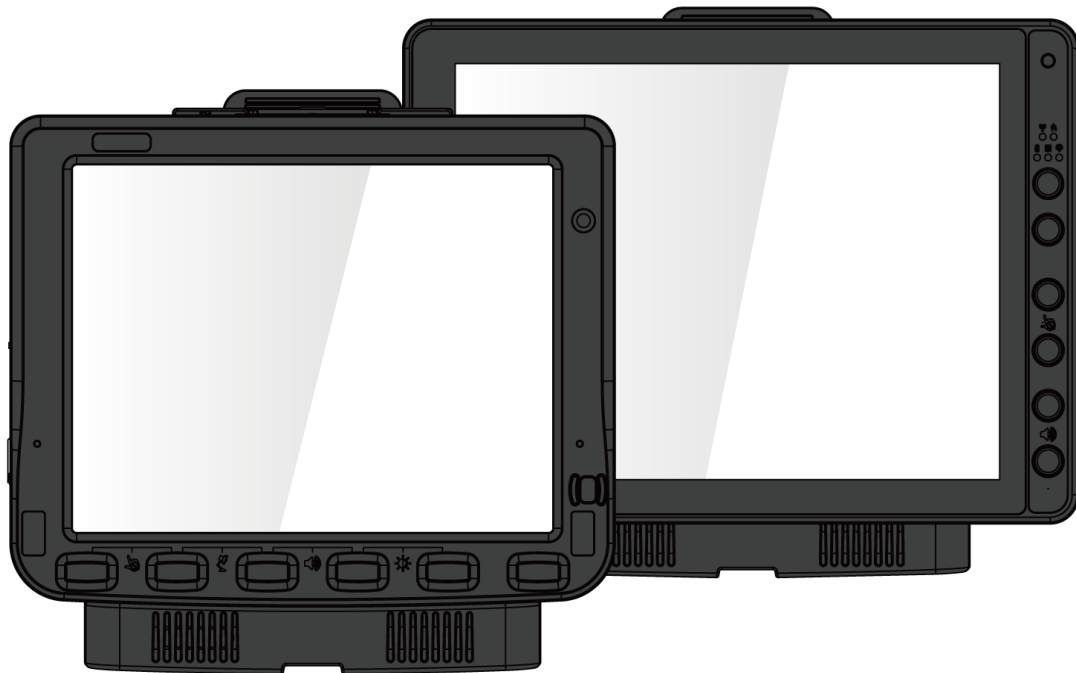


Vehicle Mounted Computer

ARM Genio 510 A78+A55 CPU



FM10/12MG

Quick Start Guide



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Preface

Copyright

No part of this manual may be reproduced, copied, translated, or transmitted in any form or any means, electronic or mechanical, for any purpose, without the written permission of Winmate Inc.

Trademarks

Brand and product names are trademarks or registered trademarks of their respective owners.

**Note:**

Display images shown may vary slightly from actual display. Information in this manual is subject to change without prior notification.

**Note:**

FMMG Series Computer has to be used together with the docking station. Use the device when located at least 20 cm (7.9 inches) away from the human body.

Disclaimer

Wimate Inc. reserves the right to make any product changes without notice, including circuits and/or software described or contained in this manual in order to improve design and/or performance. Wimate Inc. assumes no responsibility or liability for the use of the described product (s), conveys no license or title under any patent, copyright, or masks work rights to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this guide are for illustration purposes only. Wimate Inc. makes no representation or warranty that such application will be suitable for the specified use without further testing or modification.

Warranty

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

Advisory Conventions

Four types of advisories are used throughout the user manual to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.



Note:

A note is used to emphasize helpful information



Important:

An important note indicates information that is important for you to know.



Caution A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.

Attention Une alerte d'attention indique un dommage possible à l'équipement et explique comment éviter le problème potentiel.



Warning! An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.

Avertissement! Un Avertissement de Choc Électrique indique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.

FCC Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device 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 residential installation. 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:

- Reorient 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.
- Consult the dealer or an experienced technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Operation on the 5.15-5.25GHz frequency band is restricted to indoor use only. The FCC requires indoor use for the 5.15-5.25GHz band to reduce the potential for harmful interference to co-channel Mobile Satellite Systems. Therefore, it will only transmit on the 5.25-5.35 GHz, 5.47-5.725 GHz and 5.725 –5.850 GHz band when associated with an access point (AP).

CE Notice (European Union)

This device has been tested and found to conform to the limits set for a Class B product.

- EN 55022 — “Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment”
- EN 55024 — “Information technology equipment - Immunity characteristics - Limits and methods of measurement”
- EN 61000-3-2 — “Electromagnetic compatibility (EMC) - Part 3: Limits - Section 2”
- EN 61000-3-3 — “Electromagnetic compatibility (EMC) - Part 3: Limits - Section 3”
- EN 60950 — “Safety of Information Technology Equipment”.
- EN 55022 Emissions requirements

RF Exposure Information (SAR)

This device is compliance with SAR for general population /uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device was tested for operations with the device contacted directly to the human body to the back side of the EUT. To maintain compliance with FCC RF exposure compliance requirements, avoid direct contact to the transmitted antenna during transmitting.

IC Regulations

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.”

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the Device.

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The device could automatically discontinue transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems; the maximum antenna gain permitted (for devices in the bands 5250-5350 MHz and 5470-5725 MHz) to comply with the e.i.r.p. limit; and The maximum antenna gain permitted (for devices in the band 5725-5850 MHz) to comply with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate, as stated in section A9.2(3). In addition, High-power radars are allocated as primary users (meaning they have priority) of the band 5250-5350 MHz and this radar could cause interference and/or damage to LE-LAN devices.

The County Code Selection feature is disabled for products marketed in the US/Canada. For product available in the USA/ Canada markets, only channel 1~11 can be operated. Selection of other channels is not possible.

IC Radiation Exposure Statement

This EUT is compliance with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528

Read Me First

Follow and adhere to all warnings and instructions in this manual. For your safety, please read all safety and operating instructions before using the product. Keep this manual for future reference.



Attention Pour réduire le risque d'incendie ou de choc électrique ne pas exposer l'appareil à la pluie ou à l'humidité. VERIFIER que le cordon électrique est la prise murale pour un delai d'inactivite prolongé. Pour arrêter complètement l'alimentation de l'appareil, débranchez le cordon d'alimentation de la prise AC. N'enlever ni le capot arrière ni les pièces internes de l'appareil. Contactez un personnel qualifié si nécessaire.



SA1965

Avertissement Electronique Utilisé pour les instructions destinés à alerter l'utilisateur d'un CHOC ÉLECTRIQUE mortel ou de blessure grave en cas d'utilisation incorrecte de l'unité.



SA1966

Avertissement Utilisé pour les instructions destinés à alerter l'utilisateur d'un risque mortel ou de blessure grave en cas d'utilisation incorrecte de l'unité.



Attention Pour réduire le risque d'incendie ou de choc électrique ne pas exposer l'appareil à la pluie ou à l'humidité FAIRE le cordon électrique est DÉBRANCHÉ DE LA PRISE MURALE DANS UN DELAI DE PROLONGER INACTIVITÉ. De se désengager totalement LE POUVOIR DE L'UNITE, S'IL VOUS PLAÎT DEBRANCHER LE CORDON D'ALIMENTATION DE LA PRISE AC. NE PAS Romove le capot arrière, pas de PIÈCES À L'INTÉRIEUR. Contactez un personnel qualifié S'il faut le réparer.



SA1965

Avertissement Electronique Sert aux instructions destin es alerter l'utilisateur d'un CHOC ÉLECTRIQUE mortel ou de blessure grave en cas d'utilisation incorrecte de l'unit.



SA1966

Avertissement Sert aux instructions destin es alerter l'utilisateur d'un risque mortel ou de blessure grave en cas d'utilisation incorrecte de l'unit .

Informations de sécurité (FR)

Suivez et respectez tous les avertissements et instructions figurant sur l'écran. Pour votre sécurité, s'il vous plaît lire toutes les consignes de sécurité et de fonctionnement avant d'utiliser le device. Gardez ce manuel pour référence future.

1. Lire avec attention toutes les recommandations et précautions d'emploi avant d'utiliser ce produit.
2. Veuillez conserver ces recommandations et précautions pour référence future.
3. Lire et comprendre tous les avertissements énumérés dans les précautions d'emploi.
4. Suivre toutes les précautions d'emploi pour utiliser ce produit.
5. Utiliser exclusivement un chiffon sec pour nettoyer ce produit.
6. Ne pas placer le produit près de toute source de chaleur telle que radiateurs, arrivées d'air chaud, fourneaux ou autres appareils générant de la chaleur (incluant les amplificateurs producteurs de chaleur) .
7. Ne pas négliger la sécurité que procure un branchement polarisé ou avec raccordement à la terre, Un branchement polarisé comprend deux fiches dont l'une est plus large que l'autre. Un branchement à la terre comprend deux fiches plus une troisième reliée à la terre. Si la fiche secteur fournie ne s'insère pas dans votre prise de courant. consulter un 'électricien afin de remplacer votre prise obsolète.
8. Protéger le cordon d'alimentation de tout écrasement ou pincement, particulièrement au niveau des fiches, des réceptacles utilisés et à l'endroit de sortie de l'appareil. Ne pas casser la fiche de terre du cordon d'alimentation.
9. Utiliser uniquement les accessoires spécifiés par le constructeur.
10. Utilisez seulement des accessoires spécifiés par le fabricant ou vendus avec le produit.
11. Débrancher cet appareil lors d'orages ou s'il n'est pas utilisé pendant une longue période.
12. Faire exécuter le service par du personnel qualifié. Une intervention technique est requise lorsque l'appareil a été endommagé ou n'opère pas normalement.



Safety Information (EN)

Follow and adhere to all warnings and instructions on the screen. For your safety, please read all safety and operating instructions before using the device. Keep this manual for future reference.

1. Carefully read all recommendations and precautions for use before using this product.
2. Retain all recommendations and precautions for future reference as necessary.
3. Read and be sure to understand all warnings listed in the precautions.
4. Follow all operating precautions when using this product.
5. Use only a dry cloth to clean this product.
6. Do not place the product near any heat sources such as radiators, warm air intakes, stoves or other heat- generating devices (including amplifiers or other heat producing equipment).
7. Do not disregard the safety that a polarized or grounded connection can provide. A polarized connection consists of two plugs, one of which is larger than the other. A grounded connection has two blades and a third one that is grounded. If the main plug provided cannot be inserted into your outlet, consult an electrician to replace your obsolete outlet.
8. Protect the power cord from being crushed or pinched, particularly in the area of the plugs, any receptacles used, and the point of exit from the apparatus. Do not break off the ground pin of the power cord.
9. Use only accessories specified by the manufacturer.
10. Use only with accessories specified by the manufacturer or sold with the product.
11. Unplug this apparatus during lightning storms or when it is not being used for long periods.
12. Refer all servicing to qualified service personnel. A technical intervention is required when



the apparatus has been damaged in any way or does not operate normally.

