

MachineMotion Pendant V3 Datasheet

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Overview

MachineMotion Pendant V3 provides a plug and play touch screen interface for automated equipment powered by Vention's MachineMotion 2 controller. At 13 inches with two cameras, this Pendant generation is designed to be ergonomically friendly allowing easy operation through a responsive advanced display. When connected to the MachineMotion 2 controller, the Pendant enables machine operators and administrators to run and modify their program in a code-free environment. This product comes with pre-loaded control and machine operations software. Compatible with MachineMotion 2 (CE-CL-010-0001 & CE-CL-010-0004).

This new version of Pendant includes front and rear cameras for the Remote Support feature. It also includes Safety IN & Safety OUT connectors to be daisy-chained with safety modules and devices on the safety loop.

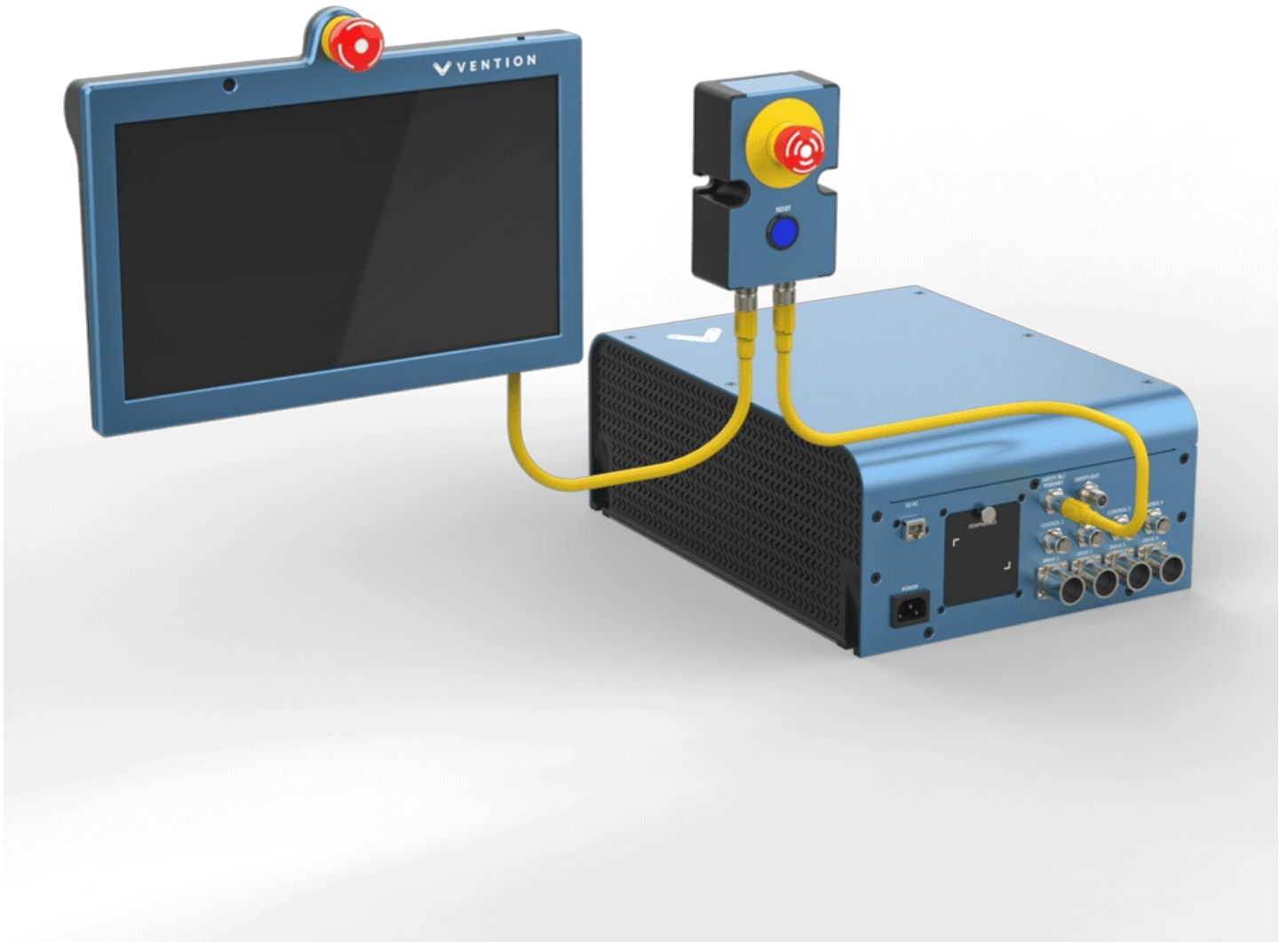


Figure 1: MachineMotion with Pendant V3

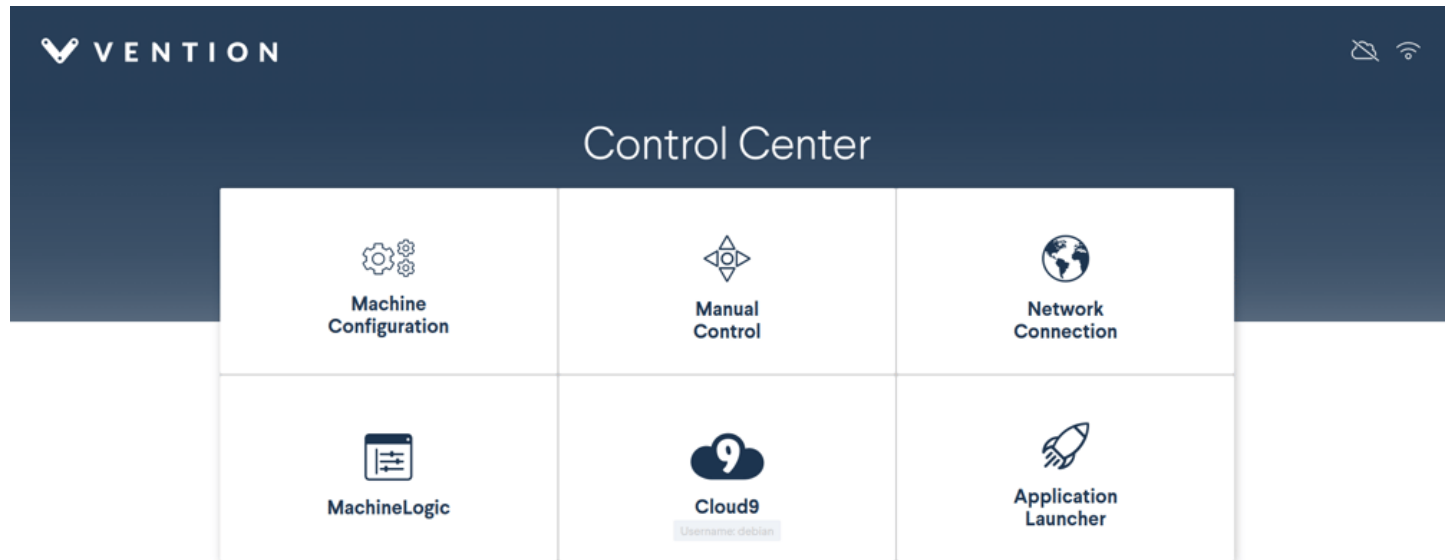
Features

- Plug and Play compatibility with MachineMotion 2 controller
- Pre-loaded MachineLogic, for code-free automation sequence editing
- Application launcher for machine operators
- Manual machine operation mode
- Detect and connect to a desired Wi-Fi network
- Front and rear facing cameras for Remote Support function (to be purchased separately)
- Safety IN & Safety OUT connectors for daisy-chaining on Vention safety loop
- Volume & Power buttons
- Removable handle

Software Included

MachineMotion 2 comes with pre-loaded control and machine operations software – all of which is accessible through the MachineMotion Pendant or via computer with an Ethernet connection.

