P-Cap Series
USER GUIDE

Winmate P-Cap Series is a multi-touch solution with a high degree of accuracy, crystal clear resolution and exquisite design.

User Guide Version 1.0

FCC Statement

This device complies with part 15 FCC rules. Operation is subject to the following two conditions：

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "a" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at him own expense.

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Warranty

We warrant that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, We will, at its option, repair or replace the defective product at no charge to the customer, provided it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in it's original packaging to obtain warranty service.

If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W07Axxxxxxxx means October of year 2007.

Customer Service

We provide service guide for any problem as follow steps：First, visit the website at http://www.winmate.com.tw/ to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance. You may have the following information ready before you call：

➢ Product serial number
➢ Peripheral attachments
➢ Software (OS, version, application software, etc.)
➢ Description of complete problem
➢ The exact wording of any error messages

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. Please do not hesitate to call or e-mail us.

Notice

1. Do not touch the LCD panel surface with sharp or hard objects.
2. Do not use abrasive cleaners, waxes or solvents for cleaning, use only a dry or damp, soft cloth.
3. Use only with a high quality, safety-approved, AC/DC power adapter.

Safety Precautions

◆ **Warning!**

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

◆ **Caution!**

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

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Safety and Warranty

1. Please read these safety instructions carefully.
2. Please keep this user's manual for later reference.
3. Please disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
12. Never pour any liquid into an opening. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
14. If any of the following situations arises, get the equipment checked by service personnel:
    A. The power cord or plug is damaged.
    B. Liquid has penetrated into the equipment.
    C. The equipment has been exposed to moisture.
    D. The equipment does not work well, or you cannot get it to work according to the user's manual.
    E. The equipment has been dropped and damaged.
    F. The equipment has obvious signs of breakage.
15. Do not leave this equipment in an uncontrolled environment where the operating temperature is below 0° C (32℉) or above 50° C (122℉) and the storage temperature is below -20° C (-4℉) or above 60° C (140° F). It may damage the equipment.

Revision History

Version	Date	Note	Author
1.0	2013.03.18	✓ First Version	Marc Tsai / Karen Liu

Revision History

Contents

Chapter 1 GENERAL INFORMATION

1-1 Projected Capacitive Touch Features

The projected capacitive touch is mainly made up with three components: sensor layer, cover glass, and controller. Within the sensor layer is a matrix of rows and columns of conductive material. When voltage applies through this matrix, a measurable electrostatic field is then created. The cover glass is optically bonded on top of the sensor layer, burying the electrodes within the stack of the lamination. It serves as a dielectric between your touch and the electrodes of the sensor layer. The controller continually scans and monitors the capacitance of the electrodes.
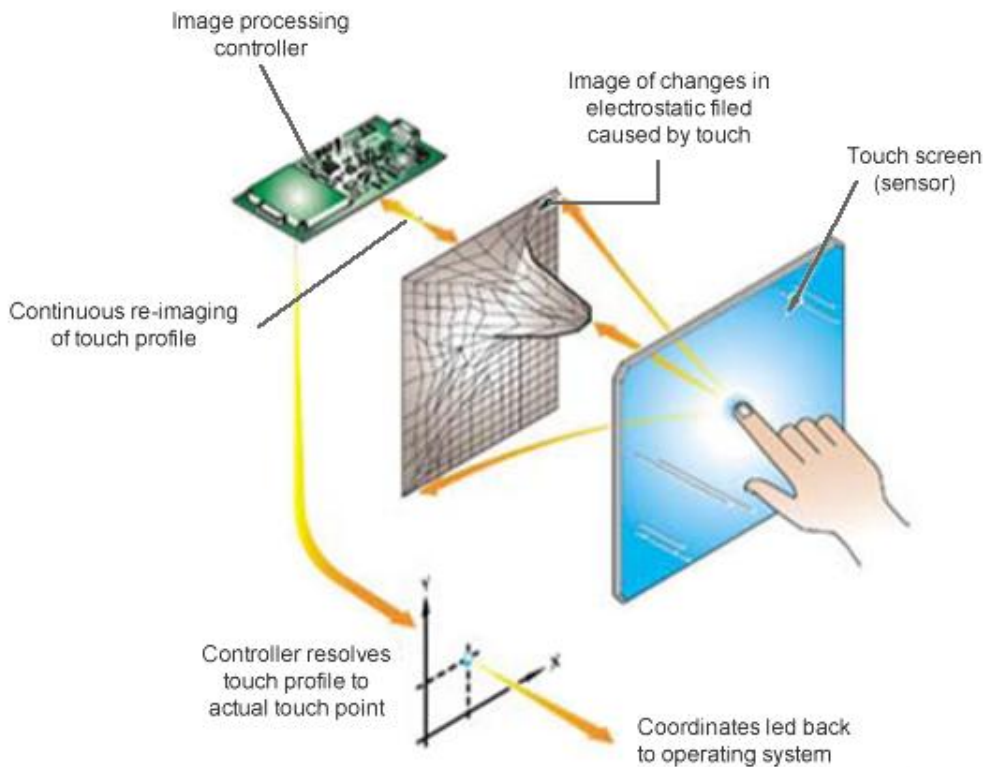
When a conductive object, such as a finger or capacitive stylus, touches the P-Cap touch screen, it distorts the local electrostatic field at that point. This is measurable as a change in capacitance. If a finger bridges the gap between two of the "tracks", the charge field is further interrupted and detected by the controller. The capacitance can be changed and measured at every individual point on the matrix (intersection).

