# **MS-5654**

## User guide

## **IMPORTANT**

Satellite signals are required for this product to function in Navigation Mode. There may be occasions within your home or surrounding area when the signal strength is limited and Navigation Mode may not be possible. This is quite normal for products of this type. If you experience difficulty in receiving a signal in your car you may need to use an external antenna (optional).

## Safety

## The Global Positioning System

The Global Positioning System (GPS) is a satellite based system that provides location and timing information around the globe. GPS is operated and controlled under the sole responsibility of the Government of the United States of America, who are responsible for its availability and accuracy. Any changes in GPS availability and accuracy, or in environmental conditions, may impact the operation of your Personal Navigation Device (PND).

## Using Your PND in the Car

When using your PND while driving it is essential that you drive with due care and attention. Never modify the settings or program your PND while driving. Only look at the PND map when it is safe to do so. Only follow the PND instructions when the road regulations allow you to do so. When mounting the PND in your car make sure that it does not obscure your view or impede the operation of any driving controls.

#### **Prohibited Areas**

Do not operate your PND in hospitals or near any electrical medical equipment.

Do not operate your PND in aircraft.

Do not operate your PND in a petrol station forecourt.

## **Battery**

Your PND uses a Li-ion battery. Do not use it in humid, wet or corrosive environments. Do not operate or store your PND in high temperatures (>60 $^\circ\!\! C$ ) or in direct sun light. Do not pierce or break the battery casing.



Failure to follow these cautions will invalidate the warranty and may cause the battery to leak acid, become hot, explode or ignite and cause injury or damage.

If you come into contact with leaked battery acid wash the contact area thoroughly and seek medical attention.

The Li-ion battery contained in this unit must be recycled or disposed of properly. Do not dispose of in household waste or burn.

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## **Getting Started**

This device combines GPS functionality with a photo viewer and Bluetooth Hands-free. Before you begin to install and use this product, please read this manual carefully for fully exploiting the functions of this product. If you experience any problems, go through the user guide before contacting the customer helpline.

#### Position of the controls



- 1. Power Button
- 2. SD Card Slot
- Touch Panel
  - 1. Menu Button
- Indicator Light\*
- 6. TMC Antenna Jack
- 7. USB Port
- 8. Strap Hole
- 9. Battery Switch
- 10. Headphone Jack11. External GPS Antenna Port
- 12. Speaker
- 12. Speake
- Stylus Pen/ Slot (Slide the stylus pen out of the slot when needed.)

- \*: When charging the light will be red; when fully charged the light will become green.
- \*\* When not using the unit for a long period of time, you are advised to turn the unit off by this switch. Use the stylus to operate the switch.

## **Battery Information**

The device is integrated with a 1000mAH/ 3.7V Li-polymer battery. It allows the unit to be used for approximately 2 hours, without being connected to a power source.

The battery icon which is shown at different point on the display depending on which screen is currently being displayed. The icon indicates the current battery status.

means the battery capacity is full.
means the battery capacity is 80%.
means the battery capacity is 60%.
means the battery capacity is 40%.
means the battery capacity is 20%.

You can also go to the Main Menu / Settings / Power Status to view the actual percentage of the remaining battery capacity.

The display shows the "Low Battery!" message automatically. When the battery capacity drops below 15%, this message will be shown for 2 seconds. However, when battery capacity drops below 5%, this message will stay on the screen until the user connects the unit via the car charger or the battery capacity becomes too low to power the unit.



## Charging the Battery

Before using your PND for the first time, we recommend you to charge the unit for 5 hours via the USB cable or 2 hours via the car charger in order to charge the battery.

Plug the USB cable or the car charger into the USB socket ...

When you use the PND in your car, we recommend that you always use the car charger in order to maintain the battery level.

\*Disclaimer: some laptops could have insufficient power through the USB port to charge the unit; this could lead to damage to your laptop USB port. MS-5654 will not be held in any way responsible for the damages caused to any laptop by charging the device through the laptop USB port

\*It is recommended that when charging via the USB cable that the power switch is set to the Off position.