Control Center



MM SW v2.0&HW V204- Pendant: v3.0

Figure 2: Control Center

MachineLogic

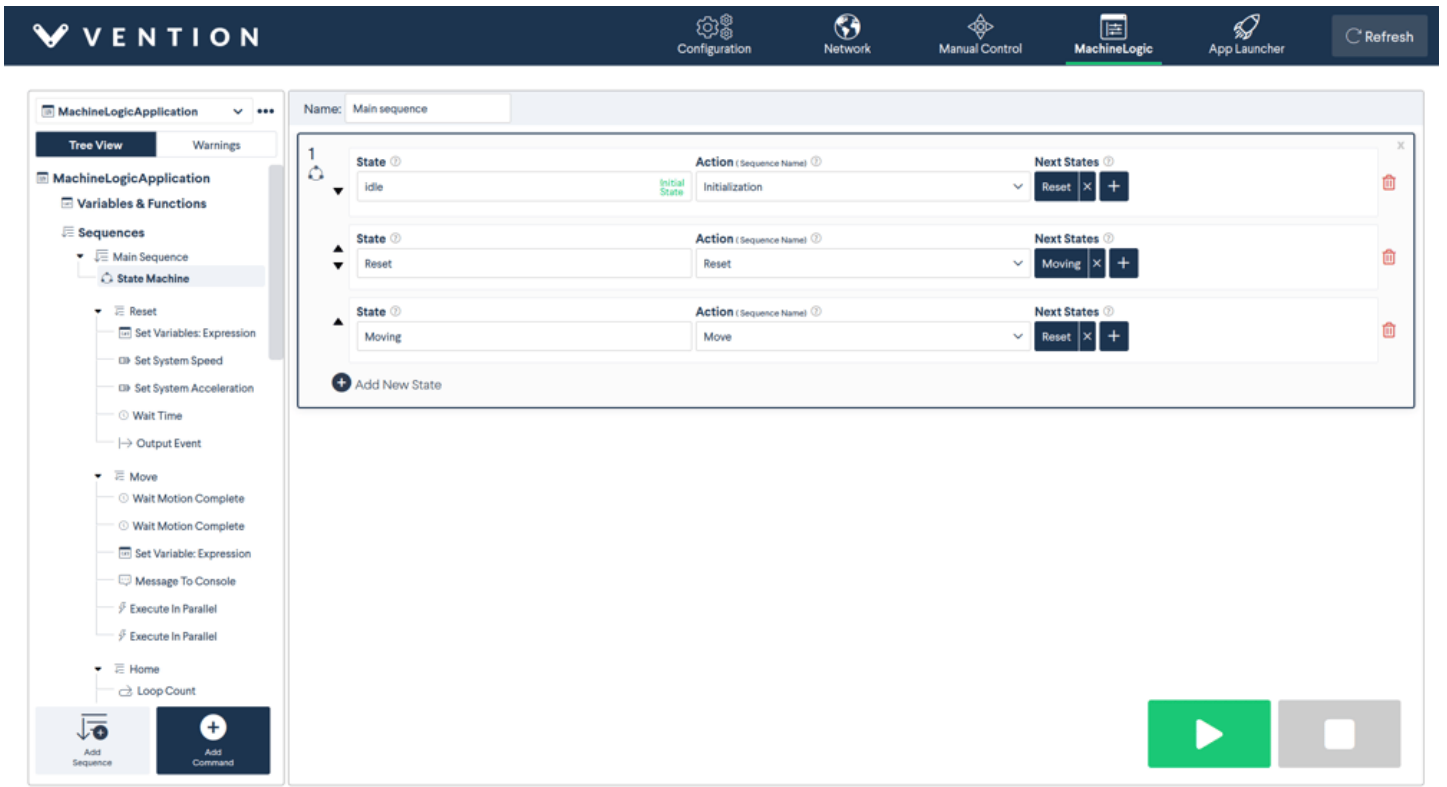