Projective capacitive touch screen provides the following benefits:
- Clear glass substrate (high optical performance / transmittance)
- Multi-touch / Gesture recognition
- Durable / Anti-scratch cover glass
- True flat front surface / Easy Cleaning

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1.2 P-Cap Touch Care and Cleaning

Typically, an isopropyl alcohol and water solution ratio of 50:50 is the best cleaning agent for your sensor. Do not use straight isopropyl alcohol. Be sure to follow solvent manufacturer's precautions and directions for use when using any solvents.
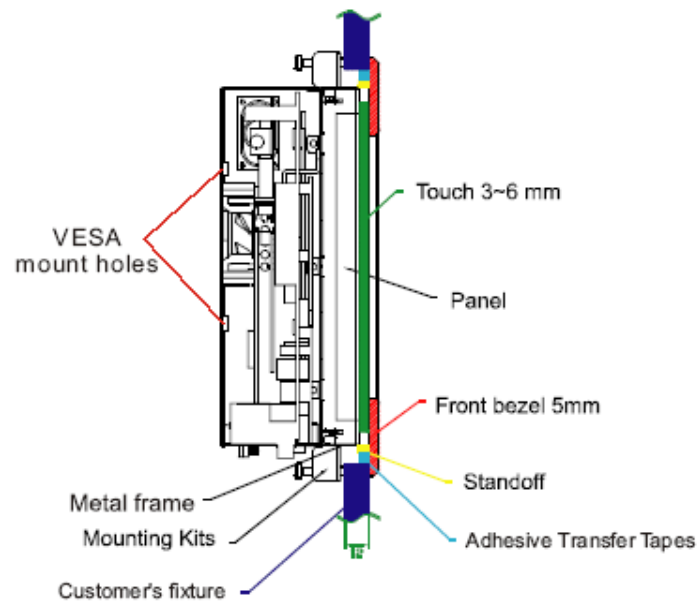
◆ It is important to avoid using any corrosive or caustic chemicals on the sensor.

◆ Always dampen the cloth and then clean the sensor. Be sure to spray the cleaning liquid onto the cloth, not the sensor, so that drips do not seep inside the display or stain the bezel.

◆ Apply the cleaner with a soft, lint-free cloth. Avoid using gritty cloths.

◆ Always handle the sensor with care. Do not pull on or stress flex tails.

◆ Use the recommended cleaner and a soft, lint free cloth to clean the sensor. Make sure the glass is clean and dry before you attach the sensor.

◆ Clean only the front surface of the sensor. Only remove the protective liner from the touch sensor just prior to placing it on the LCD.

◆ Do not clean the backside of the sensor; the surface can be easily scratched. If you need to remove any debris from the sensor, use a filtered de-ionized air source.
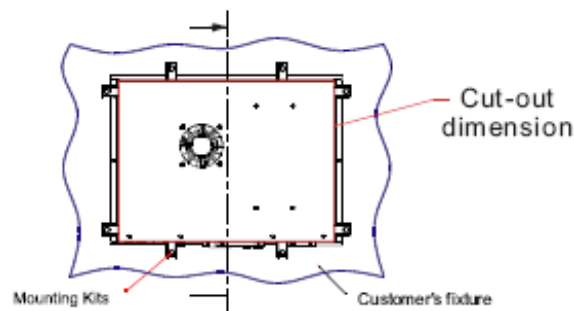
Chapter 2 PCAP Series Mounting Guide

