Thank patronage!

Thank you very much for purchasing and using our digital car audio-visual series products! To ensure you can use this product correctly, please read this user manual carefully before use it and keep it well for your future reference.

Safety Warning

- Laws of some countries prohibit users from watching TV or other programs and performing related operations when driving. For your personal safety, please do not watch videos, TV and other related operations while driving.
- The system is only for assistant function when reversing (backing), we accept no any responsibility for any accidents caused during reversing (backing).

Warning

1. Do not expose the unit in the damp environment to prevent from fire or electric shock accident.
2. Any change or modification to this unit without the clear prior consent of the authorization party may bring inconvenience to the users.
3. This unit is made up of high-precision accessories; do not dismantle the device or adjust any accessories inside this device if without authorization.
4. Do not touch the display screen with hard objects, so as to avoid scratching the screen.
5. Please don't install this device in these places which is in the way of driver's view or effect driving.
6. To avoid any traffic accidents as driver's distraction, please don't operate this device when driving, if needing to operate, please park the car in a safety place first.
7. This device is fit for such cars with 12V power supply battery system of cathode ground wire; please do not install this device to 24V battery's trucks or buses.

Class 1 Laser Products

We have the rights not to inform in advance if the product descriptions in this manual have any changing.

Platform features

- 1080p Full format decoding, which can decode the vast majority of film sources.
- Supports lossless musics.
- Full-digital DVD, no analog signal, shows is absolutely clear.
- Real 5.1 sound channel.
- Audio DSP processing, 10-band EQ to enhance the listening experience.
- Shutdown status, a second response to reversing.
- Music mode supports digital optical fiber.
- Quad-core processing ( dual ARM core + DSP core + servo core).
- Songs support jacket pictures display, frequency spectrums display and lyrics display.
- High-speed DDR3 memory, main frequency up to 800M.
- Very swift ability to receive the satellite.
- Bluetooth supports telephone book, contacts sorting and searching and contacts address display (show). It also supports background services, a key GPS navigation more convenient and safer.
Functions and features

DVD disc playing functions:

USB/SD card playing functions:
- Be compatible with DVD-R, DVD-RW, DVD +R, DVD +R, CD-DA, MP3, WMA, SVG, VCD and MPEG1, MPEG2, MPEG4, JPEG format discs.
- Supports SD port and USB (2.0) port.

Radio functions:
- 30 storage radio stations (FM: 18 pcs, AM: 12 pcs).
- Automatic, semi-automatic, manual search, and preset memory radio stations.

TV functions (optional):
- Analog TV (ATV)
- Digital TV (DTV)

IMUSIC function:
- This product supports IMUSIC, it can play the inner music through Apple's own USB cable to direct connection. Because it adopted the Apple company's certified chip, so it can support the latest Apple models.
- Note: Because Apple control protocol does not support dragging playback, so, under the playback screen, it doesn't support to dragging when playing. The product can't support the playing functions until you installed Apple authentication chip.

Aux input/output, amplifier and other functions:
- 2 roads/AUX inputs.
- 1 way rear view camera input.
- Four channels amplifier output, which can be directly speaker.
- 2 +1 channel audio output.
- Automatic reversing rear view mirror.
- Full function infrared remote control and touch function.

DVR video input function:
- The product can support external DVR (outlet) function. Such function just supports our company's DVR products (optional).

Notes:
- This product hard disc only supports FAT32/EXFAT format's file system.