Figure 3: MachineLogic

Application Launcher

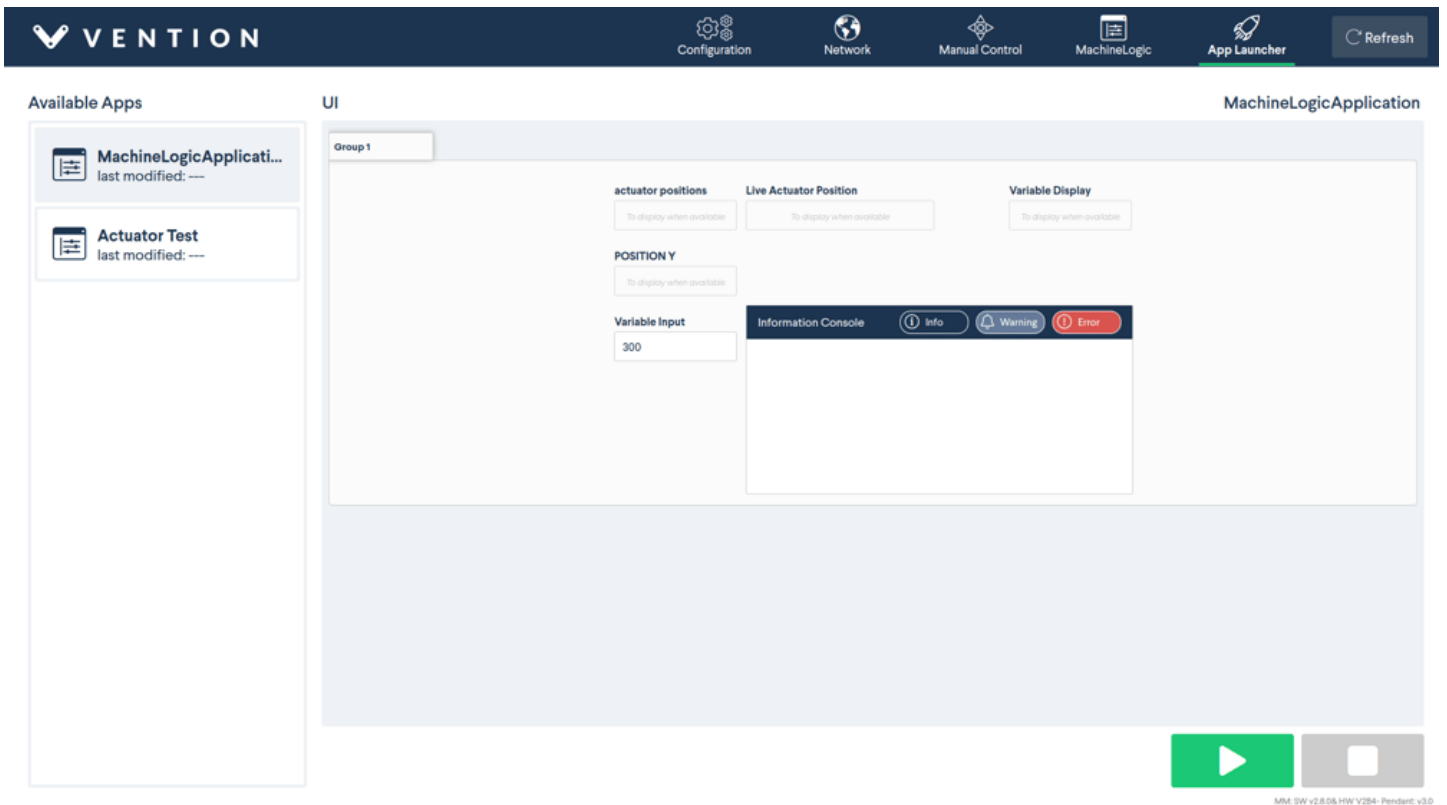
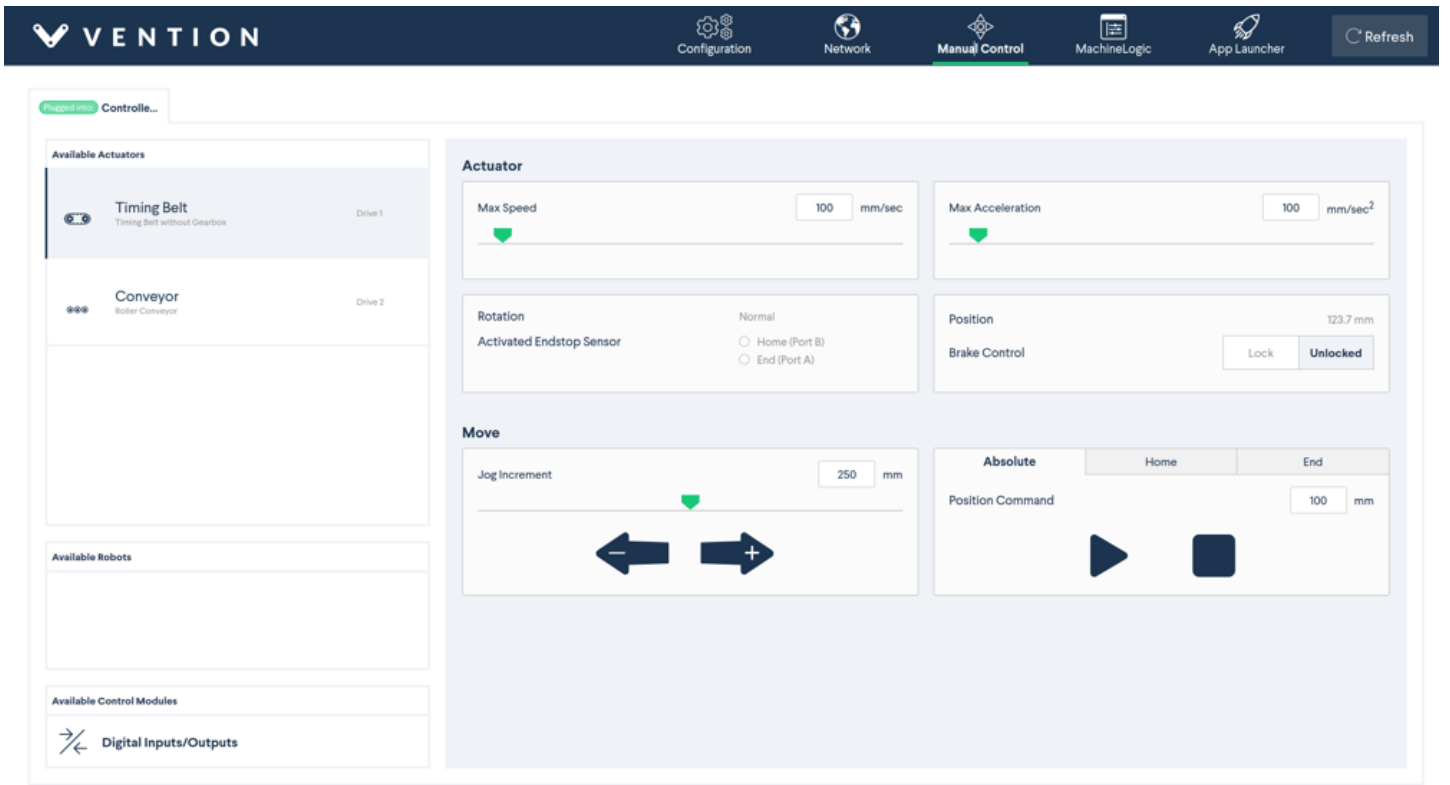


