Car Stereo Interface Instruction Manual

Chapter 1 — Getting Started

1.1 Introduction

Congratulations on your purchase of The Car Stereo Interface. The Stereo Interface is a revolutionary replacement of car CD changer. It delivers CD quality sound directly into car stereo system via car CD changer port. You will be able to control MP3 or iPod™ with the car stereo buttons or steering wheel, and iPod™ will stay charged when connected to the car stereo. For maximum enjoyment and to insure that your iPod™ or MP3 performs correctly in your car or truck, we recommend that you read this entire manual before attempting install and use The Stereo Interface.

1.2 Basic Features

- Perfect CD quality sound
- Integrate iPod™/iPhone™/USB /SD into factory car stereo
- Full control by car stereo panel or steering wheel
- According to radio up to 99 virtual CDs with 99 songs each
- Last position memory function
- No battery required
- 3.5mm AUX-IN for any additional audio source with Talkover-Function
- Hands-free system and stereo music per A2DP (Optional)
- Charged iPod™/iPhone™ while connected
- IPod™ models support iPod™ mini, iPod™ nano, iPod™ photo, iPod™ video, iPod™ classic, iPod™ touch,iPhone™,iPhone™3G, iPhone™4, iPhone™4S
- Compatible with BMW, Audi, Volkswagen, Skoda, Seat, Peugeot, Citroen, Ford, Mazda, Toyota, Honda, Nissan, Subaru, Suzuki, Hyundai, Fiat, Renault, Opel, Chrysler, Jeep, Dodge, Sony, Alpine, Clarion, Pioneer, Sanyo, Blaupunkt

Four models are available:
AL-1080A: Support USB/SD/AUX
AL-1080B: Support USB/SD/AUX/Bluetooth
AL-1080C: Support iPod™/iPhone™/AUX/Bluetooth
AL-1080D: Support iPod™/iPhone™/AUX

1.3 Precautions

1. The Stereo Interface only operates on a vehicle with 12 Volt DC, negative ground system. Do not use it on other voltage system.
2. Securely install The Stereo Interface in a location free from; heat, humidity, moving parts or direct sunlight. Beware of hot-air flow from your vehicle's climate control system. We recommend securing The Stereo Interface to a suitable location, free of sharp metal edges, using double sided tape, Velcro or wire ties.

1.4 DIP-switch Set up

DIP-switch must be set before The Stereo Interface is plugged into the vehicle. Otherwise it will not work correctly.

DIP-Switch chart

Brand	1	2	3	4
Audi/Volkswagen(8pin)	ON	OFF	OFF	OFF
Audi/Volkswagen(12pin)	ON	ON	OFF	OFF
Audi Navigation	OFF	OFF	OFF	OFF
Audi/Volkswagen(MP3)	OFF	ON	OFF	OFF
Alpine(M-bus)	OFF	OFF	ON	ON
Alpine(Ai-net)	OFF	ON	ON	ON
BMW i-bus	OFF	ON	OFF	ON
Blaupunkt	OFF	ON	ON	ON
Chrysler/Jeep	OFF	OFF	OFF	ON
Clarion	OFF	OFF	ON	ON
Fiat	OFF	OFF	ON	ON
Ford (ACP)	ON	OFF	ON	ON
Honda	ON	OFF	OFF	ON
Hyundai(8pin)	OFF	OFF	OFF	ON
Mazda (10 disc)	ON	ON	OFF	ON
Mazda (6 disc)	ON	ON	ON	OFF
Mazda (2)	ON	ON	ON	ON
Nissan	OFF	ON	ON	ON
Pioneer	OFF	OFF	OFF	ON
Renault	OFF	OFF	ON	ON
Sony	OFF	ON	ON	ON
Subaru	OFF	OFF	OFF	ON
Toyota (Small)	OFF	ON	ON	OFF
Toyota (big)	ON	OFF	ON	OFF
Toyota (2)	OFF	OFF	ON	OFF
Opel	OFF	OFF	OFF	ON
Peugeot/Citroen (RD4)	OFF	ON	ON	ON
Peugeot/Citroen (RD3/RT3)	ON	OFF	OFF	ON

Chapter 2 – General Installation

2.1 Installation location

Most installations will require you to remove the factory radio in order to plug in the vehicle specific harness.
For some vehicles you will also have an option to connect The Stereo Interface to the factory pre-run CD changer cable located in the trunk or glove box.