The notes about the full unit's connection diagram:
- The product is used for such cars with 12V battery and negative grounding, before installing this product on these cars with 12V batteries, such as truck, bus, big coach, etc., please install the reduction equipment for voltage as soon as possible.
- To avoid short circuit of the electrical system, please firstly switch off the negative electrode terminal's wire of the battery before installing it.
- Please arrange the wiring in some place where can be fixed, thus, keep it no way to touch any moving parts, such as the hand brake, gear lever, etc. Do not arrange the wiring in the heat source area, such as near the heater discharger outlet. Otherwise, the heat source will cause the wiring insulation layer was melted or worn, thus, it will cause short circuit between the wiring and the car body.
- When replacing the blown fuse, you must use (10A) fuse as rated. If use high-capacity rated fuses to replace rated fuses, or no use fuses to direct connect, very easy to cause a fire and damage the device.
- Do not let the yellow power cord go through the engine mounting hole and introduced with warehouse positions to connect the battery, otherwise, it may damage the power line, then, it will cause short circuit between power line and car body.
- Do not connect this product's power line with other devices' power lines, otherwise, it will cause overloading to change overheating.
- Please use insulation paste to wrap the leading wire of unused speaker, so as to avoid (prevent) short circuit. Please ensure that the leading wire of unused speaker gets insulation, otherwise it will cause a short circuit.
- Please ensure that keep any exposed wires to get insulation, meanwhile, bundling all electric wires very well, avoiding any touch between screen, it doesn't touch the metal parts of this device's body, thus, it can prevent short circuits.
- If your car's ignition does not have ACC position, please use ignition switch key to connect ignition wire, or use this on/off power source.
- When turning on the power source, external power amplifier control signal leads AMP (CONT) outlet if this device/unit has connected an external amplifier please do not connect AMP (CONT) leading wire to the end of power amplifier, otherwise, it will cause electric leakage and fault.
- For this product, forbidden it's loudspeaker output terminals to connect ground wire otherwise it will burn out the amplifier. Do not use such loudspeaker system, which connect with the common ground wire and three kinds of wire styles, no matter to connect the loudspeaker to car body.
- The loudspeaker which connects this device/unit must be high-power type, the minimum rated value is 50W, impedance value (resistance value) is 4Q, please don't directly connected a several speaker leads or impedance values (resistance value) outside of this range, otherwise, it will cause short circuit and damage the loudspeakers.

MCU Software Upgrade Instructions:
- Copying MCU softwares (total two files) into the SD card (please ensure the SD card is full empty). Then, inserting into the device's GPRS card slot, then, on the screen, please click "Settings" icon of the main interface, thus, it will enter into system setup interface, dragging the option bar up and down to find the settings option of "Navigation Options". Then, clicking "navigation path ", the device/unit will search files automatically and it will find a file name of "01 \ SDMMC \ MCUv1.0v.exe". After you click the file name, it will automatically generate an "UPG.exe" setting volume. Please insert the SD card into the main UI interface and click the "GPRS/navigation" icon, then, it will show an upgrade GUI (screen), after user clicks the upgrade, the device will run the upgrade automatically, after it completes the automatic upgrade, it will shut down automatically. Please see the following pictures: Notes: In the process of upgrade, please ensure the continuous power supply (never cut off the power supply) and keep the device/unit opening all the time.

Notes:
- This product supports IMUSIC, it can play the inner music through Apple's own USB cable to direct connection. Because it adopted the Apple company's certified chip, so it can support the latest Apple models.
- Note: Because Apple control protocol does not support dragging playback, so, under the playback screen, it doesn't support to dragging when playing. The product can't support the playing functions until you installed Apple authentication chip.

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- Full function infrared remote control and touch function.

DVR video input function:
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Notes:
- This product hard disc only supports FAT32/EXFAT format's file system.
ARM software upgrade instructions

Copying ARM softwares (total 7pcs files, see picture 1) into SD card and please ensure the SD card is full empty. Under the device was powered off, inserting the SD card into this device's GPS card slot, then, turning on the device (unit), at this time, the device (unit) will automatically search files to run upgrade (see picture 2), after it completes the upgrade successfully, it will switch to main UI interface automatically, then, you can use it now. Notes: when upgrade, please ensure the continuous power supply and keep the unit opening all the time, don't permit to cut off the power supply, please see picture 1, picture 2.

picture 1

picture 2
Steering wheel control connections instruction.

Enter into the steering wheel control:

Please click the "Settings" icon to enter into the system setup interface on the screen, then dragging option bar up and down to find the settings option of "How to learn steering wheel control".

The procedure for steering wheel control settings:
1. Clicking the picture of " " to clean/empty everything
2. On the steering wheel, pressing/holding this button which you will need to setting/exit.
3. Click these buttons on the touch screen, which functions are corresponding with these buttons(keys) accordingly.
4. When these buttons turn red, it means that these buttons have been set successfully.
5. Repeat 2-4 key actions to complete all learning. Please correctly connect the steering wheel control lines, please see the following pictures: Connecting two AD lines with the positive pole of steering wheel control line, connecting the GND with negative pole.

