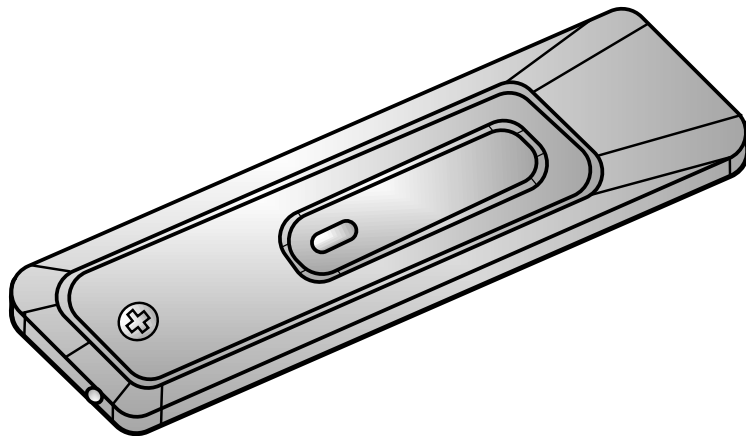


MCM3

Instruction Manual



Mobile Create Inc.

Rev1.0 - 2018 - 11

Contents

1. Introduction	1
1.1 Safety Precautions	1
1.2 Usage Guidance	3
1.3 Network Limitations	4
1.4 Miscellaneous	4
2. Before Use	5
2.1 Part Names and Functions	5
2.2 SIM Card Information	6
2.3 LED Indicator Information	8
2.4 About installing the communication module(MCM3)	9
3. Appendix	10
3.1 Specifications	10
3.2 Federal Communications Commission (FCC) statement	12

1. Introduction...

Thank you for purchasing MCM3. From this point on it will be referred to as the device in this manual. Please thoroughly read this manual before operation to use your device correctly and safely.

1.1 Safety Precautions

–Please read the following carefully–

Please take special notice of the warnings below to ensure the correct operation and safety of your device.



Warning

The manual section marked Warnings is very important. This contains information that, if ignored, could lead to serious injury or death through incorrect use. Please read all notices carefully.



Caution

The manual section marked Caution is very important. This contains information that, if ignored, could lead to property damage through incorrect use. Please read all notices carefully.



This symbol indicates actions that will cause damage, injury or death.



This symbol indicates actions that may cause damage to the device or property.










This symbol indicates advice to avoid damage to device.

■ Disclaimers





- We can not be held responsible and will not accept any liability for malfunctions or damage to your device arising from earthquakes, flooding, natural disasters, external fires, third party appliance use, negligence, accident, misuse, or any other external factors.
- We can not be held responsible and will not accept any liability for personal or financial losses arising from malfunction, bugs, communication failure, power failure, lightening, third party appliance use or other external factors.
- We can not be held responsible and will not accept any liability for personal or financial losses arising from lost or leaked data caused by tampering or destruction of the device.
- We can not be held responsible and will not accept any liability for incidental damages or losses caused by any loss or change to data due to failure during use, or not, of the device.

- We can not be held responsible and will not accept any liability for damage arising from use of unauthorised software or hardware.
- We can not be held responsible and will not accept any liability for damage arising from failing to follow advice and guidance provided within this manual.

Warnings

-  Do not operate or store the device in or around flammable gas sources because of fire risks.
-  Do not throw or allow heavy impact upon the device as this can cause malfunctioning.
-  Do not disassemble, modify or attempt repairs yourself as this can cause injury and/or malfunctioning.
-  Do not operate the device in airplanes or hospitals as there is a risk of interference with important equipment.
-  Do not insert unauthorised items into the device, for example metals or plastics, as this can cause overheating, combustion, electric shock and/or malfunction.
-  Do not use the device around automated electric devices such as fire alarms and automatic doors. The device can cause malfunctions in these automated electronics.
-  Do not use the device if you have a pacemaker. Doing so can interrupt the pacemaker's functions and poses a health risk.

Caution

-  Do not leave the device in hot places, such as a car dashboard or in direct sunlight. Doing so can lead to warping and/or malfunction of the device.
-  Do not operate or store the device in rain or wet conditions. The device is not dust or water proof. Doing so can lead to malfunction or failure of the device.
-  Do not expose the device to extreme changes of temperature, such as using the device near a heater in winter or by a cooler in summer. Doing so can lead to condensation to form and can cause malfunction or failure of the device.
-  Do not put the device on unstable tables or inclined places as this can cause damage or data corruption by falling. It may also cause injury.



