

**User Guide for LCDs
& Panel PCs with
PCAP Multi-Touch**

Version 1.0

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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.

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°F) or above 50° C (122°F) and the storage temperature is below -20° C (-4°F) or above 60° C (140° F). It may damage the equipment.

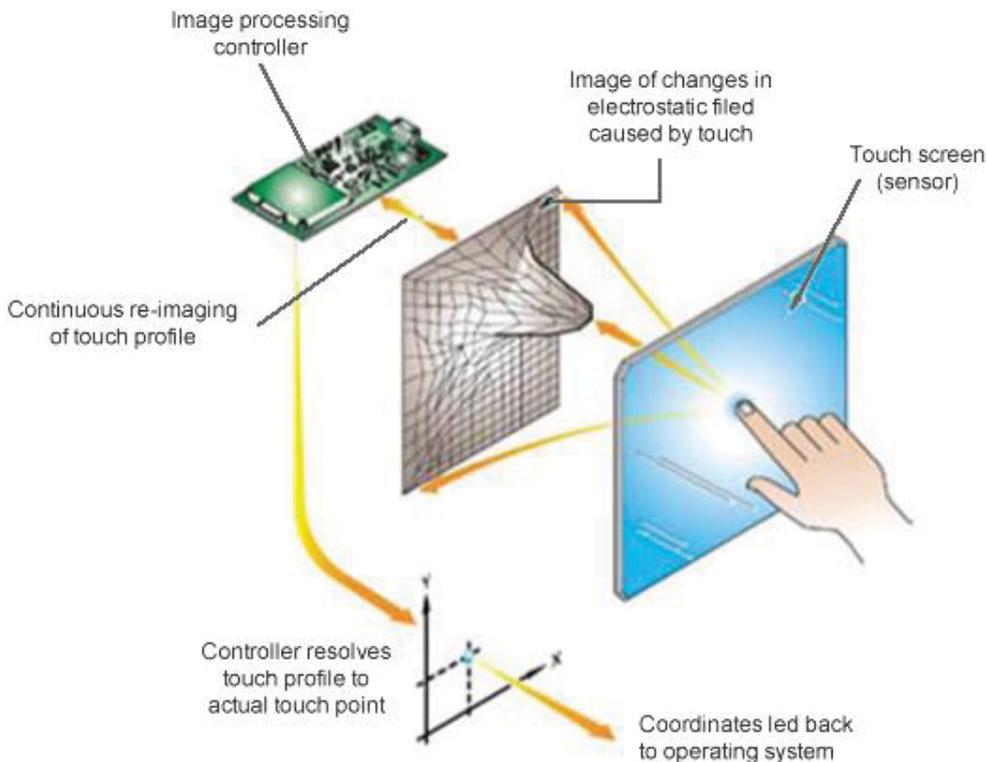
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Chapter 1 GENERAL INFORMATION

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

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.

