SmartHUD Head up Display
User Manual

EL-311   **EL-311R**   **EL-101**

Thank you for purchasing the Head Up Display! The User Manual will teach you how to operate the product. Please read the User Manual before starting using the product to make sure you operate the HUD correctly. After reading the User Manual, please save it in case if you need any information later.

Safety Warning

The product operates safely as a design and manufacture were given priority in development. To avoid any potential risks, please follow the instructions when you are going to install, operating and cleaning the product.

● Before using the product, please read and understand all instructions, and save all instructions as they may be useful in the future.

● You are required to follow all warning instructions for the product.

▼ Do not use water or any chemical products to soak the console and sensor for cleaning.

▼ When cleaning, please use a piece of smooth cloth to clean the monitor surface.

▼ Don't touch the machine with wet hands. Stop using the product and turn off the power when you find water inside, and ask qualified mechanics to fix it.

● The product is only for assistance; driver still need be aware of all situations, and must pay Note to driving and safety.

● Please update the map software when you find out map information has not been updated and is different from the current roads.

● EL-101 is included lithium battery. If the battery is not replaced correctly, there will be a risk of explosion. Only allow replacing with the same brand or recommended by the manufacturer of the same type of battery. Used batteries must be handled in accordance with the manufacturer's instructions.

Federal Communication 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 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.

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

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

I. Product appearance

■ EL-311

Full-color and high
brightness screen

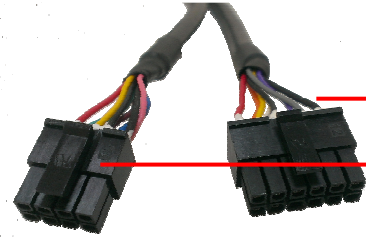Brightness sensor

Micro SD card port

Microphone

Reset button
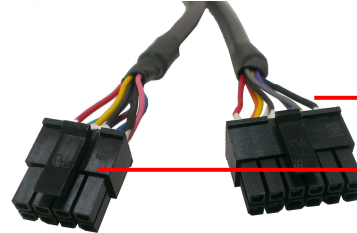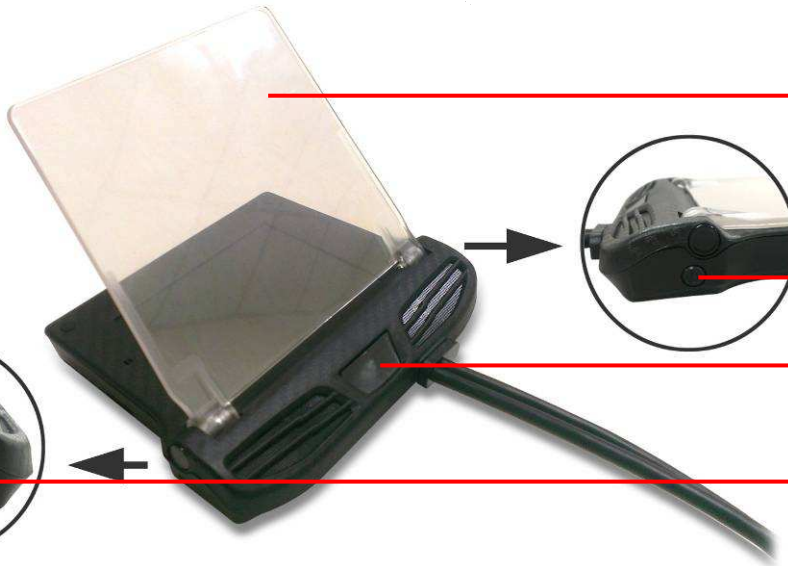
DVR connector
(Option)

12V Power input

■ EL-311R

DVR connector (Option)

12V Power input

Reflective cover

Screen on/off

Brightness sensor

Reset button

■ EL-101

Reflective cover

Screen on/off & brightness sensor

Full-color and high brightness

Micro SD card port

Microphon

Note：Long press the power button with 5 seconds for RESET device

5V Power input (USB Knob)

DVR Video input

Rear camera video

II. Product features

● 4" TFT high-resolution image with full-color display layouts indicate rich information.

● Bright screen does not hurt the eyes.

● Brightness sensor: automatic detection when light reaches the sensor.

● Built-in navigation

● Speeding alert

● Blue tooth message and indications

III. Specification

■ **EL-311**

Voltage	DC 12V
Storage Temperature	-40℃ ~ +85℃
Working temperature	-30℃ ~ +80℃
Current consume	1A After turning off car engine, the products current consume ≦0.13mA
311 Overall size(L*W*H)	122.2mm*111.4mm* 29.7mm

■ **EL-311R**

Voltage	DC 12V
Storage Temperature	-40℃ ~ +85℃
Working temperature	-30℃ ~ +80℃
Current consume	1A After turning off car engine, the products current consume ≦0.13mA
311R Overall size(L*W*H)	Length146.3mm*Width116mm*Height17.2mm

■ **EL-101**

Voltage	5V
Storage Temperature	-40℃ ~ +75℃
Working temperature	-30℃ ~ +75℃
Current consume	2A
101 Overall size(L*W*H)	Length122mm*Width187mm*Height22mm

IV. Instructions for starting the product

[Preface] Before using the product, <u>please follow below steps</u> in order to sure the regular connections.

View for first power on

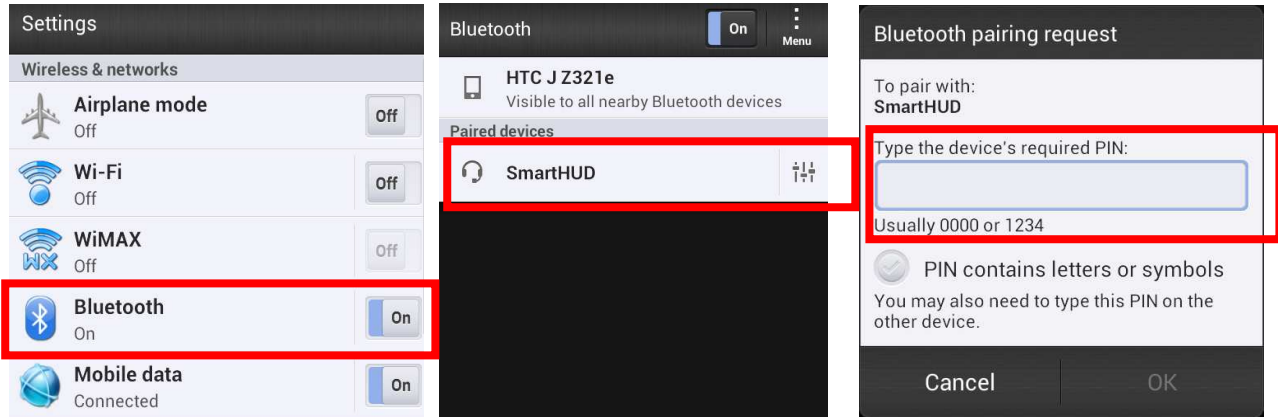View of normal power on
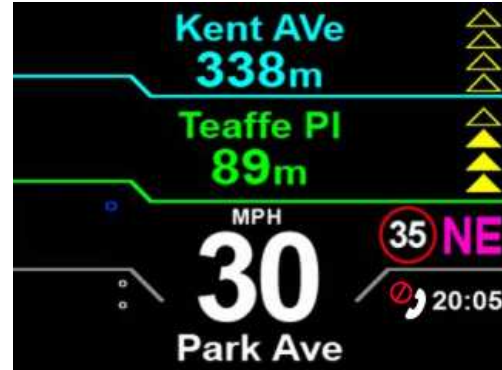
Bluetooth Connect Setting (Android System)

