

MANUAL



MDT661

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Device

The phone and the battery should not be thrown into the fire and not be 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 phone cannot no longer be used.

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

Do not charge the battery continuously 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

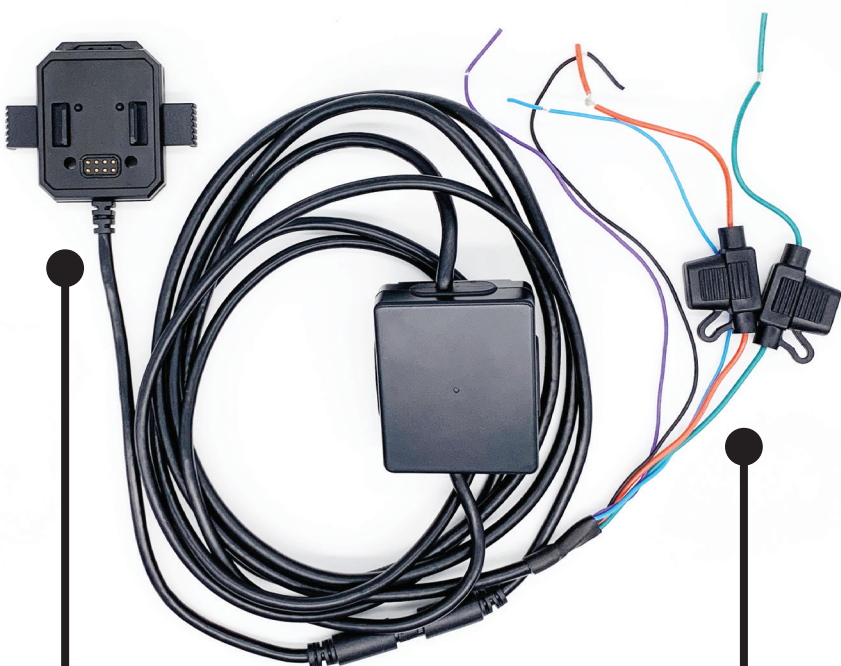
The phone is for the outdoor area designed. It is waterproof, dustproof and shockproof.

- 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 40 °C possible.
- The impact resistance was with a drop height of 1.2m tested.

Package components



Phone



Cradle

Charging Cable



Mount



Plug and USB Cable



Screws:
4 nos.
4 nos.
1 no.

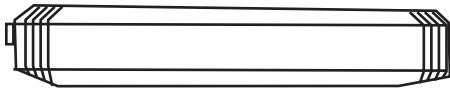


Pin



Screwdriver

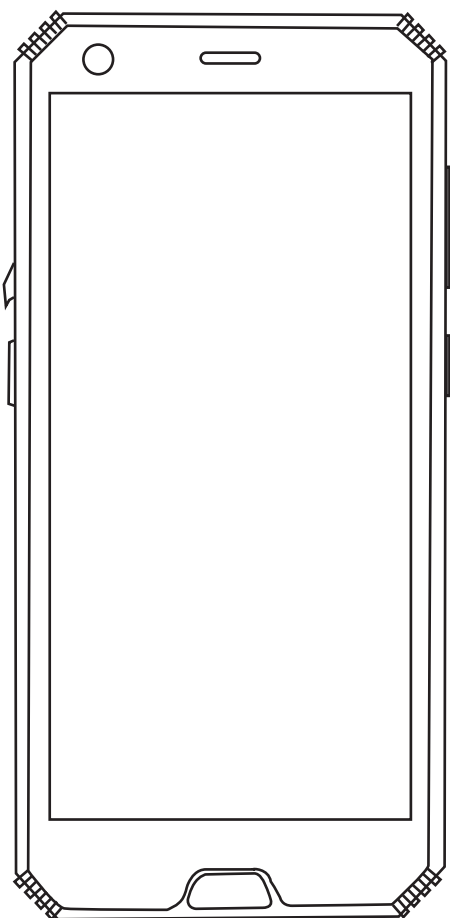
Front / Left / Right / Top / Bottom / Rear