About the Adapter

- Use only the supplied AC adapter (Rating: Input DC 10-60V DC). Use of another type of AC adapter will result in malfunction and/or danger.
- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.
- Allow adequate ventilation around the adapter when using it to operate the device or charge the battery. Do not cover the AC adapter with paper or other objects that will reduce cooling. Do not use the AC adapter while it is inside a carrying case.
- Connect the adapter to a proper power source. The voltage requirements are found on the product case and/or packaging.
- Do not use the adapter if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

Li-Ion Battery

Your device has UPS battery. When disposing UPS battery, follow local rules and regulations.



Warning! Do not dispose the battery with general waste materials.

Avertissement! Ne jetez pas la batterie avec les déchets ordinaires.

The following precautions on battery recycling should be observed:

- The battery should be disposed properly according to local regulations;
- The battery should not be damaged or crushed;
- The battery should not be heated or exposed to direct sunlight.

If you are not aware of local regulations on disposing the battery pack, contact our Service Center or sales representatives for more information.



Important: This hot-swap battery is soft-packed. It may have up to 8% inflation in dimensions under the usage in normal conditions. The mechanical design of the device reserves the space for this normal inflation.



Warning! If you observe the internal hot-swap battery has been inflated more than normal condition (or the blotch of panel and touch caused by inflated battery), contact our Service Center or sales representative for replacing the battery immediately.

Avertissement! Si vous constatez que la batterie interne remplaçable à chaud a été gonflée plus que dans des conditions normales (ou la tache du panneau et le toucher causés par une batterie gonflée), contactez notre centre de service ou notre représentant commercial pour remplacer la batterie immédiatement.



Important: The battery is consumable part. Therefore, it is recommended to replace the battery pack every two years with a new one recommended by Winmate. Contact our Service Center or sales representatives for more information on replacing the battery pack.

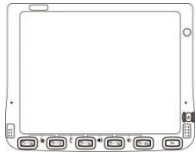
General Guideline

It is recommended to reboot the device when some functions are defect or inactive. If it still can't solve the problems, please contact your dealer or agent.

I. Unpacking

a. Standard Package Content

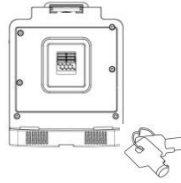
Before using this device, make sure that all the items listed below are included in your package:



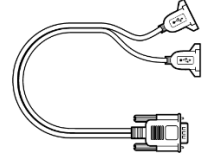
**VMC Computer
FM10MG / FM12MG**



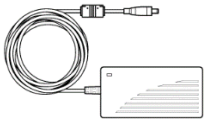
**Dock + Latch
Locking Key**



**Power Cable with
Fuse**



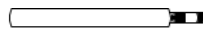
USB Cable



**84W Adapter with
Power Cable**



Quick Start Guide



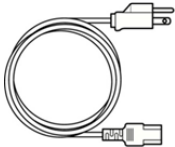
WLAN Antenna



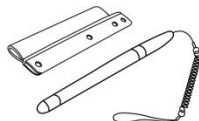
**Power Converter
Cable**



**External Antenna
Fixing Bracket**



Power Cord



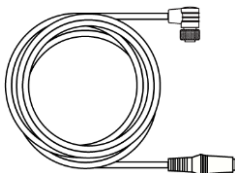
Stylus Kit

Note: Two WLAN antennas are included in the standard package.

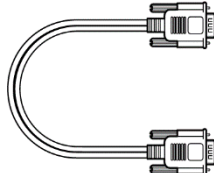
Note: Please order one bracket for one antenna. For example, if you plan to use two antennas, please order two brackets.

b. Optional Accessories

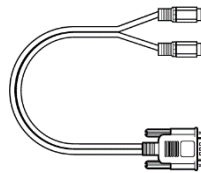
Your package may include the following items based on your order:



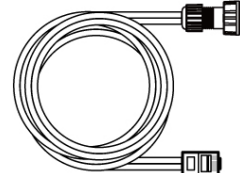
**DC Jack Power
Cable**



RS232 Cable



Audio Cable



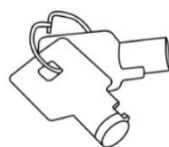
LAN Cable



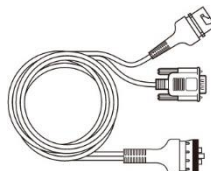
WWAN Antenna



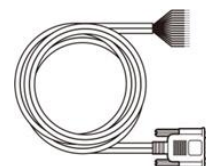
Fuse Kit



**Spare Key for
Vehicle Dock**



CANBus Cable



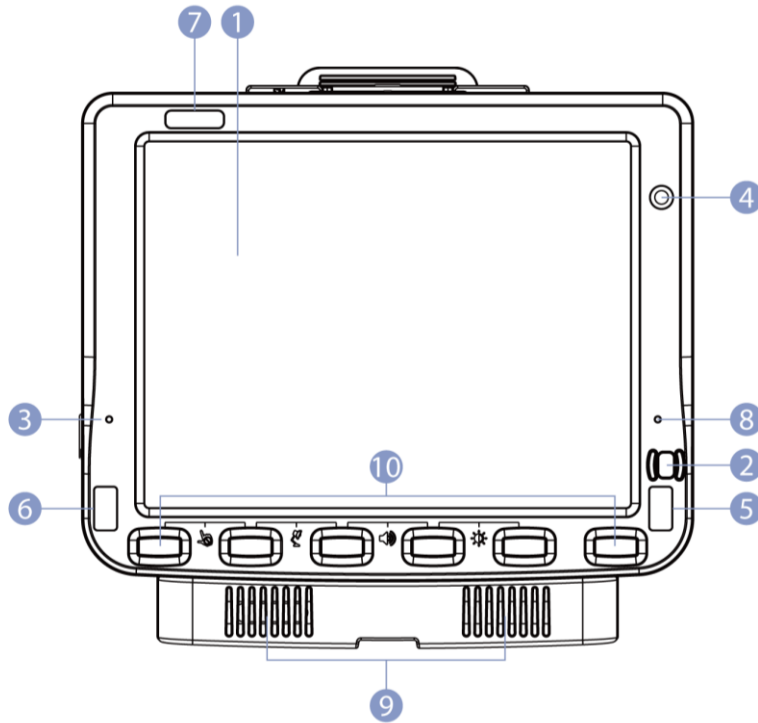
**CANBus Cable
(w/o DIDO)**








Note: Only one antenna is included in the package. If you plan to use WWAN function, please order two WWAN antennas.

Note: In order to have sound, first plug in the audio cable and then connect to the dock.

