

MANUAL



MDT860-RJ45

CONTENT

SAFETY PRECAUTIONS

Device	P.3
Environment	P.3

PRODUCT OVERVIEW

Package components	P.4
Front / Left / Right / Top / Bottom / Rear	P.5

GETTING STARTED

Inserting SIM card & TF card	P.6
Mounting the RAM and cradle	P.7
Locking device and Unlocking device	P.8
Remove device from cradle	P.9
Cradle cable pin assignment	P.10
Turning on the device	P.10
Charging the device	P.11

ANDROID TUTORIALS

Start screen	P.12
Home screen	P.12
Status bar	P.13
APP screen	P.13
Switching between apps	P.14
Viewing two apps at once	P.15
Closing active apps	P.16
Turning off the device	P.16

CONNECTING TO NETWORKS

Connecting to Wi-Fi network	P.17
Connecting to a mobile network	P.17
Sharing a mobile connection	P.17
Disconnecting from a network	P.17

USING CARD SLOTS

Inserting SIM Card	P.18
Removing SIM card	P.19
Inserting TF card	P.20
Removing TF card	P.21

SPECIFICATION

P.22

CUSTOMER SERVICES

P.23

SAFETY & REGULATORY COMPLIANCE

P.24

Device

The tablet and the battery should not be thrown into the fire and not used in areas where the temperature exceeds the specified values.

This can lead to the outbreak of a fire or cause the battery to explode.

In addition, this will result in a leak occurring and the functionality will be significantly reduced or the tablet cannot no longer be used.

If you are charging the battery or when using the tablet, and you realize, that the temperature of the case is unusual high, because the battery has overheated, quit please the applications.

Do not charge the battery continuous for more than 24hours.

Should this precautions be disregarded, there is no guarantee.

Please charge and discharge the device as one cycle at room temperature when devices are stored for half year or above.

Do not attempt to repair, customize, or disassemble the device without the appropriate knowledge and pre-cautions may lead to dangerous situations with chance on damaging the product.

Do not use in extreme conditions such as high and low temperatures, high humidity or moist environments and around magnetic fields.

Avoid long-time exposure to sunlight. Only use by the manufacturer permitted accessories to avoid damages to the product with possibly warranty loss.

Environment

The tablet is for the outdoor area designed. It is waterproof, dustproof and shockproof.

- The device can be used for up to 30minutes in 1.m deep lying water.
- You can do it in dirty and dusty environments.
- Ambient temperatures are from -10°C to 60°C possible.
- The impact resistance was with a drop height of 1.0m tested.

Package components

NFC Card

RAM Mount

Cradle



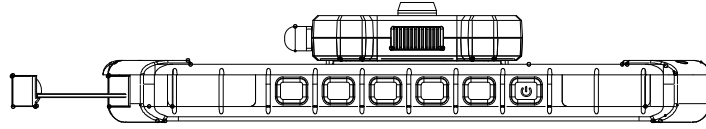
Locking Keys

SIM Card Tape
TF Card Tape

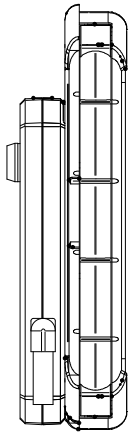
Screws:
4 nos.
4 nos.
1 no.

USB Cable

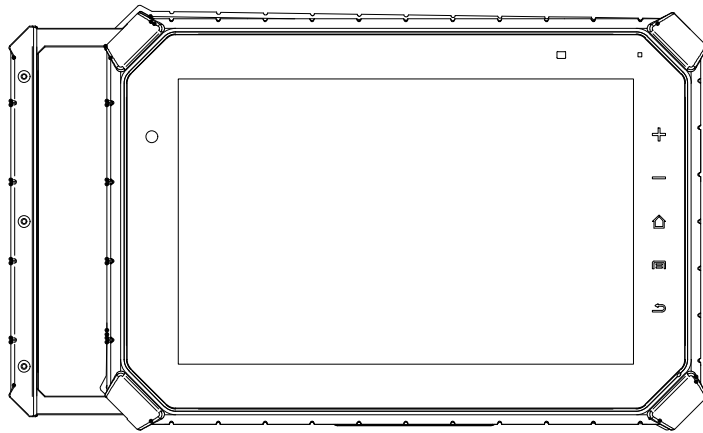
Front / Left / Right / Top / Bottom / Rear