Step 1 Install E-Where ![icon] on your phone and HUD Remote ![icon] APP. When you are doing route planning, you can share all hot spot (scenery) to SmartHUD via E-Where. HUD Remote is like a controller to remote HUD.
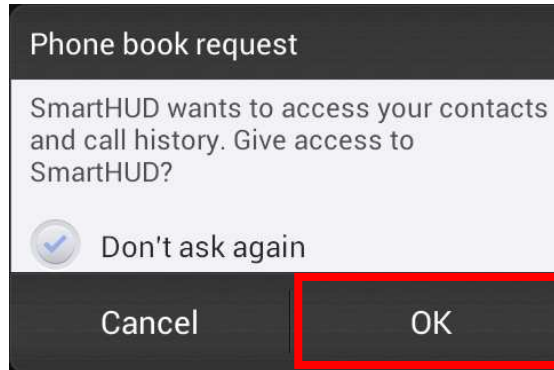
Step 2 Turn on the blue tooth function：Setting>Bluetooth>Open, choose device named "SmartHUD", and entering password 0000 for pairing.

Step 3 Enable the blue tooth function：Setting>Bluetooth>Open，Choose console equipped 「Smart HUD」，Enter password 「0000」。

When building a connection, SmartHUD will ask for confirmation to make sure you want to give the telephone saving authorization. Please choose "yes"

Phone book request

SmartHUD wants to access your contacts and call history. Give access to SmartHUD?

✓ Don't ask again

Cancel   OK

Bluetooth connect successful screenshot on mobile

Tethering or hotspot active   BT connected successfully

95   ✳   ✳   3G   .ıll   🔋   PM 8:04

Bluetooth Connect Setting (iOS System)

Step 1 Install E-Where on your phone and HUD Remote APP. When you are doing route planning, you can share all hot spot (scenery) to SmartHUD via E-Where. HUD Remote is like a controller to remote HUD.

Step 2 Turn on the blue tooth function：Setting>Bluetooth>Open, choose device named "SmartHUD", and entering password 0000 for pairing.
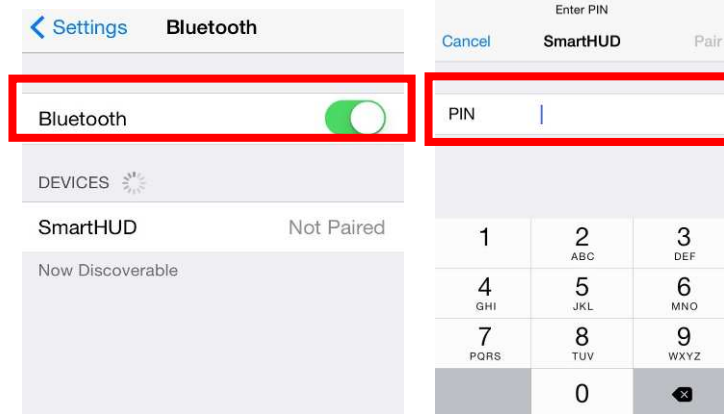
Step 3 Turn on Cellular：Settings＞Cellular >Cellular Data

Step 4 Select Bluetooth and USB only

Step 5 Turn on personal Hotspot：Settings＞Personal Hotspot＞Personal Hotspot

Bluetooth connect successful screenshot on mobile

Color change from gray to white
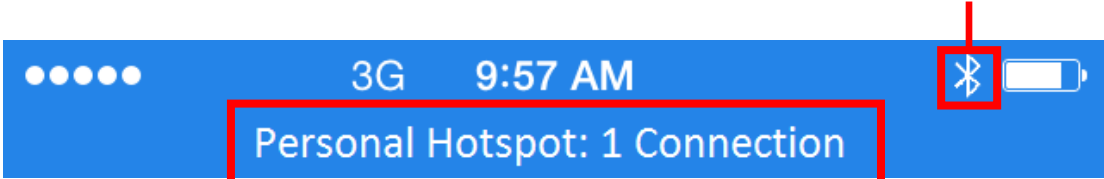
Bluetooth connect successful on SmartHUD

You can check connecting status at down-left side in safety mode. The icon will indicate status from (no connected)→(Bluetooth connected)→(PAN connected).

Product Operation—HUD Remote APP

After establishing PAN, you can enable HUD Remote operation. The gesture operation is the same as using a mouse mode. HUD Remote will indicate functional teaching window at first operation. Click on the HUD Remote right side 🛈 can review the functional teaching again after completing installation.
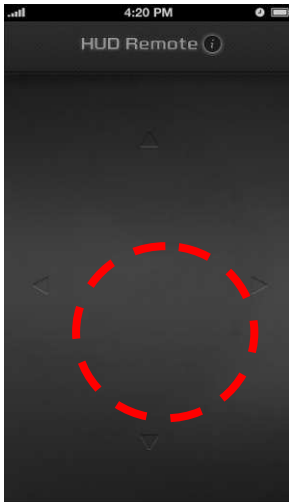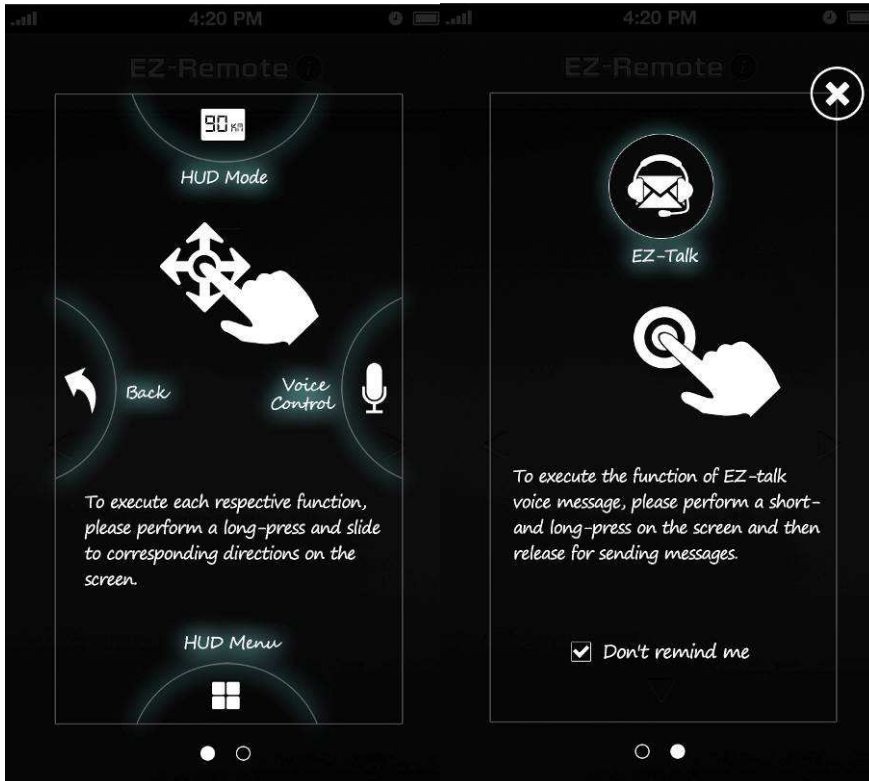
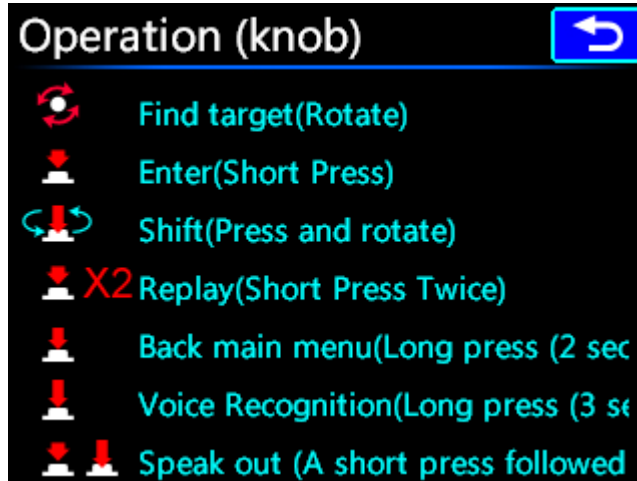(No action)　　　(Press and hold for 1 sec)