Top View



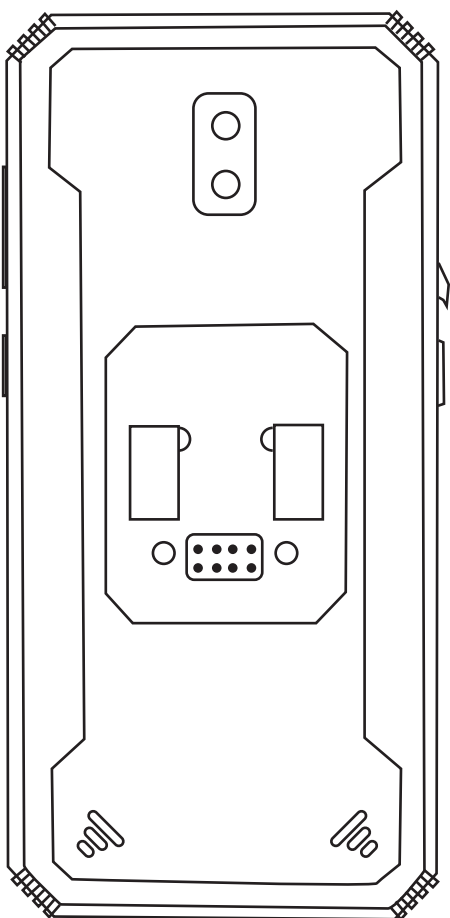
Left View



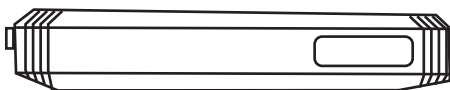
Front View



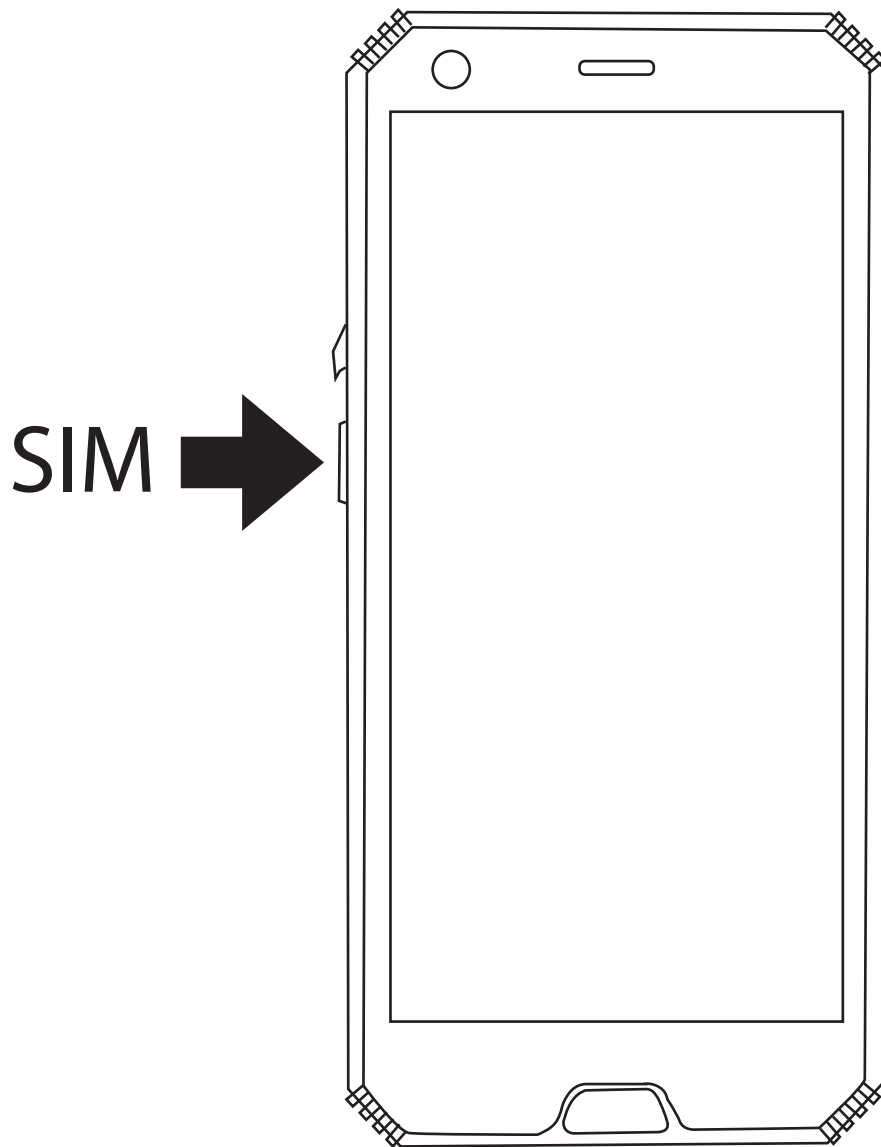
Right View



Rear View



Bottom View

Inserting SIM cardSIM card

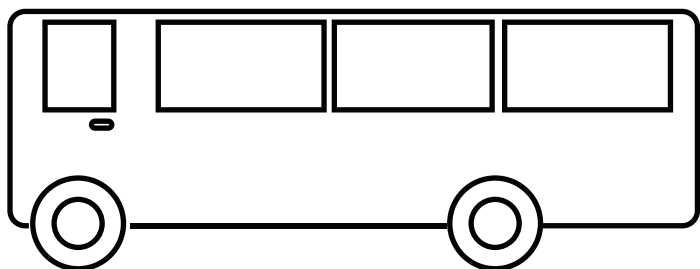
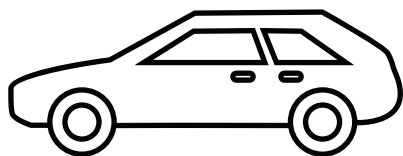
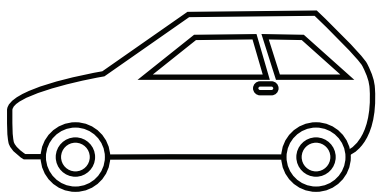
- Screw out to unlock multi-card tray.
- Insert a pin to eject the card holder.
- Place / remove of SIM/Micro SDXC card into the multi-card holder.
- Insert the multi-card holder.
- Multi-card holder can be locked by screw in preventing from the SIM to be lost or stolen.

2 IN 1 CRADLE



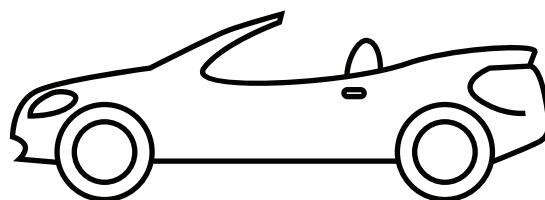
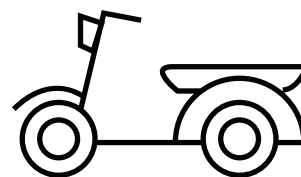
Option 1
Easy-Detach
-To-Go

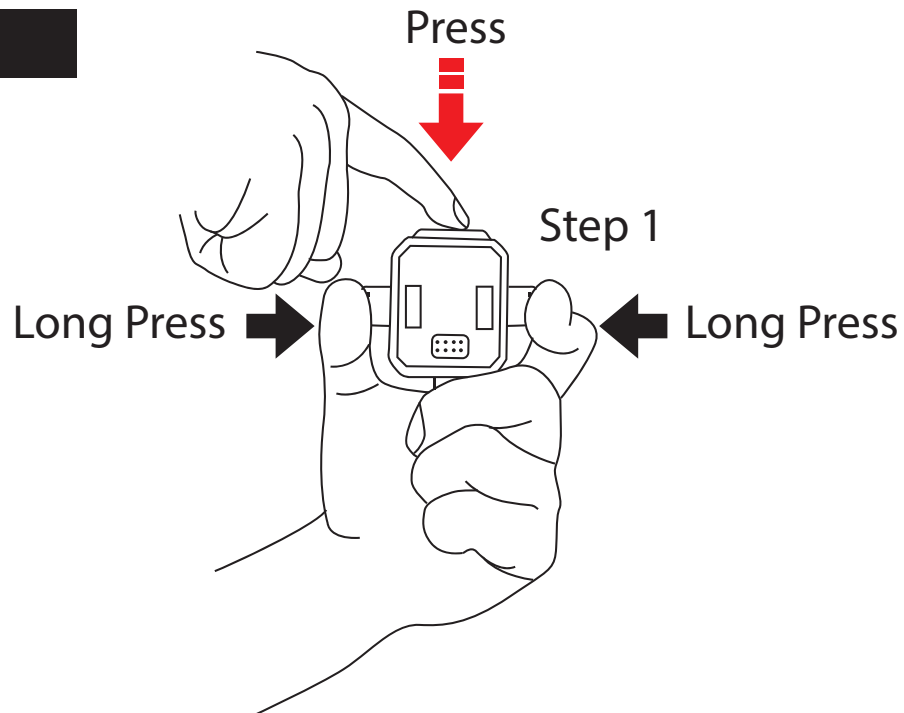
Suitable for
driver who wants
to easy pick
the device & go