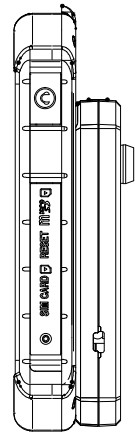
Top View



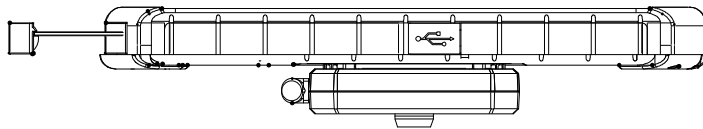
Left View



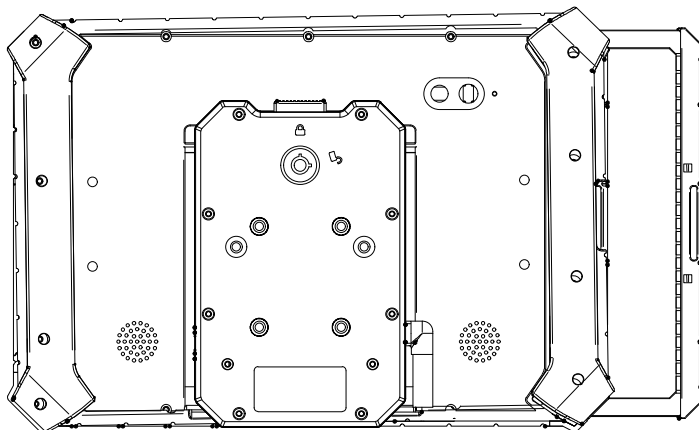
Front View



Right View



Bottom View



Rear View

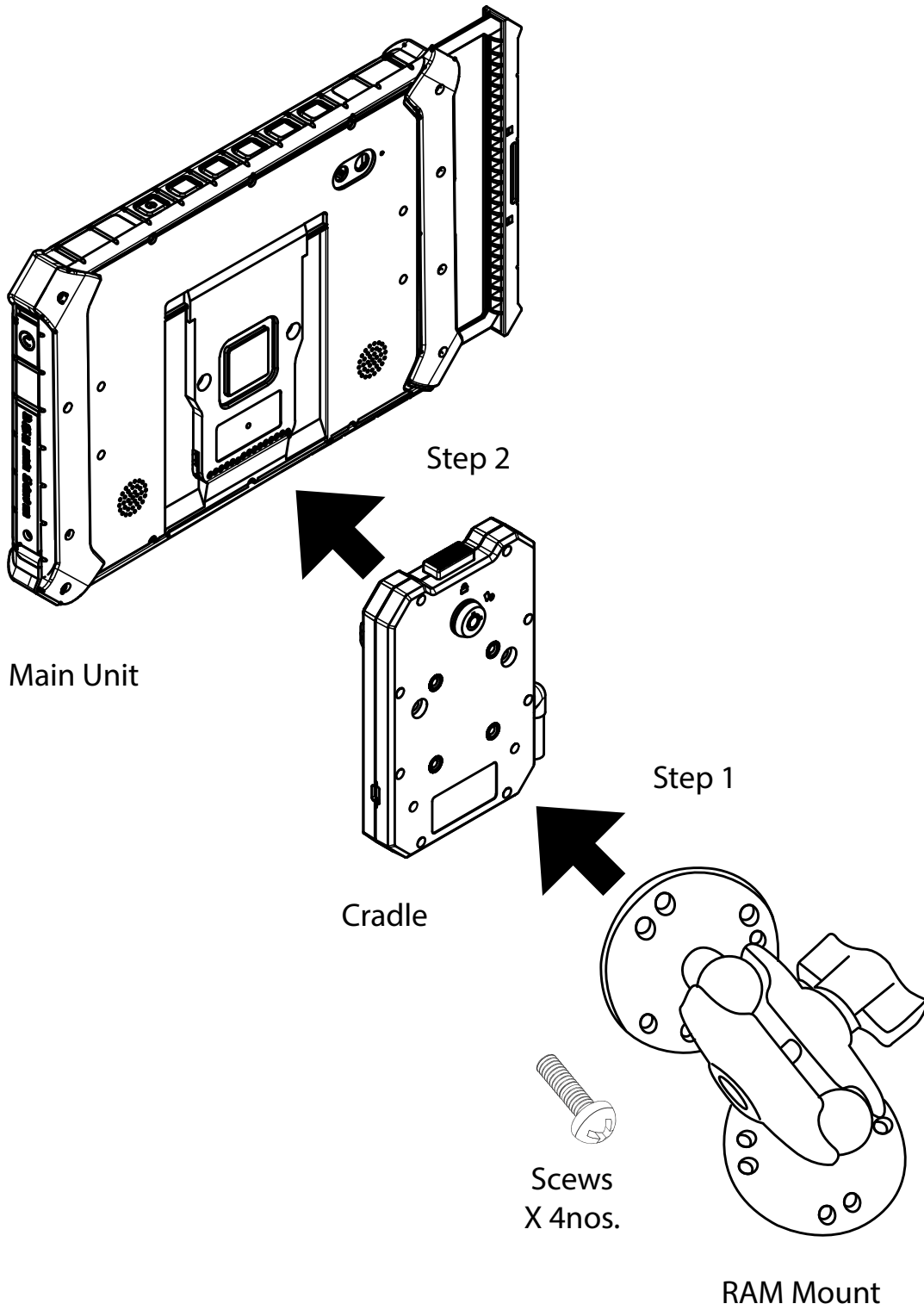
Inserting SIM card & TF card



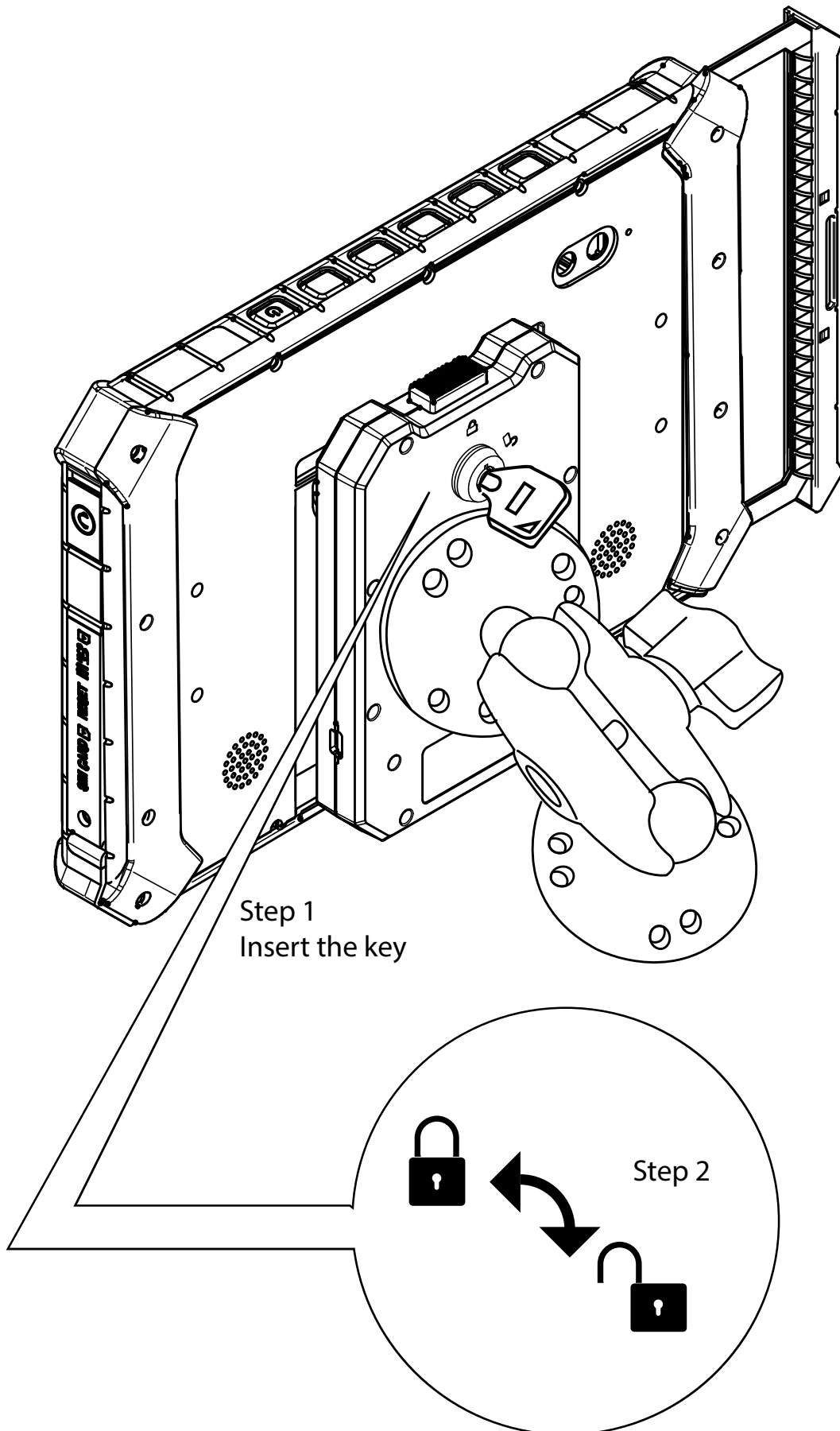
TF/SIM card

- Insert the SIM card with the gold contacts facing up.
- Insert the TF card with gold contacts facing up.
- Push the card in the direction of the arrow as shown in the figure.
- For easier removing the SIM card/ TF card from the inside card slot, please assist with the SIM card/ TF card tape as shown in the figure.
- SIM card/TF card cover can be locked by screws in preventing from loss or steal.

Mounting the RAM and Cradle

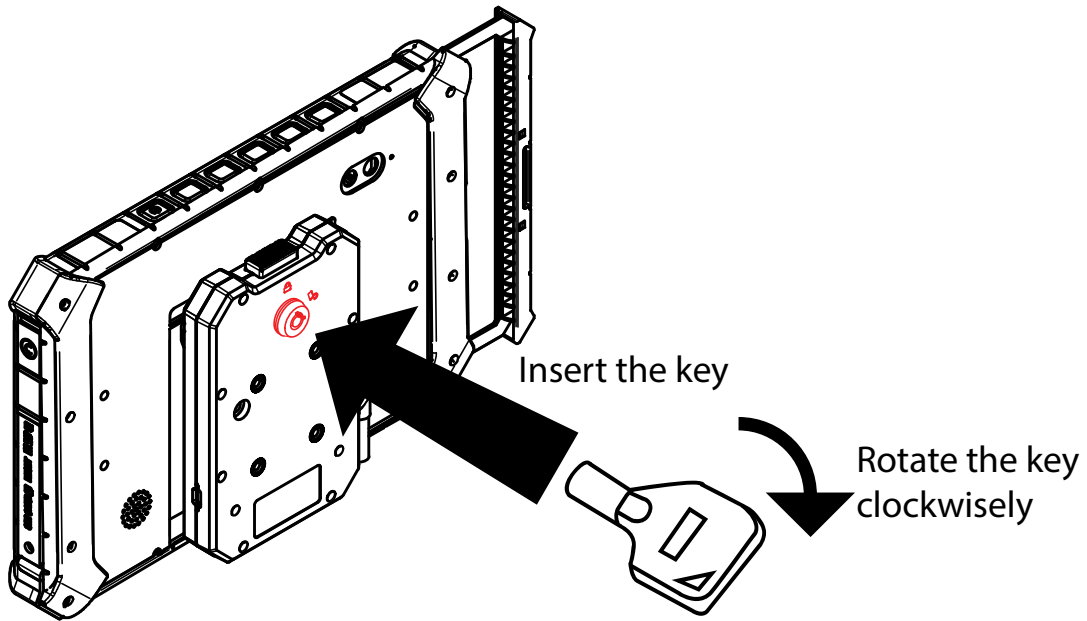


Locking Device & Unlocking device

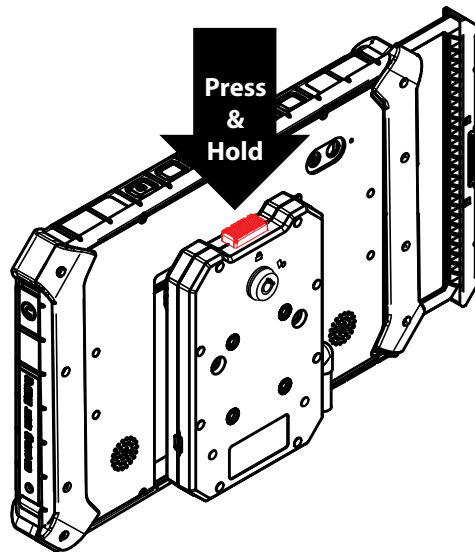


Remove device from cradle

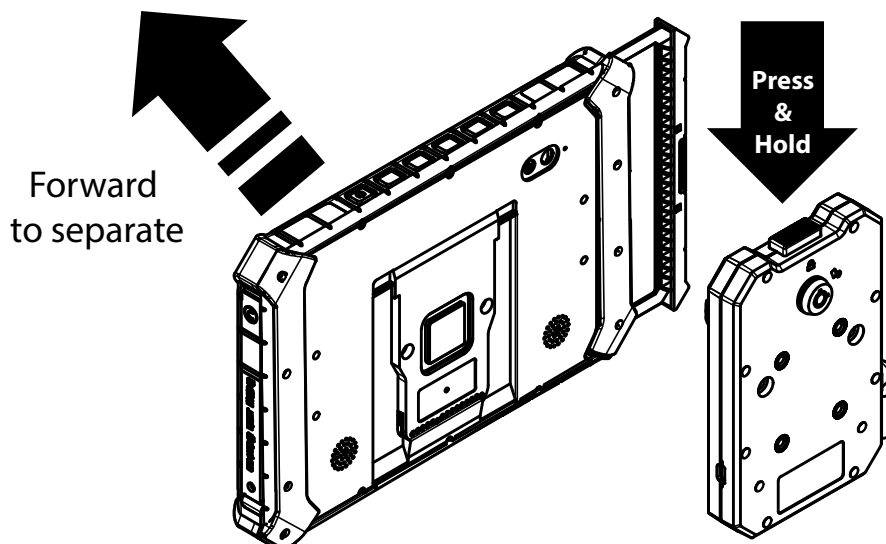
1. Insert the key, rotate the key clockwise to unlock cradle.