P-Cap Series is suitable for most of the industrial/commercial application, by any kind of mounting approach. The main mounting approaches, such as Panel Mount / Chassis, are very easy for user to install as the pictures guided:
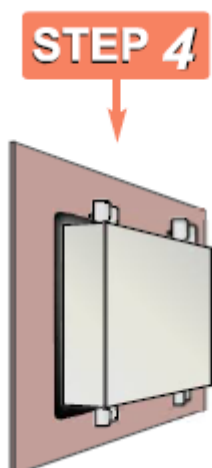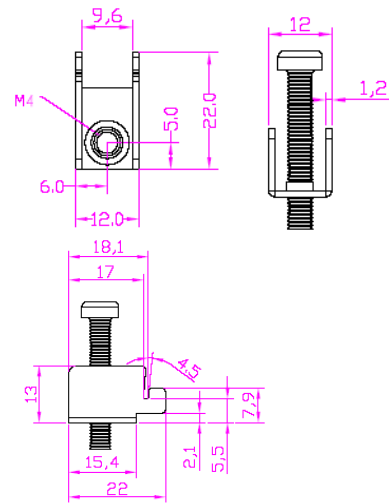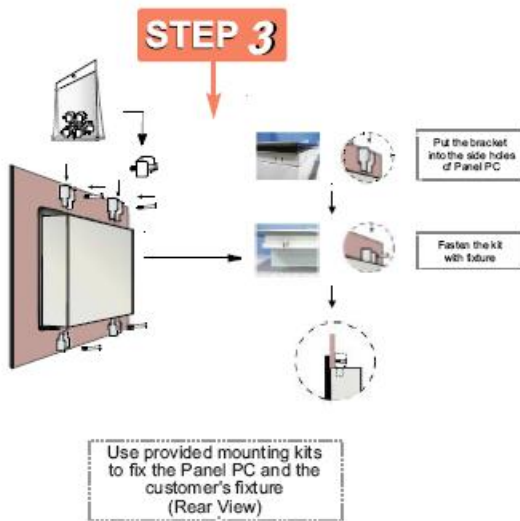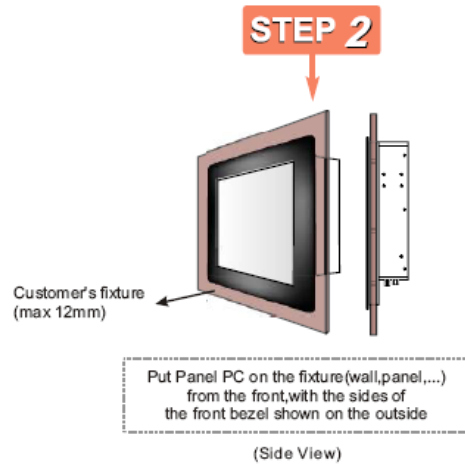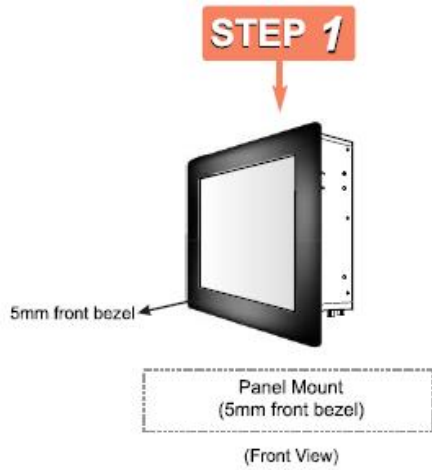
2-1 6mm Panel Mount Series (10.4"):

- Panel is aligned with the same height of the front of open frame metal housing.
- Touch/Glass is higher than Open frame metal housing.
- Customers can fix the Panel PC with their fixture (max.12mm)
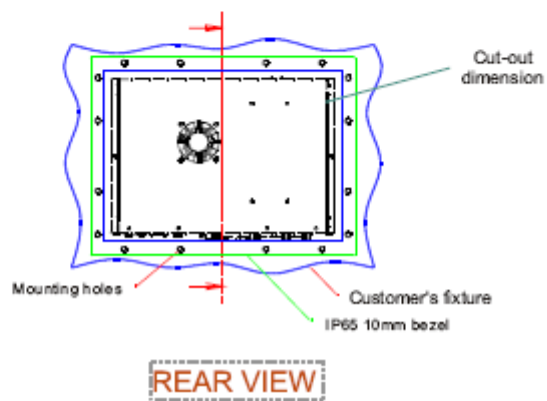- VESA mount holes are also available for mounting from back side.