Note:

When HUD Remote is in digital video record mode or safe mode, use long press follow by a down gesture to go back the Main Menu, do not support go back gesture to go back to Main Menu.

Product Operation—Knob

Choose up-right corner ? at Main Menu for checking the operation gesture.

Operation (knob)

- Find target(Rotate)
- Enter(Short Press)
- Shift(Press and rotate)
- X2 Replay(Short Press Twice)
- Back main menu(Long press (2 sec
- Voice Recognition(Long press (3 se
- Speak out (A short press followed

Note: Long press 3 seconds can start up voice recognition function on mobile (iOS system will start up Siri). If Siri is started up from mobile under connecting with HUD condition, HUD screen will pop up incoming call page.

■ Music

1. SD Music

Playing page shows as below pictures. This icon go back to folder， refresh folder's list. Support external capacity up to 32GB maximum and available to read MP3 and WAV music files.
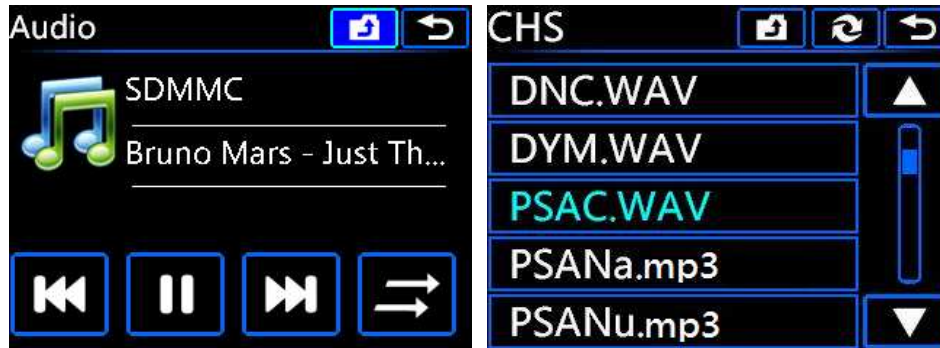
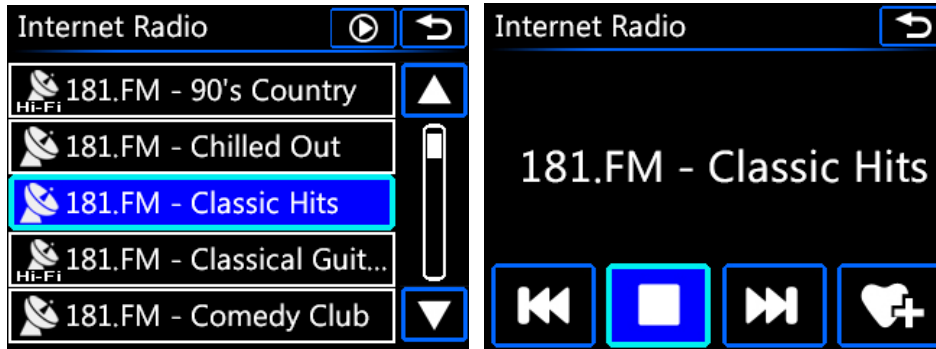 Order / All repeat / Single repeat / Random

2. BT Music

Support to read the music list from mobile and work function as below indicated.

 last song / play/pause / next song

3. Internet Radio

Data source is MUZEE. Channel list is synchronize

 Last channel / Next channel / Play / Stop

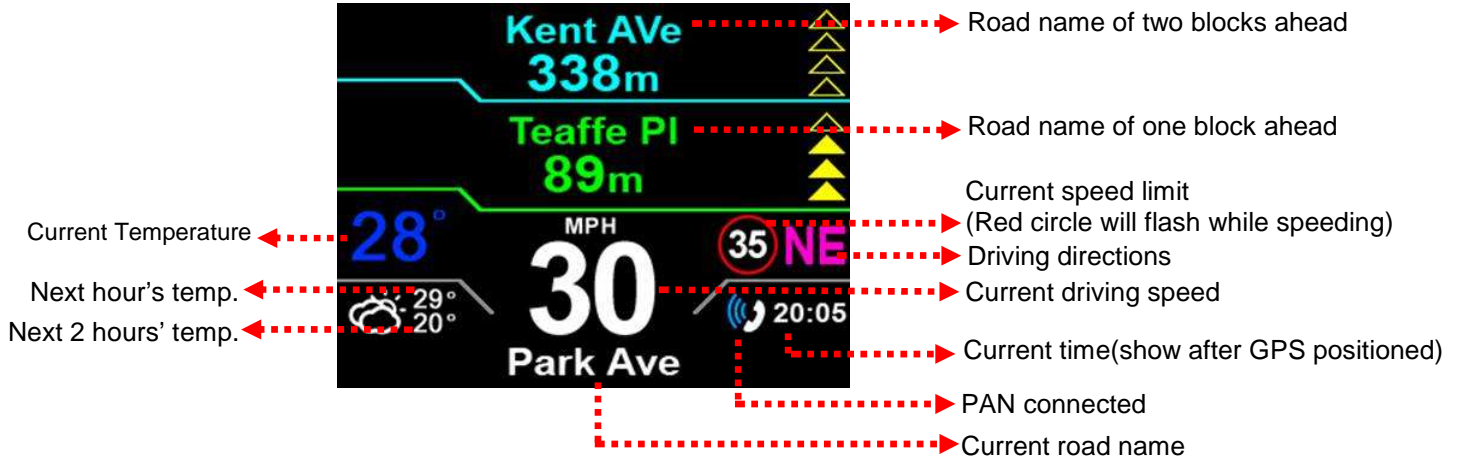 Add to my favorite / Remove from my favorite

◼ Safety

➢ Free run / No route planning

Kent AVe **338m** ········▶ Road name of two blocks ahead

Teaffe Pl **89m** ········▶ Road name of one block ahead

Current Temperature ◀······· 28°

MPH

35 NE ·······▶ Current speed limit (Red circle will flash while speeding)
·······▶ Driving directions

Next hour's temp. ◀······· 29°
Next 2 hours' temp. ◀······· 20°

30

Park Ave

·······▶ Current driving speed

((•)) 20:05 ·······▶ Current time(show after GPS positioned)

·······▶ PAN connected

·······▶ Current road name

Note: The triangles in the up-right corner indicate how close to your destination or next direction change. The first triangle will indicate to you at 200m to the destination. More triangles will become colored when you near your destination or direction change starting at 200m, and following with indication at 150m, 100m and 50m to your destination.