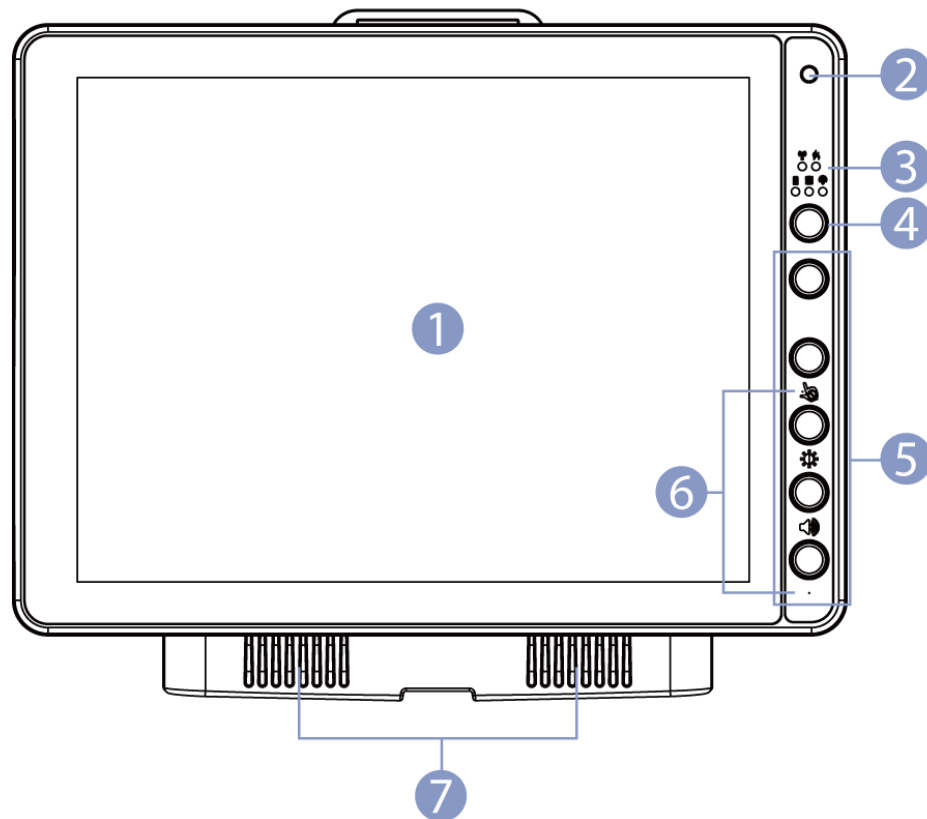
II. Components






2.1 Front View of FM10MG



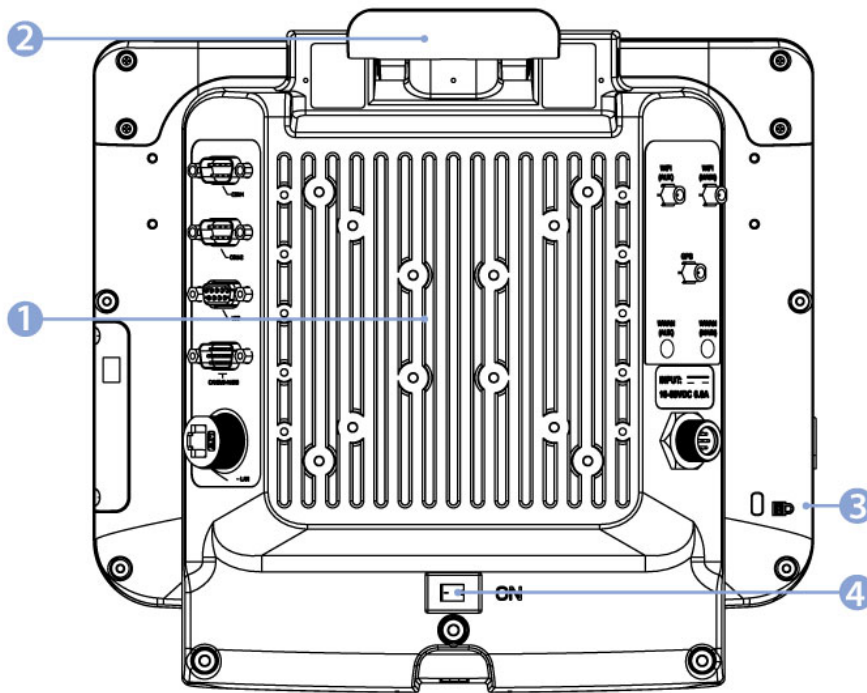
No	Item	Description
1	10.4" Touch Screen	Acts as one of the inputs for the device
2	Power Button	Press and hold the button for 3 second to turn on the device
	Power Indicator	 Power Indicator
3	Digital Microphone	For voice communication and voice recording
4	Camera	2 Megapixel front camera
5	Light Sensor and LED Indicators (Right Side)	 Light Sensor
		 Blanking Indicator
		 Defroster Indicator, default no function (Defroster is a customized feature available by request)
6	LED Indicators (Left Side)	 WLAN Indicator
		 BT Indicator
		 UPS Battery Indicator
7	Label	Space to print the label or company logo
8	Digital Microphone	For voice communication and voice recording
9	Speaker	Emits sound
10	Function button	Programmable Function key that can be configured by using the Win-Set Utility

2.2 Front View of FM12MG



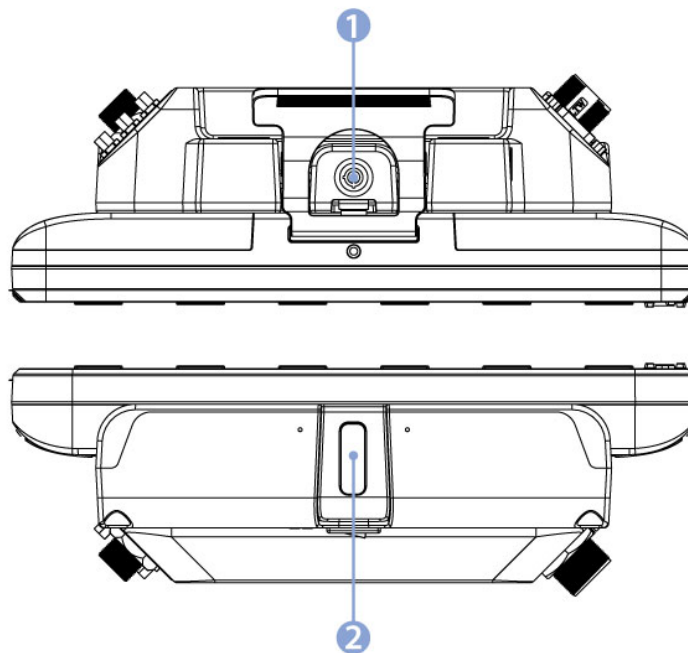
No	Item	Description
1	12.1" Touch Screen	Acts as one of the inputs for the device
2	Camera	2 Megapixel front camera
3	Light Sensor and LED Indicators	<ul style="list-style-type: none">  Wireless communication indicators  Defroster indicators (Defroster is customized feature available by request)  UPS Battery Indicators  HDD indicators  Light sensor
4	Power Button and Indicator	Press and hold the button for 3 second to turn on the device
5	Function buttons	Programmable Function keys that can be configured by using the Win-Set® Utility
6	Digital Microphone	For voice communication and voice recording
7	Speaker	Emits Sound

2.3 Rear View of FM10/12MG



No	Item	Description
1	VESA Mount Hole	VESA 75, 100, and RAM Mount
2	Release Latch	Press to release the device and the docking
3	Kensington Lock	Connect to a security lock, protecting your device from being stolen
4	Power switch	Set the switch to on (I) to provide the supply power to the device and it will automatically connect to the ignition system of the vehicle

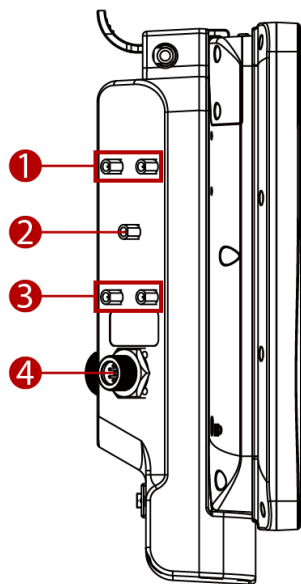
2.4 Top and Bottom View



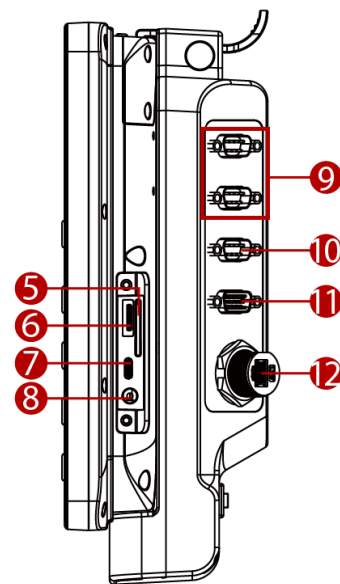
No	Item	Description
1	Lock	Lock the tablet in place
2	Reading Light	Use to provide illumination in dark environment

2.5 Side View with Vehicle Dock

Left Side



Right Side



No	Item	Description
1	WLAN Antenna Connector	Connect a WLAN external antenna and allow the device to be remotely mounted on the vehicle.
2	GPS Antenna Connector	Connect a GPS external antenna and allow the device to be remotely mounted on the vehicle.
3	WWAN Antenna Connector	Connect a WWAN external antenna and allow the device to be remotely mounted on the vehicle.
4	Wide Range Power Input	Connect a 10-60V DC IN wide range power input
5	SD Card Slot	Service window to insert MicroSD card.
6	External/ Vehicle Remote	External/ Vehicle Remote
7	USB Type-C	A high-speed USB port connects to USB devices.
8	Power Input**	Connect a 12V DC IN power input.
9	COM1 and COM2	Connect a peripheral device such as a printer or scanner with serial port.
10	USB 2.0 Type-A x 2	Connect USB peripheral devices such as USB Flash drive, mouse, keyboard, printer, etc.
11	1x CANBus or 1x Audio (In and Out)	Connect to a vehicle, allowing access to wide range of vehicle data/ Connects headphone or other audio output devices.
12	LAN Port	Connect to a local area network (LAN) using an Ethernet cable and provide optional POE with 48V.

Note:

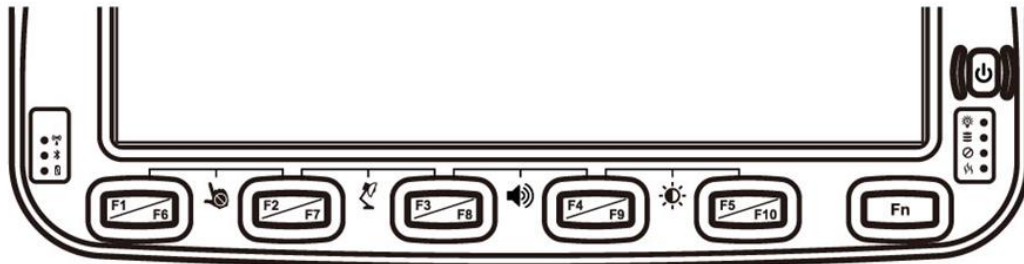
* Only Sierra Module can support dual SIM single standby function.

**For the defroster function please connect a device to a power supply.

III. Integrated Keypad

a. Integrated Keyword for FM10MG

The integrated keypad contains ten programmable keys, F1~ F10 are user programmable keys. Key Mapping is configured via the Hot Tab application on the control panel. See Programmable key to remap these keys.



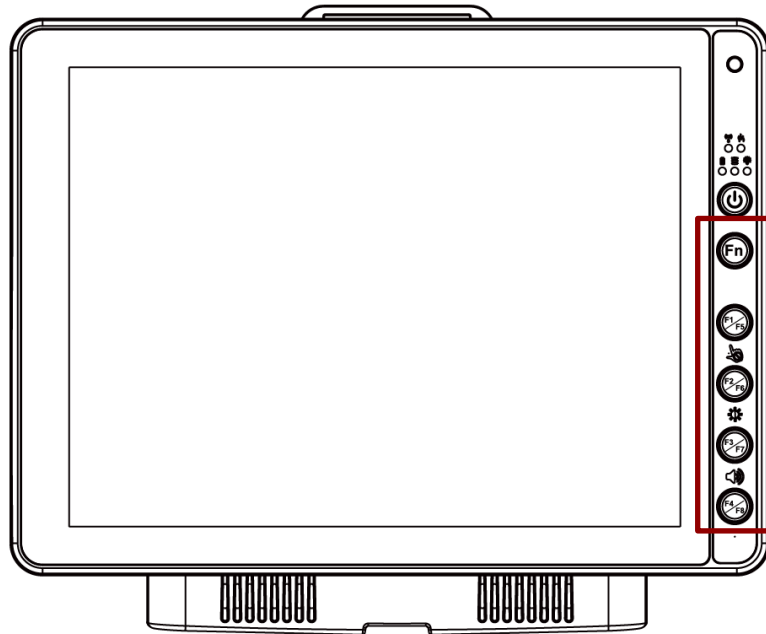
The FM10MG has ten programmable keys from F1 to F10.