When the device is connected to the car charger/USB cable the battery icon will change to a, and LED indicator light on the front of the unit will be lit red. When the battery is fully charged, and the car charger/USB cable is still connected. The icon will change to a, and the LED indicator light on the front of the unit will turn green.

## Car Adapter

When using your PND in the car we recommend that you always use the in-car charger to power the unit, especially on long journeys.

Plug the in-car charger into the USB socket on the unit. Plug the other end of the adapter into the car's cigarette-lighter / 12V DC socket.

## External Antenna (sold separately)

If the GPS receiver fails to acquire a valid signal when mounted in your car it may be due to a heat reflecting coating or heating elements in your windscreen. In these cases use an external antenna.

The antenna has a magnet and can be positioned in various locations in or outside your car to obtain the best signal reception. Push the antenna into the socket on the rear of the unit until it clicks into place. Then position the antenna so that you receive a valid signal.



\*External Antenna Optional

## Switching On/ Off

Use the stylus pen to switch the unit on by the power switch on the bottom of the unit. You will see the booting screen for a short while, then the screen will change

to show the below message to warn you about driving safety. Tap on the button to continue.







The screen will then change to the Main Menu screen shown below. This is the starting point for using all of your MS-5654 features.



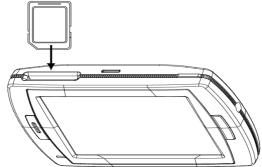
## Sleep Mode

You can use Sleep mode to conserve battery power if the unit is not going to be used for a short while, for example if you have scheduled a stop at a service station. NOTE: if the unit is not to be used for a long period of time, the unit should be switched off by the On/Off switch.

Press the Power Button for 3 seconds to put the unit into Sleep Mode. Press the Power button for 3 seconds to wake up the device, the display show the same screen as when the unit was put into sleep mode.

#### **SD Card Installation**

If you have a SD or MMC memory Card, you may install it to extend the storage capacity of the unit, or to view photos saved on the card. When installing it can only be fitted one way – the wording side facing towards you and the cut-off corner at the bottom as shown. Insert the card and push it in so that it clicks into place.



Insert a SD card into the slot, and you will see the below message.



If you need to remove the SD card, push the card in and it will eject from the slot. You will then see the below message.



Note: the card slot can also be used as a card reader, refer to the following section to operate the unit as an SD card reader..

#### Connect to PC

You can connect the unit to a PC for transferring data. Insert a SD/ MMC card to the card slot; you can then use the unit as a card reader.

- 1. Power on the unit.
- Plug B-type end of the supplied USB cable to the mini USB port on the unit, then plug the other end into your computer.
- The system will try to recognize and connect to the device; the unit display will show the below screen.

4. Once the device has been connected to you will find 2 new USB devices under "My Computer". The second device represents the memory card slot, and is only available when a SD/ MMC card is inserted. Copy or move the data needed between your PC and the unit.

## **GPS**

You have chosen a cutting-edge navigation system. Congratulations! Please enjoy using it. This navigation system leads you straight to your destination, whether you are travelling by car or on foot. You can navigate and plan your route with an easy-to-use and intuitive interface, just by using your finger or the stylus. You can also use this application to plan your trip to suit your personal preferences and interests and to save interesting destinations before you set off on your journey. This manual leads you through the main features of the system.



## Safety Instructions

- The driver's attention should always be on the road. If you are the driver of the vehicle, we do not recommend you to operate this unit while driving. Plan your route before departure and pull over if you need to change route parameters.
- The MS-5654 has a built-in Safety Mode that will prevent you from using the screen functions if your car is in motion. Unless a passenger will be the only one to operate the MS-5654, we strongly encourage you to turn on the Safety Mode.
- It is also important that you look at the display only if it is absolutely safe to do so.
- You should always observe traffic signs and road geometry before obeying instruction from the MS-5654.