2. Press and hold the release button on the cradle.

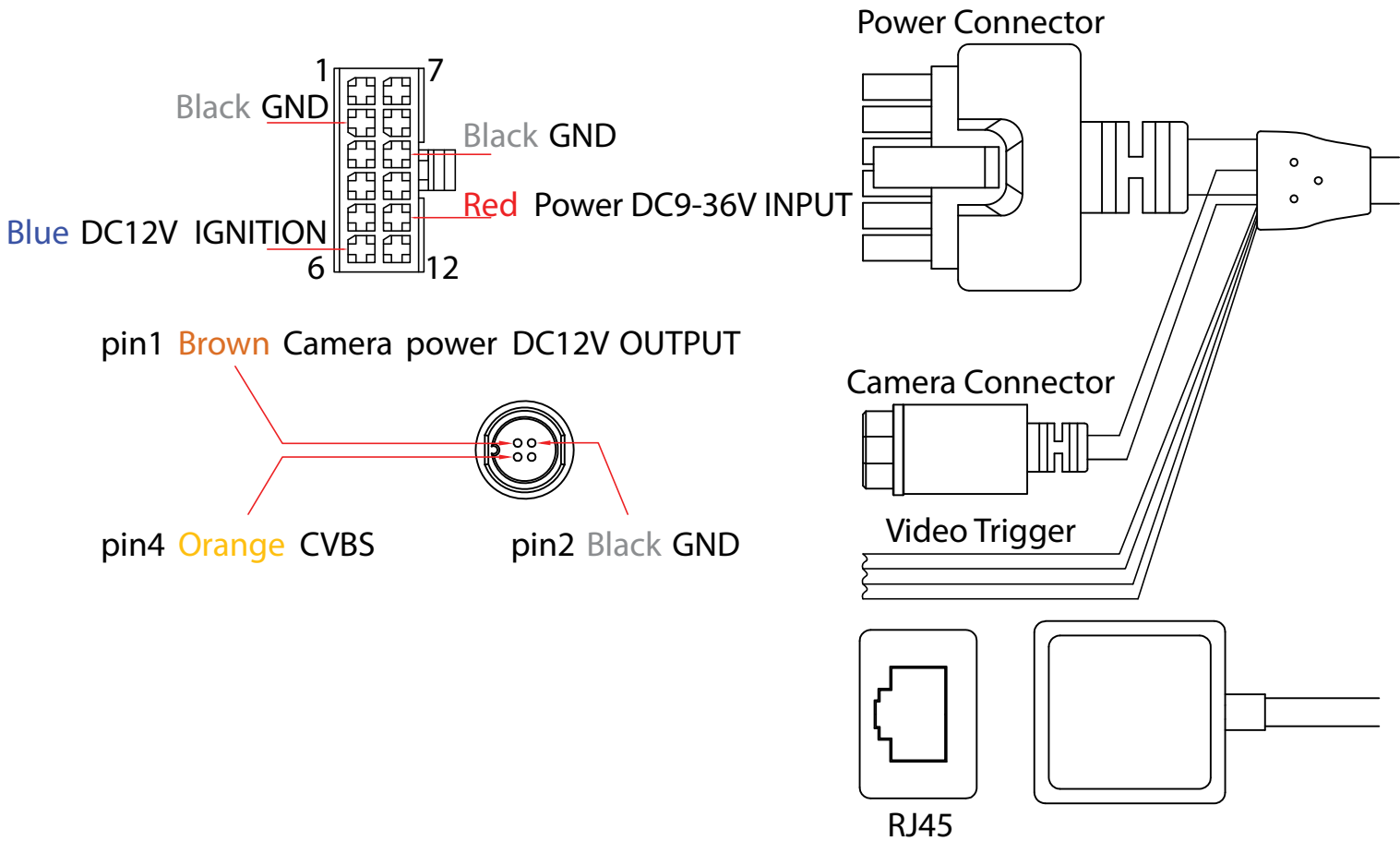


3. Separated apart between main unit and cradle.



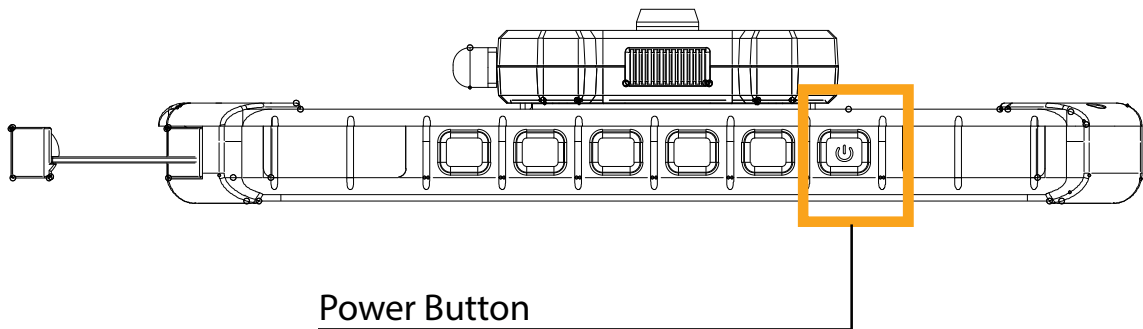
Cradle cable pin assignment

There are RJ45 and video input interfaces.

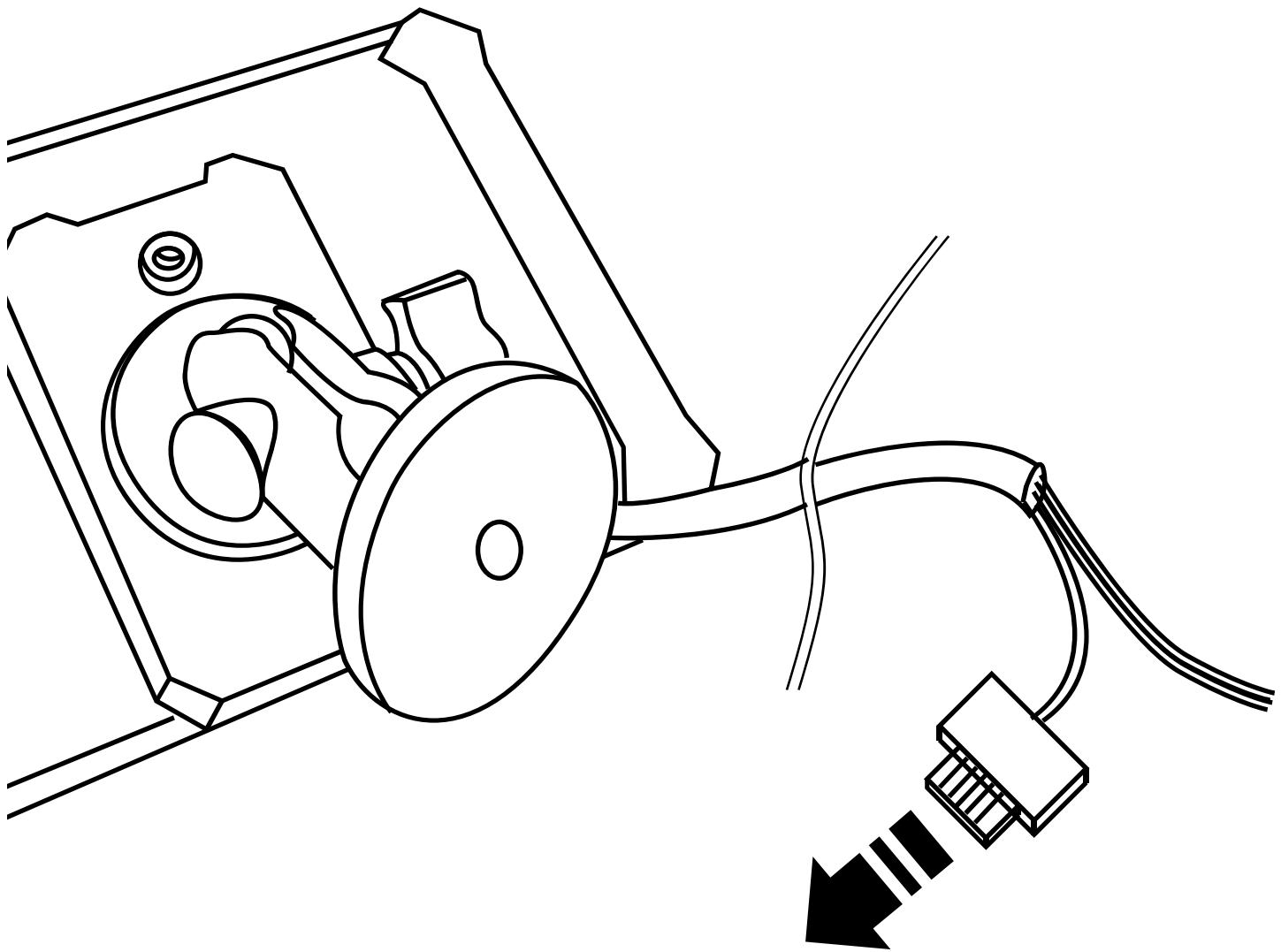


Turning On Device

Press Power button to turn on the device.