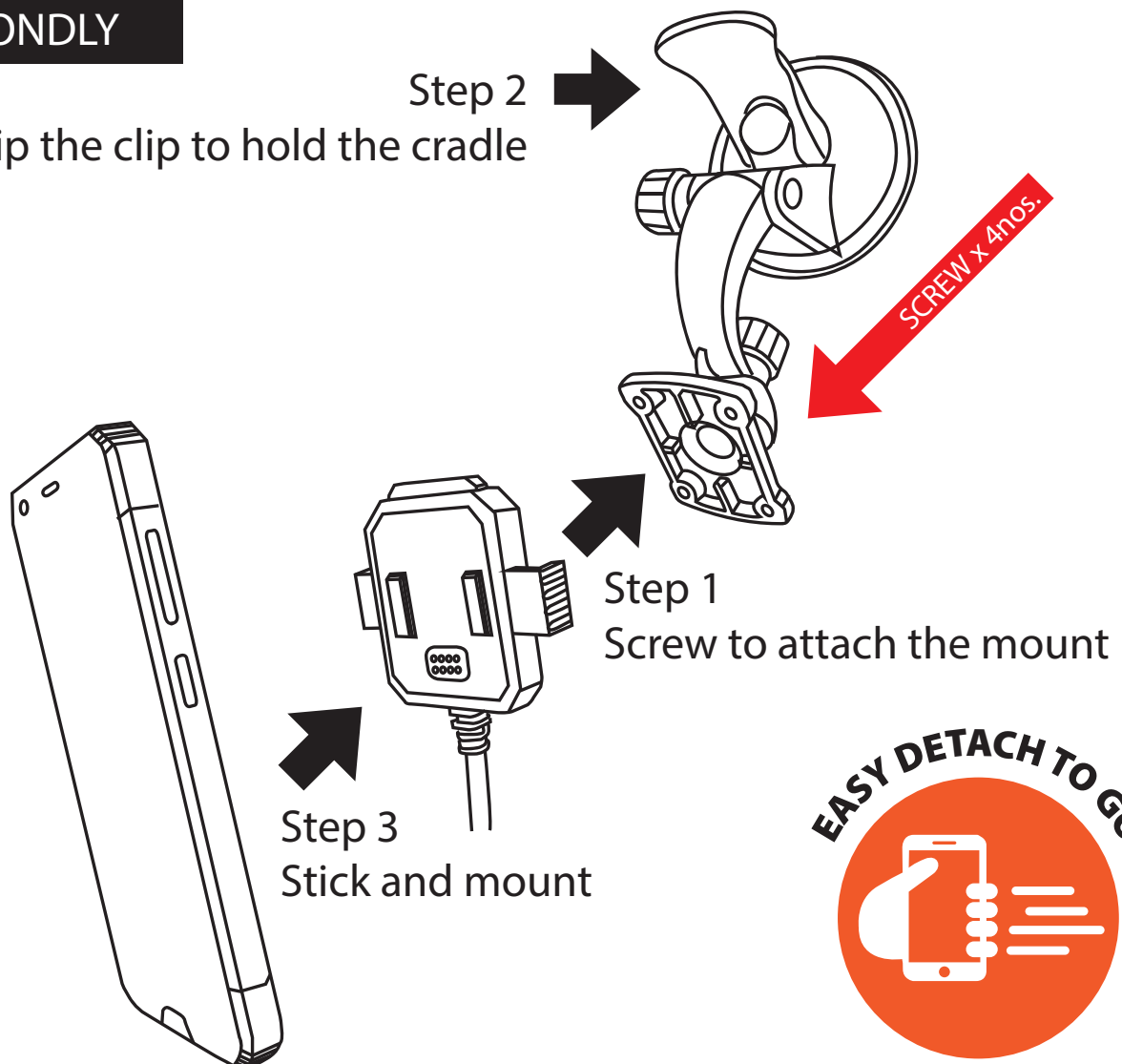
Option 2
Strong-
Mounted

Ideal for
Topless Vehicule
which fits for
an open-air
driving experience



Cradle installation - Option 1 (Easy-Detach-To-Go):**FIRST****SECONDLY**

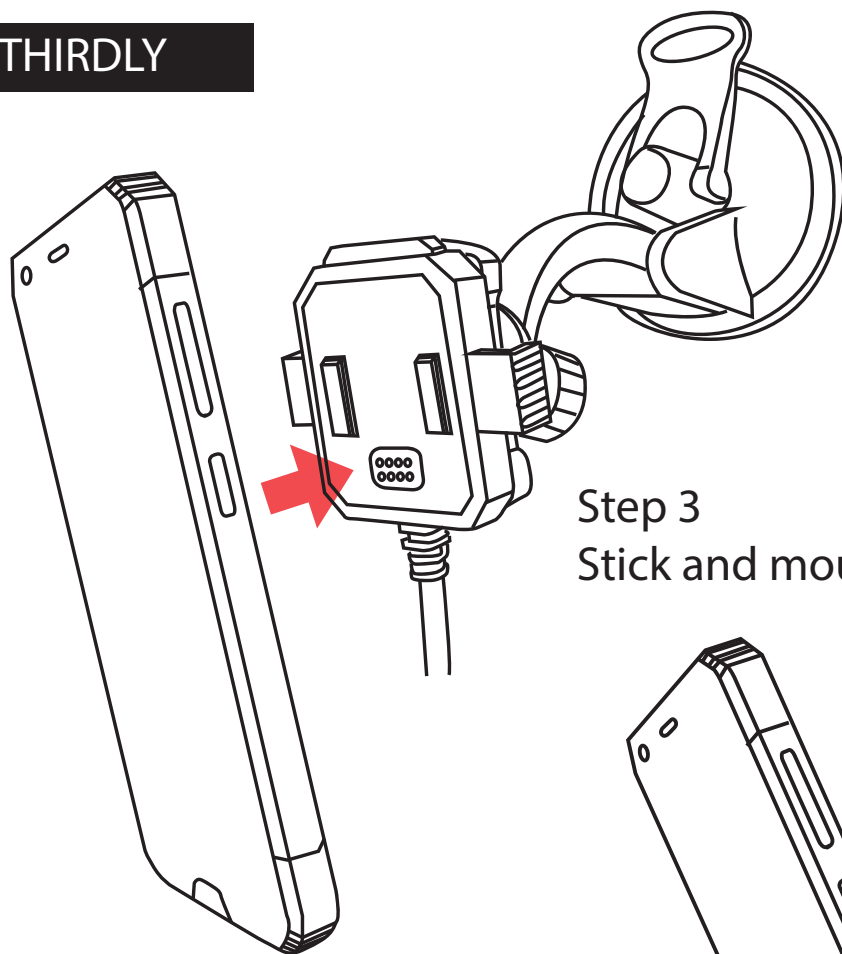
Step 2
Flip the clip to hold the cradle



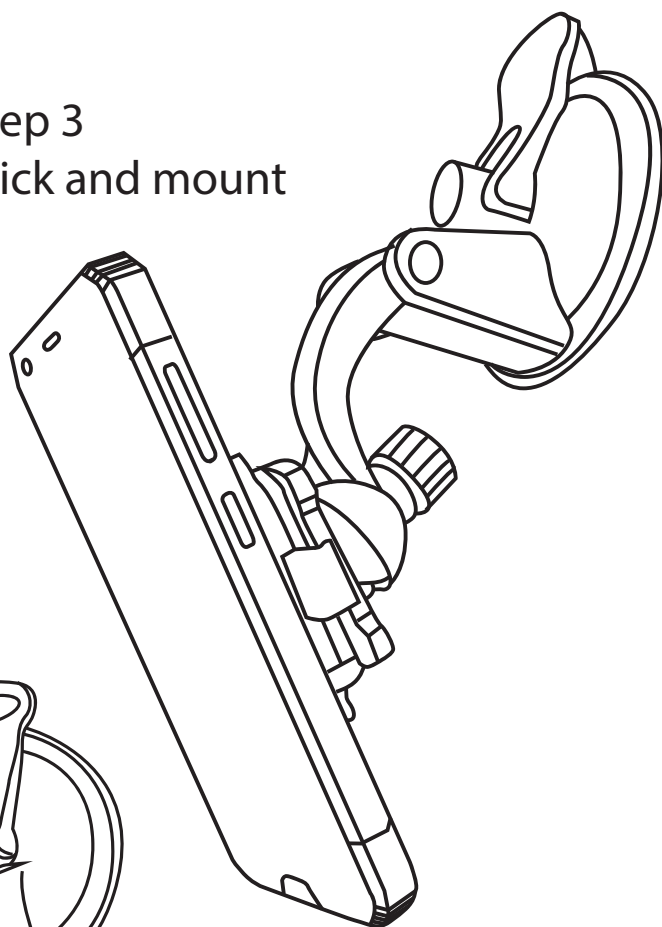
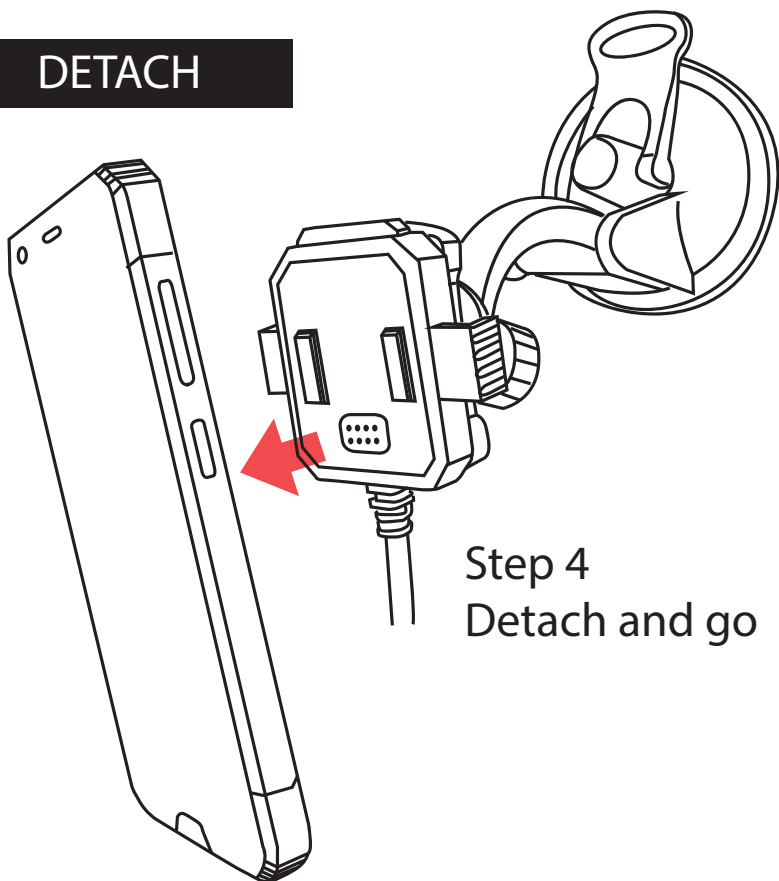
Step 1
Screw to attach the mount