## Handsfree

This device can be linked to a mobile phone as a Bluetooth Hands-free device. After being linked to a mobile phone, you can use the MS-5654 to call and answer the phone without holding your mobile phone. Tap on the Hands-free icon on the Main Menu to enter.





To operate the Hands-free function, tap on **Bluetooth** option to switch it on. You will see a message as below. Remember the passkey for later usage.



Then you can see the menu as below.



#### Paired List

To use the Hands-free function, you have to pair the device with a mobile phone first. If the MS-5654 has been paired with any mobile phone, you can see it on **Paired List**. If the **Paired List** option is dark in colour and can not be entered, that means there is no paired phone.

Follow the procedure below to pair your phone with the device.

 Switch on the Bluetooth feature on your mobile phone and on your MS-5654. A pop-up message will prompt to tell the passkey, 0000.



- Place the MS-5654 and your phone nearby, and press relative keys on your phone to make it search for new devices.
- 3. When the searching is complete, you should see a new device named "MS-5654" on the list.
- 4. Select it from the list, and then your phone will ask you to enter a passkey. Enter 0000 as the pop-up message prompts. Then the MS-5654 is now on the paired list of your phone.

 Select the MS-5654 and press the required buttons to connect it. Now you can see your phone on the paired list of the MS-5654.



Or you can also connect your phone and the MS-5654 via the MS-5654 when you want to operate the Bluetooth feature. Tap on the phone name in the

paired list of the MS-5654 first and then tap on button to start connecting. You will see the "Connecting" message on the display.



7. Your phone will ask if you want to accept the connection request from the MS-5654. Press Yes to continue. You will see the "Connection Completed!" message on the display.

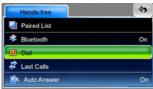


- 8. If you want to disconnect the Bluetooth connection, press the relative buttons on your phone to disconnect it from the MS-5654.
- 9. If you connected several phones to the MS-5654, the Paired List will list them all. If need be, tap on a phone name and tap on button to delete it from the device list. A confirm window will prompt, tap on button to delete, or tap on to cancel and exit.



#### Dial

Once a phone is paired and connected to the MS-5654, the Hands-free features of the MS-5654 are now enabled. You can dial from and answer your phone via the MS-5654



Tap on Dial to begin entering a number to dial out, you will see the number pad as below



Tap to enter the phone number you want to call, and then tap on the



button. If a number is dialled wrong, tap on once to erase a digit at a time. While dialling, the display will change to the below.



Wait until the call is answered, then the MS-5654 becomes a Hands-free device. You do not have to hold the phone, nor the MS-5654 to make the phone call. This is useful when you are driving a vehicle.

Tap on button to hang up the call.

Tap on button to adjust the volume.

Tap on button to mute the volume.

Tap on button to mute your voice.

When a phone call is received while the MS-5654 and your phone are connected, you will see the below screen appear. The name or number of the caller will be shown on the first line of the display.



- Tap on button to answer the call.
- Tap on button to hang up the call.
- Tap on button to adjust the volume.
- Tap on button to mute the ring volume.
- Tap on button to mute your voice.

Note: if **Auto Answer** is set to On, the call will be answered automatically after 3 seconds automatically.

#### **Last Calls**

The device records also the dialled calls, answered calls, and missed calls. You

can look them up and make a phone call to any of them when needed.



#### Dialled Number

If you have made a call via the MS-5654, you will see the number in the list.

- Tap on a number and then tap on button to call that number again.
- Tap on if you want to delete the number from the list. A message will prompt you to confirm.

#### Answered Calls

If you have answered a call via the MS-5654, you will see that number on the list.

- Tap on a number and then tap on button to call the number back.
- Tap on if you want to delete that number from the list. A message will prompt you to confirm.

#### Missed Calls

If there are any incoming calls that you did not answer, you will see the numbers on the list.