Charging Device

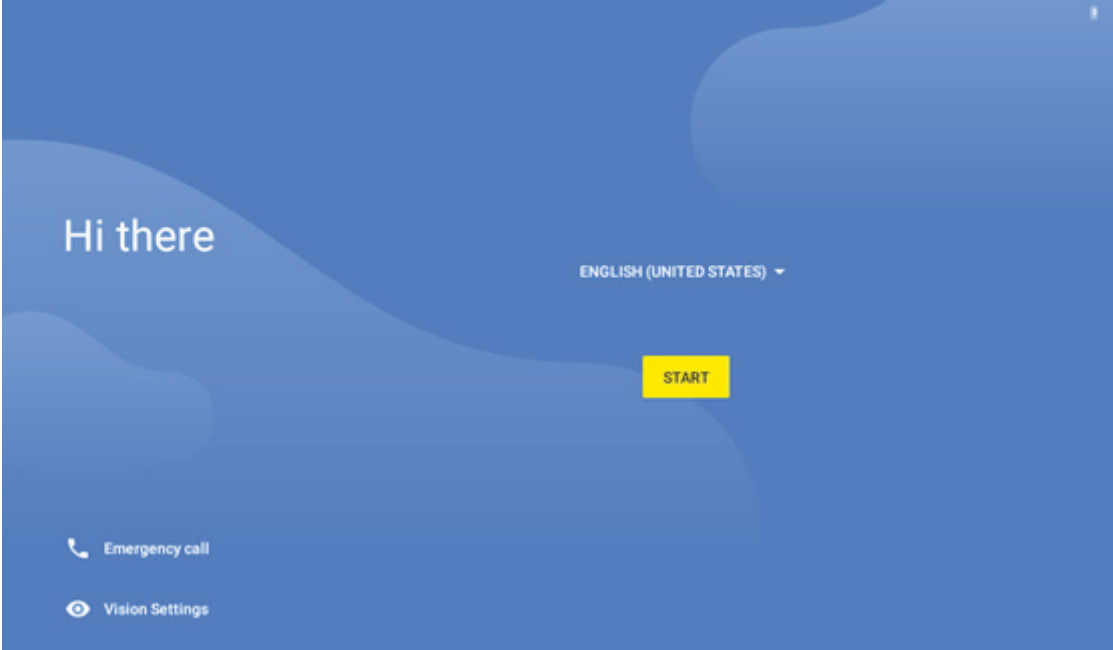


Plug into vehicle power supply

Notice & Warning

PLEASE CHARGE AND DISCHARGE THE DEVICE AS ONE CYCLE AT ROOM TEMPERATATURE WHEN DEVICES ARE STORED FOR HALF YEAR OR ABOVE.

Start Screen



Home Screen



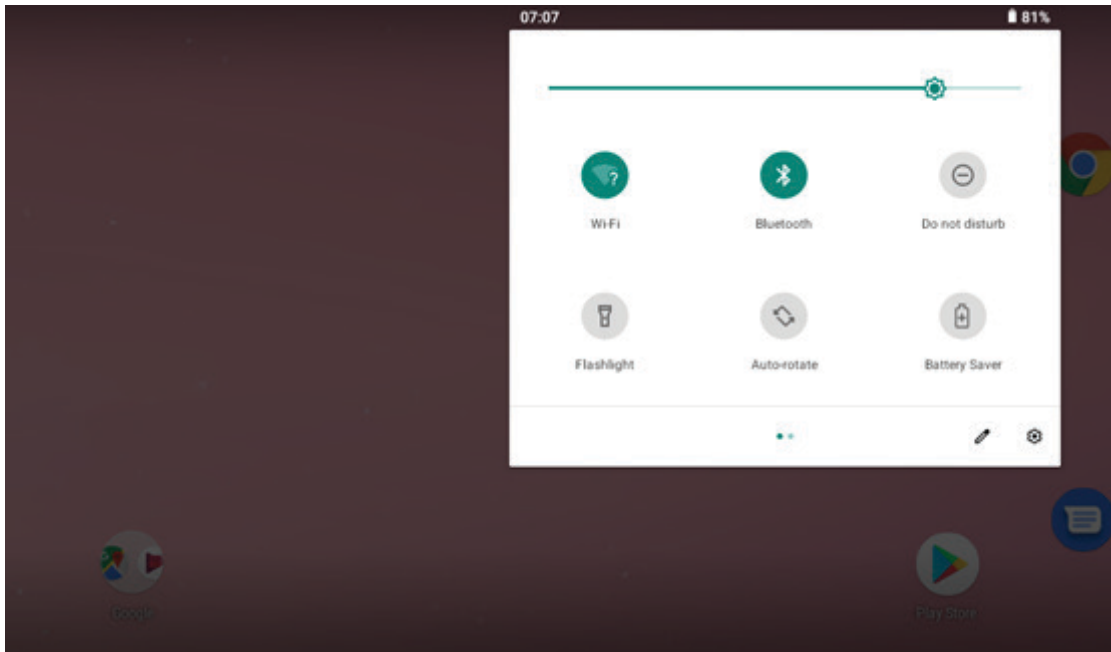
Status Bar

The status bar shows your tablet's status and notifications

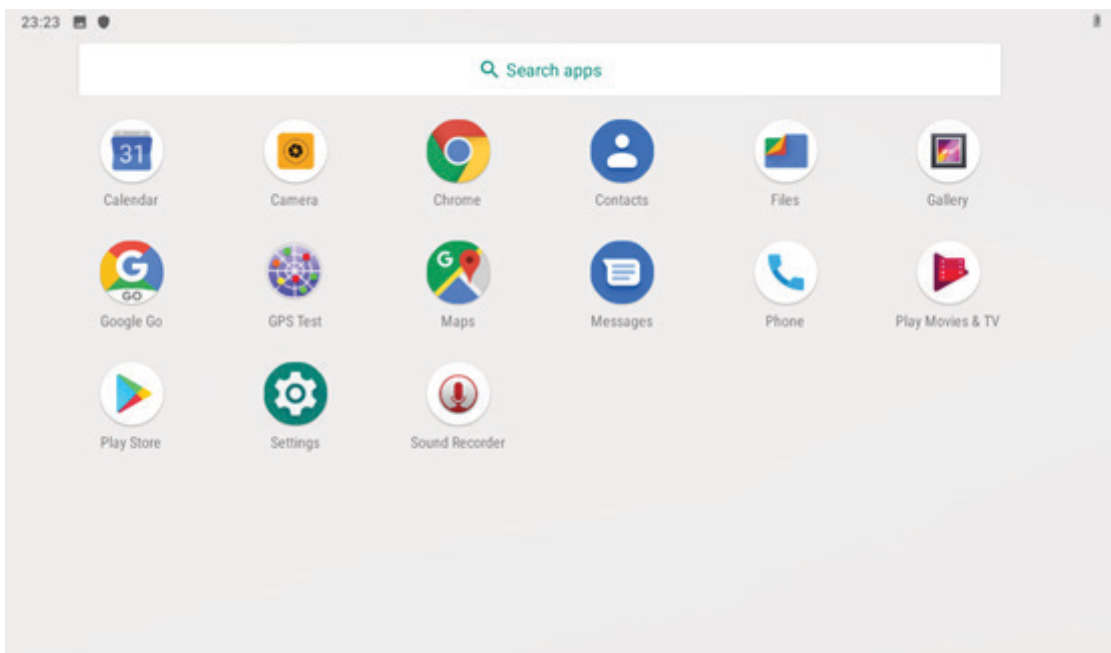
The notification panel is your center for new events:

like new e-mail, voicemail, updates, and more.

Drag down to display notifications. Touch a notification to respond.