Step 3
Stick and mount



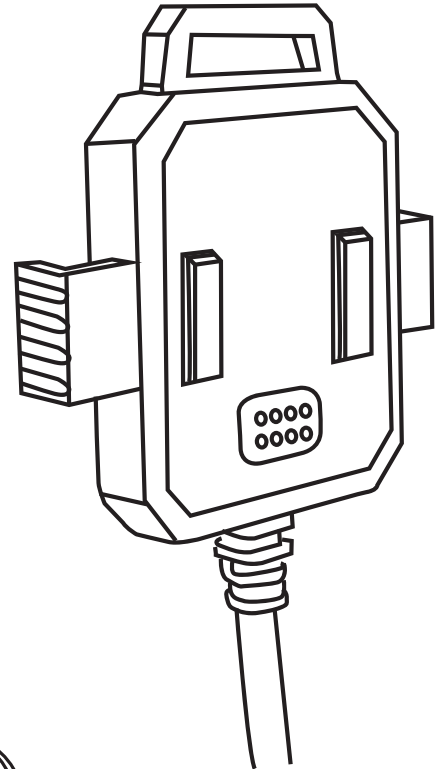
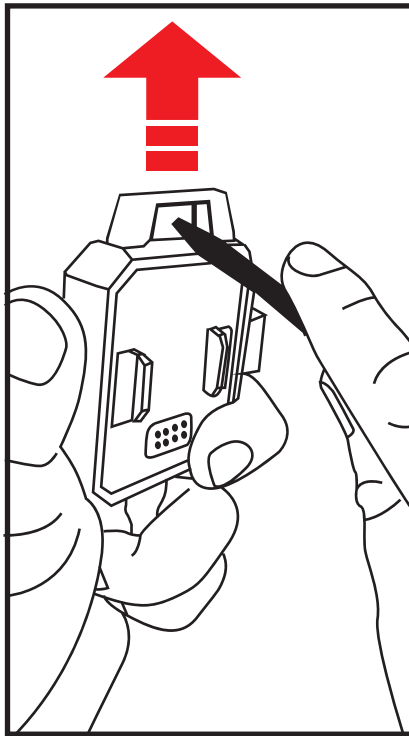
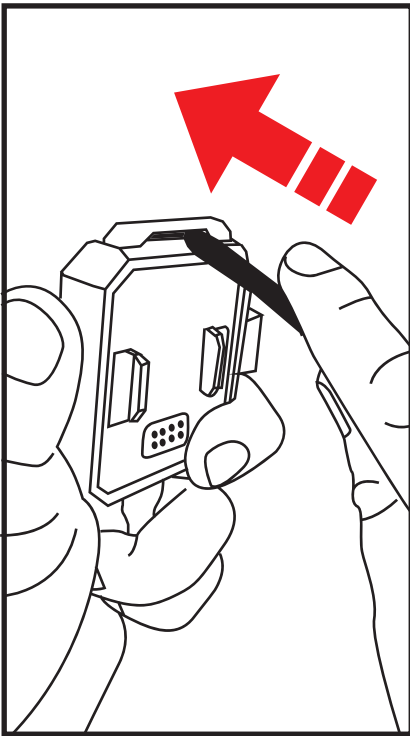
Cradle installation - Option 1 (Easy-Detach-To-Go):**THIRDLY**

Step 3
Stick and mount

FINALLY**DETACH**

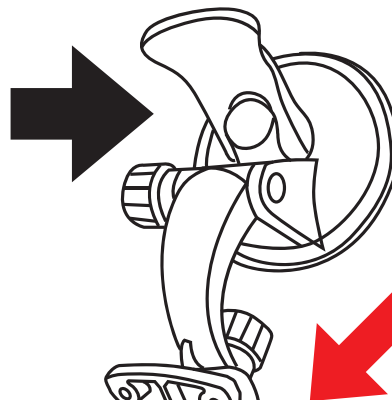
Step 4
Detach and go



Cradle installation - Option 2 (Strong-Mounted):**FIRST****SECONDLY**

Flip the clip to hold the cradle

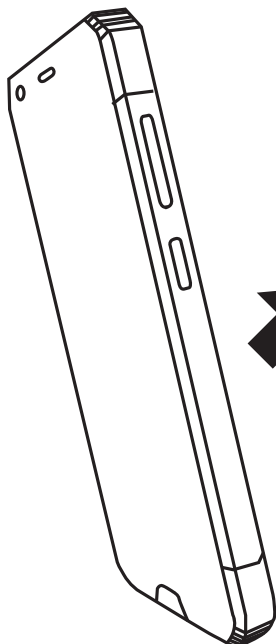
Step 2



SCREW x 4nos.

Step 1

Screw to attach the mount



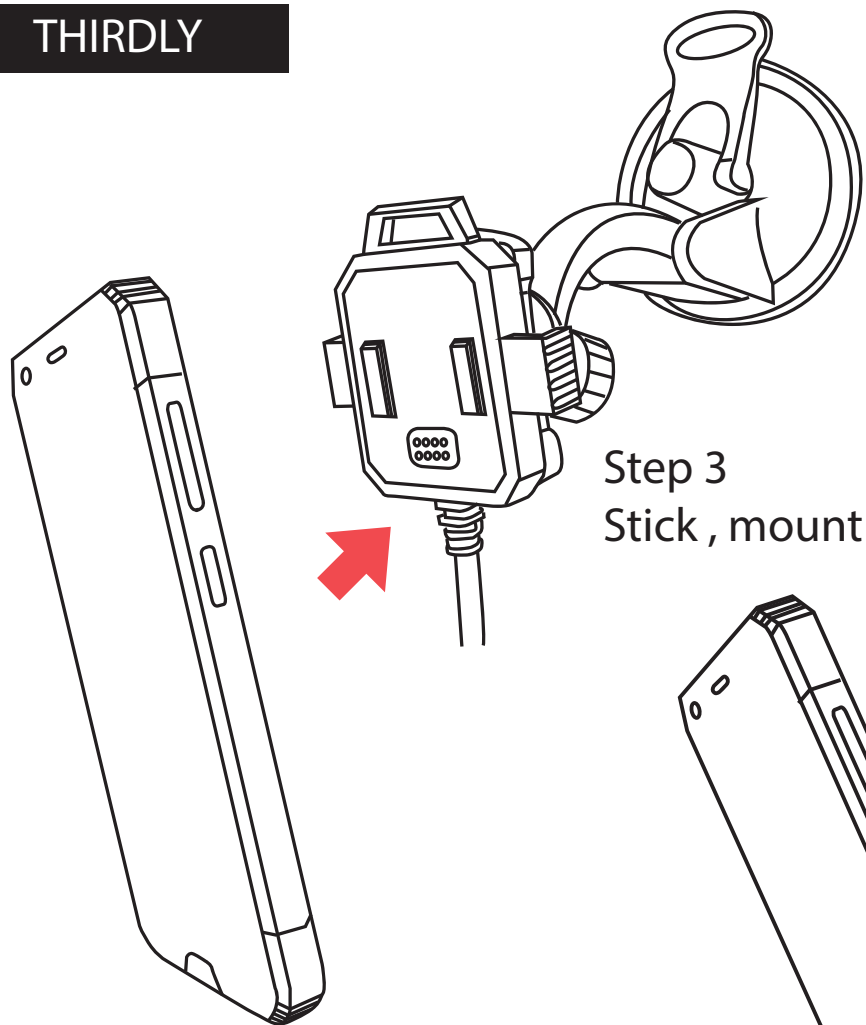
Step 3

Stick, mount and lock



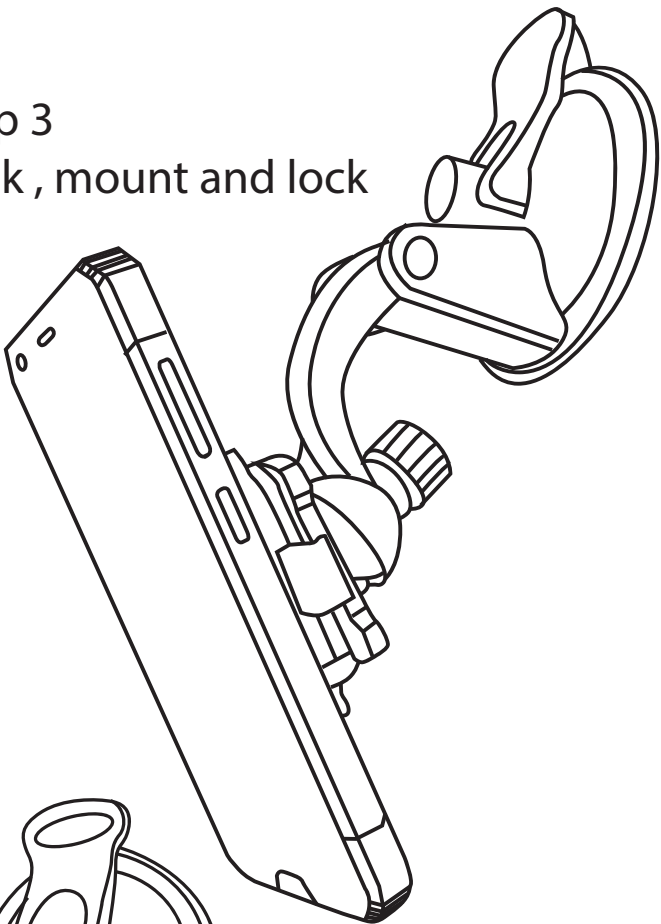
Cradle installation - Option 2 (Strong-Mounted):