➢ **With route planning**

The distance
of one block ahead → 190m

Name of road one block ahead ← Teaffe Pl

Driving Directions ← E

Current speed limit
(Red circle will flash while speeding) ← 35

Current time(show after GPS positioned) ← 20:05

PAN connected

Distance to
destination → 1005m   30

Current speed limit

Current road name ← Park Ave

GPS Positioning Status: Check icon located at the right side of the main screen if changed

from (No GPS signal) to current time, that means your GPS is positioned successfully.

If you can't get good position in your car, please use with GPS stronger to enhance GPS
positioning capability.

V. Navigation

For more details info please refer to navigation user manual. You can share POI(Point Of Interest) on your mobile via E-Where as destination to SmartHUD.

- **Android System** (Share scenic from Google Maps)
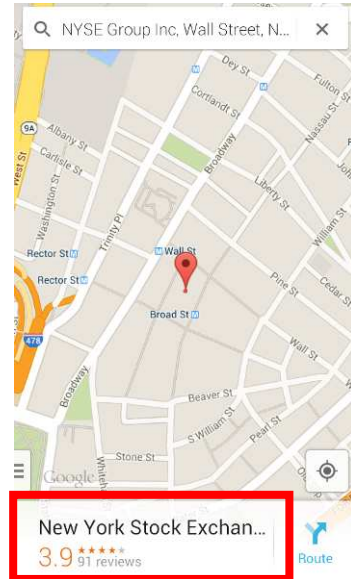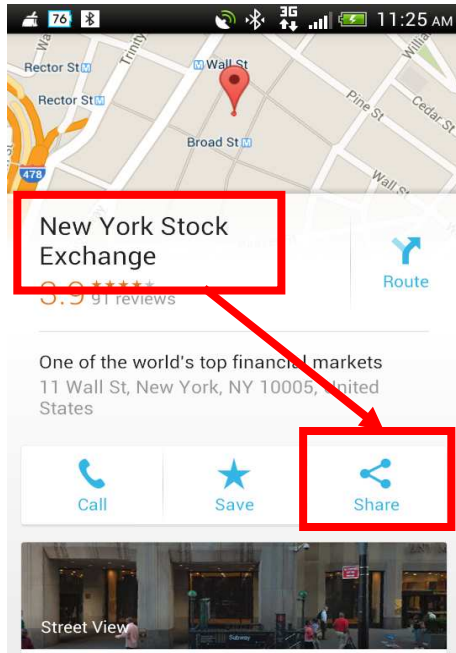
Step 1: Download E-Where APP

E-Where

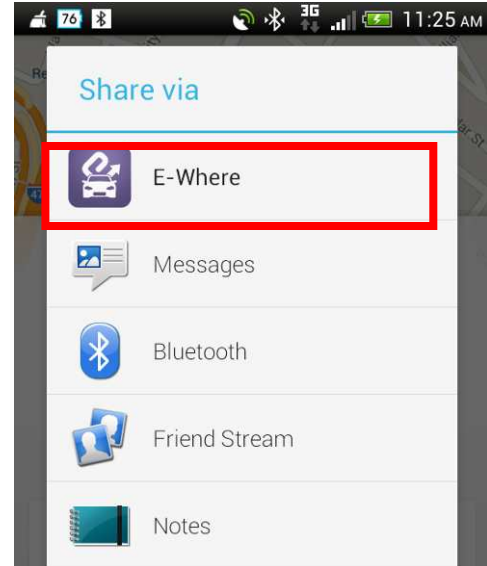**Step 2:** Enter Google Map on your mobile

Step 3: Look for scenic area (enter address or location into the search bar or pick a specific scenic area with address)
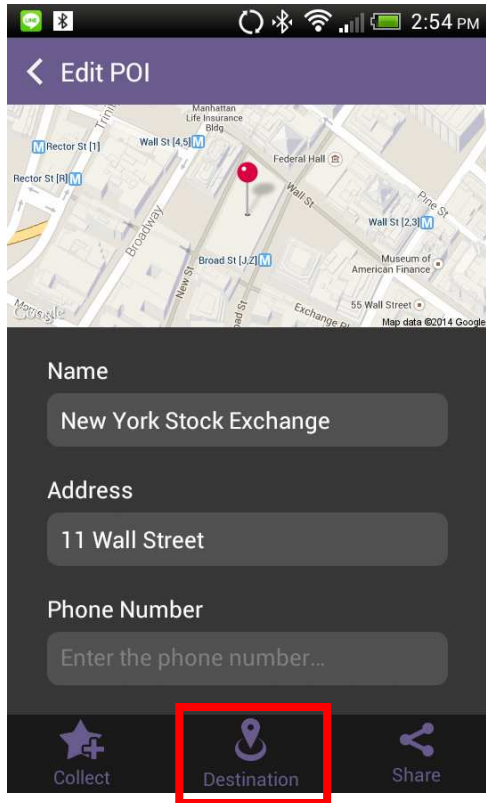
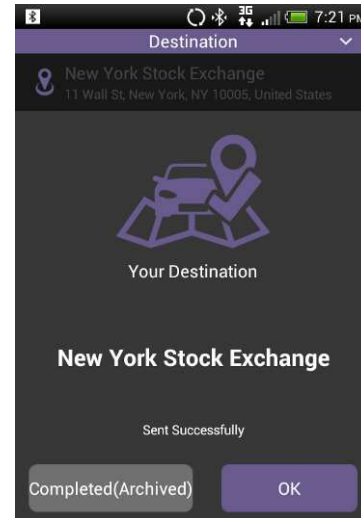**Step 4:** Sharing the Scenic Area

Step 5: Sharing to SmartHUD

30

Step 6: Set as destination

Step 7: Sent successfully

■ System will indicate text as "Sent successfully" if your mobile is connected with HUD.

■ System will indicate text as "No connected car device. E-Where will send to device by server." If your mobile is not connected with HUD.
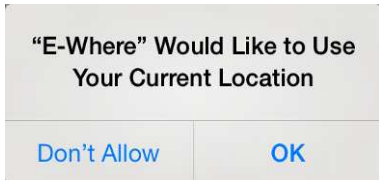
- **iOS System** (Share scenic from Apple Maps)

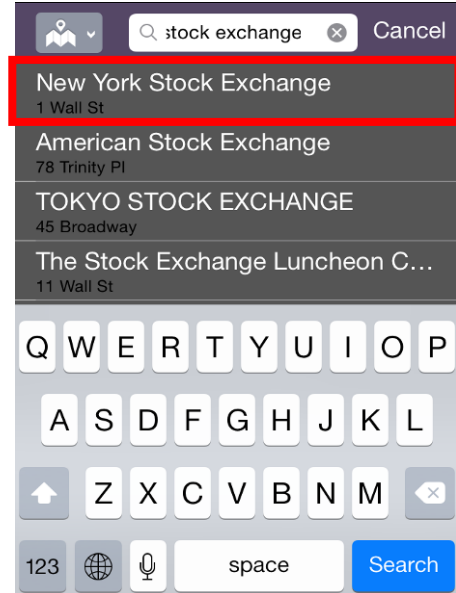**Step 1:** Download E-Where APP

E-Where

Step 2: Allow E-Where to use your current location, so you are able to continue.