The default value for these keys is:

Function Key	FM10MG Default Key Value
F1 + F2	Touch Keypad Lock/ Unlock
F2 + F3	Lamp On/Off
F3 + F4	Volume adjustment
F4 + F5	Brightness adjustment
Long Press F5	Camera
Press Fn, and then press F6~F10	Function key from F6~F10

Note: The plus sign “+” means that you have to press both function keys at the same time.

b. Integrated Keyword for FM12MG



The FM12MG has eight programmable keys from F1 to F8


The default values for these keys are:

Press these keys in this order	Default Key Value
F1+F2	Touch Keypad Lock/Unlock
F2+F3	Brightness adjustment (panel+keypad)
F3+F4	Volume adjustment
Long press on F1	Open WinSet
Long press on F3	Lamp On/Off
Long press on F4	Camera
Press on Fn	Function key form F5~F8

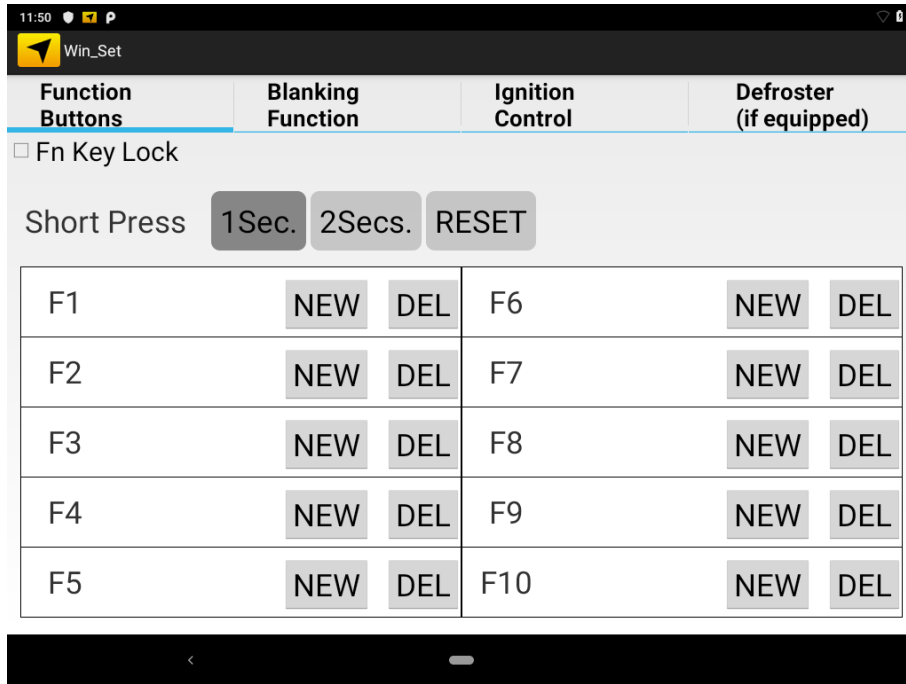
Note: The plus sign “+” means that you have to press both function keys at the same time.

IV. Function Buttons

a. Function Buttons for FM10MG

Winmate® FM10MG Vehicle Mounted Computer comes with preinstalled APP called Winset , which let users to assign functions of function keys F1 ~ F10.

To set function keys open **Winset** ,



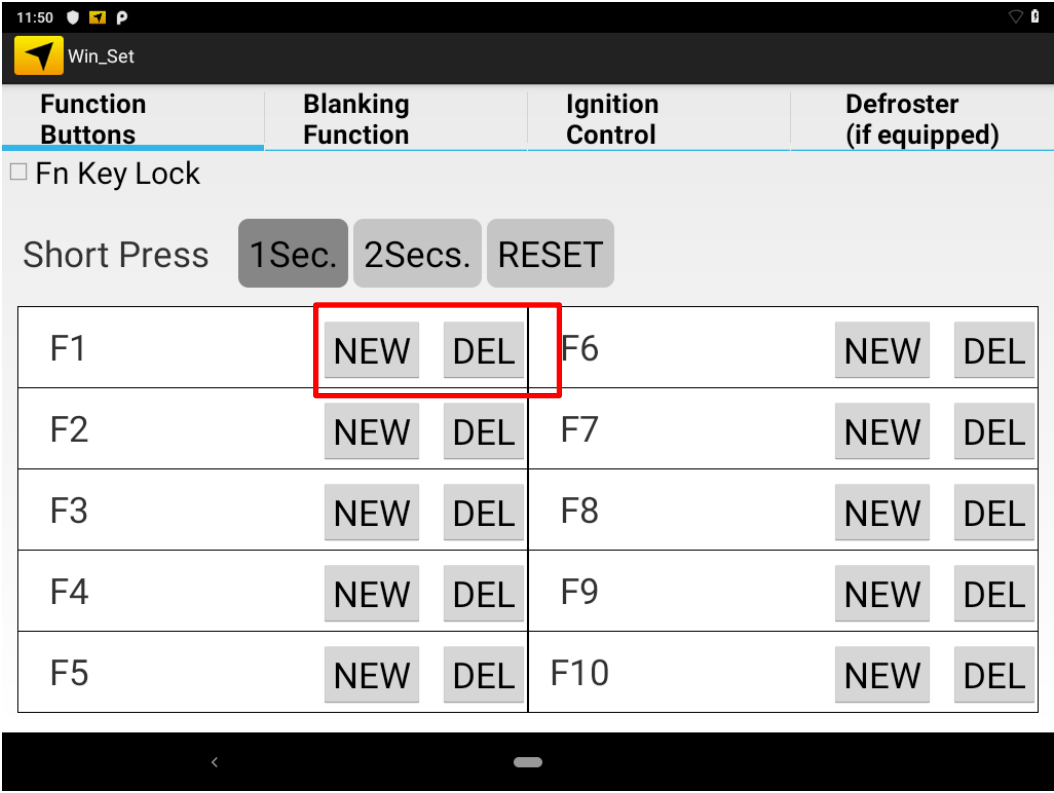
Default Settings:

Function Key	Description
F1 + F2	Touch Keypad Lock/ Unlock
F2 + F3	Lamp On/Off
F3 + F4	Volume adjustment
F4 + F5	Brightness adjustment
F5	Camera

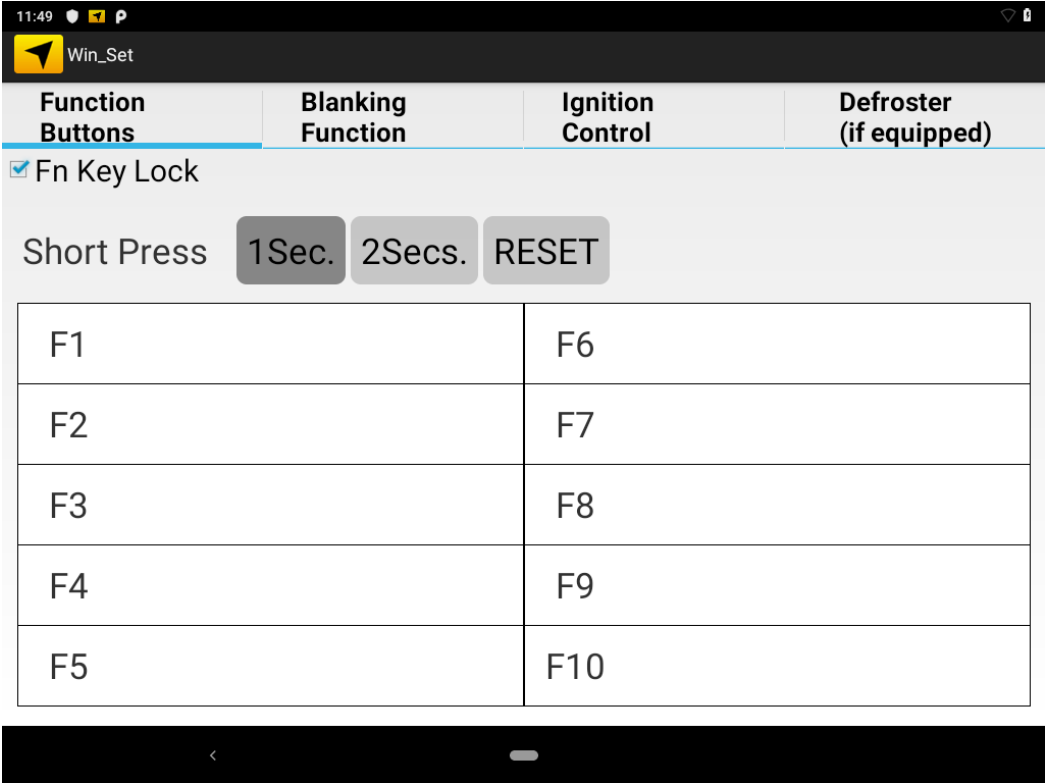
Note: The plus sign “+” means that you have to press both function keys at the same time.

In **Function Buttons** window of the **F1** click **NEW** to open the drop-down menu of function keys. In this example, we have selected to set up functions for **F1** function key.


Choose the function key and then select a **Default application** that will be opened by pressing on the function key you’ve selected. Press **DEL** to reset the function key to previous settings.



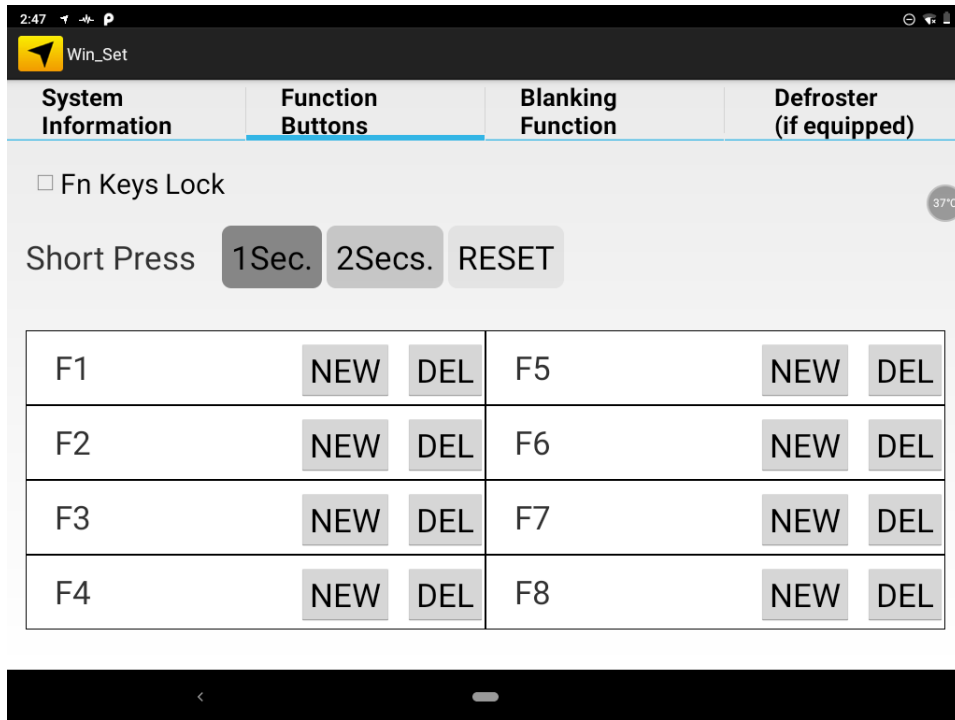
Tick the **Fn Key Lock** option to disable the function key.