THIRDLY

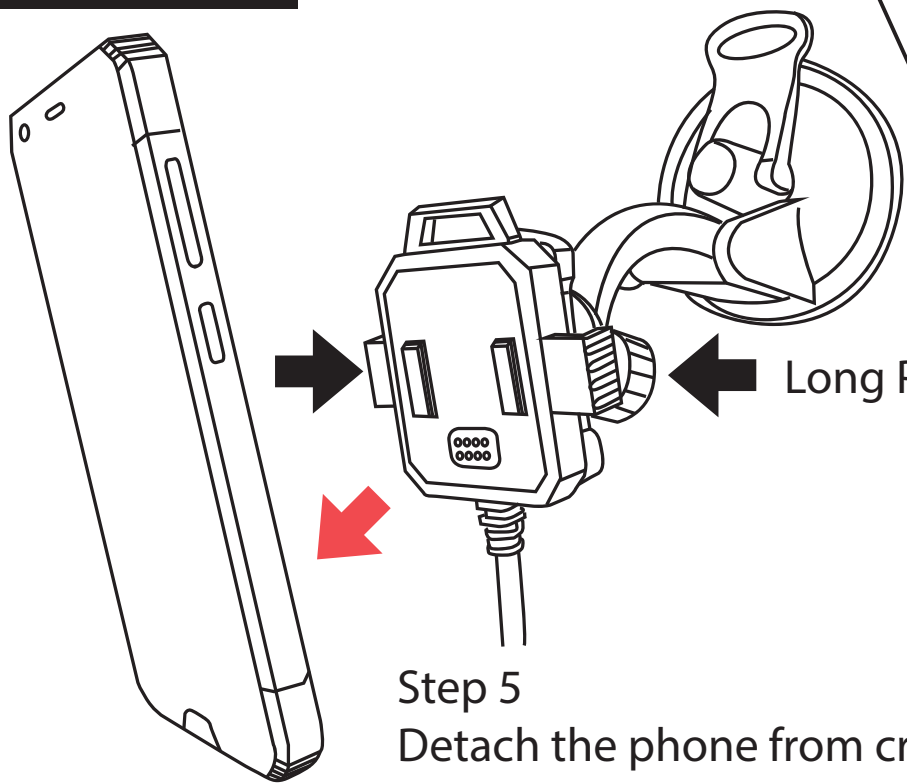


Step 3
Stick , mount and lock

FINALLY

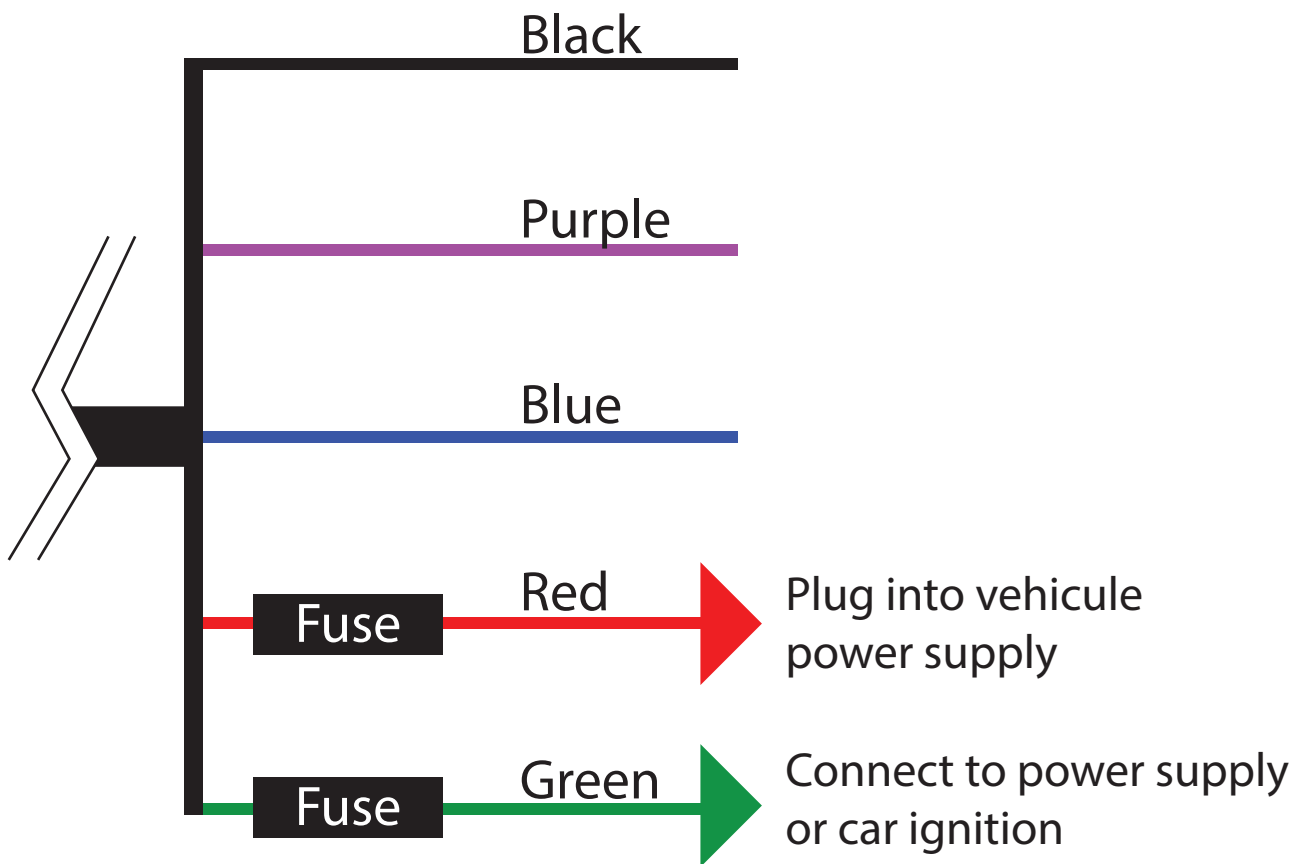


DETACH



Step 5
Detach the phone from cradle

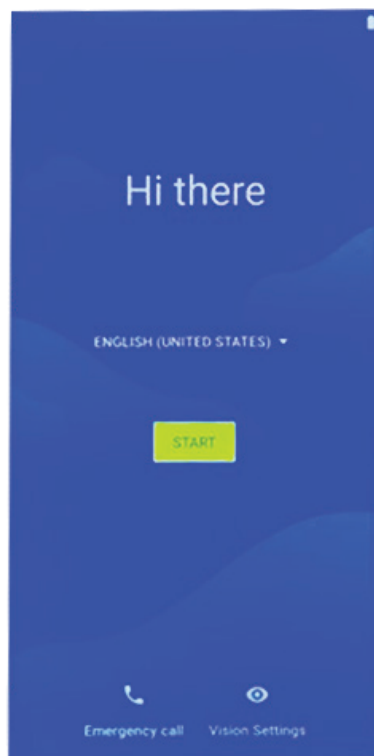


Charging Device

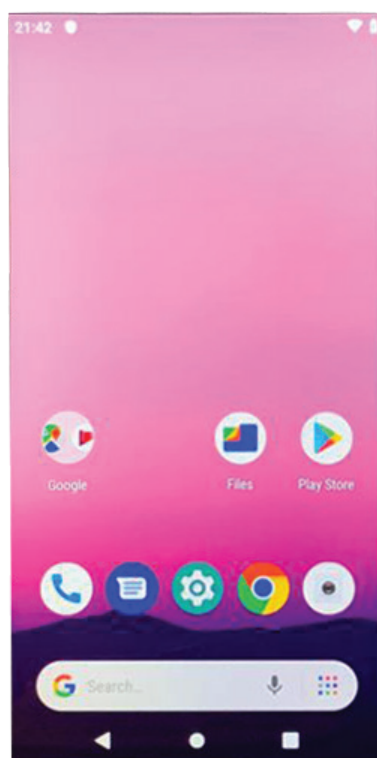
CORE	DESCRIPTION
Black	GND + Shield
Purple	RXD (RS232)
Blue	TXD (RS232)
Red	Power 9-36V (with fuse)
Green	Ignition 9-36V (with fuse) {Please note that the ignition input is used to control the power supply to the phone. If ignition is low, no power supply to the phone (no charging)}