Figure 4: Application Launcher

Manual Mode



MM-SW v2.0.0&HW V204- Pendant: v3.0

Figure 5: Manual Mode

Technical Specifications

Mechanical Specifications

Item	Specification
Shock resistance	Enclosure validated as per IEC-60068-2-31
Ingress protection	IP40
Mounting	<ul style="list-style-type: none"> VESA mounting holes Mounting bracket compatible (ST-RB-002-0005)

Electrical Specifications

Item	Specification
Processor	Intel® Pentium® Silver N6000 Processor 1.1 GHz (4M Cache, up to 3.3 GHz, 4 cores)
Graphics Display	13.3-inch, FHD (1920 x 1080) OLED 16:9 aspect ratio, 0.2ms response time, 60Hz refresh rate, 550nits HDR peak brightness, 100% DCI-P3 color gamut, 1,000,000:1, VESA CERTIFIED Display HDR True Black 500, 1.07 billion colors, PANTONE Validated, Glossy display, 70% less harmful blue light, TÜV Rheinland-certified, SGS Eye Care Display, Touch screen
Memory	4GB LPDDR4X

Item	Specification
Storage	128G eMMC
Front and rear facing cameras	<ul style="list-style-type: none"> • 5MP • 2592(H) x 1944(V) • Auto Focus
Audio	<ul style="list-style-type: none"> • Smart Amp Technology • Built-in 4-way stereo speakers • Built-in array microphone
Network and Communication	Wi-Fi 5(802.11ac)+Bluetooth 5.0 (Dual band) 2*2
Ethernet Switch	3 ports 10/100MB
Battery	50WHrs, 3S1P, 3-cell Li-ion
Power Consumption	<ul style="list-style-type: none"> • Charging: 26.5W • Fully charged: 10W
Nominal Input Voltage	24V
Input Voltage range	23.5V-25V
Emergency Stop Button	2x NC Dry contact channels
Connectors	<ul style="list-style-type: none"> • 2x USB 2.0 Type A (to be used with USB cables shorter than 3 meters) • Safety OUT: M12A-12 pins Male • Safety IN: M12A-12 pins Female
Hardware Compatibility	<ul style="list-style-type: none"> • MachineMotion 2 controller - One Drive: CE-CL-010-0001 • MachineMotion 2 controller - Four Drive: CE-CL-010-0004