b. Function Buttons for FM12MG

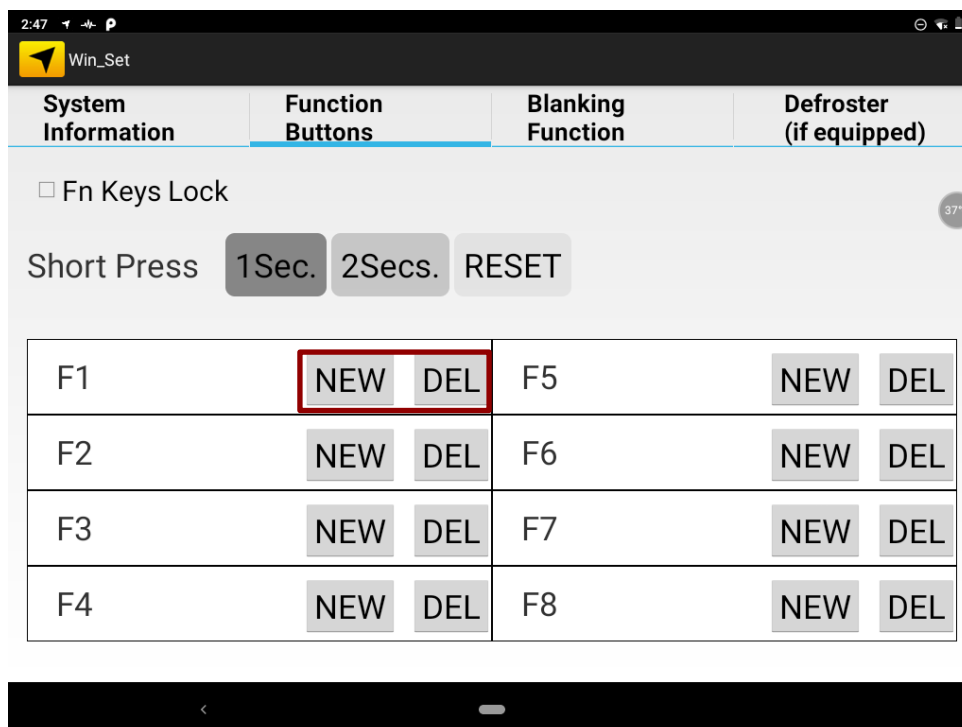
Winmate® FM12MG Vehicle Mounted Computer comes with preinstalled APP called Winset , which let users to assign functions of function keys F1 ~ F8.

To set function keys open **Winset** ,

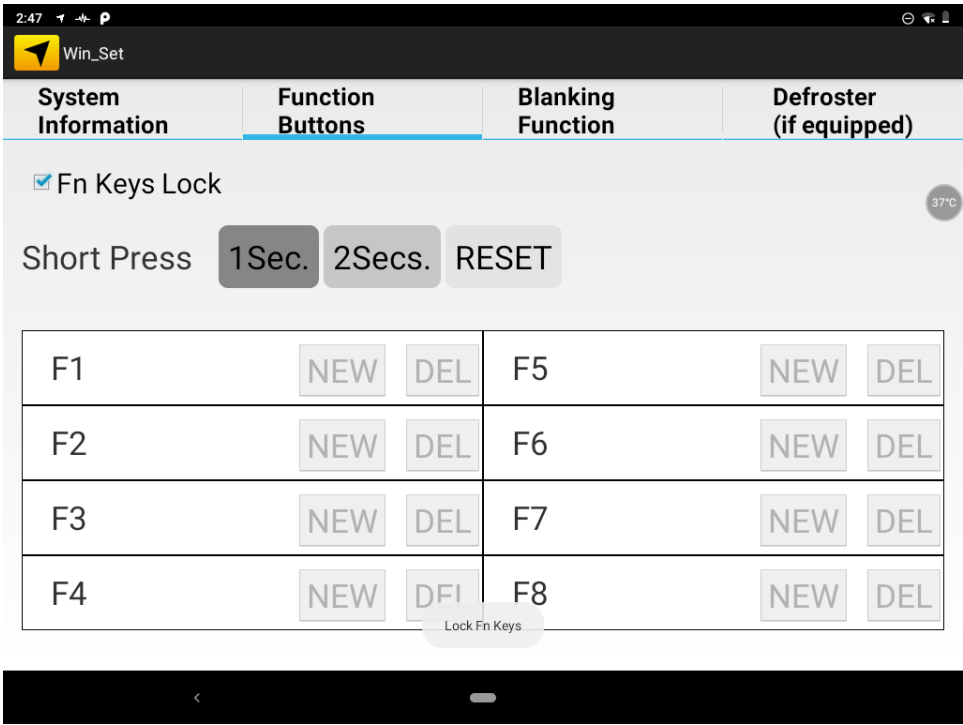


In **Function Buttons** window of the **F1** click **NEW** to open the drop-down menu of function keys. In this example, we have selected to set up functions for **F1** function key.

Choose the function key and then select a **Default application** that will be opened by pressing on the function key you've selected. Press **DEL** to reset the function key to previous settings.



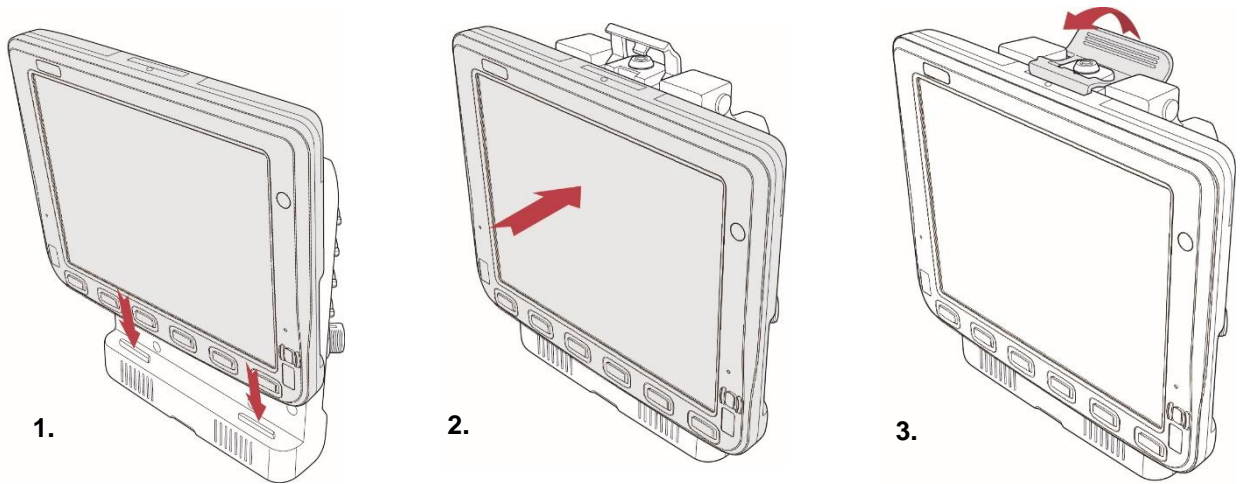
Tick the **Fn Keys Lock** option to disable the function key.



V. Docking and Undocking the Device

Perform the following to dock the FM10MG:

1. Align the golden connector and guide pin holes on the device with the golden connector and guide pins on the docking station
2. Insert the device into the guide pin holes on the docking station
3. Slightly push the upper part of the device towards the docking station until you hear the “click” sound, including the device is fixed on the docking station.



FM10MG

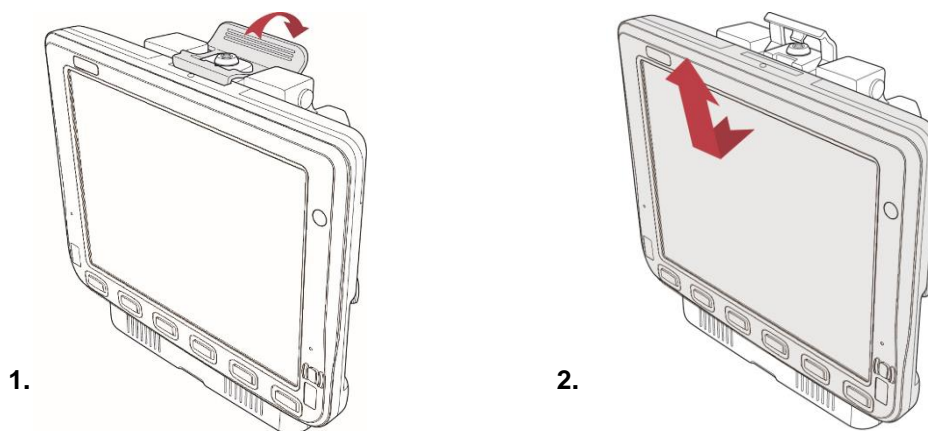


Note

Condition	Result
If the battery is full and power is connected to the dock.	The battery indicator is off.
If the battery is low and power is connected to the dock.	The battery indicator is orange.

Perform the following to undock the FM10MG:

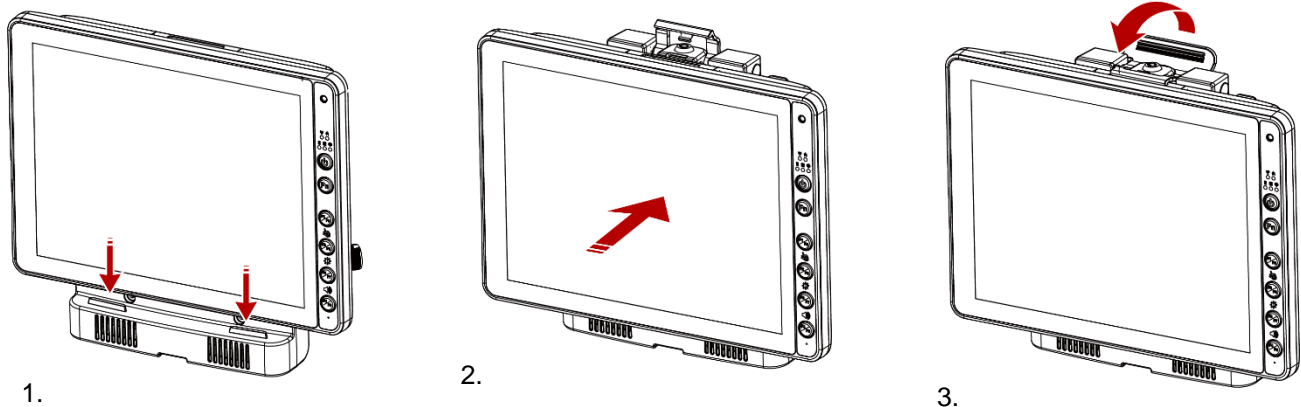
While holding the device, push the release latch on the docking station and then lift the device to un-dock it.