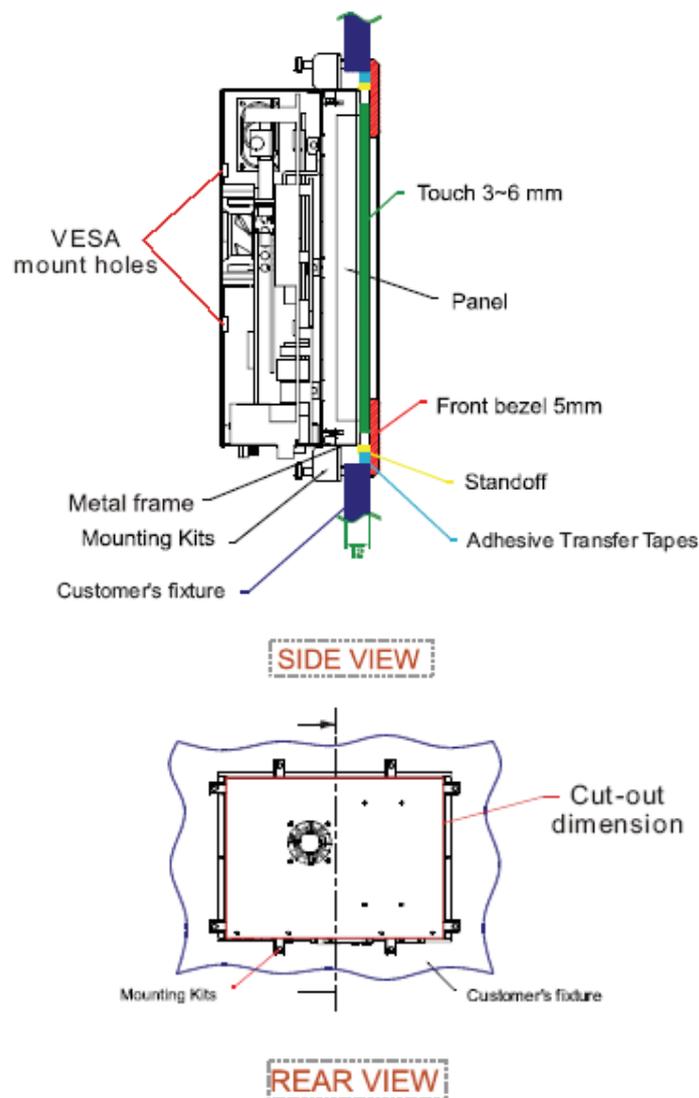
- ◆ It is important to avoid using any corrosive or caustic chemicals on the sensor.
- ◆ Always dampen the cloth and then clean the sensor. Be sure to spray the cleaning liquid onto the cloth, not the sensor, so that drips do not seep inside the display or stain the bezel.
- ◆ Apply the cleaner with 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.

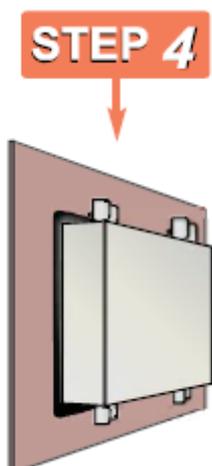
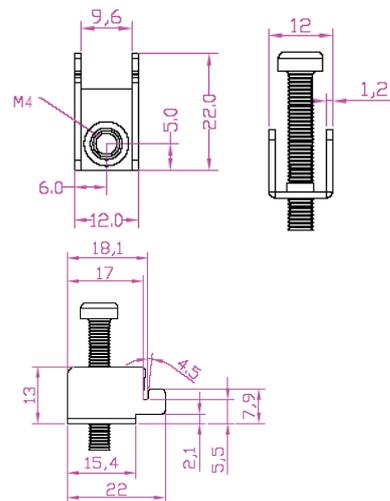
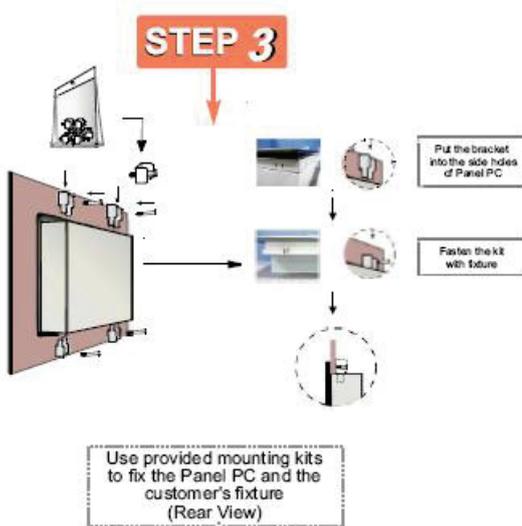
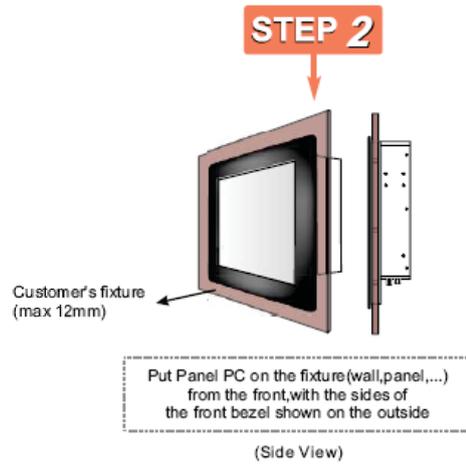
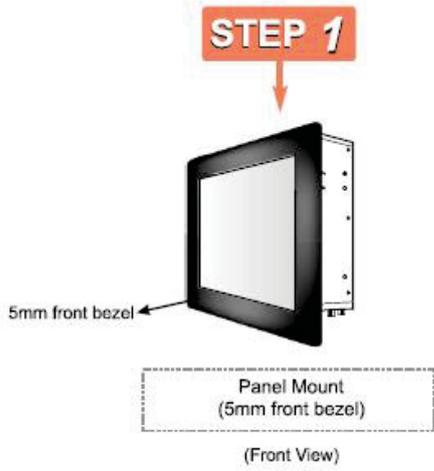
Chapter 2 PCAP Series Mounting Guide