Pin Out

Safety IN – M12A-12 pins Female

Pin	Description
1	24V
2	0V
3	MachineMotion Safety Channel 1 Contact 1

Pin	Description
4	MachineMotion Safety Channel 1 Contact 2
5	MachineMotion Safety Channel 2 Contact 1
6	MachineMotion Safety Channel 2 Contact 2
7	Reset Contact 1
8	Reset Contact 2
9	Safety IN Ethernet TX+
10	Safety IN Ethernet TX-
11	Safety IN Ethernet RX+
12	Safety IN Ethernet RX-

Safety OUT – M12A-12 pins Male

Pin	Description
1	24V
2	0V
3	MachineMotion Safety Channel 1 Contact 1
4	MachineMotion Safety Channel 1 Contact 2
5	MachineMotion Safety Channel 2 Contact 1
6	MachineMotion Safety Channel 2 Contact 2
7	Reset Contact 1
8	Reset Contact 2
9	Safety OUT Ethernet TX+
10	Safety OUT Ethernet TX-
11	Safety OUT Ethernet RX+
12	Safety OUT Ethernet RX-

Mechanical Specifications

Item	Specification
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Shock resistance

Enclosure validated as per IEC-60068-2-31

Item	Specification
Ingress protection	IP40
Mounting	<ul style="list-style-type: none">• VESA mounting holes• Mounting bracket compatible (ST-RB-002-0005)

Physical Interface

Power Button Functionality

- Pressing once on the power button while the Pendant V3 is OFF will power it ON.
- Pressing more than 10 seconds on the power button while the Pendant is ON will power it OFF.
- The Pendant goes into low brightness mode after 30 minutes of no interaction. Pressing once on the power button while the Pendant is ON and in low brightness mode will change the display to full brightness.
- If the Pendant is not connected to a MachineMotion controller, it will power OFF after 10 minutes.
- The Pendant V3 includes 2 optional camera privacy covers (as shown in Figures 6 & 7) which can be installed by the user if required.