STEP 1

5mm front bezel ←

Panel Mount
(5mm front bezel)

(Front View)

STEP 2

Customer's fixture
(max 12mm) ←

Put Panel PC on the fixture(wall,panel,...)
from the front,with the sides of
the front bezel shown on the outside

(Side View)

STEP 3

Put the bracket
into the side holes
of Panel PC

Fasten the kit
with fixture

Use provided mounting kits
to fix the Panel PC and the
customer's fixture
(Rear View)

9,6
M4
6.0
12.0
5.0
22.0

12
1,2

18,1
17
13
15,4
22
2,1
5,5
7,9
4,5

STEP 4

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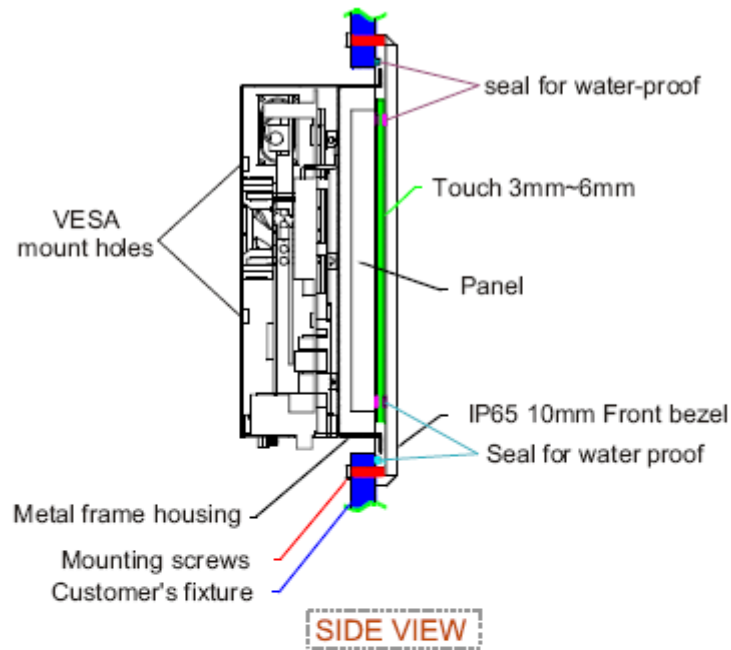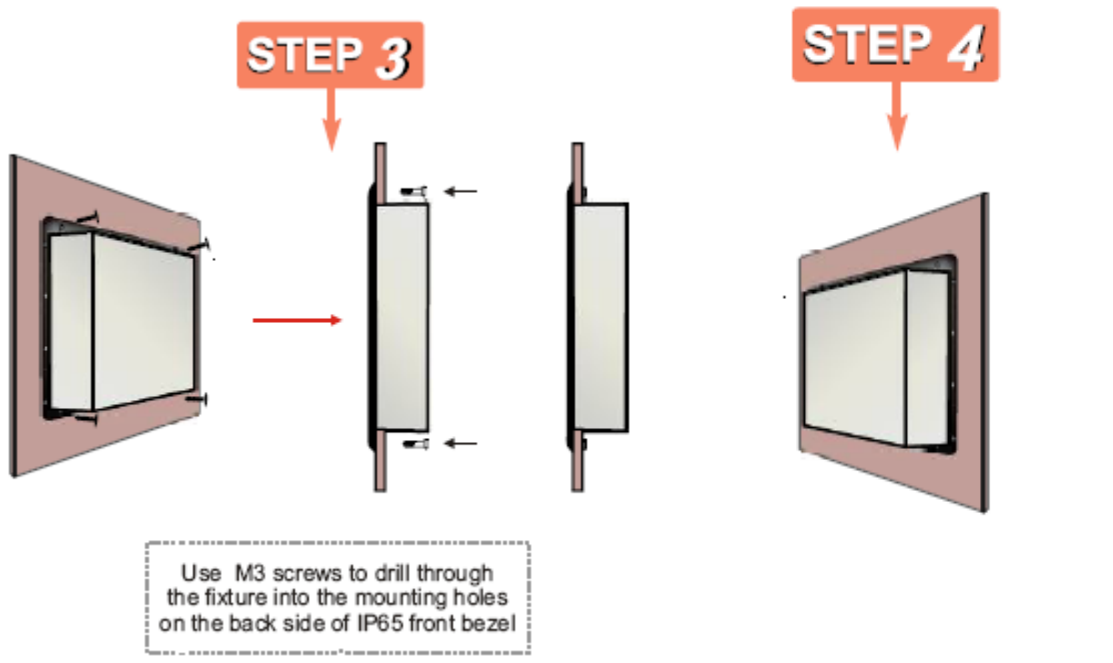
2-2 8mm/10mm Panel Mount Series (15"/15.6"/19"/21.5"):