FM10MG

Perform the following to dock the FM12MG:

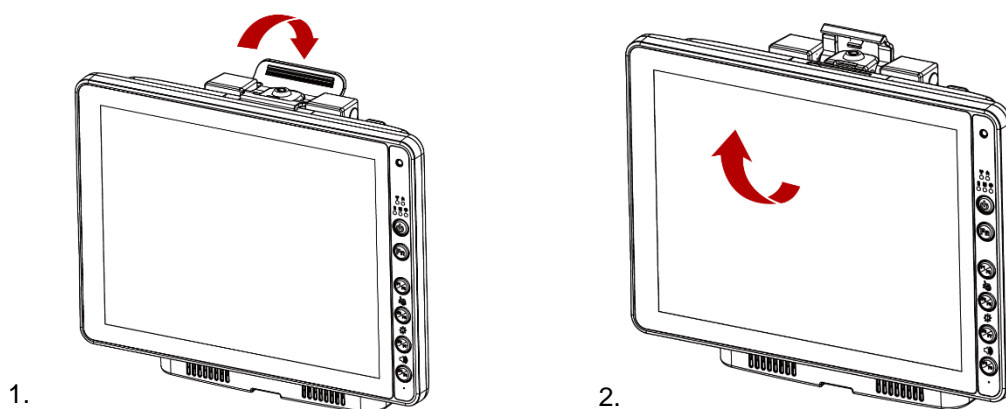
1. Align the golden connector and guide pin holes on the device with the golden connector and guide pins on the docking station
2. Insert the device into the guide pin holes on the docking station
3. Slightly push the upper part of the device towards the docking station until you hear the “click” sound, including the device is fixed on the docking station.

**FM12MG****Note**

Condition	Result
If the battery is full and power is connected to the dock.	The battery indicator is off.
If the battery is low and power is connected to the dock.	The battery indicator is orange.

Perform the following to undock the FM12MG:

While holding the device, push the release latch on the docking station and then lift the device to un-dock it.

**FM12MG**

VI. Power Cable Installation

a. Wiring the Power Cable



Warning! This procedure requires a trained service personnel only, improper installation can cause serious damage to the vehicle or the device.

Avertissement! Cette procédure nécessite un personnel de maintenance qualifié uniquement, une mauvaise installation peut causer des dommages importants au véhicule ou le dispositif.

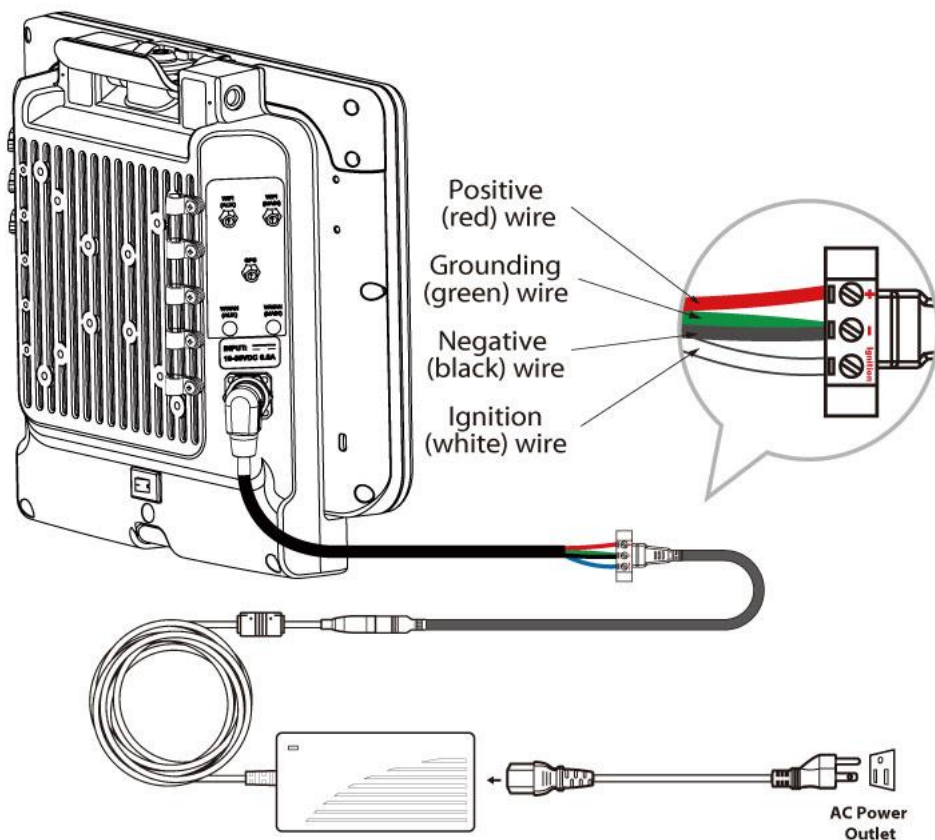
b. Connecting the Power Cable for Testing



Important:

It is highly recommended to purchase the power cable for testing purpose.

Wiring Instructions



1. Place the device on the vehicle dock and make sure the device is Off.
2. Connect the CN2 to the FM10/12MG vehicle dock by aligning the connector pins and then push it, twist to fasten the connection.
3. Connect the AC plug to the electrical outlet.
4. Switch the power switch on, located on the back of the vehicle dock.
5. Press the On button, the device is ready for testing.

c. Connecting the Power for Installation on the Vehicle



Warning! This power cable should only be used on the 24-, 36-, or 48-Volt forklifts. Note that, this power cable cannot work for 12 Volt forklifts.

Avertissement! Ce câble d'alimentation ne doit être utilisé sur les 24, 36, ou 48 chariots élévateurs Volt. Notez que, ce câble d'alimentation ne peut pas travailler pour 12 chariots élévateurs Volt.



Warning! Select a mounting location and make sure it is not located on the outside the vehicle.

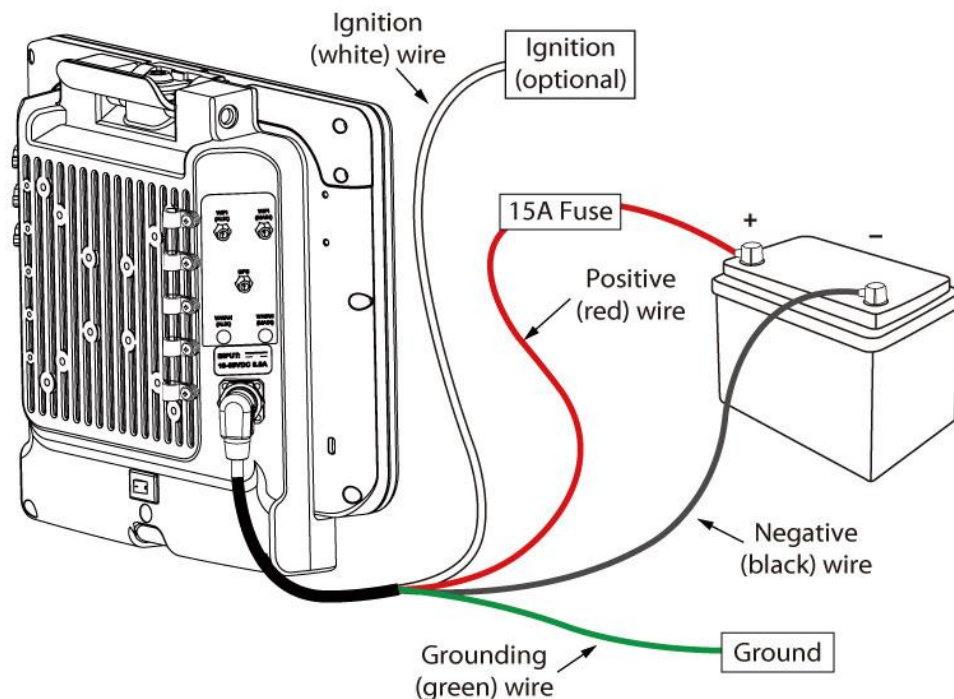
Avertissement! Sélectionnez un emplacement de montage et assurez-vous qu'il ne se trouve pas à l'extérieur du véhicule.



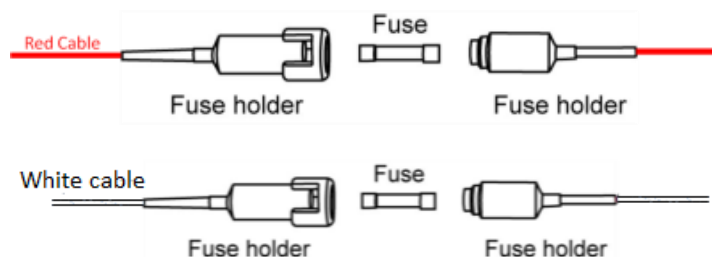
Warning! Do not perform the installation on a moving or live electric forklift.

Avertissement! Ne pas effectuer l'installation sur un mobile ou un chariot élévateur électrique sous tension.

Wiring Instructions



1. Remove the vehicle battery before connecting the power cable
2. Connect the **Green** Wire (Ground) to the vehicle's chassis (grounding), which can also be negative pole of the battery
3. Place the fuse and fuse holder in-line of the **Red** (VCC +) and White (ignition) wires as shown below.



Fuse Specification :

Two Fuses , 15A, 250Volt, UDA Type Fuses

4. Slide tubing over wires, remove the wires and insert it to the fuse holder, crimp it.
5. Connect the **red** wire to the vehicle's positive power source. Connect the black wire to the vehicle's negative power source.
6. Connect the white wire to the vehicle's ignition switch for the ignition function, if the requirement is connected to vehicle without ignition, please connect ignition pin to battery V+.



