimmer.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- 256 levels 0-100% dimming smoothly without any flash.
- Leading edge dimming or trailing edge dimming set by dip switch.
- Min brightness can be set by key.
- Light on/off fade time 3s selectable.
- Over-heat protection, recover automatically.

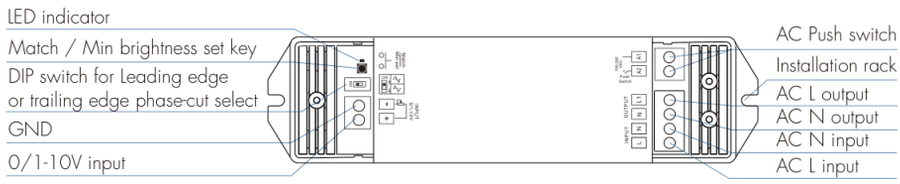


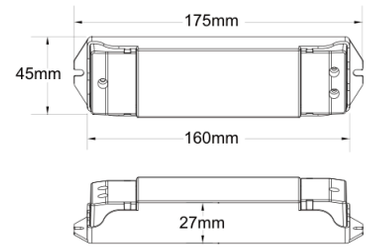
CE RoHS

Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	AC100-240V	Input signal	RF + 0/1-10V + AC Push	EMC standard	EN IEC 55015/EN IEC 61547 ETSI EN 301 489-1/-3
Output voltage	AC100-240V	RF Control distance	30m(Barrier-free space)	Safety standard	EN 61347-1/-2
Output current	Max 2A	Dimming level	256 levels	Radio Equipment	ETSI EN 300 440
Output power	200-480W	Dimming range	0-100%	Certification	CE RoHS
Environment		**Package**		**Warranty**	
Operation temperature	Ta: -30 ℃ ~ +55 ℃	Size	L178 x W50 x H38mm	Warranty	5 years
Case temperature (Max.)	Tc: +85 ℃	Gross weight	0.141kg		
IP rating	IP20				

Mechanical Structures and Installations





Compatible Load Types

Load Type	Maximum Load	Remarks
Dimmable LED lamps	300W @ 220V 150W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac Dimmable LED drivers	300W @ 220V 150W @ 110V	Maximum permitted number of drivers is 300W divided by driver rated input power, and make sure the surge current is no more than 2 times 65A.
Incandescent lighting, HV Halogen lamps	500W @ 220V 250W @ 110V	

Match Remote Control (Two Match Ways)

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

Use the controller's Match key

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

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

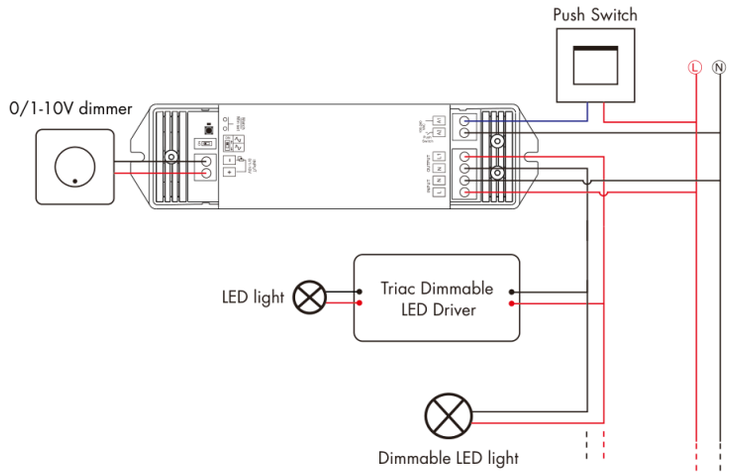
Use Power Restart

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.

Wiring Diagram

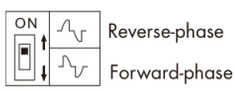
⚠ Caution: Please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this dimmer will be damaged.



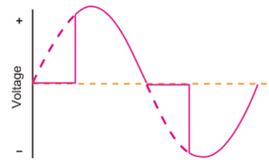
Note: When calculating the maximum number of load lamps or drivers, the input power or input current parameters of a single lamp or driver must be used, the output power parameters can not be used.
In addition, the maximum surge current of the dimmer is 65A, the sum of surge current of multiple dimmable LED drivers should not exceed 2 times. otherwise, the product will be overloaded and damaged.

Leading Edge or Trailing Edge Dimming Setting

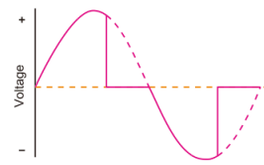
Select leading edge(forward-phase) dimmer or trailing edge(reverse-phase) dimmer according to dimmable LED light or driver.



Forward-phase control dimmer(TRIAC)



Reverse-phase control dimmer



Caution: before power on, you must confirm the selection of dip switch.

Min Brightness Setting

Long press Min set key for 2s, the light blink 2 times, ready for min brightness set, then short press Min set key 1-6 times, to get 6 min brightness: 5%, 10%, 15%, 20%, 25% or 30%, the light will output the current min brightness immediately,
Long press Min set key for 2s or wait 8s, quit min brightness set, the light will output 100% brightness automatically.

Light on/off Fade Time

Long press Match key 5s, then short press Match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.
Long press Match key 10s, restore factory default parameter, the light on/off time also restore to 0.5s.

0/1-10V Dimming

- The 0/1-10V input is operable via commercially available simple rotary wall switchs designed for 0/1-10V dimming equipment or from decicated system central dimming controllers.
- Compliant with 0-10V, 1-10V, 10V PWM, RX(4 in 1).
- We recommend the number of AC triac dimmers connected to 0/1-10V dimmer does not exceed 50 pieces, The maximum length of the wires from dimmer to AC triac dimmer should be no more than 50 meters.
- If the AC triac dimmer be used with the RF remote or Push-Dim interface prior to using the 0/1-10V interface, the 0/1-10 V signal should change over 10% to return 0/1-10V control.

AC Push Dim

The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching(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.
- Synchronization:
  If more than one AC triac dimmer are connected to the same push switch, do a long press for more than 10s, 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 AC triac dimmers connected to a push switch does not exceed 25 pieces,
  The maximum length of the wires from push to AC triac dimmer should be no more than 20 meters.