- Touch/Glass is aligned with the same height of the front of open frame metal housing
- Customers can fix our Panel PC with their fixture by M3 screws.
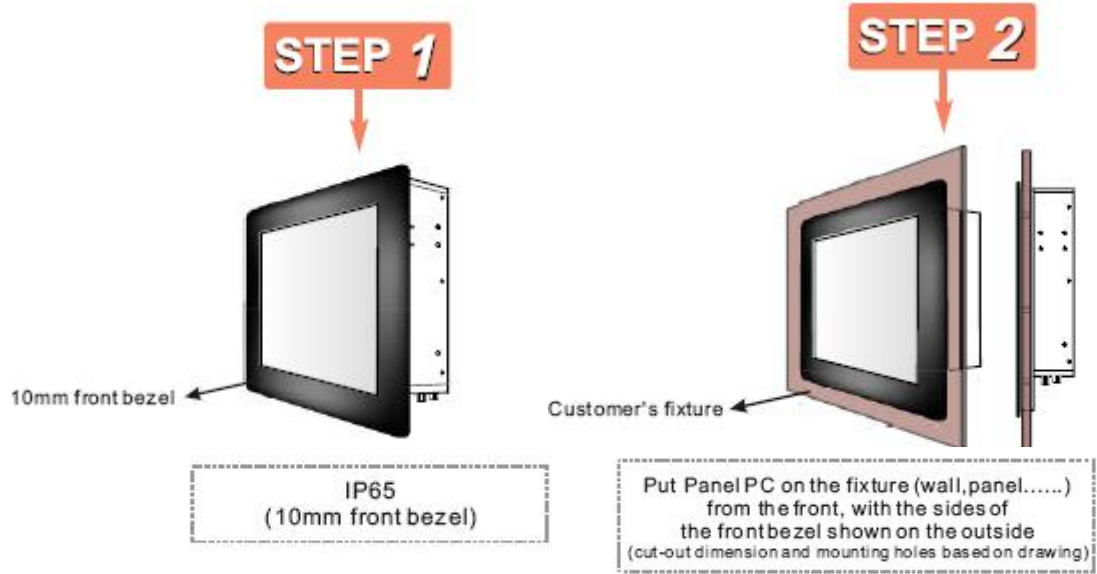- VESA mount holes are also available for mounting from back side.

SIDE VIEW

REAR VIEW

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STEP 1

10mm front bezel

IP65
(10mm front bezel)

STEP 2

Customer's fixture

Put Panel PC on the fixture (wall, panel......)
from the front, with the sides of
the front bezel shown on the outside
(cut-out dimension and mounting holes based on drawing)

STEP 3

Use M3 screws to drill through
the fixture into the mounting holes
on the back side of IP65 front bezel

STEP 4

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2-3 Chassis Series (10.1"):

1. **VESA Mount:**
   - **Dimension:** 75 x 75 mm
   - **Screw Hole Diameter:** M4 x 5 mm
   - **Direction:**
   Compatible with swimming arms mounting kits.

2. **Flush Mount / Panel Mount:**
   - **Cut Out:** 157.6 x 249 mm
   - **Screw Hole Diameter:** M3 x 4 mm
   - **Direction:**
   (1) Adhere the attached gasket to panel PC back cover.