Android Tutorial

Start Screen



Home Screen



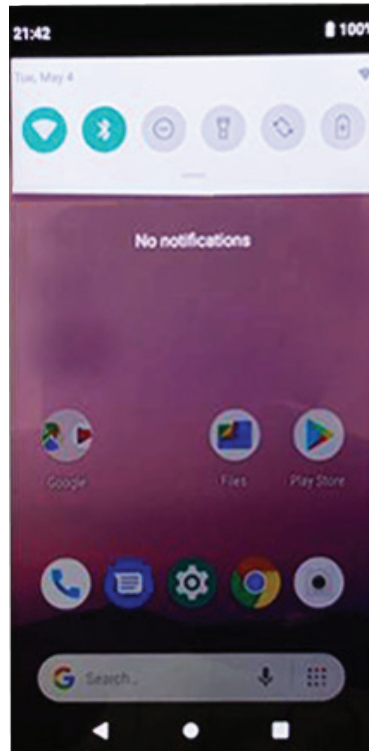
Status Bar

The status bar shows your phone's status and notifications.

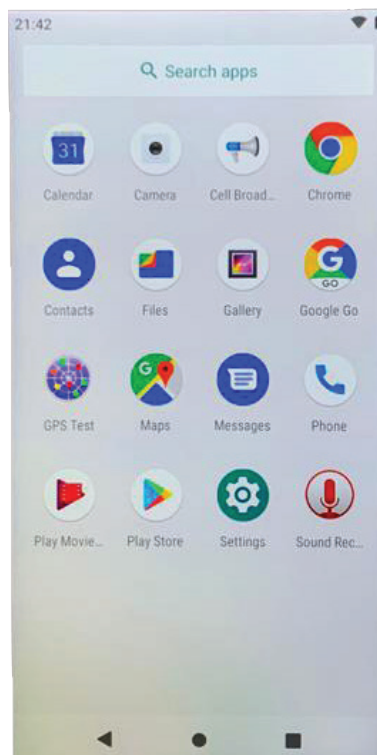
The notification panel is your center for new events:

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

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



APP Screen

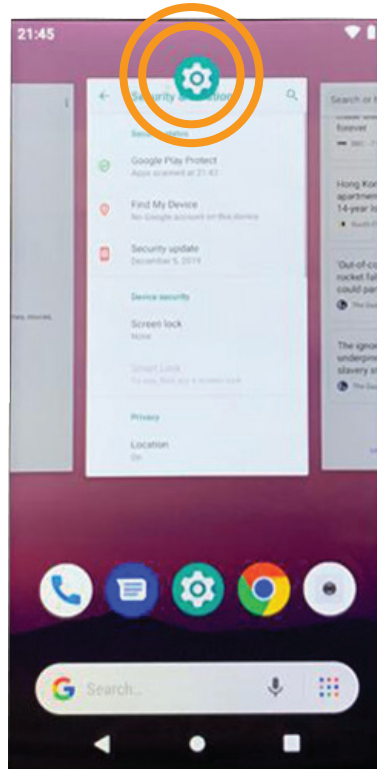


Switching between home screen and app screen.

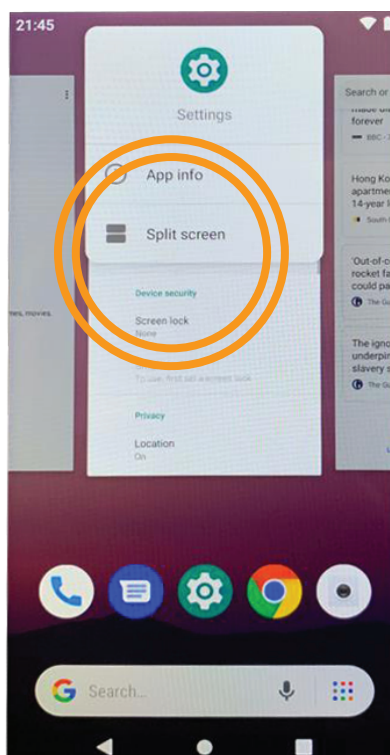
Slide your fingers up from the bottom of the home screen.

Split screen:

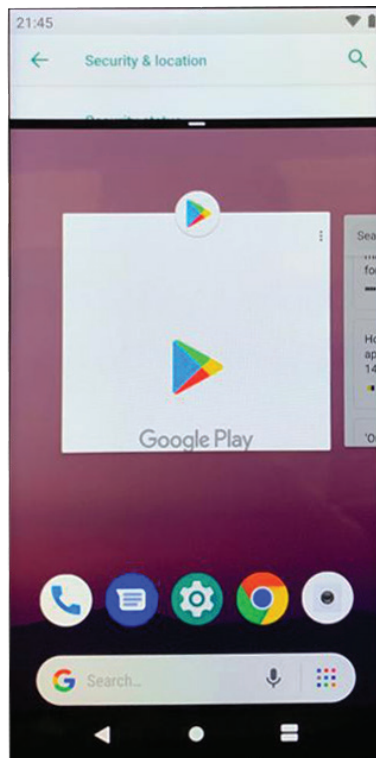
1. Press the recent key to the right of the touch screen to display the recent applications history.
2. Press and hold the icon on top of the application you want to split screen.



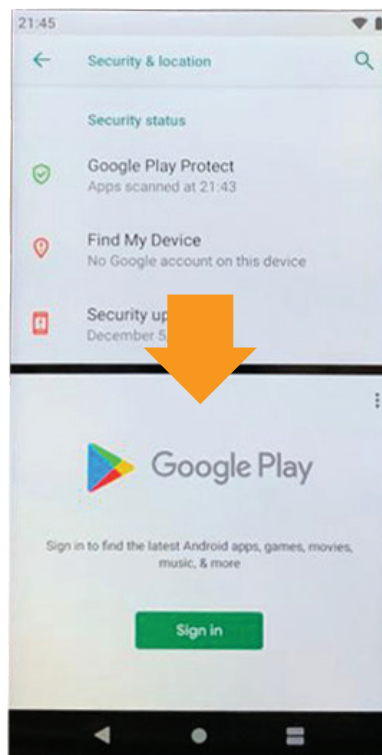
3. Click Split screen.



4. Select second app displayed at the same time.
5. When the second app appears, click the app to confirm the selection.

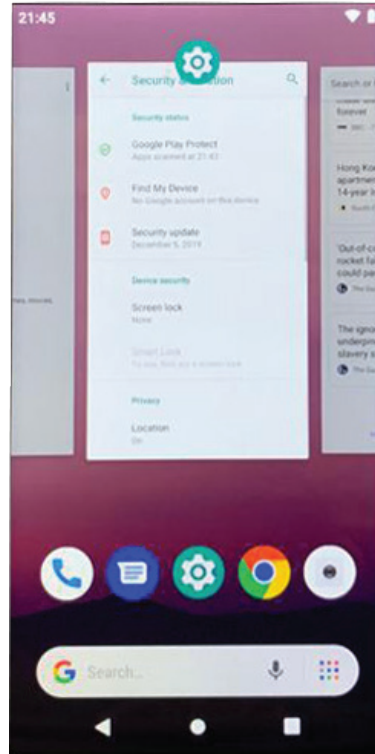


6. Release the app. Both apps appear in the screen.

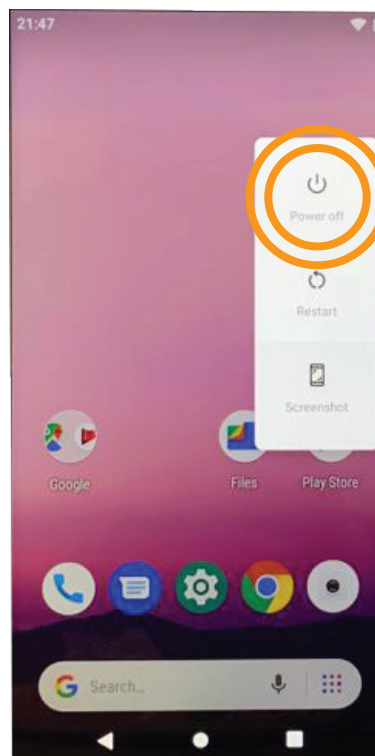


Close active Apps:

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.

