

## User Manual 17" / 19" LCD



### RMD-152-17 / -19 1U Short Depth LCD Drawer

#### Options :

- AV / HDMI / Audio
- Touchscreen / DC power

FC CE



REACH

## Legal Information

First English printing, October 2002

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

## Safety Instructions

**Please read all of these instructions carefully before you use the device. Save this manual for future reference.**

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labeled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

## What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - ☐ Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - ☐ Repair or attempted repair by anyone not authorized by us.
  - ☐ Any damage of the product due to shipment.
  - ☐ Removal or installation of the product.
  - ☐ Causes external to the product, such as electric power fluctuation or failure.
  - ☐ Use of supplies or parts not meeting our specifications.
  - ☐ Normal wear and tear.
  - ☐ Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

## Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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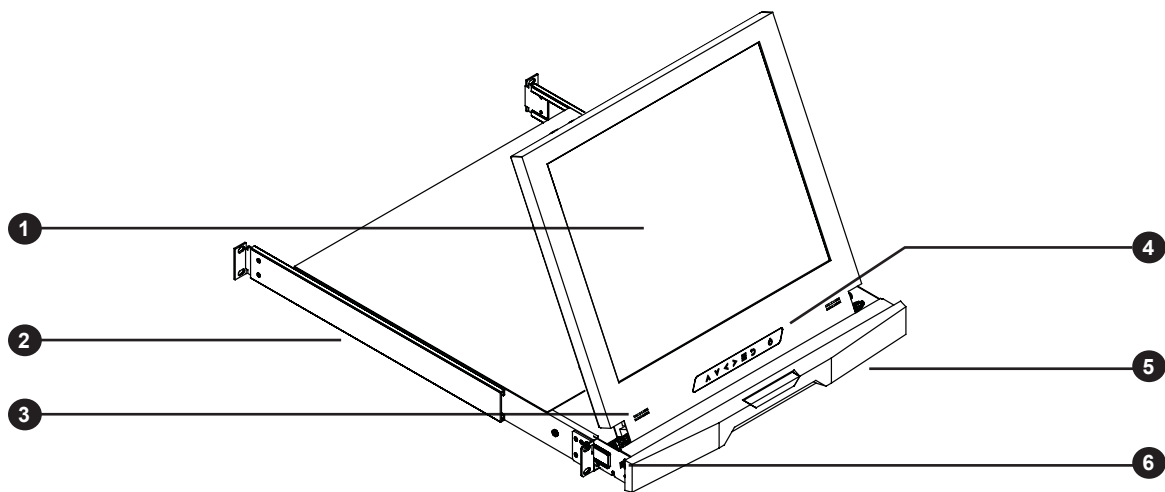
**RMD-152-17 or -19 unit X 1**

- 6ft VGA cable X 1
- Power cord X 1
- M6 screw, cage nut & cup washer X 8



The above package content is only for the pure model ( VGA and DVI-D only ). It varies with options such as HDMI, AV, audio, touchscreen & DC power.

< 1.2 > Structure Diagram



① LCD panel

② Installation Slide

③ Audio speaker ( for HDMI or Audio option )