      [Note] Please make sure that the eight holes on gasket can fit those mounting holes on panel PC.
   (2) Put panel PC on the pre-drilled fixture (wall or panel…) from the front, with the sides of the front bezel shown on the outside.
   (3) Fix the PPC to fixture with M3 screws.
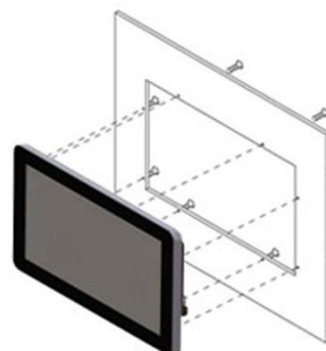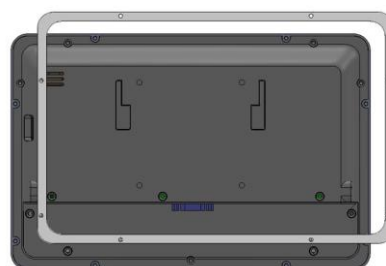
3. **VESA Stand (optional):**
   - **Order Information:**
     Model Name : PCVS-V1
     Part Number: 99KK00A0000E
   - **Direction:**
     Use provided M4 screws to fix the stand to VESA holes on the panel PC back cover.
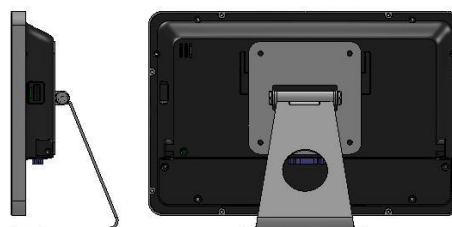
4. **Winmate VESA Bracket Mount (Optional):**
   - **Order Information:**
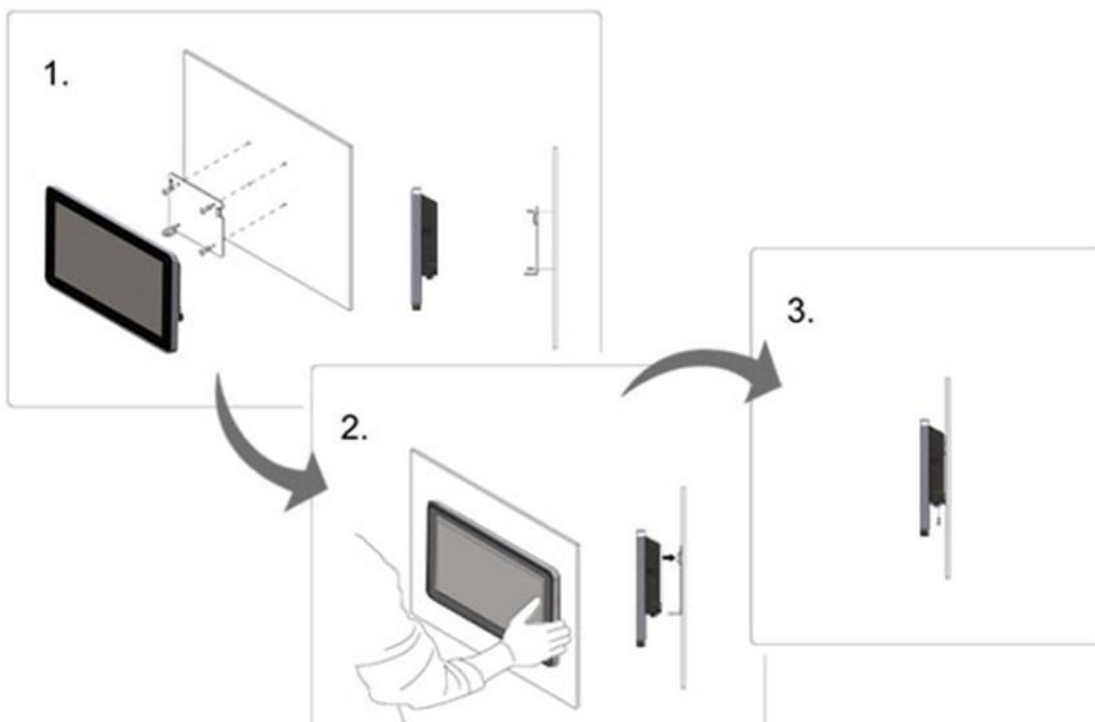   Model Name : PCVB-V1
     Part Number: 99KK00A0000B
   - **Screw Diameter:** M4 flat head (countersunk) screws
   - **Direction:**
   (1) Screw Winmate VESA Bracket to the fixture (ex. Wall) with M4 flat head screws.
   (2) Hang the 10.1" panel PC on VESA bracket. Please notice that both hooks on bracket should lock the notches on panel PC back cover.
   (3) Slightly pull down panel pc till reaching the blocker on bracket. Fix panel PC to the blocker with the M3 round head screw attached.

5. **Front Side Wall Mount (Optional)**
   - **Order Information:**
     Model Name : PCFW-V1
     Part Number: 99KK00A0000C
   - **Cut Out:** 275x184x28.4 mm
   - **Direction:**
   (1) Place the interface plate to the backside of panel PC. Fix the interface plate to the panel PC with attached M3 flat head screws.
   (2) Insert the back box in the wall open and fix with M4 tapping screws.

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(3) Connect cables and power to panel PC. Fix the striker into the roller catcher until there is the lick sound click.

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