Turn 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.

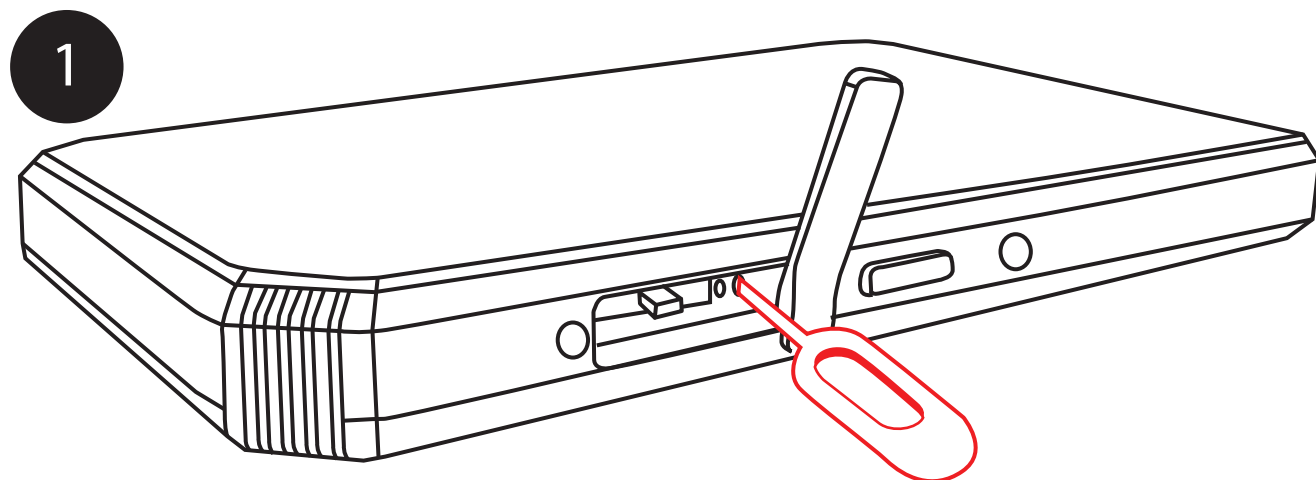
Sharing a mobile connection, to share a connection to a mobile network with other devices, follow these steps:

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.

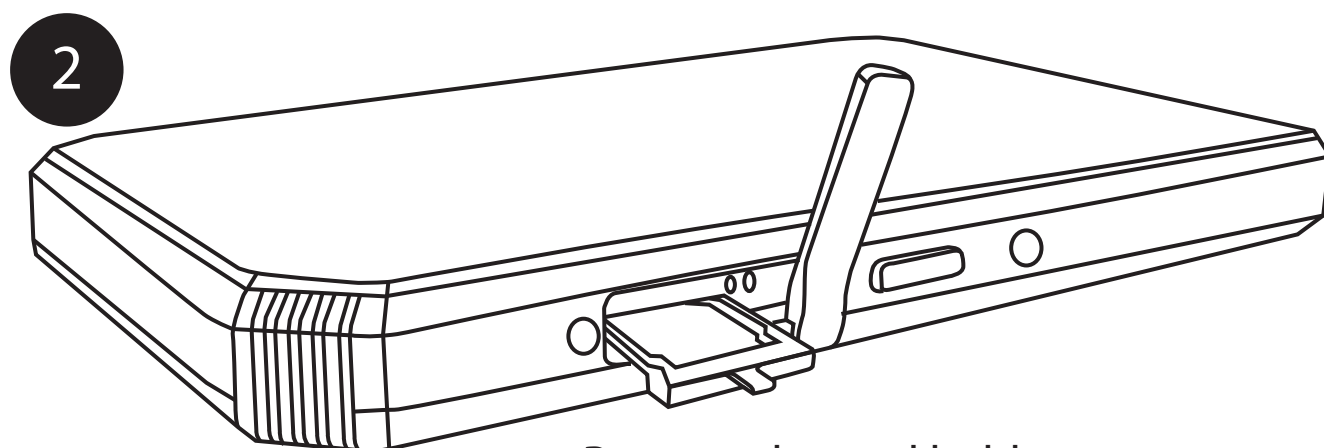
Disconnecting from a network::

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.

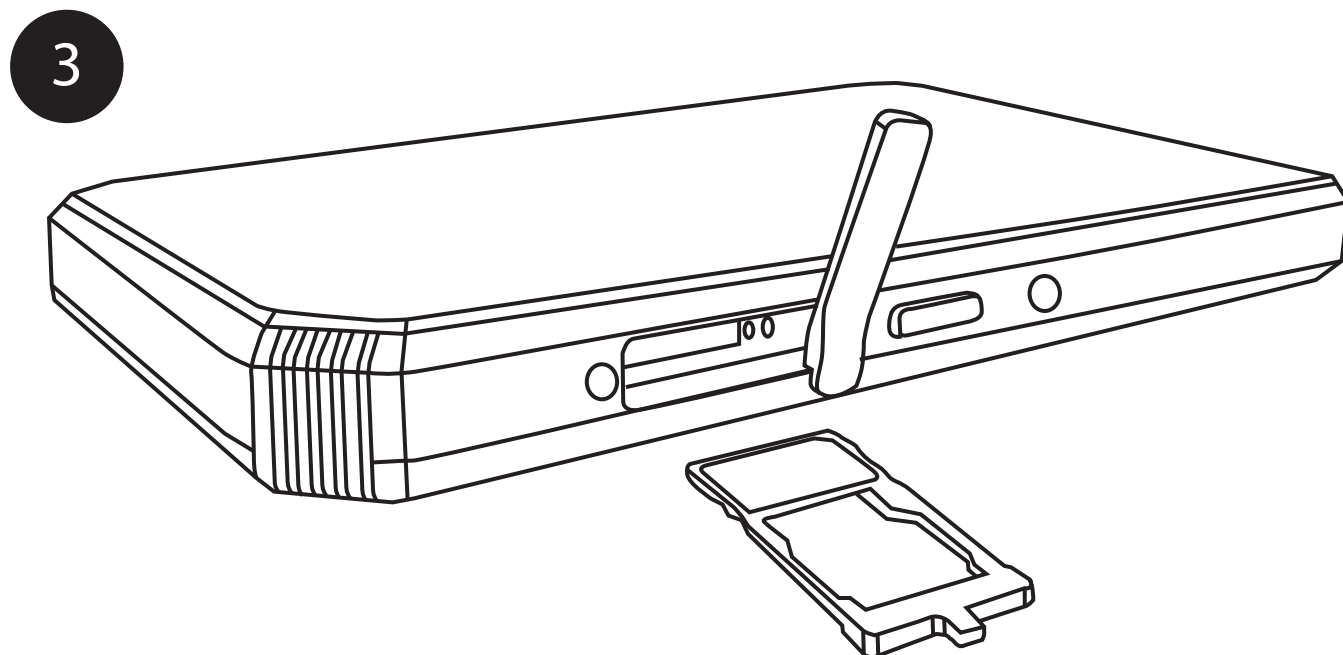
Inserting / Removing of SIM card / Micro SD Card



Insert a pin to pop the card holder.