④ LCD OSD membrane

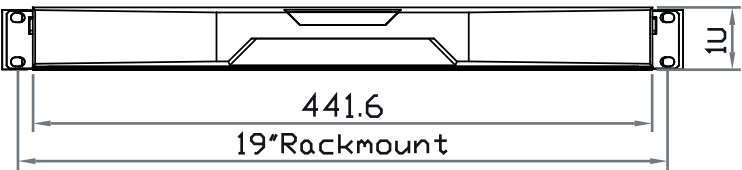
⑤ Carry handle to release the 2-pt lock

⑥ 2-point lock

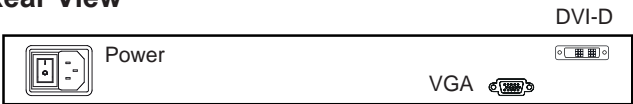


< 1.2 > Dimension

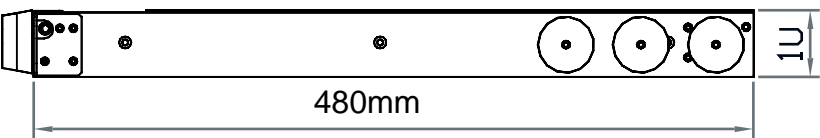
Front View



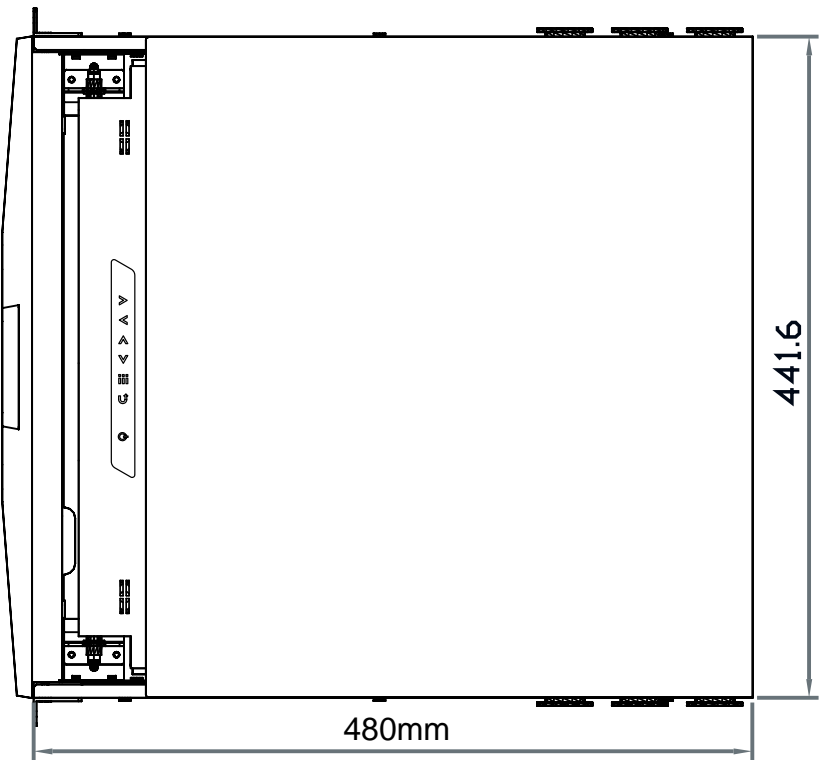
Rear View



Side View




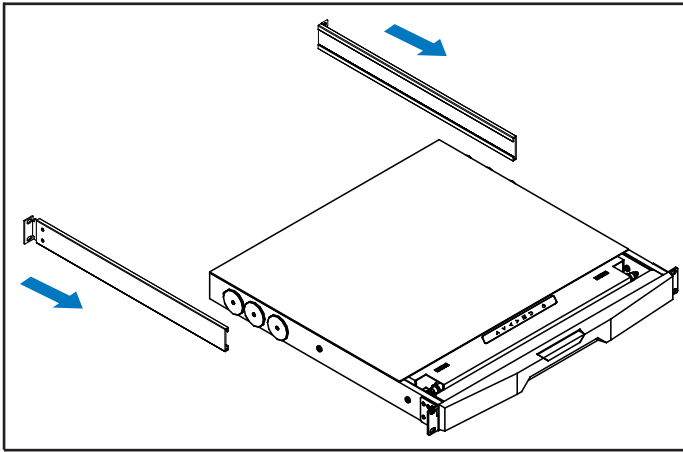
Top View



UNIT : mm  
1mm = 0.03937 inch

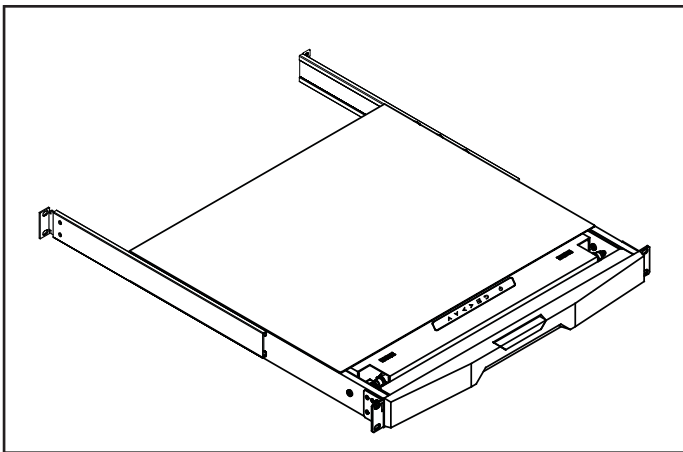
| Model      | Product Dimension<br>(W x D x H)           | Packing Dimension<br>(W x D x H)         | Net<br>Weight      | Gross<br>Weight    |
|------------|--|--|--------------------|--------------------|
| RMD-152-17 | 441.6 x 480 x 44 mm<br>17.4 x 18.9 x 1.73" | 588 x 758 x 120 mm<br>23.1 x 29.8 x 4.7" | 10.5 kg<br>23.1 lb | 16.5 kg<br>36.3 lb |
| RMD-152-19 | 441.6 x 480 x 44 mm<br>17.4 x 18.9 x 1.73" | 588 x 758 x 120 mm<br>23.1 x 29.8 x 4.7" | 12.5 kg<br>27.5 lb | 18.5 kg<br>40.7 lb |

 The weight is only for the pure models. It varies with accessories & options such as HDMI, AV, audio, touchscreen & DC power.



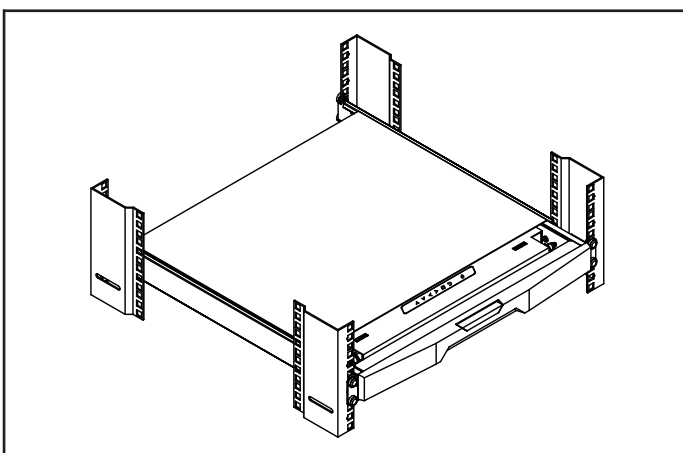
**Step 1**

- Insert the left and right rear mounting brackets into the display drawer.



**Step 2**

- Measure the depth of the front and rear mounting rails.
- Align each rear mounting bracket to a suitable length.



**Step 3**

**Complete the installation**

- Fix the display drawer into the rack.



**M6 screw, cage nut & cup washer x 8 are provided.**

## < Part 2 >

### < 2.1 > Product Specifications

| LCD Panel |                                | RMD-152-17             | RMD-152-19            |
|-----------|--------------------------------|------------------------|-----------------------|
|           | Manufacturer                   | AUO                    | AUO                   |
|           | Panel Size ( diagonal )        | 17-inch TFT color LCD  | 19-inch TFT color LCD |
|           | Display pixel ( dots x lines ) | 1280 x 1024            | 1280 x 1024           |
|           | Brightness ( typ. )            | 250                    | 250                   |
|           | Contrast Ratio ( typ. )        | 1000:1                 | 1000:1                |