Map installation and parameter(specification)

Map installation steps:
1. Users can insert the SD card of pre-installed GPS navigation map software into the GPS card slot on the face panel of the device.
2. On the screen, please click the "Settings" icon of main interface to enter into the system settings interface, dragging the options bar up and down to find the settings option of "Navigation Settings". See picture, entering into "Navigation path": the system will automatically find out all the "exe" files in the navigation card, just need to click the correct navigation path.
3. Thus, you can set the current navigation path as start's navigation path.
4. Re-press GPS key on the face panel of main unit or click the "navigation key" of main interface to enter into navigation screen. As the following pictures shown:

GPS parameter:
1. The operating system: Microsoft Windows 06 NET6.8
2. GPS chip: BuLi-(internal) MTK3360
3. Supported screen resolution: 800*480
4. GPS BAUD (baud rate): 9600bps
5. GPS COM: 2

USB-IMUSIC installation diagram/instruction (optional)

This unit supports USB-IMUSIC function, which only supports our company’s USB-IMUSIC products. When using it, please insert USB-IMUSIC into the jack which is marked with the word of LICENSE on the back of this device, then inserting Apple audio device into the jack which is marked with the word of MEDIA in the tail, then you can use it now. Note: USB-IMUSIC dongle with password!
3G settings

Enter into 3G settings:
On the screen, please click "Settings" icon of main interface to enter into the system setting interface. Dragging the option bar up and down to find "APN" setting option.

Unicom:
Network access point: 3GNET
Phone Number: *99#
Username: (empty)
Password: (empty)

Telecommunications/Telecom:
Network Access Point: (empty)
Phone Number: #777
Username: card
Password: (empty)

3G settings
On the screen, please click "Settings" icon of main interface to enter into the system setting interface. Dragging the option bar up and down to find "APN" setting option.

Hua Wei E220
Hua Wei E11750(Modem:COM6,ATCM:COM8,COM7 not use)
Hua Wei E11550
Hua Wei E1156G(Modem:COM6,ATCM:COM7)
Hua Wei Vodafone K3765(Modem:COM6,ATCM:COM9,COM7&COM8 not use)
Hua Wei Vodafone K3565-Rev2(Modem:COM6,ATCM:COM7)
ZTE Vodafone K3565-2(Modem:COM6,ATCM:COM7,COM8&COM9 not use)
ZTE MF637U(Modem:COM6,ATCM:COM7,COM9 not use)
MOBIDATA HSPA-500HU
SAMELINE UM220(Modem:COM6,ATCM:COM7,COM8&COM9 not use)
Vition E1196(Modem:COM6,ATCM:COM7,COM9 not use)

2. CDMA2K/EVDO
Hua Wei EC1260
Hua Wei EC1261(Modem:COM6,ATCM:COM8,COM7 not use)
ZTE AC560/580(Modem:COM6,ATCM:COM7,COM8&COM9 not use)
ZTE AC2726
ZTE AC2736(Modem:COM6,ATCM:COM7,COM8&COM9 not use)
ZTE MC8630
SINCOM SE189U
ETCOM E300
Vition E1916(Modem:COM6,ATCM:COM7,COM9 not use)

3G supporting lists

The following are some of the USB devices, parts of them don't make actual tests. Just for your reference.
1. WCDMA/DSDPA:
Hua Wei E180