Step 3: Enter keyword in search bar using an address, select one place you want to go.
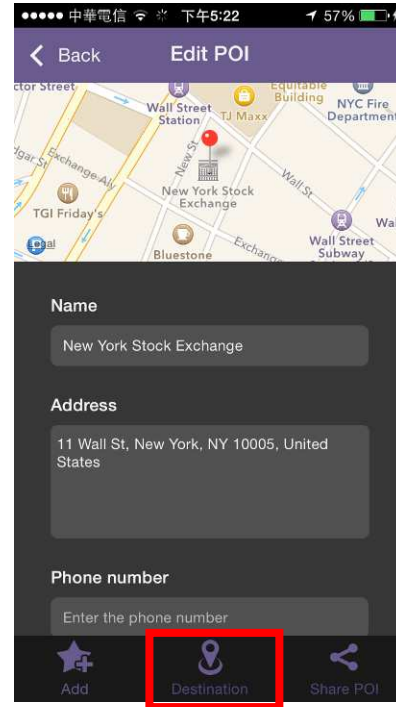
Step 4: Available for previewing the selected POI in map. You can also use your finger to move the map to select POI.
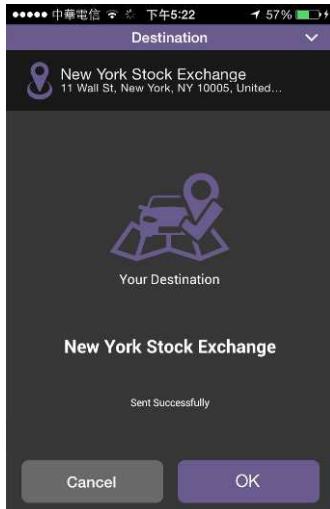

Step 5: Click the scenic information on the pin to enter edit page, then set it as destination.

Step 6: Sent successfully

■ System will indicate text as "Sent successfully" if your mobile is connected with HUD.

■ System will indicate text as "No connected car device. E-Where will send to device by server." If your mobile is not connected with HUD.

VI. Applications

■ **Content:**

- **News:** Support to read news with Text to speech.

- **Weather:** Indicate current temperature and next three hours' temperature.

- **E-Where:** Available to edit scenic to prefer group, pre-saving POI and share POI…etc.

- **EZ-Talk:** In-time communication software, need to work with installed APP on mobile.

  Available to send text, voice message, current location, and pictures…etc. to your contacts.

- **Calendar:** Need to use with EZ-Account APP to connect your Google account.

■ **Traffic Report:** The active traffic report enables the user to pass along information to those upcoming drivers about issues or incidents on the road ahead.

➢ **News**

Default setting is real-time news. Click to switch to different kind of news.

 Pause / Play / Stop / Repeat

News/Class	
ALL	▲
USA	
WORLD	
POLITICS	
TECHNOLOGY	▼

News	
Israel, Hamas agree to 72-...	▲
Hon Hai: South Korea's thir..	
Kim Jong-un guide tactical ..	
Hong Kong's nearly 79 mil...	
Hussein's Iraqi army fierce...	▼

| Text	
That's the question fol-	▲
lowing word late Monday	
that Israel and Palestin-	
ian factions, including	
Hamas, agreed to a 72-	▼

➢ **Weather**

Indicate the weather information of your current located GPS position. The area description is written with local default language. Besides local language and English, system will directly indicate as English once the setting is changed to others.

[icon]: Indicate the weather information of current position, data will be updating automatically per 5 minutes under stable internet connecting environment.

[icon]: Supports to indicate the weather information of destination if your destination is transmitted from E-Where APP.
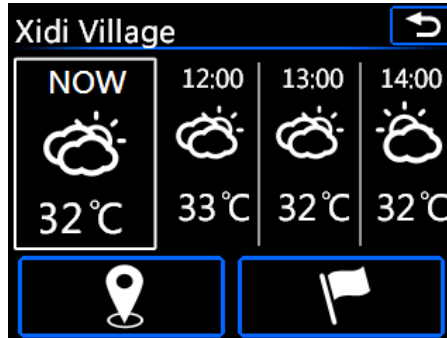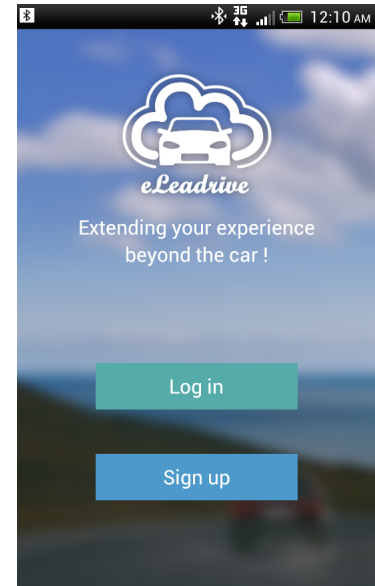
> ➤ **E-Where**

To use this function, please download eLeadrive and E-Where APPs on your mobile in

advance.

■ **eLeadrive:** The main entrance of E-LEAD cloud service, you can access the related information more easily by this application.

■ **Features:**
- Bridge between your mobile and E-LEAD products
- Profile picture settings
- Supports E-Where& EZ-talk login

■ **Connect with SmartHUD:**

1. Click eLeadrive on your mobile to enter logging screen.

Enter your account and password.

> (For initial operation, please select **sign up** and follow the indicated steps to finish signing process)

2. Please enter your phone number or e-mail address and password to log in. (Refer to the left picture as below)

3. After logging, eLeadrive will indicate the message of car device added at the bottom.
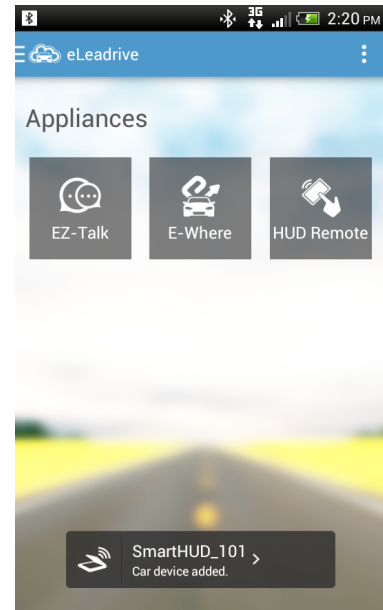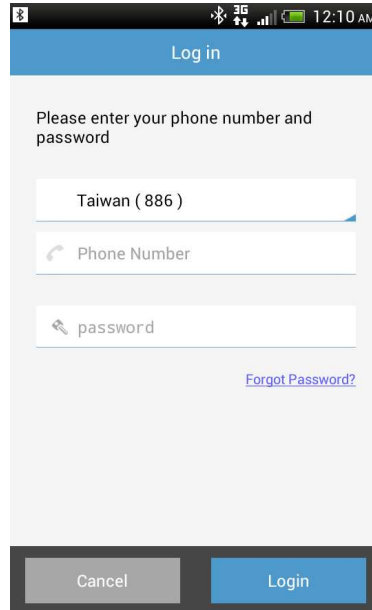
■ **E-Where:** By E-Where, you can search/collect POIs and share it with friends. It provides a

more effective way to locate and navigate on SmartHUD.