Do not force the device into small places, such as clothing pockets or the bottom of a bag. This can cause the device to malfunction.



Do not use the device in excessive humidity as this can cause malfunction due to moisture and/or sweat getting inside the device.



When first using the device, if you smell anything unusual, like rust or overheated metal or plastic please discontinue using the device immediately and return it to your point of purchase.

■ SIM card information



Caution



Do not apply excessive force to the SIM card. Doing so may cause damage to it.



Do not force the SIM card in or out of the device. This could lead to damage of the SIM card, the device or yourself.



Do not modify or dismantle the SIM card yourself. Doing so could cause loss of data or malfunction.



Do not damage or short circuit the IC chip of the SIM card. Doing so could cause loss of data or malfunction.

1.2 Usage Guidance

■ Handling of the device

- 1) This device is intended for use within Japan only. Do not use abroad as it is not compliant with international radio laws.
- 2) Please use the device for its intended purpose. Deviation from this may lead to a shortened life and/or reduced function of the device.
- 3) Any use outside of the stated purpose of the device, as laid out by the manufacturer, is outside of the warranty of the device.
- 4) Wireless communication issues may arise due to external factors, which may lead to data loss.
If you encounter interference in your wireless communications, try placing the device in a different location.
- 5) Please refer to your local government bylaws with regards to disposal of the device.
- 6) Please do not store the device in an area with a lot of electronic noise. Antennas should be kept far away from the stored device.

- 7) During use, the device will become hot. This is normal. If you can hold it, please don't worry about the functionality of the device. Prolonged use of the device, however, could cause low heat burns. Please be careful when using the device for extended periods of time.
- 8) When moving from cold temperature outside to a warm temperature inside or using the device in humidity, there is a possibility of moisture build up inside the device.
Under these conditions, please refrain from using the device until condensation has subsided to prevent malfunction.
- 9) Do not store the device near AC units. The variations in temperature may cause condensation to form within the device, leading to rusting or degradation of the interior of the device.
- 10) When the device is not in use, please remove the USB connector and store the device in a dust-free environment. If the USB port becomes too dirty, the device may not function as intended.
- 11) Please connect the USB connector carefully and correctly. Forcing it can cause damage to the device.

1.3 Network Limitations

- You will encounter communication issues inside buildings, trains, tunnels, basements, in built-up areas and mountainous areas. Even within a serviceable area you may encounter communication issues, so please check local coverage.
- In bad reception areas, you may find that the signal will drop suddenly. This can happen in strong reception areas also. Please be aware of this.

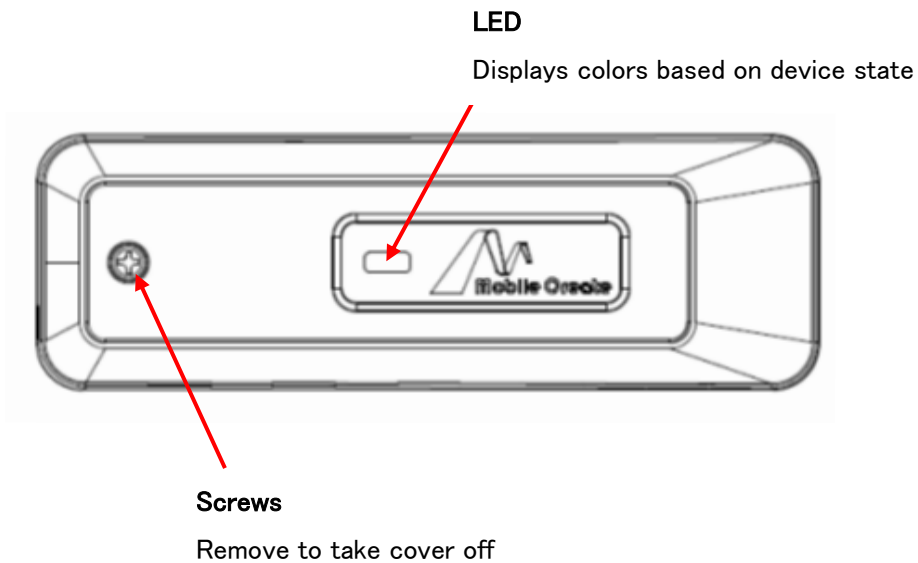
1.4 Miscellaneous

- Using the device near TVs or radios may cause interference or noise. Please relocate to a place away from TVs and radios.
- This device encrypts data and we take your privacy very seriously, but we cannot guarantee that your data is perfectly safe from hacking or interception by third parties. Please take the utmost care in your use of the device.
- This device is classed as a radio transmitter by radio law, and as such it may be subject to inspection.
- Please be aware of your surroundings at all times while using the device.