|           | Color                          | 16.7 M                 | 16.7 M                |
|           | Viewing Angle ( L/R/U/D )      | 85/85/80/80            | 85/85/80/80           |
|           | Response Time ( ms )           | 5                      | 5                     |
|           | Dot pitch ( mm )               | 0.264                  | 0.294                 |
|           | Display Area ( mm )            | 337.92H x 270.33V      | 376.32H x 301.06V     |
|           | Surface treatment              | Haze 25%, Hard-coating |                       |
|           | Surface hardness               | 3H                     | 3H                    |
|           | Backlight Type                 | LED                    | LED                   |
|           | MTBF ( hrs )                   | 30,000                 | 30,000                |

| Video Connectivity | Digital         | HDMI              | HDMI 1.2, CEA-86D         |
|--------------------|-----------------|-------------------|---------------------------|
|                    |                 | DVI               | DVI-D, TMDS single link   |
|                    | Analog          | VGA               | Analog 0.7Vp-p            |
|                    |                 | Composite ( BNC ) | NTSC & PAL                |
|                    |                 | S-Video ( 4-pin ) | NTSC & PAL                |
|                    | Plug & Play     | DVI / VGA         | VESA EDID structure 1.3   |
|                    | Synchronization | VGA               | Separate, Composite & SOG |

| Audio Connectivity | Audio Input  | Connector                | 3.5mm stereo jack |
|--------------------|--------------|--------------------------|-------------------|
|                    |              | Impedance / Power level  | 30kΩ / 750mV      |
|                    | Audio Output | Connector                | 3.5mm stereo jack |
|                    |              | Resistance / Power level | 30kΩ / 2.8V       |
|                    | Speaker      | Dual Stereo Speaker      | 2W x 2            |