■ **Feature:**

- Search POI: Integrate with Google maps / iOS built-in map, and locate where you are immediately
- Favorites: collect the locations you like and save them by category
- Share Records: record the locations you sent or received from your friends
- Except for POI searching, you can set a location through map browsing

■ **Support function at SmartHUD device:**

- Synchronize the scenic list from favorite record
- Connect to Bluetooth hand-free function
- Select scenic and set as destination

: Call scenic's phone number / : Set as destination and start navigating
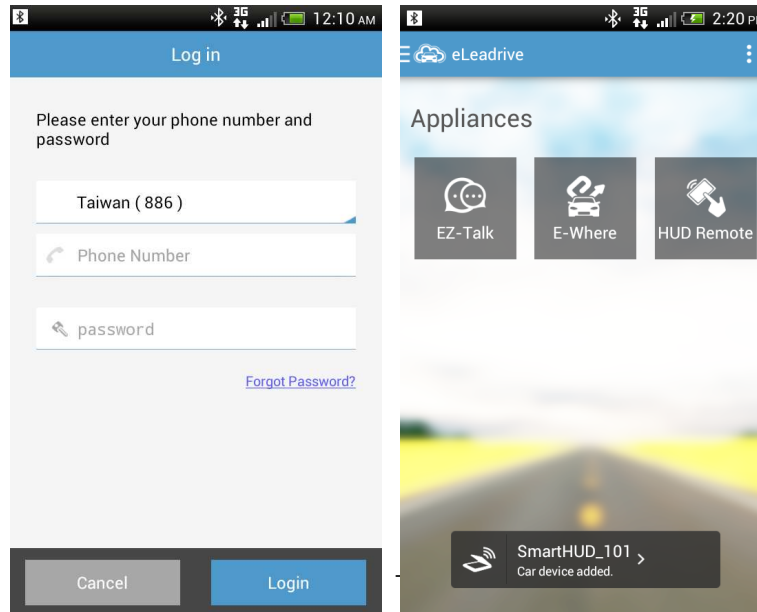
➢ **EZ-Talk**

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   - Bridge between your mobile and E-LEAD products
   - Profile picture settings
   - Supports E-Where& EZ-talk login

■ **Connect with SmartHUD:**
   1. Click eLeadrive on your mobile to enter logging screen.
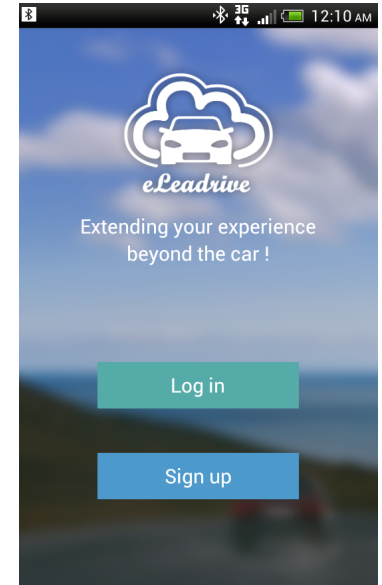
2. Enter your account and password.

   (For initial operation, please select **sign up** and follow the indicated steps to finish signing process)

3. Please enter your phone number or e-mail address and password to log in. (Refer to the left picture as below)

4. After logging, eLeadrive will indicate the message of car device added at the bottom.

■ **EZ-Talk Messenger:** EZ-Talk Messenger is a FREE intstant messaging app make you be able to chat with your friends anywhere, anytime. This app not only supports mobile phones but also specific E-LEAD head units. You can send voice messages and location in car, and receive overall messages on phone. What we want to provide is a seamless experience from insinde of vehicle to outside of vehicle.

■ **Features:**

- Sync chats to SmartHUD
- Supports 4 message types: text, voice, location, picture
- One-to-one, one-to-many, and many-to-many
- Create chat or join chat room
- Personalized name of chat room
- Find EZ-Talk users nearby

■ **Support function at SmartHUD device:**

- Sync chats from mobile

- [icon]: create new chat

- [icon]: Account information

- [icon]: Scenic transmits record, select one scenic and set it as destination to navigation

- [icon]: Picture transmits record

- [icon]: Add new member at this chatting room/Check members/Share current

position(linked with Google Maps for preview)/Leave chat

- Auto : Set as Auto talk, turn on **Auto play** and **Auto send** function at same time.

　　■ **Auto Play:** auto play incoming message.

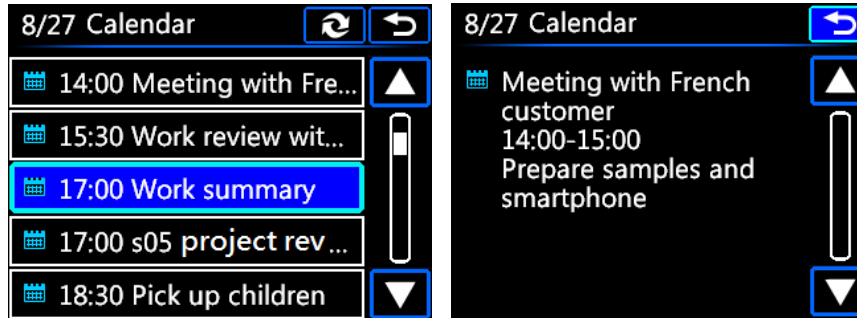　　■ **Auto Send:** auto send message to this chatting room by a short press followed by
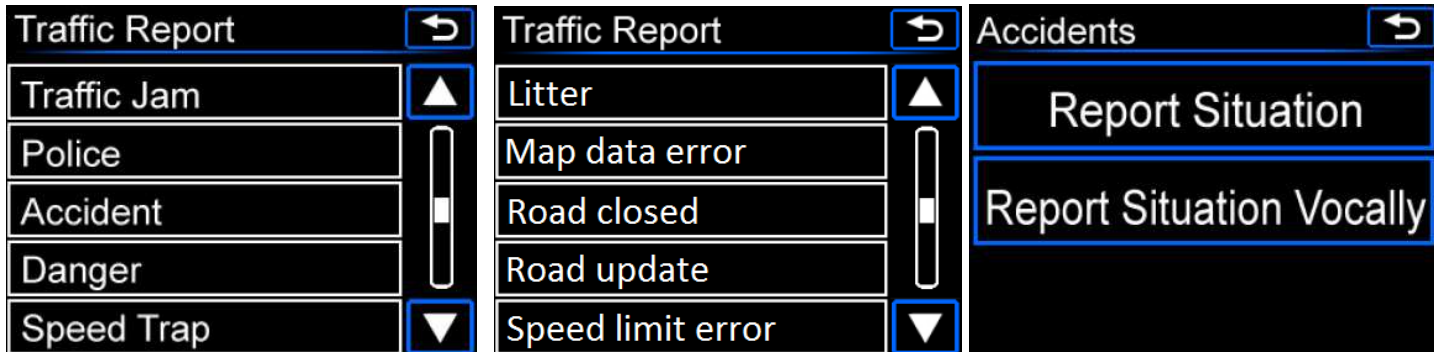
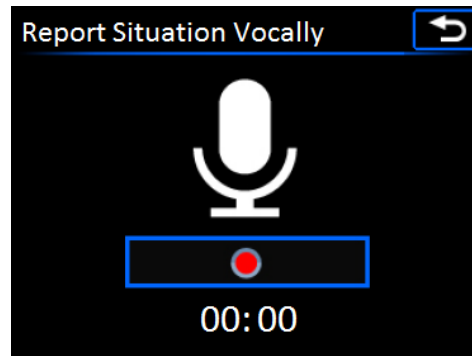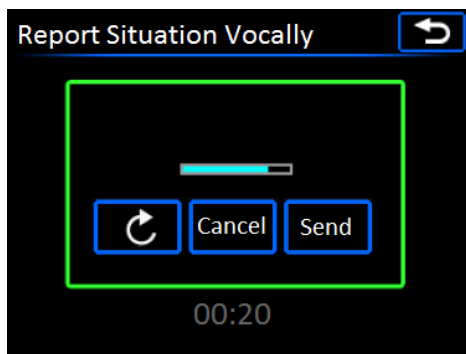a hold at any page.