- Tap on a number and then tap on button to call the number back.
- Tap on if you want to delete the number from the list. A message will prompt you to confirm.

If there are no numbers recorded in a list, you will see the "No record!" message on the display.

#### Auto Answer

The MS-5654 supports answering incoming calls automatically, tap on **Auto Answer** to set it to On/Off. If it is set On, any received call will be answered automatically after 3 seconds. If it is set Off, then you have to tap on the

button to answer the call when it comes.



## **Travel Kit**

This device integrates several multimedia programs. You can watch video clips, view photo, and also listen to music. Enter each function to enjoy your media files



#### Music

This device supports MP3, WMA formats. Enter "Music" function to read music list.

Note 1: if the music file was saved into the Memory card, enter the Memory card folder to find it.

Note 2: if the music file was saved into a specific folder, enter the folder to find it. Note 3: press Menu button to go back main menu.



Tap on the screen to select a file from the list to play; you will see the display shows as below.



- Tap once to pause the playback.
- Tap 

   once to play the previous track. Or press it longer to rewind the
   playback and find the section you need.

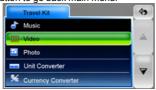
- Tap PM once to skip and play the next track. Or press it longer to fast-forward the playback and find the section you need.
- Tap once to select the repeat mode.
  - Tap to set Repeat One.
  - Tap sto repeat all.
  - Tap to play the files once in regular sequence.
- Tap on button to mute the volume.
- Tap on 4 button to adjust the volume.

#### Video

This device supports MPEG4, WMV formats. Enter **Video** function to watch video clips.

Note 1: if the video clip was saved into the Memory card, enter the Memory card folder to find it.

Note 2: if the video clip was saved into a specific folder, enter the folder to find it. Note 3: press Menu button to go back main menu.



Enter Video function, you will see the figure as below, supported video clips will be listed.



You can set to preview the selected clip. If the clip icon is activated, the tapped clip will be played in thumbnail. Press the clip icon to play it in full screen. If you tapped again to make the icon become the tapped clip will be played in full screen without previewing.

Tap on the icon to enter Settings. You can select if to resize the clip to fit the screen for watching. And you can set the Zoom Mode to be **Letter Box** or **Pan Scan**. Tap on to apply and exit the settings.



Tap on the icon to read the information of the software company.



Tap on the icon to view the detail information of the selected clip.



Once a clip is selected and being playing, you can tap on the screen to call the function buttons.



- 0: Tap on this button to pause the playback. Tap on . to resume to play.
- 😈 & 💽: Tap on these buttons to adjust volume. Tap on 🔕 to mute.
- Tap on this button to set repeat mode as Repeat Loop, Repeat One, or Repeat List.

#### Photo

This device supports jpg, bmp, png, gif formats (up to 12MegaPixel file). Enter "Photo" function to see thumbnails for all the photo files.

Note: press Menu button to go back main menu.





If you see an unsupport icon on the list, it means that photo is unsupported. Tap on a photo you want to view, and then you can tap on the left or right triangle to view the previous or next photo.



To view pictures (bmp and jpeg formats only) from a SD card:

- 1) Copy all the pictures you want to view into the SD card.
- Insert the SD card into the slot. In Photo thumbnails list, tap on "SD Card" folder to enter.
- 3) You will see thumbnails of photos on the card, view and operate as you do to photos on unit.

Tap on the photo, you will see Exit and More buttons on the upper and lower corner of right side. Tap on button to go to previous level menu.

Tap on button to open the Tool Bar. After 5 seconds idling, the buttons and the tool bar will disappear, tap the photo again to see and operate the buttons.





#### Slideshow

Tap on the button to view the photos show one by one automatically.

After tapping on the button, slideshow tool bar will prompt instead.



- Tap on button again to stop slideshow.
- Tap on button to set the slideshow interval among 2, 3, and 5 seconds.
- Tap on button to mute the touch tones.
- Tap on button to adjust the touch tones.

#### Rotate

Tap on button to rotate the current photo.



