

Features

- **Constant Current mode**
- Universal input voltage 120-277V
- Protections: Open / Short / Over-Voltage / Over-Temperature
- PFC, flicker-free and isolated design
- Suitable for UL dry and damp location
- Programming output current with Wand / IOS APP
- 2Kv to 6Kv surge protection
- 3 in 1 Dimming (PWM, 1-10V, Resistance), Dim to 10%, 1%, or Off
- 5 years warranty
- **Isolated Dimming**















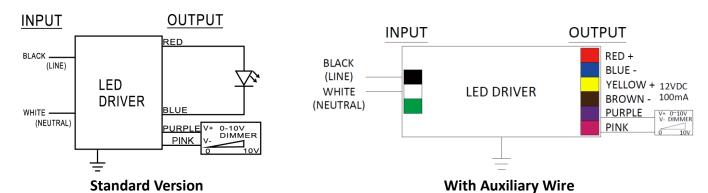


Input/Output Specifications

| input/Output Specifications | | | | | | | | | |
|---|------------------|------------------------------------|--------------------|-----------------|--|--|--|--|--|
| Mode | Parameter | PAC1400S60DIL | ■PAC2100S80DIL | PAC2750S98DIL | | | | | |
| | Voltage range | 120 ~ 277 VAC ± 10%, 170 ~ 392 VDC | | | | | | | |
| INPUT | Frequency | 50/60 Hz | | | | | | | |
| INFO | Efficiency | 86% | 86% | 86% | | | | | |
| | AC current | 0.6A@120V | 0.76A@120V | 0.93A@120V | | | | | |
| | AC current | 0.26A@277V | 0.33A@277V | 0.4A@277V | | | | | |
| | DC Voltage | 27-55V | | | | | | | |
| | Current | 0.7-1.4A | 1.05-2.1A | 1.4-2.75A | | | | | |
| OUTPUT | range | 0.7 1.74 | 1.03 2.17 | 1.4 2.7 5/4 | | | | | |
| | Rated power | 60W | 80W | 98W | | | | | |
| | RIPPLE & | 200mVp-p | | | | | | | |
| | NOISE | 200πνρ-μ | | | | | | | |
| ☐ Auxiliary ☐ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ | | 12V / 100mA | | | | | | | |
| | Wire | 121, 200 | | | | | | | |
| Dimension | (L x W x H) | ☐ Case C(AM159) - 314 * 34 * 27.5 | ☐ Case E (AM145) - | 395 * 38 * 27.5 | | | | | |
| (mm) | | ☐ Case D(AM24L) - 325 * 34 * 29 | 241* 61 * 37 | | | | | | |
| | | | | | | | | | |



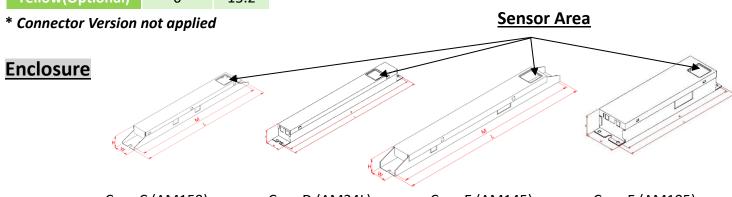
Wire Diagram



Maximum wiring distance (at full load) is 5.5meters. LED case should be grounded.

Standard Lead Wire Length

| Wire Color | Inch | Cm |
|------------------|------|------|
| Black | 6 | 15.2 |
| White | 6 | 15.2 |
| Red | 6 | 15.2 |
| Blue | 6 | 15.2 |
| Purple | 7.1 | 18 |
| Pink | 7.1 | 18 |
| Brown (Optional) | 6 | 15.2 |
| Yellow(Optional) | 6 | 15.2 |