\*When the audio output is connected, speaker output is OFF

| Power | Power Supply      | Range             | Auto-sensing 100 to 240VAC, 50 / 60Hz |
|-------|-------------------|-------------------|---------------------------------------|
|       |                   | Screen ON         | Max. 25W                              |
|       | Power Consumption | Power saving mode | Max. 4W                               |
|       |                   | Power button OFF  | Max. 1W                               |

| Regulatory | Safety        | FCC & CE certified      |
|------------|---------------|-------------------------|
|            | Environmental | RoHS2 & REACH compliant |










|                          |                         |             |                                  |
|--------------------------|-------------------------|-------------|----------------------------------|
| Environmental Conditions | Operating               | Temperature | 0 to 55°C degree                 |
|                          |                         | Humidity    | 20~90%, non-condensing           |
|                          |                         | Altitude    | 16,000 ft                        |
|                          | Storage / Non-operating | Temperature | -20 to 60°C degree               |
|                          |                         | Humidity    | 5~90%, non-condensing            |
|                          |                         | Altitude    | 40,000 ft                        |
|                          |                         | Shock       | 10G acceleration (11ms duration) |
|                          |                         | Vibration   | 5~500Hz 1G RMS random            |

| Physical Specification |                       | RMD-152-17                                     | RMD-152-19                                     |
|------------------------|-----------------------|--|--|
|                        | Product ( W x D x H ) | 441.6 x 500 x 44 mm<br>17.4 x 19.7 x 1.73 inch | 441.6 x 500 x 44 mm<br>17.4 x 19.7 x 1.73 inch |
|                        | Packing ( W x D x H ) | 588 x 758 x 120 mm<br>23.1 x 29.8 x 4.7 inch   | 588 x 758 x 120 mm<br>23.1 x 29.8 x 4.7 inch   |
|                        | Net Weight            | 10.5 kgs / 23.1 lbs                            | 12.5 kgs / 27.5 lbs                            |
|                        | Gross Weight          | 16.5 kgs / 36.3 lbs                            | 18.5 kgs / 40.7 lbs                            |


|                   |                   |              |                                       |
|-------------------|-------------------|--------------|---------------------------------------|
| Applicable Format | DVI-D / VGA Input | PC Signal    | 1280 x 1024 x 60 / 75Hz               |
|                   |                   |              | 1280 x 600 x 60Hz                     |
|                   |                   |              | 1280 x 768 x 60 / 75Hz                |
|                   |                   |              | 1152 x 864 x 75Hz                     |
|                   |                   |              | 1024 x 768 x 60 / 70 / 75Hz           |
|                   |                   |              | 848 x 480 x 60Hz                      |
|                   |                   |              | 800 x 600 x 60 / 72 / 75Hz            |
|                   |                   |              | 720 x 400 x 70Hz                      |
|                   |                   |              | 640 x 480 x 60 / 72 / 75Hz            |
|                   |                   |              | 640 x 400 x 70Hz                      |
|                   |                   |              | 640 x 350 x 70Hz                      |
|                   | HDMI Input        | PC Signal    | Same as VGA                           |
|                   |                   | Video Signal | 720p : 50 / 60Hz                      |
|                   |                   |              | 480p : 60Hz                           |
|                   |                   |              | 576p : 50Hz                           |
|                   |                   | Audio Signal | 2ch Linear PCM ( 32 / 44.1 / 48 KHz ) |
|                   |                   |              |                                       |



## < 2.3 > On-screen Display Operation ( OSD )








| Membrane Switch   | Function   |
|---|--|
|    | Turn the monitor on or off   |
|    | Display the OSD menu<br>Act as an Enter key to select screen setting options   |
|     | Scroll through menu options and adjust the displayed control                   |
|    | Exit the OSD screen<br>Go back to the previous on-screen sub-menu or main menu |

Remark : All LED touch buttons in **WHITE** light.