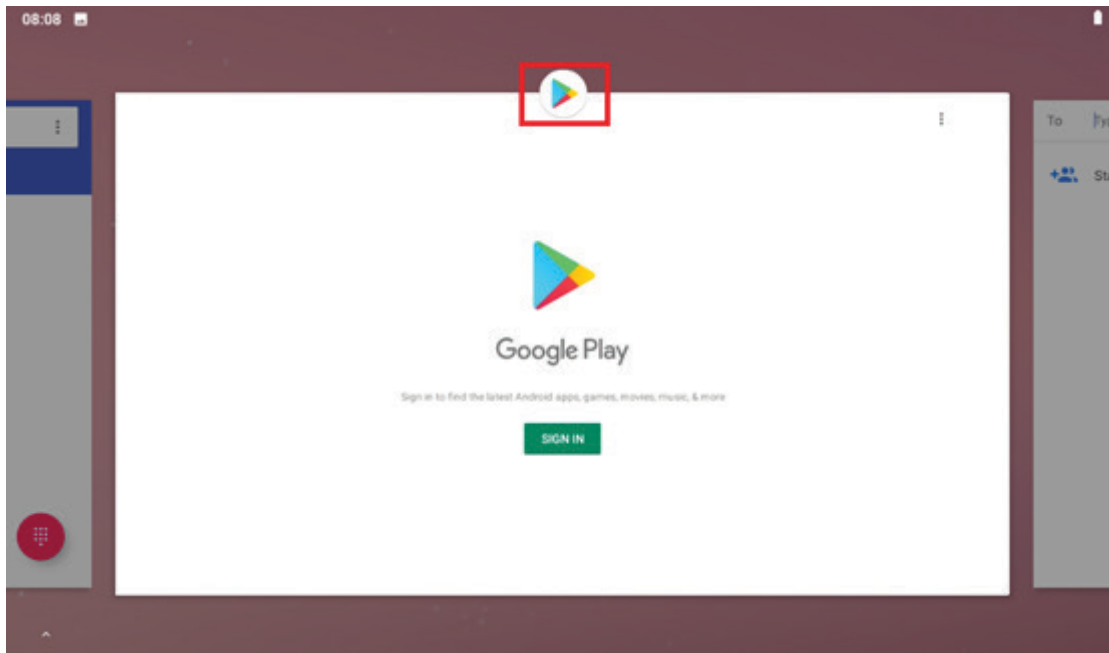
APP Screen



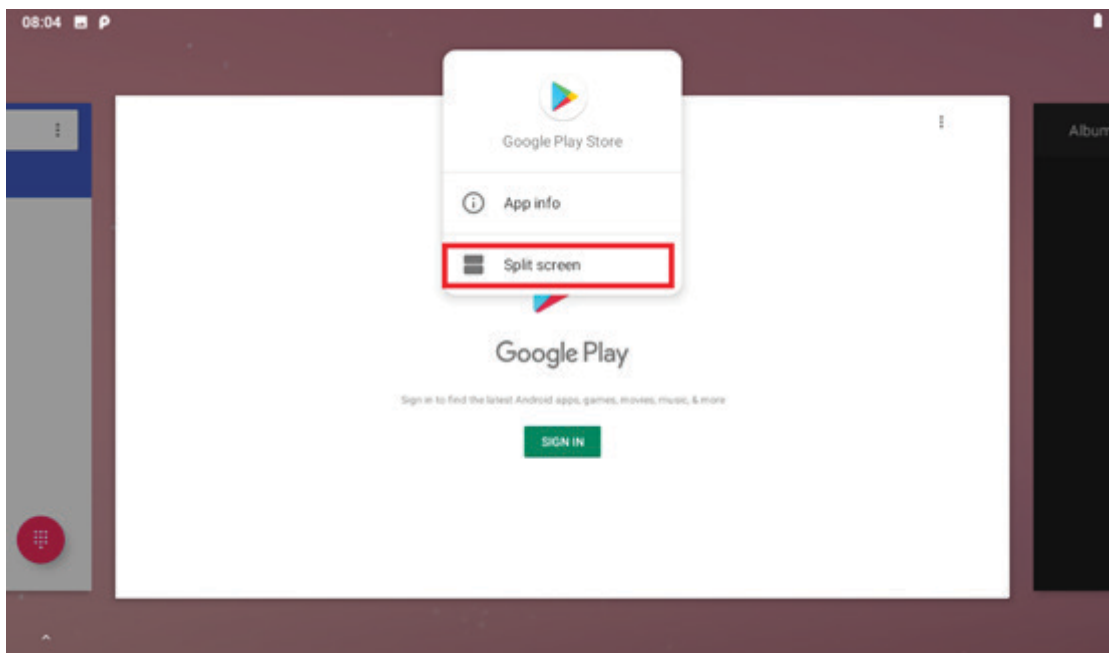
Switching between home screen and app screen.
 Slide your fingers up from the bottom of the home screen.

Split screen:

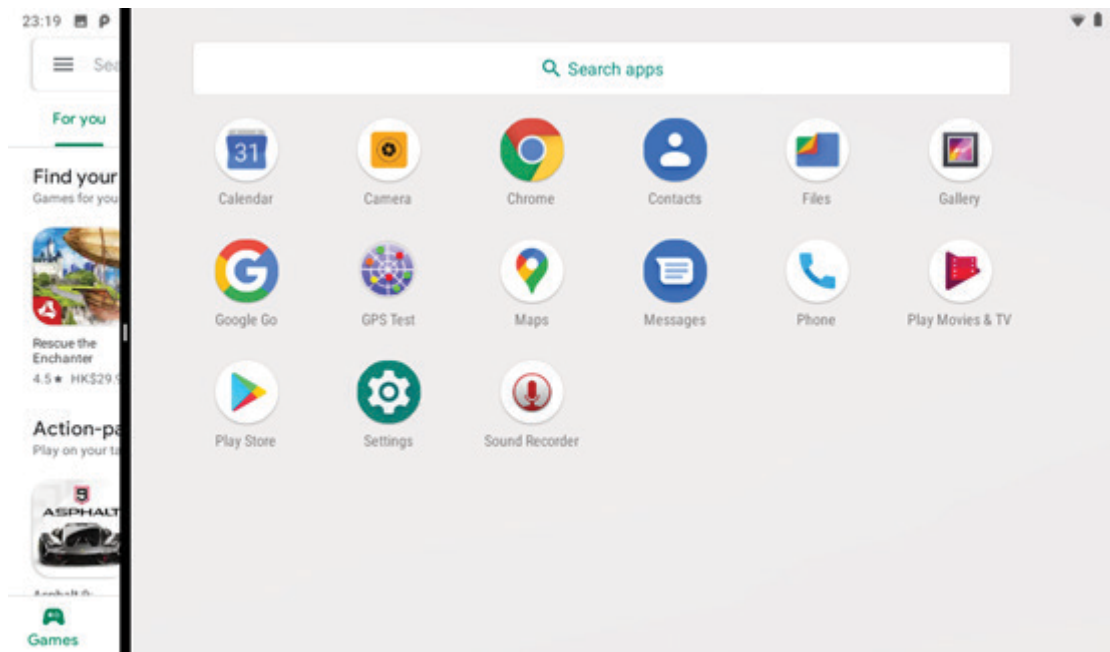
1. Press the recent key to the right of the touch screen to display the recent applications history.
2. Press and hold the icon on top of the application you want to split screen.



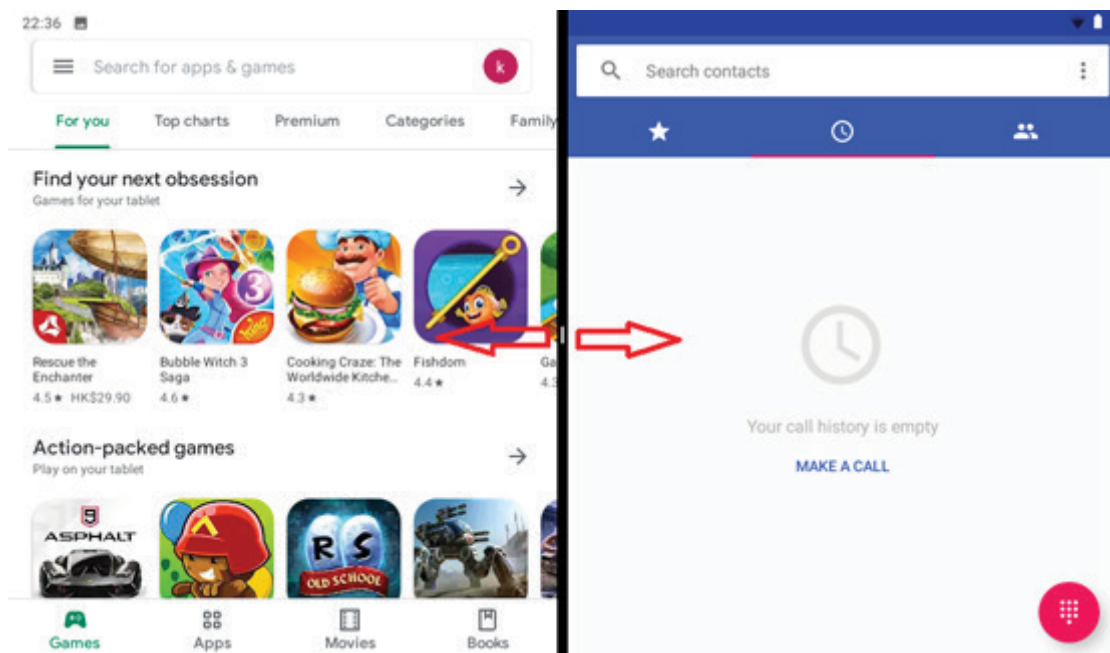
3. Click Split screen.