Case C (AM159) Case D (AM24L) Case E (AM145) Case E (AM105)

| Enclosure | Inch | Cm | Inch | Cm | Inch | Cm | Inch | Cm |
|-------------|------|------|------|------|-------|------|------|------|
| Length(L) | 12.3 | 31.4 | 12.8 | 32.5 | 15.55 | 39.5 | 9.5 | 24.1 |
| Width(W) | 1.33 | 3.4 | 1.34 | 3.4 | 1.49 | 3.8 | 2.4 | 6.1 |
| Height(H) | 1.08 | 2.75 | 1.15 | 2.9 | 1.08 | 2.75 | 1.46 | 3.7 |
| Mounting(M) | 11.8 | 30.1 | 12.5 | 31.7 | 15.23 | 38.7 | 8.9 | 22.6 |



General Specifications

| Parameter | Min. | Тур. | Max. | Notes |
|---------------|-----------------|------------------|------|--|
| MTBF | - | 100,000 Hours | - | @25°C ambient temperature |
| Lifespan Time | 75,000 Hours | - | - | In the range of specification required by normal use of the power supply at ambient temperature 55°C |
| Cold Start | - | - | 1.0s | @-40℃ |

Protection

| Parameter | Description | | | | |
|------------------------------|---|--|--|--|--|
| Over Voltage | Output current decade mode, recovers | | | | |
| Over Voltage | automatically after fault condition is removed. | | | | |
| Chart Cinnit | Hiccup mode, recovers automatically after fault | | | | |
| Short Circuit | condition is removed. | | | | |
| | Brightness dims to 25% when T-case > 80°C for | | | | |
| Over Temperature (Optional)* | overheat protection, and auto-recovers to 100% | | | | |
| | when T-case drops below 80°C | | | | |

^{*} The factory default setting does not include over temperature protection.

Environmental Specifications

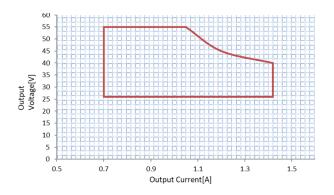
| Parameter | Min. | Тур. | Max. | Notes |
|----------------------|--------|------|------|-------|
| Operation Temperatur | e -40ზ | - | 50℃ | |
| Storage Temperature | -40℃ | - | 308 | |
| Humidity | 10% | - | 90% | |
| T-Case Temperature | - | - | 900 | |

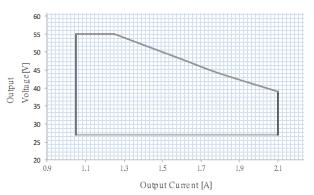
Safety and EMC Compliance

| Safety Standards | Withstand Voltage | Isolation Resistance | EMC Standards | | | |
|------------------|---|--|---|--------------------------------|--|--|
| | | I/D O/D: | EMI | EMS | | |
| UL 8750 | I/P-O/P: 2.0K Vac I/P-FG: 2.0K Vac O/P-FG: 0.5K Vac | I/P-O/P: I/P-FG: O/P-FG: 100Mohm/500VDC | FCC Part 15 class A UL8750 CSA C22.2 No. 250.13-14 | FCC Part 15 class A UL 8750 | | |



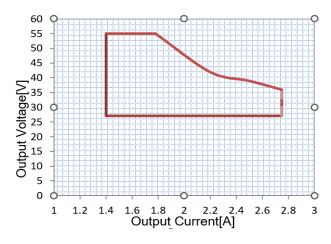
Iout vs Vout Curve





PAC1400S60D

PAC2100S80D



PAC2750S98D

Data is based upon tests performed by Antron Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.



Programmable Tool

- Put the programmable wand above the NFC mark of the driver to start programming
- Download the software from www.antron.com.tw



Programmable Driver Options (App Note)

All programmable drivers accept a 16-bit hexadecimal code to program the output current (lout) of the driver. The lout programming codes are documented in the computer based-programming software (ST-TOOLS.exe) or from the driver's IOUTCODE.pdf file. The Locations below 0, 1, 2, 3 contain the basic code for a specific output current value (example $84\ 03\ 00\ 01 = 1050\ mA$ for PAC1400S50D).