The LED of **Power**  touch button will flash continuously when there is no signal input.

- ① All the LED touch buttons will automatically turn off after 10 minutes of idle status ( except the **Power**  ).
- ② Light up all membrane buttons, please press any button for 1 - 2 seconds ( except the **Power**  ).

Ver: G56SN20SSTD7011024 x 768 59.8Hz



Image

Brightness50

Contrast50

Color TempUser

Red255

Green255

Blue255

Adjust: ⬅➡Select: ⬆⬇Set: ⌚/⌚Exit: ⏏

OSD Configuration Page






Image:

for the brightness, contrast, color temp, red, green, and blue




Geometry:

for the auto adjust, H position, V position, phase and clock




Video:

for the colour, tint, sharpness, noise reduction, DCDi and TV Setup



Audio:

for volume, bass, treble, balance, AVL and mute



Misc:

for the language, OSD position, graphic mode, ratio, reset and timer

## < Part 3 >

### < 3.1 > Options :

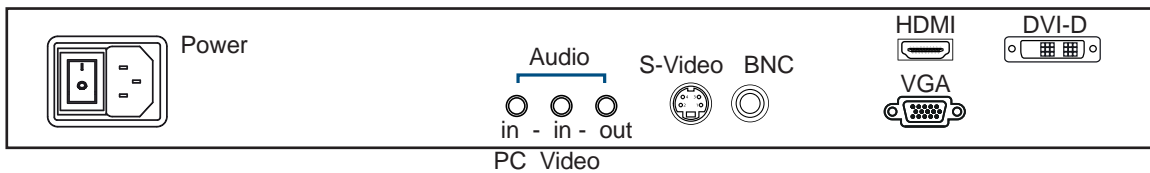
- **HDMI** ( HDMI 1.2, CEA-861-D )
- **AV** ( S-Video + Composite, BNC )
- **Audio** ( Built-in Dual Stereo Speakers, 2W x 2 )  
( 3.5mm audio jacks for audio in & out )



( 1 ) Either HDMI or DVI-D can be selected.

( 2 ) In some circumstances, if the user connects the LCD to PC via HDMI port for video and audio signals, the LCD may display incorrectly on a full screen. If so, please adjust the display card setting on display size to fix the issue.

( 3 ) For the above options, casing depth will be extended from 500mm ( 19.7" ) to 570mm ( 22.4" )



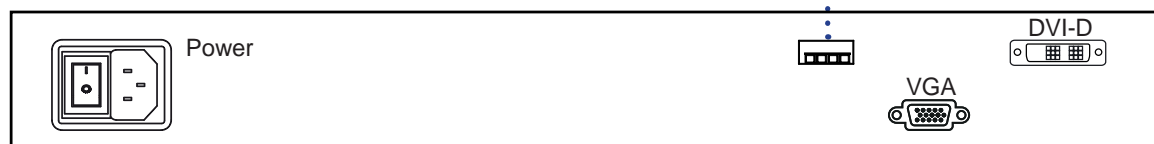


## 17" / 19" USB Touchscreen Specification

| Model                 | 17"                           | 19"         | 17"                           | 19"         |
|-----------------------|-------------------------------|-------------|-------------------------------|-------------|
|                       | TRB e-Resistive               |             | TCB e-Capacitive              |             |
| Technology            | 5-Wire Resistive              |             | Capacitive                    |             |
| Touch Point           | Single                        |             | Single                        |             |
| Method                | Stylus or Finger              |             | Finger                        |             |
| Activation Force      | ≤ 50g / Stylus=R0.8           |             | ≤ 50g                         |             |
| Durability            | 35 million touches            |             | 300 million touches           |             |
| Response Time         | 15 ms                         |             | 20 ms                         |             |
| Optical Transmittance | 80% ± 3%                      |             | 93% ±2%                       |             |
| Surface Hardness      | 3H                            |             | 9H                            |             |
| Haze                  | 8% ± 3%                       |             | 7%                            |             |
| Glass                 | 1.4 ±0.2 mm                   | 3.2 ±0.2 mm | 2.8 mm ±10%                   | 2.8 mm ±10% |
| Connector             | USB Type A                    |             | USB Type A                    |             |
| Compatibility         | Windows 7 / XP / Vista, Linux |             | Windows 7 / XP / Vista, Linux |             |

