
MCS Hardware Manual

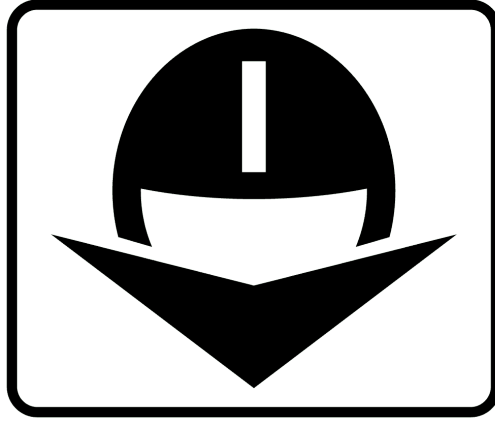
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Embention

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MCS | **VERONTE**
CONTROL STATIONS

INTRODUCTION



Multimedia Control Station

Veronte is the components division from Embention, which has developed the control station MCS for high performance operations. This portable control station gives the operator a ready-to-use system which can be run outdoor with Veronte

control systems.

Veronte MCS is ready to be used with Autopilot Veronte and Veronte Pipe systems. Please, refer to their respective manuals for the proper use of them and more information.

1.1 Applications

Veronte MCS is the main control station in use for Veronte system operations. This system is available with a standard configuration which fits all operational requirements for each application. The main applications that can be develop with this system are:

- Search and rescue.
- Mapping and photogrammetry.
- Surveillance.
- Environmental control and research.
- Firefighting.
- Military forces.

Changing the aircraft to manual control can be done in any time during the operation. Joystick control allows the use of different flying modes as manual, arcade or completely personalized.

QUICK START

2.1 First Steps

2.1.1 Battery

Charging capacity	5A
Charging time	4:30h
Autonomy	6:00h

Note: 15 minutes before the battery is finished, the led starts to blink.

The integrated battery can be used with no power connections, allowing the system to be connected and disconnected from the battery charger during the operation without turning off the system. In order to charge the battery, follow the next steps:

- Ensure the power source is properly connected.
- Turn on the system (press Power button) and keep Windows On to check the state of the battery on the bottom right of the bottom screen.
- If you turn off Windows but keep the Power Button On, batteries will keep charging.

2.1.2 How to operate

Veronte MCS is a highly intuitive and easy-to-use system. The main steps to operate it are the following ones:

- Set your MCS in a firm, stable and dry surface, and proceed opening it.
- Connect the required wires: Power Source, Ethernet, USB...
- Turn On the system by pressing the Power Button.
- Connect (if needed) any wireless communication.
- Open “Veronte Pipe” app with which to operate the Veronte system. This is located on the main desktop

Veronte MCS is provided with tactile screens and Bluetooth trackpad keyboard. However, if a different mouse or keyboard is needed, they can be connected through the 3 ports USB provided.

Integrated computer has installed Windows, which allows the user to install any personalized application in order to be used together with Veronte Software (Veronte Pipe).

2.1.3 Led

MCS on and with battery	fixed light
MCS on with low battery	fast blinking light
MCS charging	slow blinking light
MCS with full battery	slow blinking to fixed light

2.2 Warnings

- Veronte MCS is designed according to IP67 for the system to be closed. However, it loses its resistance to water once it is opened.
- Do not use chemical cleaners for the maintenance of the product; a wet cloth is enough for cleaning purposes.
- Do not cover the fans or its protection, in order to ensure the correct cooling of the system. Ensure no object is obstructing the fans before powering them on, otherwise the system could be damaged.
- Avoid any damage during transportation or operation, since some of the components could be affected.
- Do not close the briefcase with any connection still wired. All removable elements must be disconnected from the system in order to avoid any future damages on screens and connectors. Ensure this is not happening accidentally in situations where strong winds are taking place or in movable platforms.
- Be careful when installing external applications into the computer, since they could contain any virus or slow down the system, which will strongly affect safety during operations with Veronte system.
- For battery charge / power input, it is strongly recommended to use the provided MCS charger. The use of external devices and the results from it are not covered by Embention.
- For a complete disconnection, **ONLY AFTER** turning off Windows, you can press the Power Button again.

3.1 Part List

Units	Items
1	Veronte MCS Control Station
1	Veronte MCS charger (24V DC)
1	Bluetooth trackpad keyboard
1	Windows activation code written on a card