Common Troubleshooting Guide

<table>
<thead>
<tr>
<th>Fault</th>
<th>Reason</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No boot up</td>
<td>Power fuse was burnt.</td>
<td>Using the same insurance with main unit to replace</td>
</tr>
<tr>
<td></td>
<td>Other factors caused the microprocessor incorrect operation</td>
<td>After pressing the RESET key with a small nib on the face panel, power on again.</td>
</tr>
<tr>
<td>After ignition starting up and power off, all settings information were missing</td>
<td>The BATT of ACC ignition was wrong connection.</td>
<td>Re-connect the starting line</td>
</tr>
<tr>
<td>No remote control action/function</td>
<td>Low battery in the remote control</td>
<td>replace/change the battery of the remote control.</td>
</tr>
<tr>
<td>Poor receive stations effect</td>
<td>Car antenna didn't got out</td>
<td>Checking if the ANT of radio automatic antenna control lines are not connected well, then please re-check the connection.</td>
</tr>
<tr>
<td>No way to put into Optical disc</td>
<td>There has installed disks already in the DVD loader/mechanism.</td>
<td>Pop-up the disc in the unit (device), then re-insert it into again.</td>
</tr>
<tr>
<td>Disc can't play</td>
<td>Optical disk's positive and negative were placed reversal(opposite)</td>
<td>Put the face of optical disk logo upwards and put it into the device.</td>
</tr>
<tr>
<td></td>
<td>The laser head has been dirty</td>
<td>Using pick up head cleaning disk to clear the pick up.</td>
</tr>
<tr>
<td>No action to switch between Language and sub-title</td>
<td>CD only burned a language/sub-title</td>
<td>No multilingual sub-title's disk can't make switch between language and sub-title</td>
</tr>
<tr>
<td>No image</td>
<td>No connect the video cables very well from main unit to TV</td>
<td>Re-connect the connection line.</td>
</tr>
<tr>
<td>Mode screen dislocation</td>
<td>No making touch screen calibration very well</td>
<td>Calibrate touch screen (refer to page 16 about the touch-screen calibration of system information).</td>
</tr>
<tr>
<td>Functional disorders</td>
<td>Other factors caused the microprocessor incorrect operation</td>
<td>After pressing the resetting key of &quot;RESET&quot; with a small nib on the face panel, then re-boot up.</td>
</tr>
</tbody>
</table>
Operation Instruction

Car Mobile Digital TV Box
Client removes the fragile label at the bottom of the product or disassembles the product without authorization.

Fault or damage due to force majeure.

Fault or damage not due to product design, technology, manufacturing and quality problems.

3. Invoice and valid certificate is an important document to get after-sale service, so please keep it properly, and be sure to take it along when you need service. If you can show the invoice and valid certificate, or the information in the valid certificate doesn’t match the faulty product, or the valid certificate has been altered and get dirty and can’t be recognized, then the warranty period will count and take the production date on the product as the starting time.

一、Technical Specifications

• support CA decode
• support upgrade via USB or TF memory card
• NTSC output
• Full-function remote control operation, support digital channel selection
• Two-way video output
• left and right stereo output, audio amplifier function
• working voltage: DC-12V (wide voltage 9V-16V)
• working constant temperature: -25~85°C
• product size: 115mmX64mmX25.4mm
• Product antenna: pure copper sucker antenna

二、Standard Accessories

Antenna 1 piece
Universal cable 1 piece
remote control extension cable 1 piece
remote control 1 piece
special cable 1 piece

三、Functions of Remote Control

1. Start/shut down: [⑤]
2. Scan: [SCAN ]
3. Mute: [MUTE ]
4. Show subject in all languages: [SUB ]
5. exit touch screen mode: [EPG ]
6. press[CH+][CH−] to move to front channel and next channel.
7. press[ VOL+][VOL−] to increase and decrease the volume.
8. Confirm: [OK ]
9. Audio: [AUDIO ]
10. Menu: [MENU ]
11. Exit: [EXIT ]
12. Recall: [RECALL ]
13. Channel Information: [INFO ]
15. Favorite Channel: [FAV ]

四、Connector Diagram of Universal TV Box

五、For instructions of installing special TV Box, please consult local dealer or factory after-sale service.
Warranty Information

Model No.: 
Serial No.: 
CA Card No.: 
Production Date: 
Client Name: 
Purchase Date: 
Contact Address: 
Zip Code: 

Contact No.: 

We guarantee that the above information is all true!

Client Signature:

Guarantee Acceptance

One year free maintenance
One year since the purchase date, if the product can't work properly due to performance issues, you can send the faulty product and all the items to the local sales office for repair.

Attention Please

1. Accessories (gift box, user manual, all the wirings, etc) not in beyond the scope of warranty. If you need to change for new ones, cost of the new accessories shall be charged, please refer to the pricelist of the accessories.

2. Since the purchase date, if the product has failure problems due to one of the following reasons:
   ★ Exceed the effective warranty period.
   ★ Fault or damage due to use, repair and store not according to the requirements of the operation instructions
   ★ No Three Guarantees valid certificate and effective invoice, can't prove the product within the valid period.
   ★ Alter the valid certificate without authorization.
   ★ The product model No. in the valid certificate doesn't match the real product.