■   **Calendar**

Click EZ-Account APP on your mobile, and set your Google account to connect with SmartHUD. After setting, you would be able to see the edited schedule.

■ **Traffic Report**

The active traffic report enables the user to pass along information to those upcoming drivers about issues or incidents on the road ahead. It also enables the user to report problems or issues with your current position. You can choose to report situation directly or report vocally by uploading additional voice message to our server. While entering recording page, system will directly start recording voice for maximum time limit as 20 seconds. If you want to end recording earlier, please click recording button again for select send, repeat or cancel.

Traffic Report ⤺	Traffic Report ⤺	Accidents ⤺
Traffic Jam ▲	Litter ▲	Report Situation
Police	Map data error	
Accident	Road closed	Report Situation Vocally
Danger	Road update	
Speed Trap ▼	Speed limit error ▼	

Report Situation Vocally

00:20

Report Situation Vocally

Cancel   Send

00:00

VII. Mobile

Support to loading dial pad, phoneBook, call history and messages from mobile.

**Note:** iOS system is not supported for blue tooth message function.
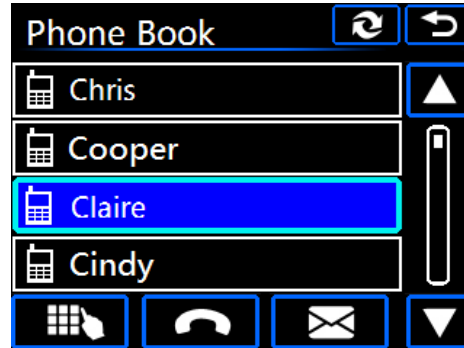
 Dial pad / Call history / Message /

 : Update contact list to phone book.

※ **Blue tooth phone function:** Based on driver's safety is top priority, all incoming calls will be popped up as full-screen notification besides you are staying at navigation and safety mode. At these two modes, incoming call will inform you as notify bar from top of screen. During the calling, it only allows to swift mode to navigation, not allows to operate other's

function. If the incoming phone number is not within contact list, it will be presented as unknown.
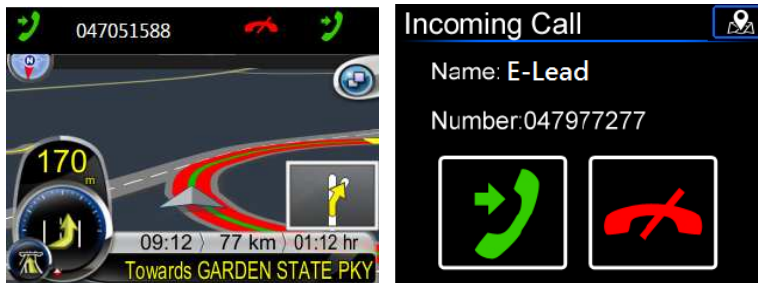
■ **Dial pad**

Click the number you want to call. After keying, click [phone icon] for calling. If there is any mistake during entering process, please use delete [⌫] , clear [⊗] for cancel.
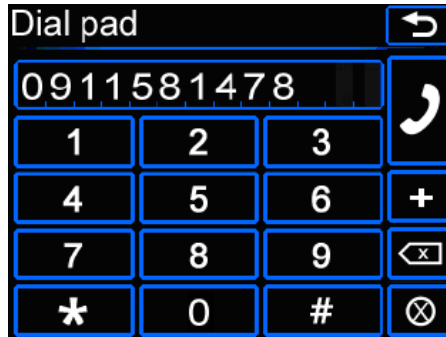
■ **Call history**

Downloading from the calling history on mobile.

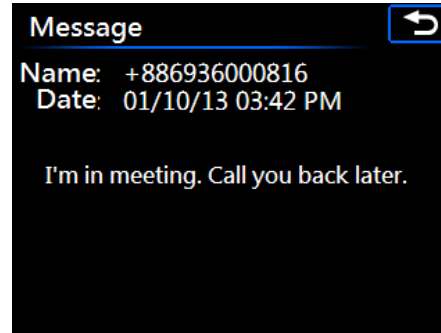 Missed calls

 Outgoing calls

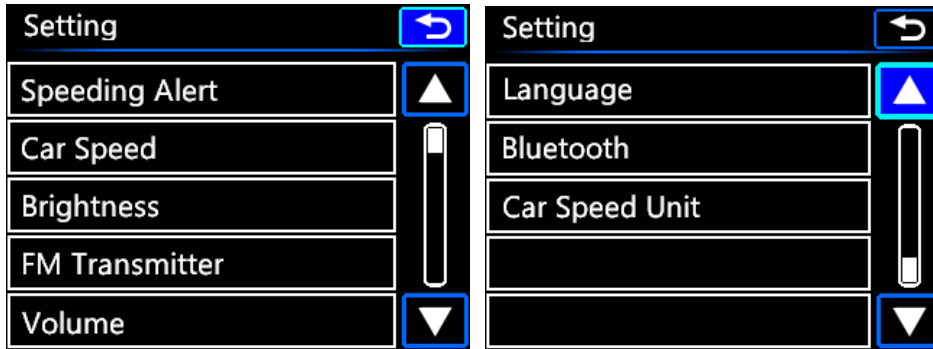 Incoming calls

■ **Message**

 : update new messages.

VIII.　Setting

Provide personal favorite setting for Speeding Alert / Car Speed / Brightness / FM Transmitter / Volume / Language / Bluetooth / Car speed unit.

Setting	↩		Setting	↩
Speeding Alert	▲		Language	▲
Car Speed			Bluetooth	
Brightness			Car Speed Unit	
FM Transmitter				
Volume	▼			▼

■ **Car speed**

Set the number to adjust the indicated value from 0. The setting range is -50~50.