4. Select second app displayed at the same time.

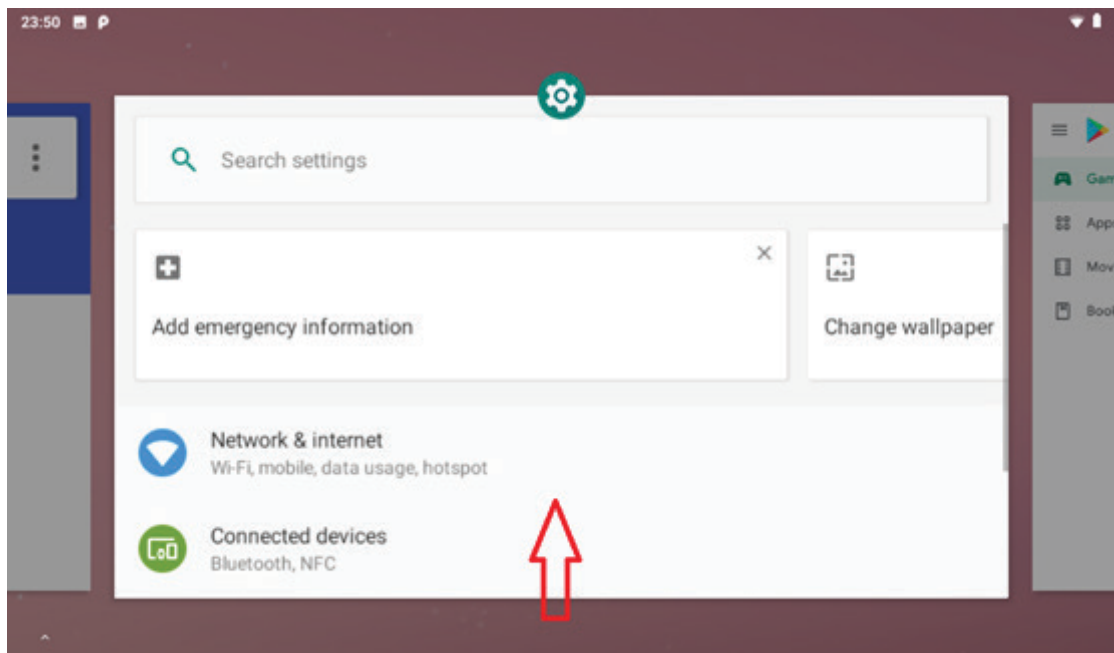


5. When the second app appears, drag it to the left or right side of the screen.
6. Release the app. You can press and drag the dividing line in the center to resize the apps.



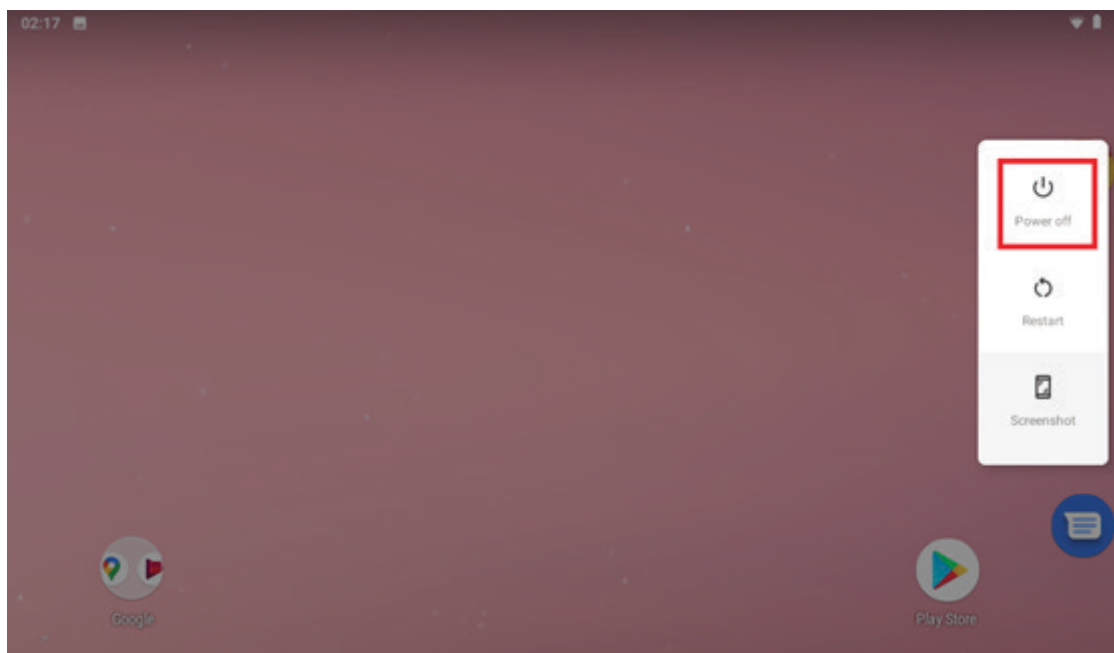
Close active Apps:

1. Press the recent key to the right of the touch screen
2. Slide your fingers up from the bottom of the application you want to close



Turning off the device:

1. Press and hold the power button for about three seconds to choose power off.



CONNECTING TO Wi-Fi NETWORK:

1. Tap Settings icon to open settings menu.
2. In the Settings menu, tap Network & internet.
3. Tap the Wi-Fi toggle to enable Wi-Fi connections.
4. When the list of Wi-Fi networks appears, tap an available network.
5. Tap Connect.
6. Type in the password to connect to the network.

After you connect to a Wi-Fi network, the device will automatically connecting to mobile network whenever it is within range.

CONNECTING TO MOBILE NETWORK:

1. Insert a SIM card
2. In the Settings menu, tap Network & internet
3. Tap Mobile network
4. Enable Mobile data
5. It will show the 4G icon on the status bar if the 4G network is connected.

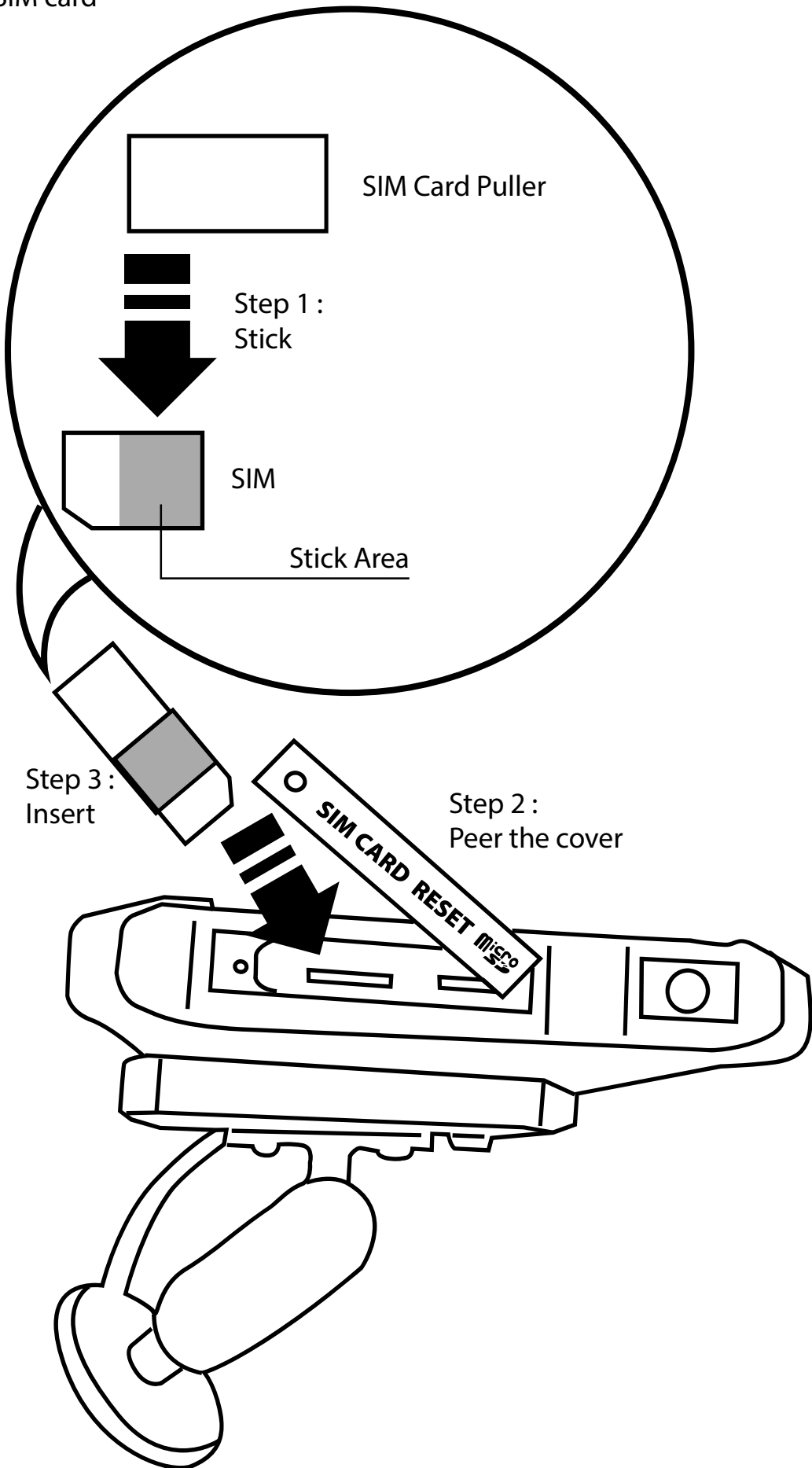
Sharing a mobile connection, to share a connection to a mobile network with other devices, follow these steps:

1. Tap settings to open setting menu.
2. Tap Hotspot & tethering.
3. Tap Wi-Fi hotspot and tap the toggle switch to turn on network sharing.
4. Specify the name of the network and the password.
5. On the other device, locate the network and enter the password to log in.