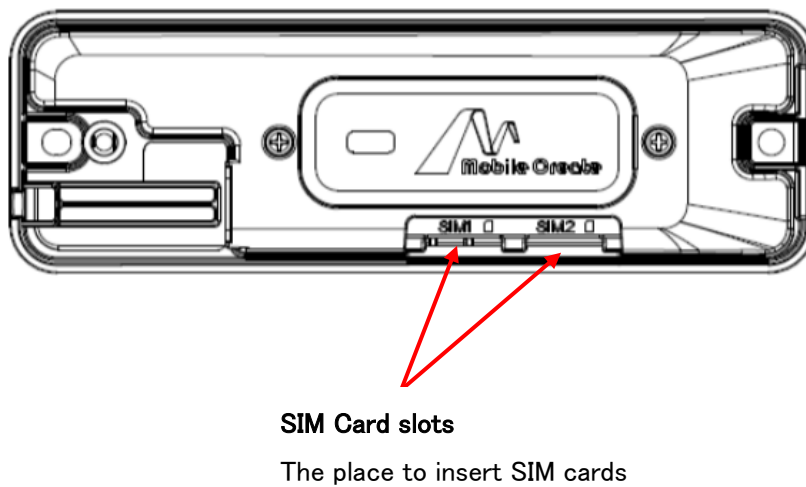
2. Before Use

2.1 Part Names and Functions

■ Part Names



■ Device Front (Cover removed)



2.2 SIM Card Information

The IC chip of the SIM card holds your information.

To use data communication, you must insert the SIM card into the device.

Please ensure the device is powered off before removing or putting on the device's cover.



• There will be no data communication functionality without the SIM card inserted into the device.

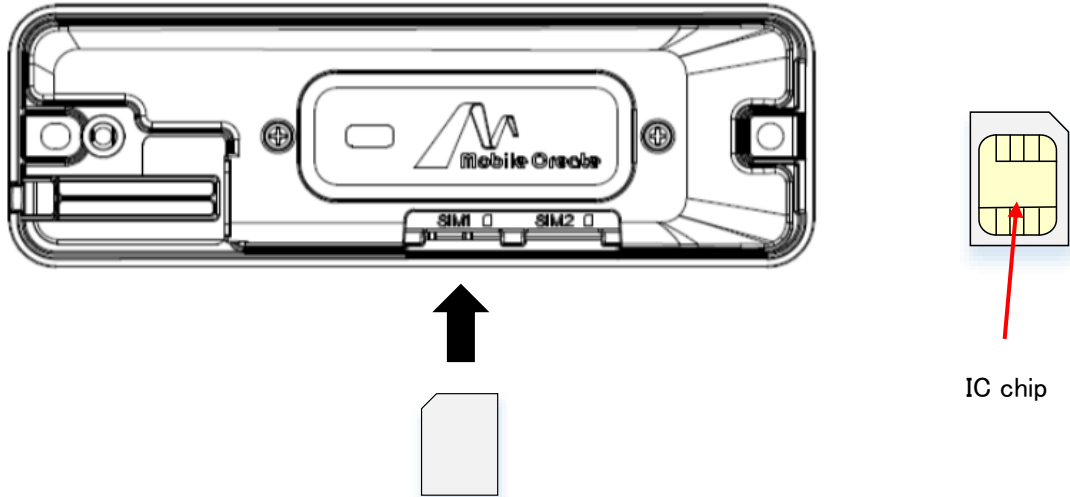
■ How to insert the SIM card

After removing the device cover, you will see the SIM card slots below the LED display area.

Insert the SIM card in the SIM1 slot, with the IC chip facing down.

Push carefully until you feel and hear the SIM card click into place.

After insertion, please replace the device cover.