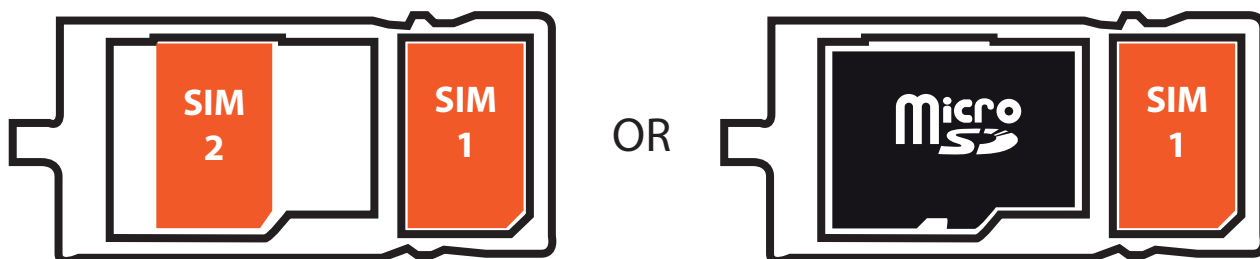
Remove the card holder.



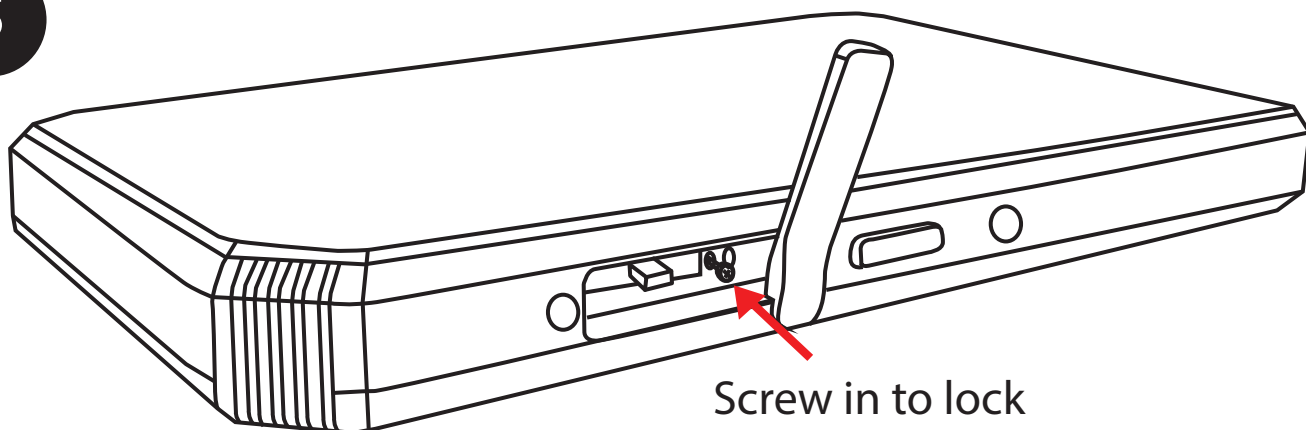
Inserting / Removing of SIM card / Micro SD Card

4

Place the cards



5



MODEL	
5.7"	MDT661
PERFORMANCE CHARACTERISTICS	
CPU	2.0GHz Octa Core Processor
OS	Android 9.0 with GMS or without GMS (Optional)
Memory	4GB LPDDR4X 32GB eMMC
PERFORMANCE CHARACTERISTICS	
Dimensions (L x W x D)	161.5 x 77.5 x 14.5 mm
Weight	280g
Display	5.7inch, 1440 x 720
Touch Panel	Gorilla Glass Generation 4.0 (Capacitive multi-touch / Glove, Wet, Stylus)
Backlight	LED Backlight
Power	Battery 3.7V 4000mAh
Expansion Slot	User accessible micro SDXC card slot (standard supports up to 2TB)
SIM	2 Nano SIM
Interface	Docking Connector (8-pin) 1 x USB Type C (2.0) (OTG)
Notification	Audible tone
Voice / Audio	Speaker, Microphone, Headphone
Keypad	On-screen Keypad
WIRELESS WAN DATA AND VOICE COMMUNICATION	
Radio Frequency	EUR - (Europe Market)
	GSM:900/1800MHz
	WCDMA - 850/900/2100MHz
	FDD (4G, EUR) - B1, B3, B5, B7, B8, B20
	TDD (4G) - B40, B38/B41
	NAR - (North America Market)
	GSM : 850/1900MHz
	WCDMA : 850/1700/1900MHz
	FDD (4G, NAR) : B2, B4, B5, B7, B12, B17
	TDD (4G) : B40, B38/B41
GPS	A-GPS, GLONASS, BEIDOU, Galileo

* Specification is subject to change.

WIRELESS PAN	
Bluetooth	V2.1+EDR, 3.0+HS, V4.1+HS
WIRED LAN	
Radio	802.11 b/g/n/d/r/h/i/v/k/w
Data Rate	2.4GHz:802.11b/g/n - up to 144Mbps
Security & Encryption	WFA WPA/WPA2 Personal,AES-CCMP, WPI-SMS4, GCMP, WPS2.0,
DATA CAPTURE	WAPI(hardware)
Scanning (Optional)	1D&2D Imager (w/ Smart Plug)
Camera	Rear 16MP Autofocus / Front 8MP Fixed Focus
NFC	ISO 15693, MiFare, DesFire
Serial Communion	USB or RS232 (default with docking station)
SENSOR	
Light Sensor	Ambient Light
Motion Sensor	Accelerometer, E-Compass, Gyroscope
USER ENVIRONMENT	
Operating Temperature	-10°C to 60°C / -14°F to 140°F
Storage Temperature	-20°C to 70°C / -4°F to 158°F
Humidity	90% non-condensing
Drop Specification	1.2m / 4 ft. to drop per MIL STD 810G
Sealing	IP67
Electrostatic Discharge (ESD)	+/- 8kVdc air discharge +/- 4kVdc direct discharge +/- 4kVdc indirect discharge
OPTIONAL ACCESSORIES	
Vechicle docking station Motorcycle docking station	FM boardcasting Fingerprint

* Specification is subject to change.

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 Radiation Exposure 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 (FCC ID: 2AHAF-MDT661) 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 10mm to body. To maintain compliance with FCC RF exposure requirements, use accessories should maintain a separation distance between the user's bodies mentioned above, the use of holsters and similar accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

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

For the following equipment:
Product Name: Rugged Phone
Brand Name:--
Model No.: MDT661
TOPICON HK LIMITED
E-mail: keller.sin@topicon.hk

hereby declares that this [Name: Rugged Phone, Model: MDT661] is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.



Adapter shall be installed near the equipment and shall be easily accessible.

Only can use adapter as below:

Power Adapter Model: GS-0500200

Input: AC100-240V, 50/60Hz, 0.3A; Output: DC5V, 2A

Shenzhen Guangwei Electronic Technology Co., Ltd.

The plug considered as disconnect device of adapter

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 5mm.

Support Networks: GSM, GPRS, EDGE

Support Bands: GSM900, DCS1800

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

RF Output Power: GSM900: 33.2dBm, GSM1800: 30.23dBm; EDGE900: 26.96dBm, EDGE1800: 26.45dBm

Support Networks: WCDMA, HSDPA, HSUPA

Support Bands: WCDMA Band 1, WCDMA Band 8

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: 23.38dBm, WCDMA Band 8: 23.41dBm

Support Bands: FDD-LTE Band1, 3, 7,8,20,TDD-LTE Band 38, 40

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

TDD-LTE Band 38: Tx: 2570-2620MHz, Rx: 2570-2620MHz

TDD-LTE Band 40: Tx: 2300-2400MHz, Rx: 2300-2400MHz

Max.RF Output Power: FDD-LTE Band 1: 22.98dBm, FDD-LTE Band 3: 22.59dBm, FDD-LTE Band 7: 21.72dBm,

FDD-LTE Band 8: 23.19dBm, FDD-LTE Band 20: 22.45dBm,TDD-LTE Band 38: 22.84dBm,

TDD-LTE Band 40: 22.71dBm

Bluetooth

Bluetooth Version: Bluetooth V4.1
Frequency Range: 2402-2480MHz
Max.RF Output Power: 9.83dBm (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: 16.13dBm (EIRP)

NFC

Frequency Range: 13.56MHz
Radiated H-Field: 14.69dBuA/m(@3m)

GPS

Frequency Range: 1575.42MHz Receiving