Car Speed	↩
Speed +	0

Adjust the value to set speed indicator.
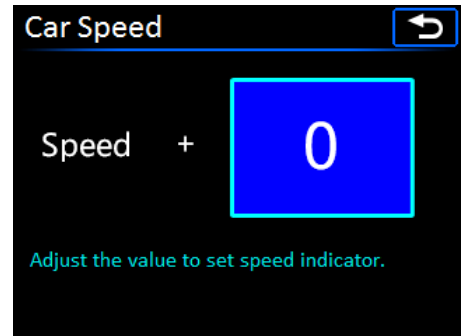
■ **Speeding Alert**

The speeding indicator will remind you by color change when you are driving above the speed. You can set the value from 0. The setting range is -50~50.
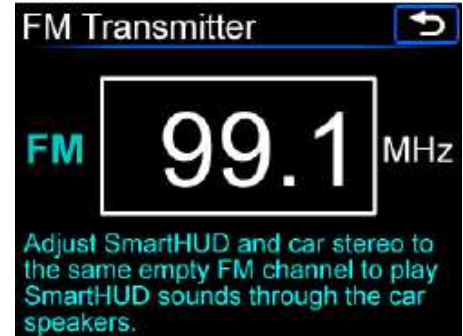
■ **Brightness**

The device is able to detect outside light to switch screen presentation automatically. As personal preference you can switch by yourself, switch range use + and -.
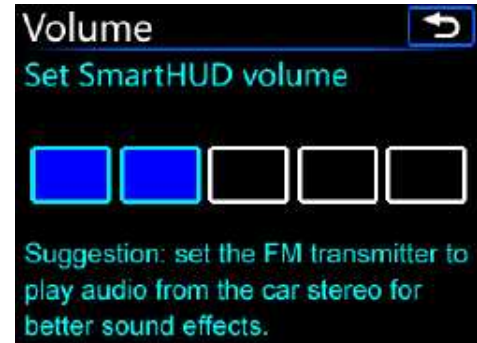
■ **FM Transmitter**

The ability to use FM Transmitter to listen to FM channels, using the car stereo channels and switches to listen to HUD music signal. (FM range: 88.1-107.9 MHZ)

FM Transmitter

FM **99.1** MHz

Adjust SmartHUD and car stereo to the same empty FM channel to play SmartHUD sounds through the car speakers.

■ **Volume**

Change to your personal preference.

Volume

Set SmartHUD volume

Suggestion: set the FM transmitter to play audio from the car stereo for better sound effects.
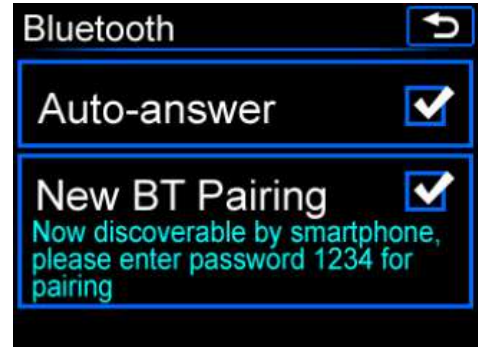
■ **Language**

According your personal preference you can set the language. The console support English, Traditional Chinese and Simplified Chinese.

Language	⤺
繁体	
English	
简体	

■ **Bluetooth**

➢ **Auto-answer:** Default is on. HUD will directly answer the incoming call after it keeps ringing till 10 seconds. For turning off this function, please cancel the block.

➢ **New BT Pairing:** Default is off for auto-connecting function. If you want to pair with other device, please turn on the block and find device named SmartHUD, then enter password 0000 for pairing.

Bluetooth	⤺
Auto-answer	☑
New BT Pairing	☑

Now discoverable by smartphone, please enter password 1234 for pairing

■ **Car Speed Unit**

Change the unit to your personal preference.

Car Speed Unit	↩
km/h	☑
mph	☐

Troubleshooting

Version checking

Step 1：Please enter to primary links/setting /language's screen

Step2：Please practice how to use actuated button turn left move, and select a target toward to up one space gesture.
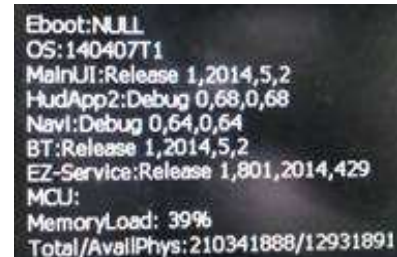
Step 3：Please practice using rotated button turn right move, then select a target to move down once space gesture.

Step4 : Continues doing the following actions:「up、up、down、down、up、down、up、down」，then you will access manual mode(as the photo below shows) and check software version。The actions may have no effect if you select an of the target options. In the procedure, you can not pause or stop for too long of time.

Please inform the Service Specialist of your version number to let them solve your problem as soon as possible.



```
Eboot:NULL
OS:140407T1
MainUI:Release 1,2014,5,2
HudApp2:Debug 0,68,0,68
Navl:Debug 0,64,0,64
BT:Release 1,2014,5,2
EZ-Service:Release 1,801,2014,429
MCU:
MemoryLoad: 39%
Total/AvailPhys:210341888/12931891
```

System Programs Automatic Updates

Step1：Please put update program on a Micro SD, please notice you are not allowed to put same profile name on the same card, if you do this you be
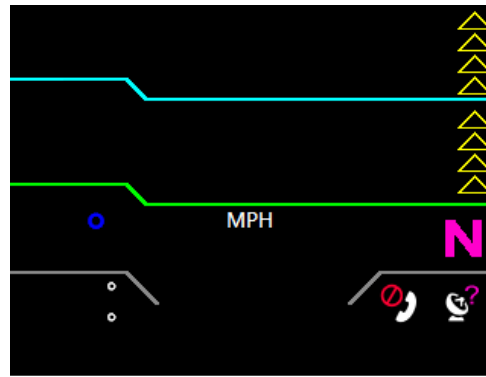
unsuccessful when updating.

Step2 : Put Micro SD card inside the console's SD card slot, And at the same time turn off your car. 。

Step3：Turn on car engine and the automatic system will begin to update, please be patient and wait for the update.　The program will alert you when you are able to remove the SD card. The console will also automatically restart after the update is complete.

Step4：The preparation time before the update starts may be 1 minute.
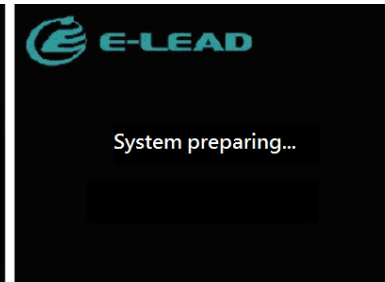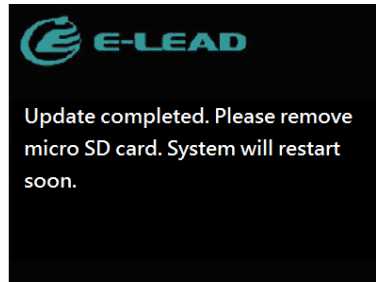
Step5：When screen switch the main screen, please wait at least 15 seconds for continuing to use the device.