- Tap on the button again to rotate the photo by 90 degree clockwise again.
- Tap on button to restore the photo and zoom in.

#### Zoom in

Tap on button to zoom in the photo.



- Tap on the button to zoom in.
- Tap on the button to zoom out. When the photo is zoomed in, you can tap and drag it to view the part you need.
- Tap on button to restore the photo.

Note: when the zoom in or zoom out limitation is met, the zoom in/ zoom out button will become in gray color and not selectable.

#### UnitConverter

This device integrates a UnitConverter tool. You can use it to easily convert the units of area, distance, speed, temperature, and weight.

Note: press Menu button to go back main menu.



Tap on button to select one option from measurement categories, depends on the unit you need to convert.

For example, if you want to convert cm<sup>2</sup> to m<sup>2</sup>, select Area.

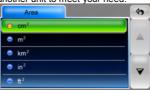


Then tap on the number buttons to enter value To delete last digit, tap on

button. Then tap on <u>under the state of the converted value.</u>



The source and target units are both selectable. In this example, tap on cm<sup>2</sup> and/ or m<sup>2</sup> button to select another unit to meet your need.



## **Currency Converter**

This device integrates a Currency Converter tool. You can use it to easily convert the currency.

Note: press Menu button to go back main menu.



select the needed source and target currencies. After currencies are selected, you have to set the currency rate. Tap on

button to enter Currency Rate setting page.



Tap on the number buttons to set the rate of the source and target currencies. To delete last digit, tap on button. After entering, tap on button to save the currency rate for further usage. And the device will go back to the previous menu. Tap on the number buttons to enter the digits of source currency. To delete last

button. Then tap on button, you can see the converted digit, tap on value



## **Settings**

NOTE: You do not need to enter the **Settings** menu before you start to navigate. Tap on the **Settings** icon on the **Main Menu**, the following screen is displayed.



To exit this page or any subsequent page, tap on the Exit button at the upper-right corner of the screen or press the menu button.

The and button means there are more options available. Tap on one of them to scroll through the list to view the other options.

Note: when there is no option above/ below, the \_\_\_\_\_\_ / \_\_\_\_\_ button will become grey in colour and is no longer selectable.

#### Volume

Tap 'Volume' you can modify the volume level of the Touch tones and the hands-free volume. You can increase or decrease the level by clicking



You can also check or un-check the Touch Tones, to enable or disable having the beep sound when you touch the screen.

Note: when the minimum or maximum volume level is met, the volume down/ volume up button will become grey in colour and is no longer selectable.

## **Display**

Tap on the Display option to enter display submenu. There are 3 tabs to select and adjust: Brightness, Backlight Timeout, and Screen Calibration.



Brightness: With this item, you can change the brightness of the screen. Adjust it darker or brighter by tapping or button.

Note: when the minimum or maximum brightness level is met, the level down/level up button will become grey in colour and is no longer selectable.



Backlight Timeout: Select an option to set the idling time to shut down the display to save battery power. If you want it to display continuously, select "Never".



Screen Calibration: This function calibrates the unit to respond to your screen taps. You will need to use this function only if the unit begins to respond inconsistently to your screen taps. Tap on button to start.



Follow the on screen directions to tap on the centre of the cross to calibrate. When the steps are done, you will see the second screen, tap on the screen to save and apply the new calibration settings.



## Language

Tap to select a language from the list to suit your need.



#### **Power Status**

Enter this option to find out the battery power status.



While charging, the status will be in motion, and de-noted "Charging".

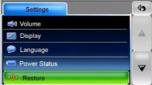


If the battery is fully charged and the unit is still on charge, the display will show as the figure below.



## Restore

This is to allow you to restore the settings back to default values. When necessary, tap on the "Restore" option.



Tap on button to restore all the settings back to default. After this has been done, the message "Finished!" will be displayed.



Or tap on to cancel and exit.