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”):

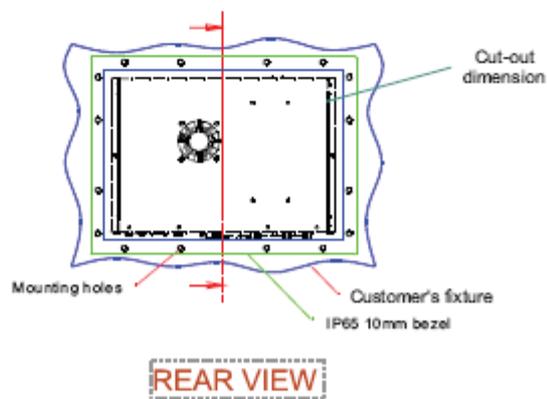
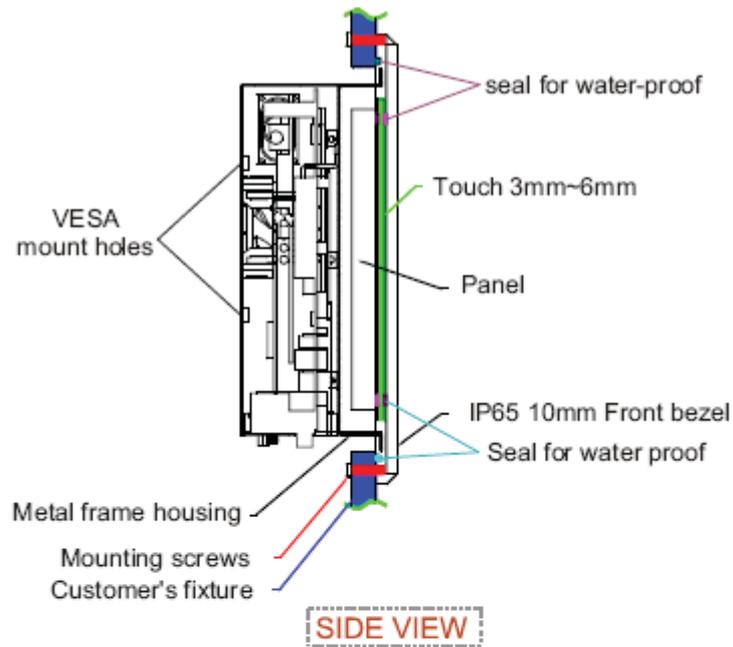
- Panel is aligned with the same height of the front of open frame metal housing.
- Touch/Glass is higher than Open frame metal housing.
- Customers can fix the Panel PC with their fixture (max.12mm)
- VESA mount holes are also available for mounting from back side.