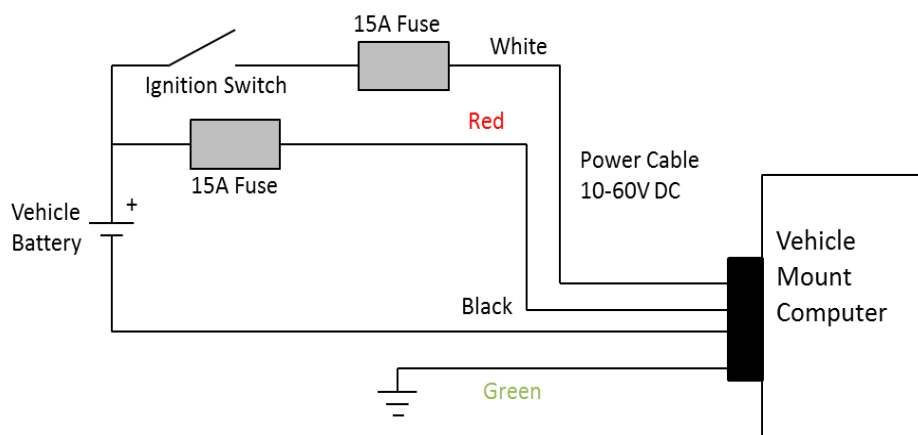
Warning! When power is on, ignition pin connects to battery V+ will cause the power consumption even ignition is off.

Avertissement! Lorsque l'alimentation est allumée, la broche d'allumage se connecte à la batterie V + provoquera la consommation d'énergie même si l'allumage est coupé

Power Cable Description: 00000

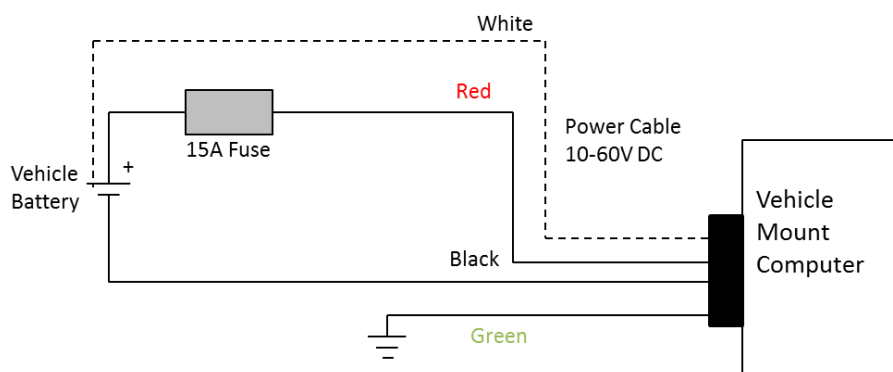
Color	Symbol
Red	VCC+
Black	VCC-
Green	Ground
White	Ignition input (optional)

With Ignition Function



7. The ignition cable (White cable) must be connected to the battery positive if the customer does not want to have ignition function, as following.

Without Ignition Function



8. Secure the power cable to the device using cable clamps and place the device in the dock.



Warning! Use the proper cable clamps and do not over tighten it to prevent it from break.

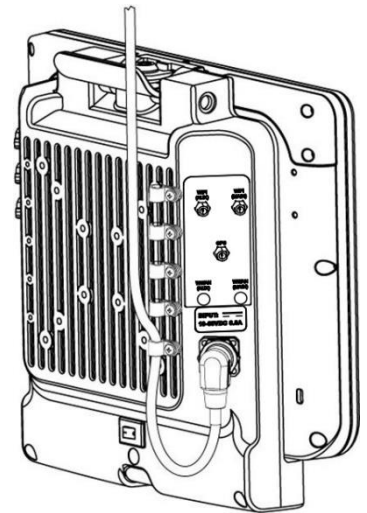
Avertissement! Utilisez les pinces appropriées du câble et ne serrez pas pour l'empêcher de pause.

9. Press the power switch on the back of the dock See *Power switch*.
10. Press the power button on the front of the device See *Power Button*.

d. Power Cable Routing

There are many cables available for the FM10/12MG including power cable, CAN Bus cable, or USB cable. To secure these cables, there are five cable clamps safeguarding the vehicle dock to prevent the cable strain. To secure audio, power, and I/O cables perform the following action:

1. Determine the proper strain relief cable clamps; there are different sizes of the clamps depending on the thickness of the cable. For example, the largest clamp is designed to secure the power cable.
2. Remove the cable clamps from the vehicle dock by releasing the screw. Put the screw and save in it the secure location.
3. Slide the clamp over the cable.
4. Refasten the cable clamp to the dock, adjust the tension in the cable to allow it to be connected and disconnected when needed.
5. Repeat this step until all cables are secured to the dock.



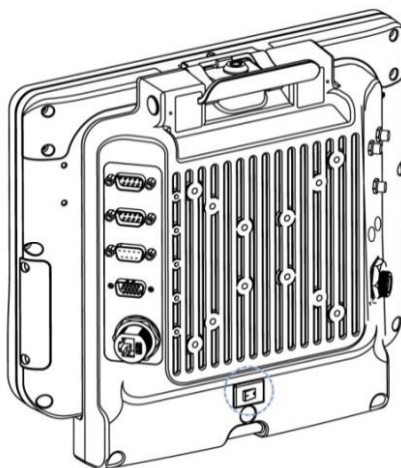
VII. Power on Behavior

The table below shows the Ignition control power scheme on the vehicle installation and office test.

Power On Behavior	Office Test / Evaluation	Vehicle Installation	
		With Ignition	Without Ignition
Ignition delay	Default '0" sec"	Default "'0 sec"	Default "'0 sec"
	Adjustable from 0-120 sec, through application. Refer to Ignition Control application.		
Auto-ON	OFF	ON	ON
Power Button	√	X	X

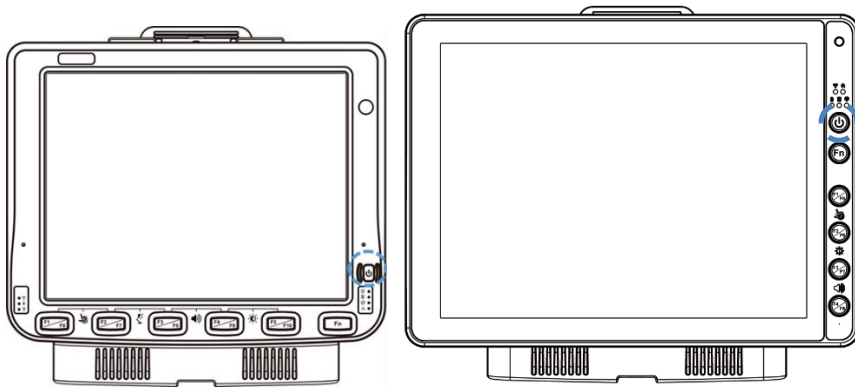
a. Power Control

Power Switch



Power switch is located on the rear side of the vehicle dock. When the dock is connected to the external power and the power switch is ON, the dock delivers power to the FM10/12MG and the device can be powered on.

FM10/12MG Power Button



Power button is located on the right side of the FM10/12MG. If the device is OFF, pressing the power button will start the power up sequence.








Note:

- The FM10/12MG has to be docked in a powered vehicle docking station or UPS battery has to have a sufficient charge to power the device.
- If no external power available and the UPS battery do not have enough charge, pressing the power button will cause no action.

b. Standby and Wakeup Behavior

The FM10/12MG has four power modes: Turn On, Suspend, Wake Up, and Turn Off.

Action	Button		LED Indicator
Turn On		Press the On button for “3 seconds” until the blanking indicator located on the right side On (solid red), and then release the button.	 On
Suspend		Press the On button for “1 seconds” until the screen On and then release the button. The battery indicator will Off after the screen is Off, the system is already in the standby / sleep mode.	Off
Wake Up		Press the On button for “1 second” until the screen On and then release the button.	Off
Turn Off		Press the On button for “2 second” until the system is turns Off and then releases the button.	Off

Turn On

When the FM10/12MG is attached to either vehicle power or an external power supply, or it is operating from the UPS battery and the power button is pressed, the device is in the “ON” mode. In this mode, the keypad, touch screen and any attached peripherals will function normally. The display remains ON until the display, standby or suspend timer expires. When the device is in ON mode, the power LED indicators is off.

Suspend

When the device is in Suspend Mode, all LEDs are off. Press the power button to wake up the device back to ON mode.


Wake Up

When the device is in Wake Up Mode, all LEDs are off.

Turn Off

By default, the FM10/12MG turns off if the user turns off the device through the system or presses the power button for 10 seconds with a critical shut down. The FM10/12MG will also be off when there is no connection to a power source or the UPS battery is depleted. However, the internal RTC will keep maintaining the date and time while the device is off.