## System Info

Tap on 'System Info' to access information about the unit and any inserted memory card. There are 2 tabs to select and read: Devices and Storage.



Devices: The Devices page shows information about your software version and capacity of the embedded internal memory.



Storage: The Storage page tells you the total capacity and free capacity of your storage card (if installed) and the flash disk. If no storage card is installed, the information will show as N/A.



## Firmware Upgrade (advanced feature)

You can upgrade the firmware of the unit for better performance or/ and more functions. Follow the steps below to do so.

Note 1: only advanced users are recommended to operate this feature.

Note 2: before upgrading, please make sure that the battery capacity if filled, or power the unit with the car charger to ensure the upgrading will not be corrupted by power failure.

Note 3: do not remove the memory card during upgrading!

Note 4: please visit www.binatonecarrera.com for more information.

 Download the firmware file from our website. Uncompress the file and copy it to a SD/ MMC memory card. Insert the card into the card slot of the unit.

2. Tap to enter this option; you will see the screen as shown below on the right.





3. To start upgrading, tap on the button. The unit will restart automatically and the "Upgrading..." message will be shown. A few seconds later, the "Finished!" message will be shown after the upgrading is done.





4. If the upgrade is failed, you will see the below screen, which shows the "Failed!" message.



## FM Adjust

The device has a FM broadcasting function. Enable this function, you can broadcast audio signal of the device, GPS voice and Music tracks playing on the device, then receive with the FM radio on your car, and output with the speakers.



Enter this setting, you can see 2 options. Tap to select Speaker option to let the device output audio by itself. Or tap on FM Transmitter option to set the device broadcast the audio signal to a FM frequency.



When FM Transmitter is selected, you will see the figure below. Here you can adjust the frequency to broadcast.



Adjust a frequency to broadcast by tapping on the two triangles. Four frequencies are able to be saved for further usage. After a frequency is adjusted, tap on the

button. You will see a window asking to select a number to save the frequency. Tap to select a number, then the frequency is selectable on the list. You can select it from the list when you need to broadcast the audio of the device next time.

Note: select a frequency with no available station, or the audio signal will be covered.



## **Technical Specifications**

Model Name	• MS-5654
Display	<ul> <li>480 x 272 WQVGA Resolution</li> </ul>
	<ul> <li>4.3" TFT with Touch Panel</li> </ul>
Processor	Centrality A3 372MHz
Software	Microsoft Windows CE 5.0 Core Version
Memory	1G/2G Onboard NAND Flash ROM
	64 MB SDRAM
Card Slots	SD Card (Memory type only)
GPS antenna	Embedded 15x15 mm patch antenna
	External GPS connector x 1
	<ul> <li>External TMC connector x 1</li> </ul>
Audio	3.5mm Stereo Headphone Jack x 1
	<ul> <li>2.5mm Headphone Jack x 1(for TMC)</li> </ul>
	<ul> <li>Integrated 1W Speaker (Mono)</li> </ul>
	<ul> <li>Video playback function</li> </ul>
Special	TMC GNS(FM6)
	FM Transmitter
	Bluetooth function
Power	<ul> <li>1500mAH(Max)/3.7V Li-polymer battery</li> </ul>
	Battery Life: 3 Hrs for GPS
Input	Stylus
Interface	• USB 1.1
Digital frame	Digital photo stored in SD card should be displayed
Buttons	Power Button x 1
	Battery switch x 1
	Menu Key x 1
System / Power Indicator	Charger LED (Yellow -charger/ Green-finish)
Temperature	Operator:0~50 Degree
	Storage:-10~60 Degree
Standard	USB Sync Cable
Accessory	Car charger
	Cradle for device
	Holder
	• CD
	Manual x1
	TMC external antenna x1
Dimension	• (H x W x Depth) (mm): 131 x 78 x 19.8
Weight	Below 205 g (w/ battery)

## FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

## **CAUTION:**

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

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.

RF exposure warning ·

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment must be installed and operated in accordance with provided instructions.

The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.