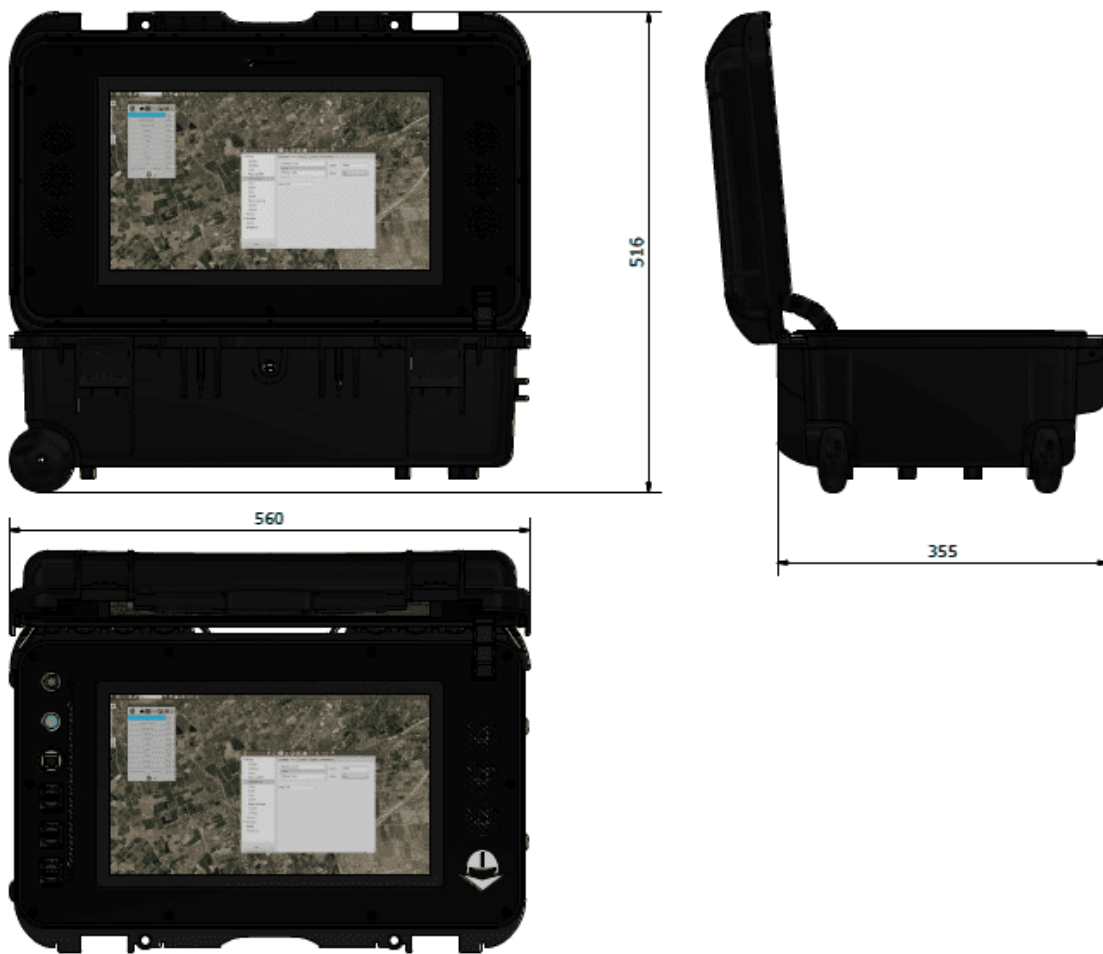
3.2 Main features

- **Multi-touch display**
 - 15.4”
 - Capacitive
 - Sunlight readable
 - Antiglare protection
- **Embedded PC**
 - Intel Core i5 8th Gen
 - 8 Gb RAM memory
 - 120 GB SDD
 - Windows 10 Pro
- **Antiglare treatment**
- **High brightness**
- **Rugged computer**
- **Dual screen**

3.3 Mechanical Specifications

Weight	21 kg
Size	560x356x229mm (closed) 560x516x355mm (open)
Robust Design	IP67 (closed) High performance & strict design standards
Transport	Wheeled Cabin Size
Enclosure	Polypropylene
Temperature	-40° to 65° (storage) -10° to 65° (operation)
Harsh Environments	Sunlight, dust, shocks

3.3.1 Dimensions



Interface dimensions

3.4 Interfaces

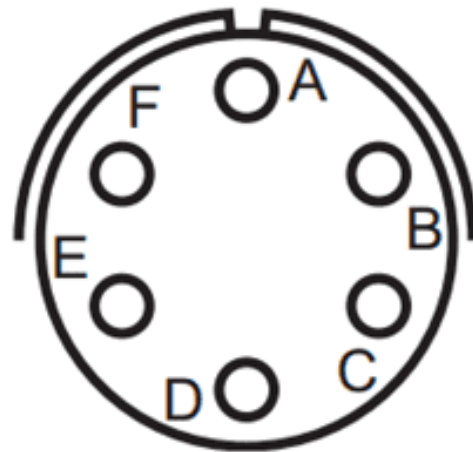
Communications	Wi-Fi & Bluetooth connections
I/O Interfaces	1 x Ethernet 3 x USB

HARDWARE INSTALLATION

4.1 Pinout

Veronte MCS comes with our standard integrated connectors, being the following models for each type:

Connector	Standard
Power	Amphenol PT02E-10-6P (027)
Ethernet	Amphenol RJF22B03100BTX
USB	USB 3.0



Pin	Signal
1-A	24V
2-B	24V
3-C	24V
4-D	GND
5-E	GND
6-F	GND

OPERATION

Note: External keyboard and mouse are recommended for use comfort.

5.1 MCS Interface



Parts identification

ID	Items
A	Anti-glare tactile 15.4" screens (1080p.)
B	Power connector
C	Power On/Off
D	Ethernet connector
E	3 USB connectors
F	Battery indicator (windows ON)
G	Fan

MAINTENANCE

6.1 Updates

Embention will send periodically by email executable files, which update the system automatically when they are executed.

6.2 Cleaning

After each mission, the MCS should be cleaned with a wet cloth (except for connectors, where it must be dry).

CONTACT DATA

You can contact Embention if you need further help and support.

Embention contact data is as follows:

Email: support@embention.com

Telephone: (+34) 965 421 115

Address: [Polígono Industrial Las Atalayas, C/ Chelín, Nº 16, CP 03114, Alicante \(España\).](#)