- USB touchscreen package includes 1 x 6ft USB cable, quick reference guideline and CD disc
- For detailed information, please refer to the attached CD disc
- As the touchscreen unit is not made of toughened glass, please handle it carefully

## USB Touchscreen



\*\*\*

For touchscreen option, casing depth will be extended from 480mm ( 18.9" ) to 570mm ( 22.4" )

## Please follow the below steps to setup the touch screen:-

**Step 1.** Run the bundled CD disc or download the driver from the link below :

[http://www.eeti.com.tw/drivers\\_Win.html](http://www.eeti.com.tw/drivers_Win.html)

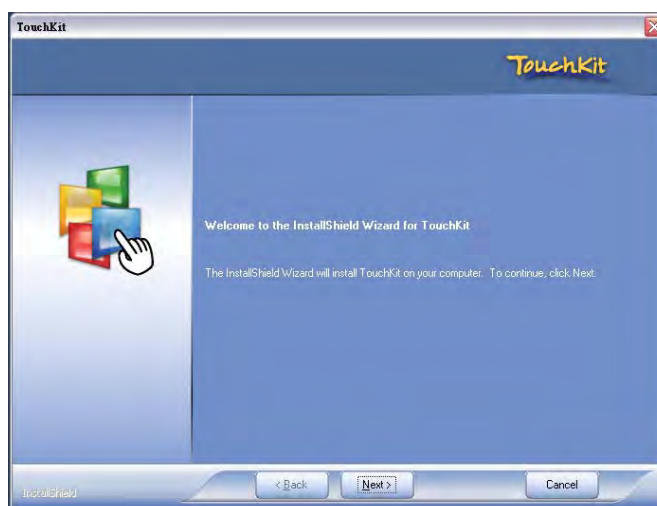
**Step 2.** Double click the Setup.exe

**Step 3.** Follow the installation instruction to finish the setup

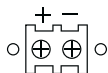
**Step 4.** After installation, run the TouchKit program & the "4 point calibration"



Please do the initial calibration after the first setup

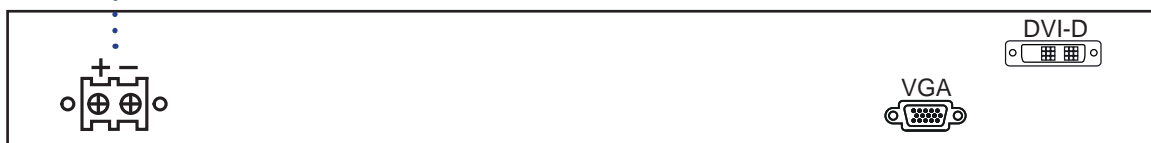


### < 3.3 > Options : DC Power




| Model                | 12V     | 24V      | 48V      | 125V      | 250V       |
|----------------------|---------|----------|----------|-----------|------------|
| <b>Input rating</b>  |         |          |          |           |            |
| Input voltage:       | 12-Volt | 24-Volt  | 48-Volt  | 110-Volt  | 300-Volt   |
| Input range:         | 9 ~ 18V | 18 ~ 36V | 36 ~ 75V | 66 ~ 160V | 180 ~ 425V |
| Input current        |         |          |          |           |            |
| - No load            | 50 mA   | 50 mA    | 50 mA    | 35 mA     | 10 mA      |
| - Full load          | 4950 mA | 2450 mA  | 1220 mA  | 749 mA    | 600 mA     |
| <b>Output rating</b> |         |          |          |           |            |
| Output voltage:      | 12-Volt | 12-Volt  | 12-Volt  | 12-Volt   | 12-Volt    |
| Output current:      | 4.16A   | 4.16A    | 4.16A    | 6.25A     | 12.5A      |
| <b>Efficiency</b>    | 84%     | 85%      | 85%      | 91%       | 86%        |

### DC power



\*\*\* For DC power option :

- ( 1 ) If the unit with LCD, earthing may be required 
- ( 2 ) DC option excludes AC power adapter and power cord.
- ( 3 ) Casing depth will be extended from 500mm ( 19.7" ) to 570mm ( 22.4" )



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