Location | 0 | 1 | 2 | 3 | Value | 00 | 00 | 00 | 00 |

For drivers containing Revision C of their firmware (contact factory for date code of implementation), it is also possible to adjust the minimum dimming level and the dimming speed. This adjustment is made by modifying location 2 of the programming code while keeping the other locations set for the desired output current. Specifically, the location 2 values are defined as:

- 00 => Dim to 1%, Speed ≤ 1.0 sec
- 01 => Dim-to-OFF, Speed ≤ 1.0 sec
- 02 => Dim to 10%, Speed ≤ 1.0 sec
- 03 => Dim to 1%, Speed ≥ 2.5 sec
- 04 => Dim-to-OFF, Speed ≥ 2.5 sec
- 05 => Dim to 10%, Speed ≥ 2.5 sec

As an example, if the programming code value of 84 03 00 01 is programmed, the output current will be 1050 mA, and the driver will dim to 1% and the dimming speed will be \leq 1.0 sec. If the programming code of 84 03 04 01 is programmed, the output current will be 1050 mA, and the driver will dim to off and the dimming speed will be \geq 2.5 sec.

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Revision History

| Change date | Description of Change | | | | | |
|-------------|-----------------------|------------|----|----------------------------|----|-------------------------------|
| | | ltem | | From | | То |
| 2025/02/05 | 1. Mode | name | 1. | NFC 120-277V Series 25~50W | 1. | NFC 120-277V Series 60/80/98W |
| 2023/02/03 | 2. Over 1 | emperature | 2. | / | 2. | Updated |
| 2025/02/07 | 1. Enclos | ure | 2. | / | 1. | Update format |

HOW TO USE NFC PROGRAMMING

1. Downloading the App

- (1.) Open the App Store on your Apple device.
- (2.) Search for Antron LED Driver App.
- (3.) Tap Download and wait for the app to install.



2. App Setup and Operation

(1.) Launch the App

Open the app by tapping the Antron LED Driver icon on your home screen.

- (2.) Ensure NFC is Enabled

 Verify that the NFC functionality
 on your device is turned on.
- (3.) Scan the Driver
 Place your device's NFC area
 near the tag's NFC logo to start
 scanning.
- (4.) Automatic Detection
 Once detected, the app will
 navigatedirectly to the
 corresponding operationinterface.

3. Configuring Driver Settings

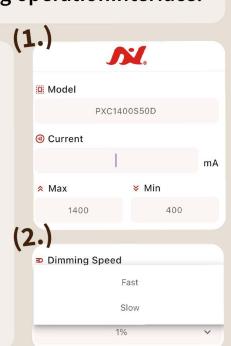
(1.) Current Settings

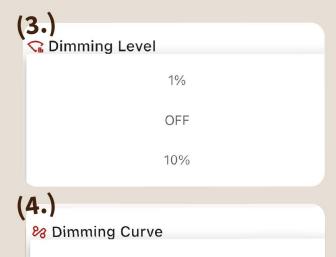
In the Current field, input the desired current value.

The maximum and minimum current limits will be displayed below for reference.

(2.) Dimming Speed

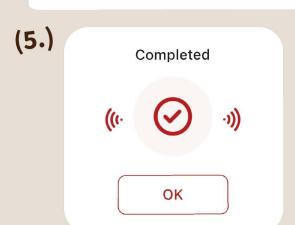
Select either Fast or Slow based on your preference.





Linear

Log



(3.) Dimming Level Adjust the minimum output power via the dimmer to 1%,

power via the dimmer to 1%, 10%, or off, according to your requirements.

requirements

(4.) Dimming Curve
Choose between Linear or
Log dimming for your
application.

(5.) Apply Settings

Once all the desired settings are selected, tap Write and bring your device's NFC area close to the LED Driver's NFC logo to initiate programming.

When the screen displays Completed, the scanning and configuration are finished.

4. Troubleshooting

(1.) Unable to Detect the Driver

Ensure NFC is enabled on your Apple device.
Check that the NFC tag is clean and free of obstructions.

(2.) Settings Not Applying

Confirm that the device is properly scanned.

Confirm that the input current value is within the product's maximum and minimum limits.

Retry applying settings and ensure you tap Write.

(3.) App Crashing or Freezing

Restart the app or your device.

Ensure you're using the latest app version.

(4.) Contact Support

For further assistance, contact our support team:

Email: info@antron.com.tw