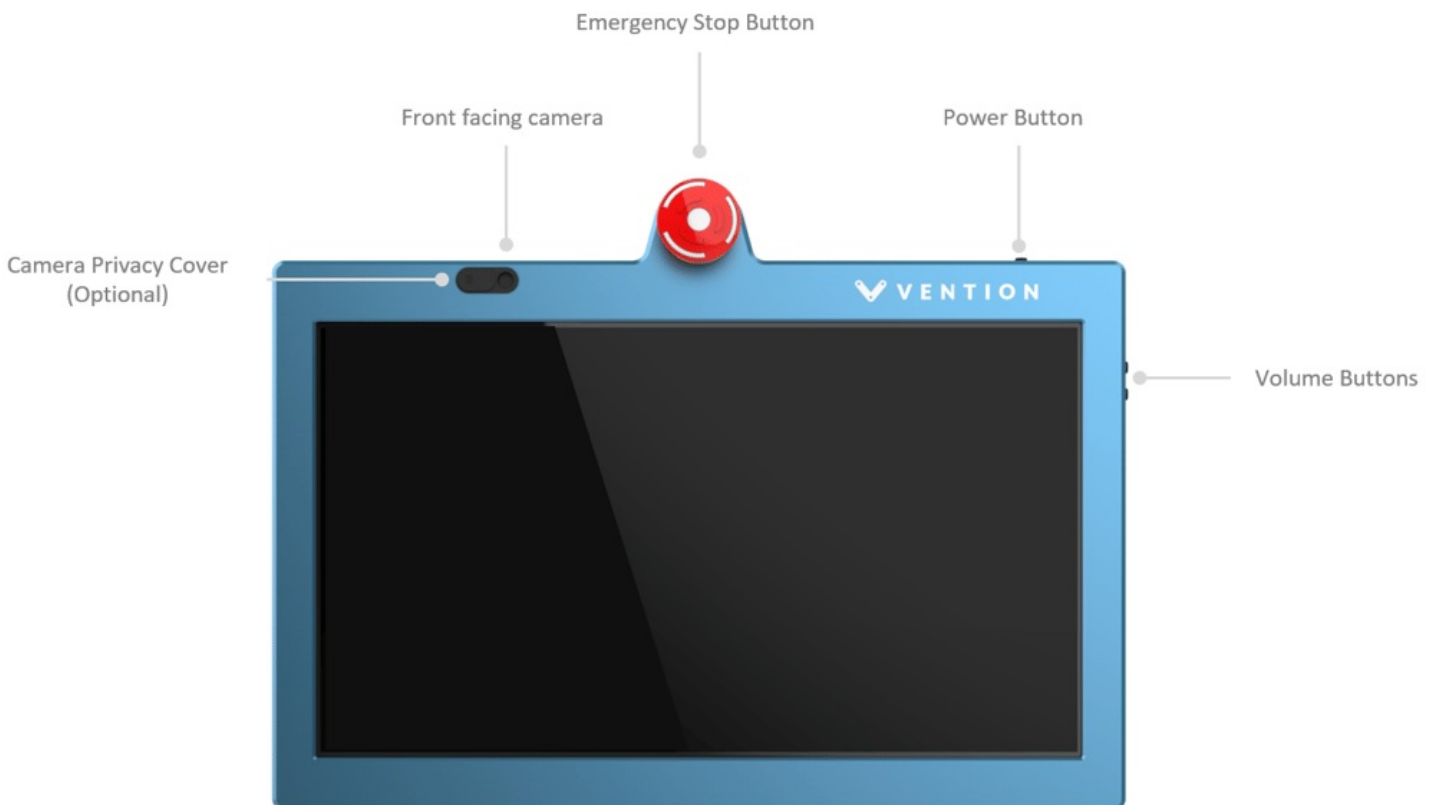


Figure 6: Pendant V3 Front

Removable handle

Rear facing camera

Camera Privacy Cover
(Optional)

M12 Connectors

USB 2.0 Connectors

VESA Mount
(75 x 75 mm; M4 x 6 mm)

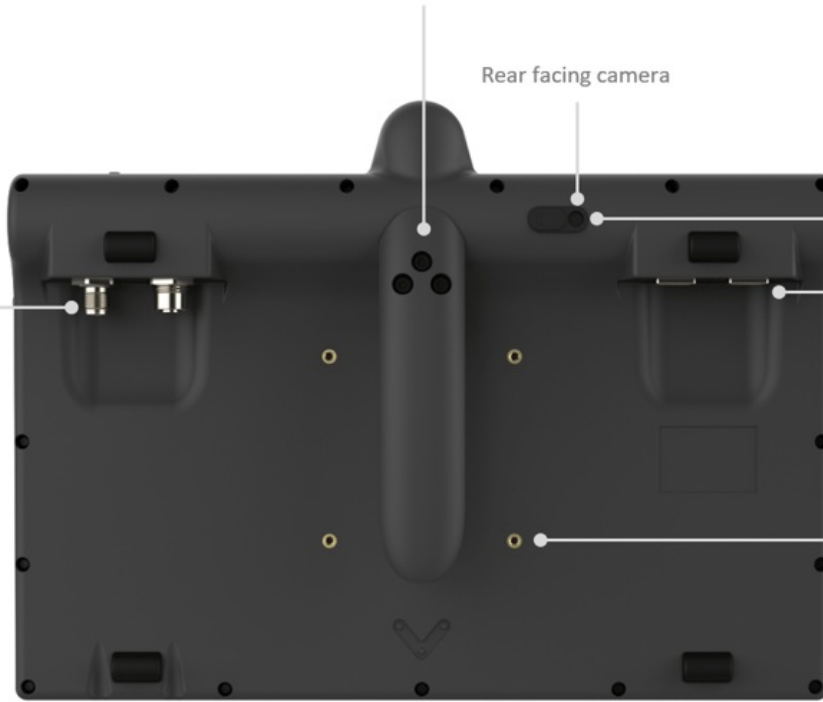


Figure 7: Pendant V3 Back