DISCONNECTING FROM A NETWORK:

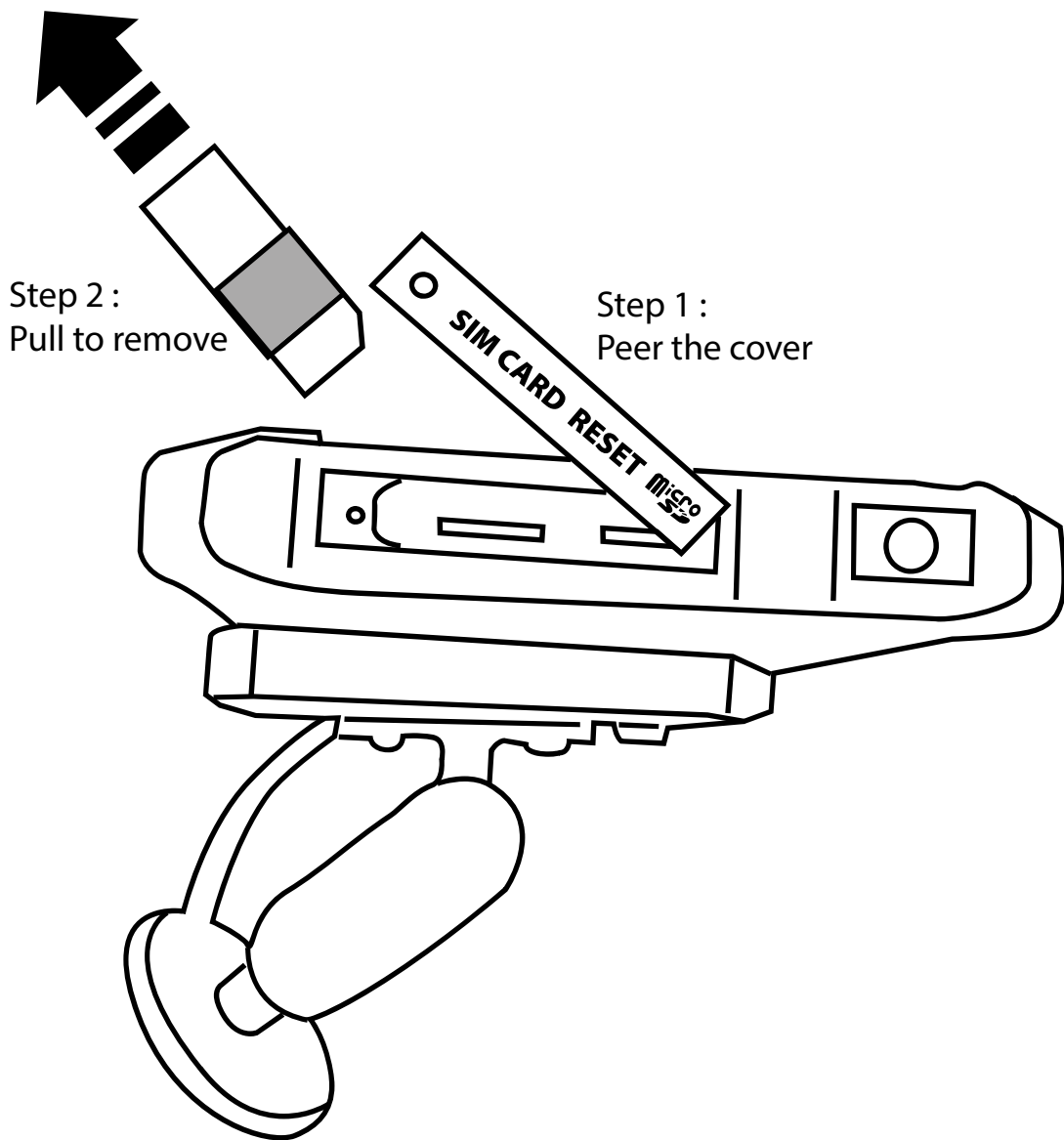
1. Tap settings to open setting menu.
2. Tap Hotspot & tethering.
3. Tap Wi-Fi hotspot and tap the toggle switch to turn off network sharing.

Inserting SIM card



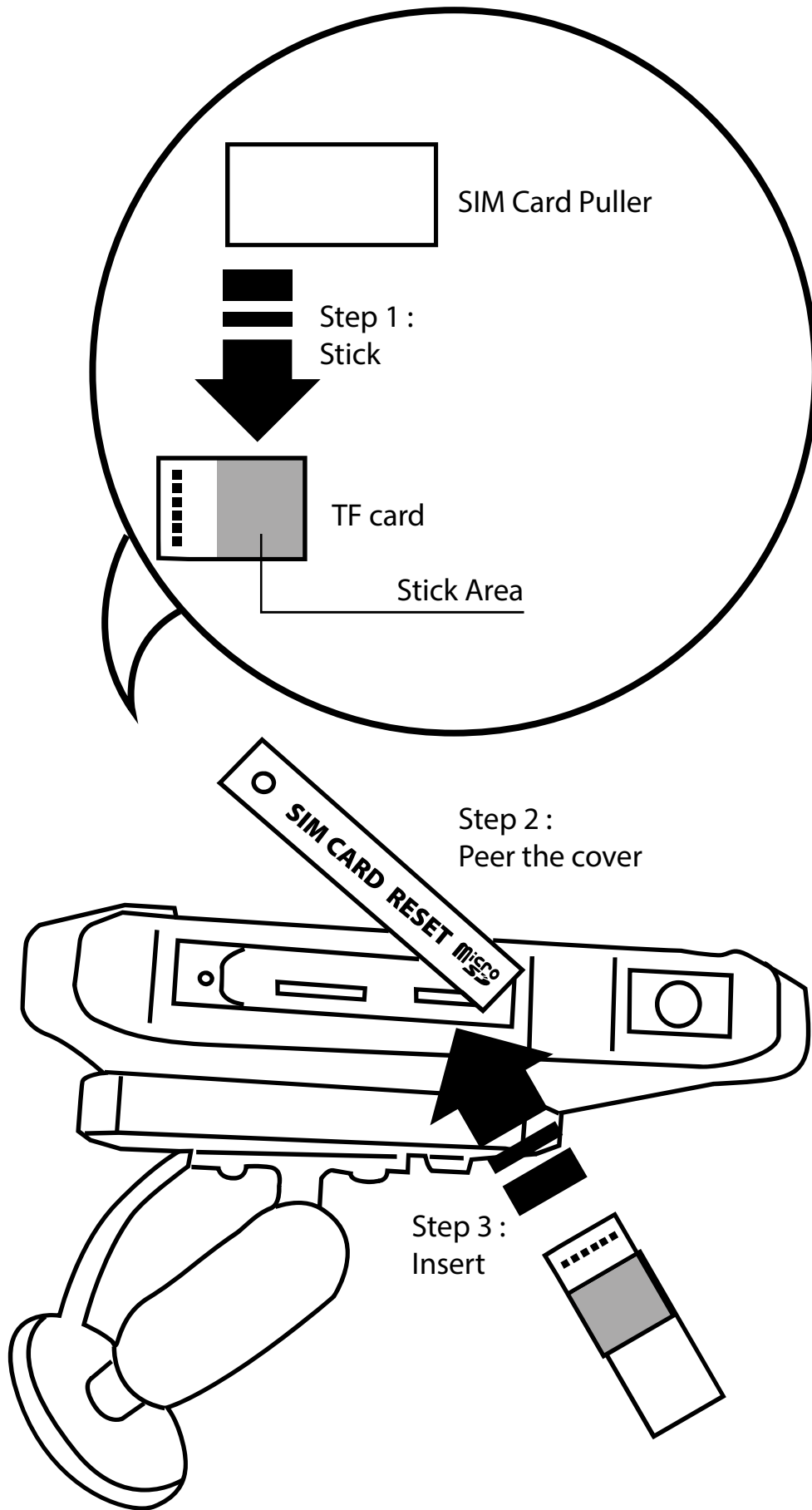
Remove : SIM Card Puller helps to insert SIM Card easily.