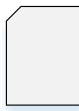
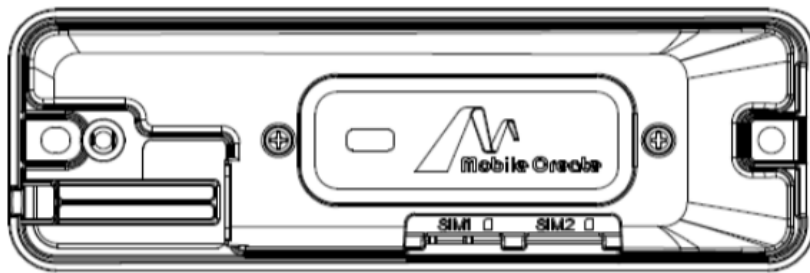


■ Removing the SIM Card

To remove the SIM card, you must remove the device's cover.

Next, press on the inserted SIM card until it clicks, and pull it out in the direction of the arrow in the figure below.

After removing the SIM card, don't forget to put the device's cover back on.



- Please be careful when putting on and removing the device's cover as too much force may damage the SIM card.
- Please ensure the device is powered off before removing or putting on the device's cover. There is a risk of data loss.
- Please refrain from touching or damaging the IC chip of the SIM card. If the IC chip is dirty, the connection may become inconsistent, so the device may power off.
- Please be careful to not lose or misplace the SIM card after removing it.

2.3 LED Indicator Information

Please read the following carefully to know what each LED Indicator display means.

Device state	LED
Power off	No display
Outside service area	Keep LED status just before going out of range
Power on, confirming packet connection	Red
SIM Card connection confirming	Yellow
Processing packet communication	Green
Obtaining IP address	Purple
Querying McNS Server	White
Set up finished, Connecting, Waiting	Blue

2.4 About installing the communication module(MCM3)

1. Please remove the screws and remove the lid.
2. Please fix the communication module on A-pillar and drive the screws in the red arrows in the figure below.
Then connect the USB cable.
3. Please attach the lid again and tighten the screw.



The communication module has a built-in GPS antenna.

The recommended mounting position is the A-pillar, but if it is difficult to install by airbag etc., male both ends of the dashboard the recommended mounting position.

If any of the above is difficult to install, it may be installed in a place where radio waves of the module can be secured.

If there is a metal plate in the surroundings, reception sensitivity may decrease.



- Please use the supplied USB cable.
- Please do not use other than the supplied USB cable.
- Please do not extend the USB cable.
- Please consider the installation location within the reach of the cable.

3. Appendix

3.1 Specifications

Product Name		MCM3
Interface		USB2.0
Dimensions		(D)135.8mm * (W)44.5mm * (H)12.7mm (Excluding cables)
Weight		Approx.70g (Excluding cables and SIM card)
Power supply		DC 5V
Current consumption	While connected wirelessly	600mAmax(At maximum transmission output)
Temperature range (outside)	Operating temperature range	-20°C - +60°C(Do not expose to direct sunlight)
	Storage temperature range	-30°C - +80°C
Humidity	Operating humidity range	20 - 80%RH(Do not allow condensation to form)
	Storage humidity range	20 - 80%RH(Do not allow condensation to form)
Environment Agency		RoHS compliant
Wireless Specifications (AT&T)	4G (FDD)	Band2 (1900MHz) Band4 (1700MHz/2100MHz) Band5 (800MHz) Band13 (700MHz) Band17 (700MHz)
	3G (W-CDMA)	Band2 (1900MHz) Band5 (800MHz)
GNSS Performance	Number of positioning satellites	GPS :12ch GLONASS :10ch QZSS :2ch
	Receiving Signal	GPS :L1(1575.42MHz), C/A code GLONASS :L10F(1602MHz) QZSS :L1(1575.42MHz), C/A code

GNSS Performance	Receiving Sensitivity	GPS : -161dBm typ. (Ta=25°C) GLONASS : -157dBm typ. (Ta=25°C) QZSS : -146dBm typ. (Ta=25°C)
	TTF	Cold start 33sec typ. (-130dBm/ Open sky)

3.2 Federal Communications Commission (FCC) statement



15.105(b)

This equipment 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 a 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 radio/TV technician for help.

15.19

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 of the device.

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 10 mm between the radiator and your body.

-
- The contents of this manual can not be reprinted, replicated or modified without express permission.
 - The contents, design, and wording of this manual may change, without warning, due to improvements.
-

Mobile Create USA

2961 W.MacArthur Blvd, Suite 210, Santa Ana, CA 92704

<https://mcusainc.com/>

Mobile Create Inc

2-5-60 Higashi-Omichi Oita City,Oita Prefecture 870-0823, Japan

<http://www.mcinc.jp>