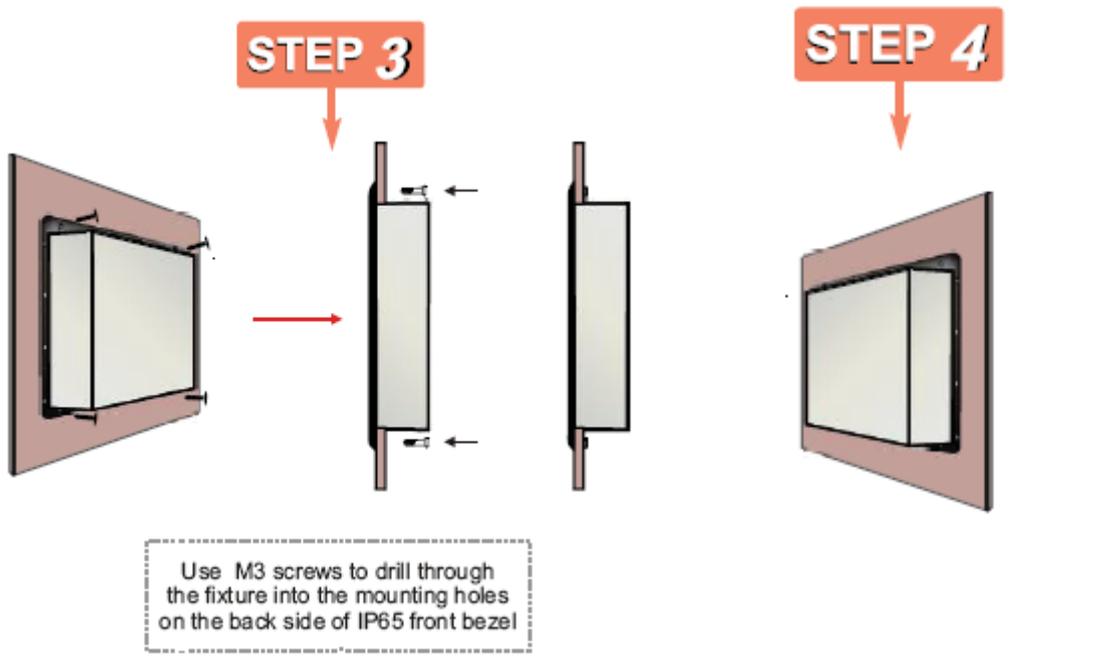
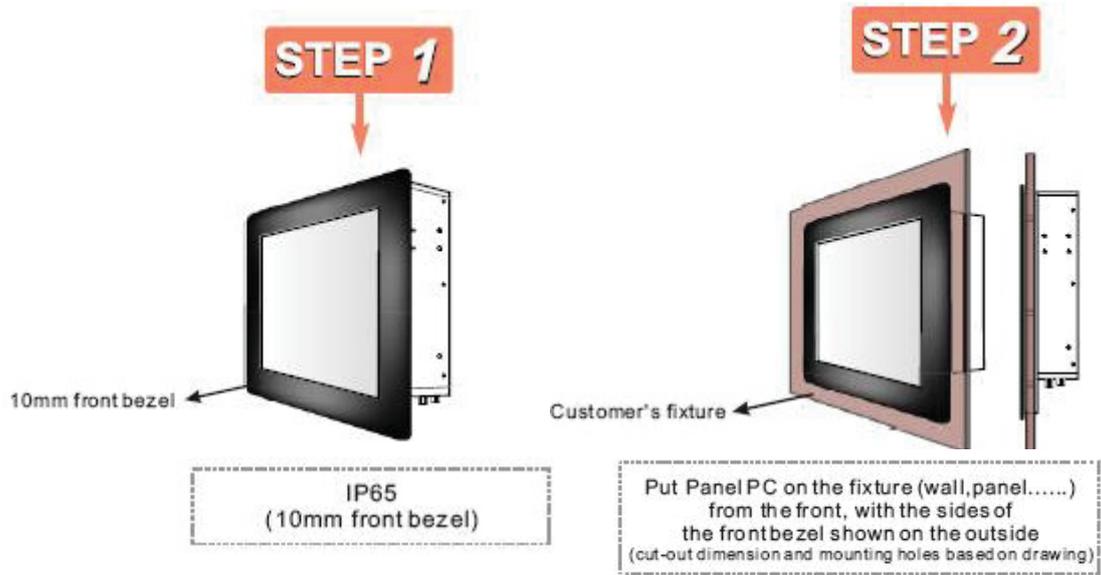




2-2 8mm/10mm Panel Mount Series (15"/15.6"/19"/21.5"):

- 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.