Removing SIM card



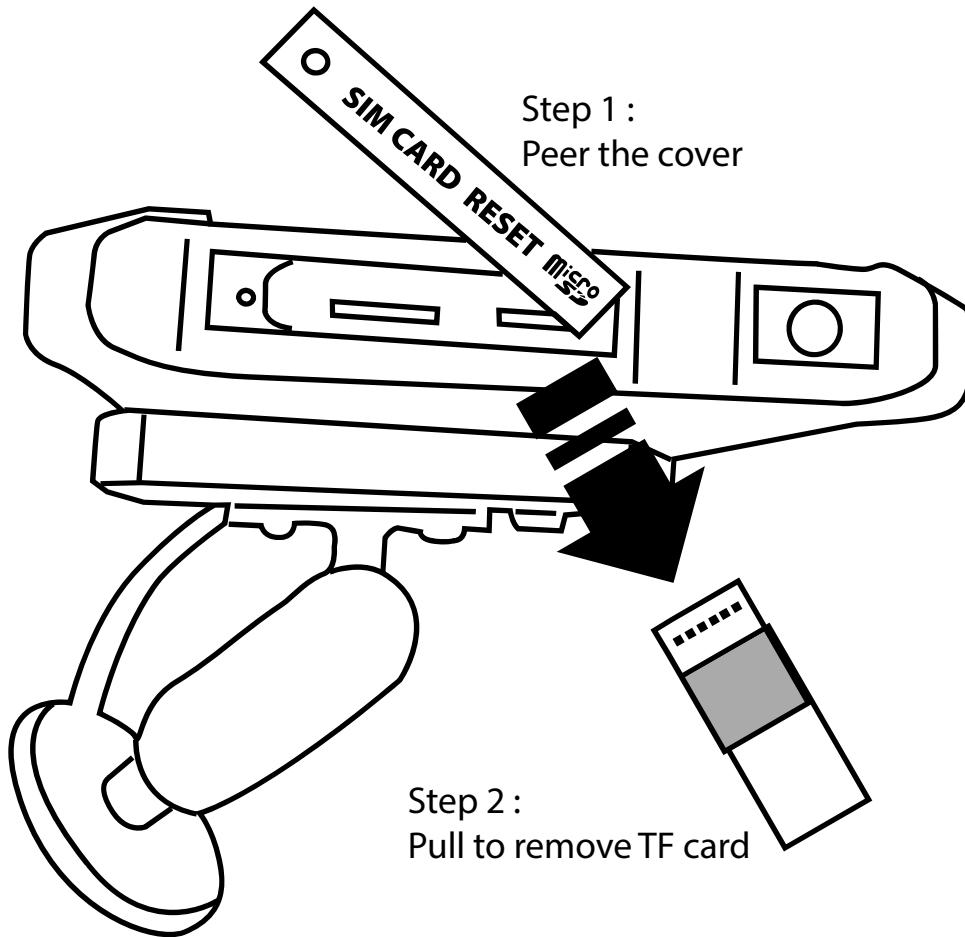
Remove : SIM Card Puller helps to pull-out SIM Card easily.

Inserting TF card



Remove : TF Card Puller helps to insert TF Card easily.

Removing TF card



Remove : TF Card Puller helps to pull-out TF Card easily.

Model		
8"	MDT860	
Hardware		
CPU	MTK platform 2GHz oct core CPU	
GPS	high sensitivity receiver, 64 channels	
4G / 3G module / GSM module	2 version (EUR and NAR) with voice call: EUR - (Europe market) <ul style="list-style-type: none"> • GSM : 900/1800Mhz • WCDMA – 850/900/2100Mhz • FDD (4G, EUR) – B1 , B3 , B5, B7, B8, B20 NAR- (North America market) <ul style="list-style-type: none"> • GSM : 850/1900MHz • WCDMA : 850/1700/1900Mhz • FDD (4G, NAR) – B2, B4, B5, B12, B17 	
Bluetooth	V2.1 and V4.0 with data transfer (OPP profile)	
WLAN	Wifi IEEE 802.11 b/g/n	
Camera (back camera)	16M pixel autofocus camera and flashlight	
Camera (front camera)	Optional but not default	
Analog video input	Default 1x 1080p AHD video input	
RFID	Yes, optional	
g-sensor	Yes, default	
Light sensor	Yes, default	
GYROSCOPE	Yes, default	
Wireless module	Optional, Lora module	
Display	8" colour TFT touch screen (1280x800, capacitive Touch panel)	
Memory	ROM (SLC/MLC)	32G NAND flash (dual layout for flash and eMMC)
	RAM (DDR)	2GB DDR4
	Extend Slot	Micro SD (T Flash) card
Antenna	Internal antenna	
LED indicator	Two-color LED (Red/Green)	
Interface	Type C USB Connector	USB2.0 connection and power charging
	Pogo pins	Pin 1&2 – 5V Vcc Pin 10 - Video trigger Pin 3&4 – USB (D+, D-) Pin 11 – ID pin Pin 5&6 – GND Pin 12&13 – I ² C Pin 7&8 – RS232 (Tx/Rx) Pin 14 – ignition Pin 9 – Video input Pin 15 - 9-36V input
	SIM card slot	Yes

Battery	Capacity	6300mAh (default)
	Standby	NA
	Operating Time	NA

Software	
Operating System	Android version 9.0
Android applications	TBD
Navigation software	TBD
Packaging Details	
1pc main unit and 1pc cradle	

CUSTOMIZATION SERVICES

Topicon's device management server is developed to allow customer to update different firmware and make kiosk mode function:

- BOOT ANIMATION
- INSTALL APK
- ADD APN
- DEFAULT SETTING
- CUSTOMIZED BUTTON

kiosk mode quick start guide :

https://docs.google.com/document/d/1nsodkquYQnlz6K0846ZwTNscECbnMiOzaJD_81x3cDo/edit?usp=sharing

FCC RF Exposure Information and Statement

This device meets the government's requirements for exposure to radio waves.

The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA (FCC) is 1.6 W/kg averaged.

Device types: portable device has also been tested against this SAR limit. SAR information on this and other pad can be viewed on-line at <http://www.fcc.gov/oet/ea/fccid/>.

Please use the device FCC ID number for search.

This device was tested simulation typical 0mm to body.

To maintain compliance with FCC RF exposure requirements, use accessories should maintain a separation distance between the user's bodies mentioned above.

FCC Warning

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.

NOTE 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE

The product shall only be connected to a USB interface of version USB2.0 and that the connection to a power USB is allowed.

Use careful with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss.



CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

Intended for sale and application in a business environment.

Use the Product in the environment with the temperature Between -10 °C and 40 °C;
Otherwise, it may damage your product. Products can only be used below 2000m altitude
For the following equipment:

Product Name: GPS

Model No.: MDT860 Brand Name: --

TOPICON HK LIMITED

E-mail: katie.lau@topicon.hk

hereby declares that this [Name: GPS, Model: MDT860] is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.



This product is intended for sale and application in a business environment.

RED Article 10 2

-This product can be used across EU member states

RED Article 10 10

-The product is class 1 product, No restrictions

The RF distance between body and product is 0mm

2G

Support Networks: GSM, GPRS, EDGE

Frequency Range: GSM900: Tx: 880-915MHz, Rx: 925-960MHz;
DCS1800: Tx: 1710-1785MHz, Rx: 1805-1880MHz

RF Output Power: GSM900:33.0dBm, GSM1800: 30.2Bm;
EDGE900: 27.42dBm, EDGE1800: 25.17dBm

3G

Support Networks: WCDMA, HSDPA, HSUPA

Frequency Range: WCDMA Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz;
WCDMA Band 8: Tx: 880-915MHz, Rx: 925-960MHz

RF Output Power: WCDMA Band 1: 23.78dBm, WCDMA Band 8: 23.71dBm

4G

Support Bands: FDD-LTE Band1, 3, 7, 8, 20

Frequency Range: FDD-LTE Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz
FDD-LTE Band 3: Tx: 1710-1785MHz, Rx: 1805-1880MHz
FDD-LTE Band 7: Tx: 2500-2570MHz, Rx: 2620-2690MHz
FDD-LTE Band 8: Tx: 880-915MHz, Rx: 925-960MHz
FDD-LTE Band 20: Tx: 832-862MHz, Rx: 791-821MHz

Max.RF Output Power:FDD-LTE Band 1: 22.60dBm, FDD-LTE Band 3: 23.54dBm;

FDD-LTE Band 7: 23.63dBm, FDD-LTE Band 8: 23.69dBm, FDD-LTE Band 20: 23.01dBm

Bluetooth

Bluetooth Version: Bluetooth V4.0;

Frequency Range: 2402-2480MHz

Max.RF Output Power: 6.82dBm (EIRP)

Wi-Fi (2.4G)

Support Standards: 802.11b, 802.11g, 802.11n-HT20/40

Frequency Range: 2412-2472MHz for 802.11b/g/n(HT20); 2422-2462MHz for 802.11n(HT40)

Max.RF Output Power: 15.88dBm (EIRP)

Frequency Range: 868.00MHz-868.6 MHz; 869.4MHz-869.650 MHz

RF Output Power: 868.1MHz:12.31dBm(ERP); 868.3MHz: 12.29dBm(ERP);

868.5MHz: 12.28dBm(ERP); 869.525MHz:12.25dBm(ERP)

NFC

Frequency Range: 13.56MHz

Radiated H-Field: MDT760: 15.49dBuA/m(@3m); MDT860: 15.44dBuA/m(@3m)

GPS Frequency Range: 1575.42MHz