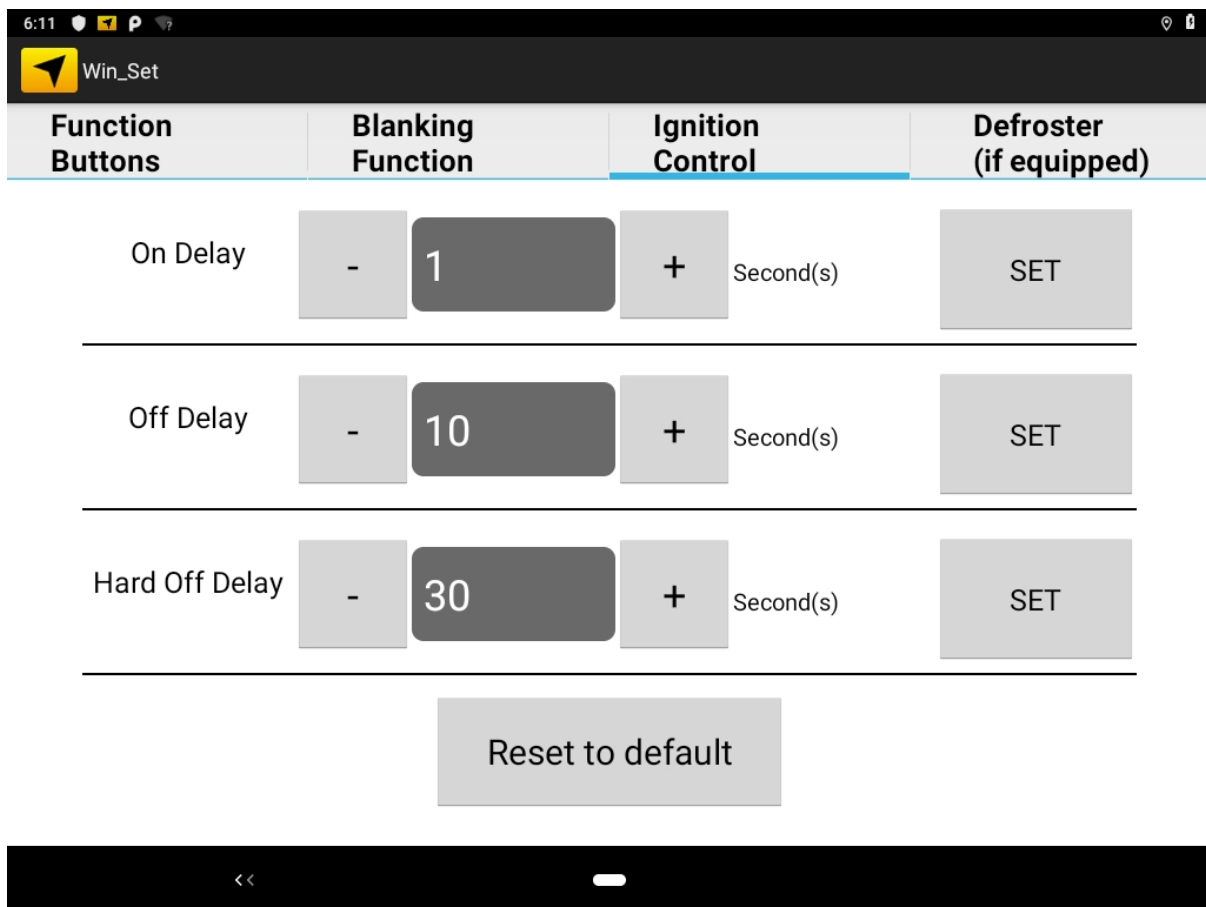
VIII. Ignition Control

Winmate provides Ignition Control feature in Winset  application to control the timing of delay. You can select 1 to 120 seconds for each period of timing delay.



Note: If you don't plan to use the ignition feature connect the green wire to the vehicle's positive power source.

Go to APPS > Winset  > Ignition Control



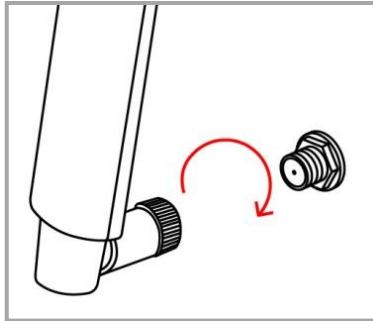
Setting	Default Setting	Description
On Delay	1 second	When the system is powered on via ignition key, the system will delay 1 second to power on.
Off Delay	10 seconds	When the system is powered off via ignition key, the system will delay 10 seconds to shut down.
Hard Off Delay	30 seconds	When the system is powered off via ignition key, the device will cut off power after 30 seconds.
Reset to default	-	Resets the ignition settings back to the default.

IX. External/ Vehicle Remote Antenna Installation

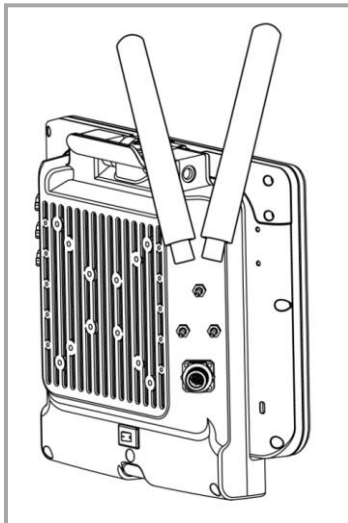
The FM10/12MG equipped with internal antennas on the Computer side as well as external antennas on the Vehicle Dock side. When the FM10/12MG Computer is on the Vehicle Dock, it will by default use the external antennas on the Dock that are attached through the SMA Connectors for better signal strength. Only when the FM10/12MG computer is removed from the dock will it use the internal antennas. GPS and WWAN are optional on the device and require external remote mount antennas.

To install the antenna please perform the following:

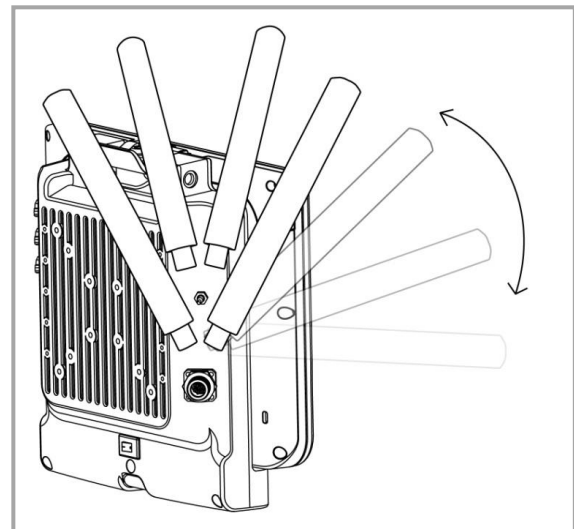
1. Remove the rubber cap on the SMA connector before installing the antenna.
2. Align the antenna with the SMA connector and fasten it as following picture.



3. Adjust the position of external antennas.

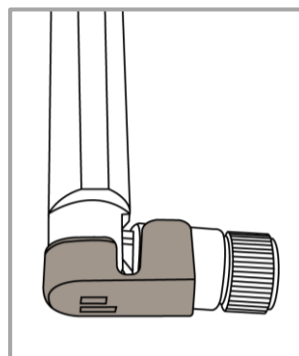
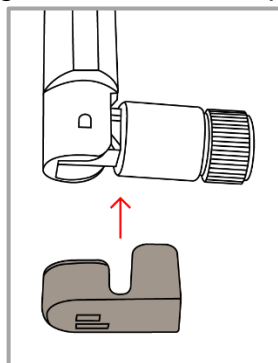


• WLAN Antenna Installation



• WLAN and WWAN Antenna Installation

4. Attach plastic fixing bracket to fix the position of each antenna.



X. CANBus Cable Installation Reference

After connecting the CAN Bus cable to the FM10/12MG, please open software utility to check settings.

	COM1	COM2	COM3*	USB	CAN Bus	Audio
Disable CANBus	V	V	V	V	X	V
Enable CANBus	X	X	V	V	V	V

Note: COM3 is located on the external cable (supplied with the FM Series Computer).

XI. Screen Blanking

Winmate® FM10/12MG has screen blanking function. Once activated, it will lock the screen display to prevent or restrict the use of the in-vehicle computer. This application allows setting the threshold to perform preset actions while device is moving. When enabled Blanking function reduces visual, cognitive, and physical distractions by limiting device functionality while the vehicle is in motion.

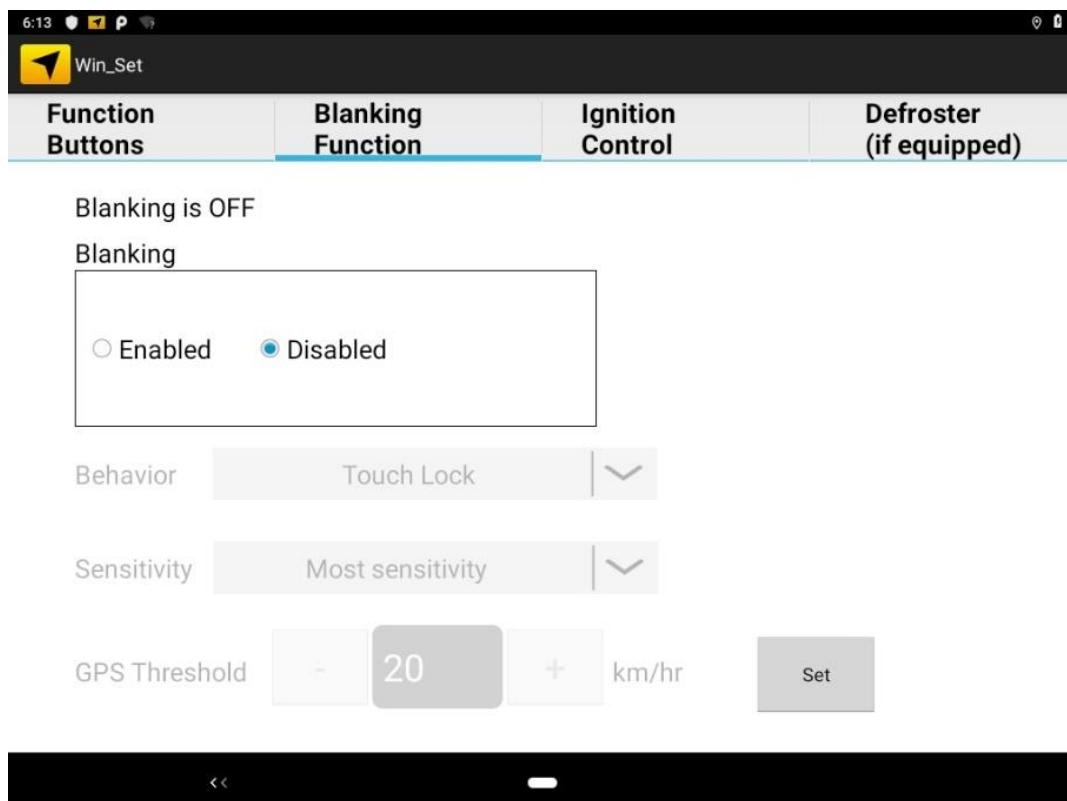
To set up threshold actions

Go to **APPS > Winset**  **> Blanking Function**

Step 1 Choose both of these conditions or either one to set up the threshold.

Step 2 Select what action you want to perform while the threshold had been triggered.

Step 3 Press **Set**.



Setting	Setting Options	Description
Blanking ON/ OFF	-	Enable or disable screen blanking function.
Behavior	Touch Lock	Locks touch function.
	Blank Screen	Screen is going blank.
	Lock and Blank Screen	Locks touch function and screen is going blank.
	Show Dialog	Warning "Moving too fast" appears on the screen each time G-Sensor Threshold Level / GPS Threshold level exceeds preset parameters.
Sensitivity	Mode 1	Most sensitivity
	Mode 2	High sensitivity
	Mode 3	Medium sensitivity
	Mode 4	Low sensitivity
GPS Threshold	0 ~ 20 km/h	When the speed reaches GPS threshold settings, screen blanking function will be activated in 2 seconds



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