2-3 Chassis Series (10.1''):

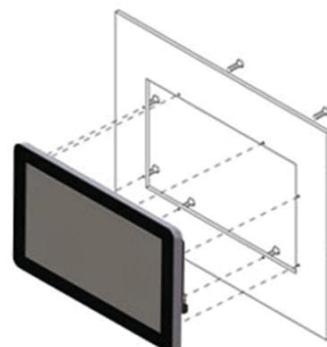
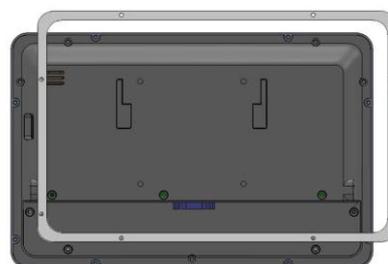
1. VESA Mount:

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



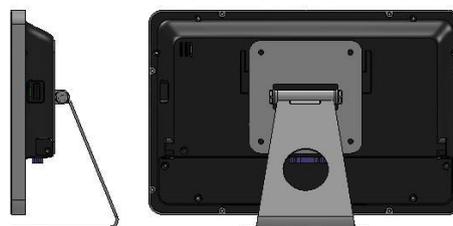
2. Flush Mount / Panel Mount:

- **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.



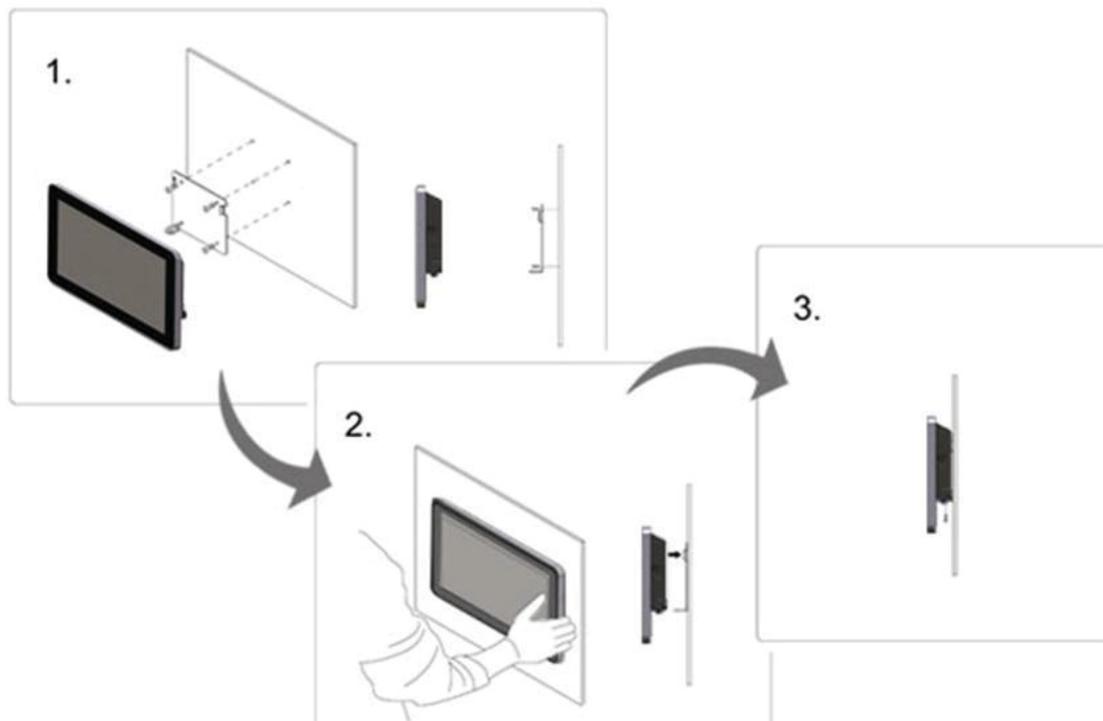
3. VESA Stand (optional):

- **Direction:**
Use provided M4 screws to fix the stand to VESA holes on the panel PC back cover.



4. VESA Bracket Mount (Optional):

- **Screw Diameter:** M4 flat head (countersunk) screws
- **Direction:**
 - (1) Screw the 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)

- **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.

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