2.2 Tools required

In many cases there are no any special tools required in order to remove the stereo out. For some stereos it is better to use car stereo removal tools. Please consult your local car audio shop or your vehicle's dealership for instructions or assistance if necessary.

2.3 Preparation and installation

1. Turn off car engine and remove key from ignition
2. If your radio uses a Security Code, make sure that you have the code before unplugging the radio.
3. Un-mount your radio from the dash in order to get access to the back side of the radio. Some vehicles require the special tools to remove the radio. Please consult your vehicle's dealership or a local car audio professional if necessary.
4. Attach the harness connector to the back of the stereo to the CD changer port. Be sure to make a firm connection but do not force it.
Note:
a) If there is a BLACK ground wire on the harness, you will need to attach it to the metal part of the car stereo chassis (car stereo body).
b) If there is a YELLOW power wire on the harness, you will need to attach it to the power of the car, which connect to battery
c) If there is a RED ACC wire on the harness, you will need to attach it to the ACC signal of the car.
Without attaching those cables to the right position, The Stereo Interface will not work!
5. Check DIP-switch if set up correctly.
6. Connect The Stereo Interface with harness. AL-1080A and AL-1080B connect as picture 1, AL-1080C and AL-1080D connect as picture 2
7. For model AL-1080A/B, insert USB disk or SD Card (Please refer to usage manual about file setup and edit).
8. For model AL-1080C/D, connect the iPod™ cable to the iPod™. Turn on the iPod™. Now you should hear the sound coming from the car stereo speakers.
9. Once The Stereo Interface is connected to the radio, you will need to test the operation of The Stereo Interface before re-assembling the dash. With the operation of The Stereo Interface confirmed, you may continue with the installation. If you experience difficulties with the installation, please see our troubleshooting section.

10. Turn your car stereo on and switch it over to CD Changer mode. In order to do so you can use Disk / Mode / CD / SOURCE / AUX buttons on your car stereo (depending on the stereo type). Now The Stereo Interface will run, please proceed to the next chapter for usage manual.

Note: for some cars like Lexus, Toyota, Honda, and Acura cars after turning your stereo on you have to turn ignition off and then on for device to get recognized.

11. Find a place where you can place The Stereo Interface. In many cars there is enough room in the dash to place it.

Note: Make sure you mount The Stereo Interface in a place with enough room so when you mount the car stereo back you do not break The Stereo Interface.

12. Mount your car stereo back into the dash, make sure it's clips or screws are secure.

13. For some AUDI stereo the additional part or harness modification required in order to gain the access to the CD changer port. The 8-pin CD changer port on such stereos is occupied by solid 20-pin connector. So need to connect with our special Audi cable.

Picture 1

MP3 + BLUETOOTH OR AUX IN
Installation diagram
CAR RADIO

Back of Radio

CD Changer Port | Power+speakers | ANT

Changer
connect port

AUX IN

Connect
line port

LOGO

POWER
LIGHT
RESET

MIC IN FOR BLUETOOTH

SD
CARD

USB
FLASH

IPOD + BLUETOOTH OR AUX IN
Installation diagram
CAR RADIO

Back of Radio

CD Changer Port   Power+speakers   ANT

Changer
connect port

AUX IN

Connect
line port

LOGO

POWER

POWER
LIGHT

RESET

RESET

IPOD

MIC IN FOR BLUETOOTH
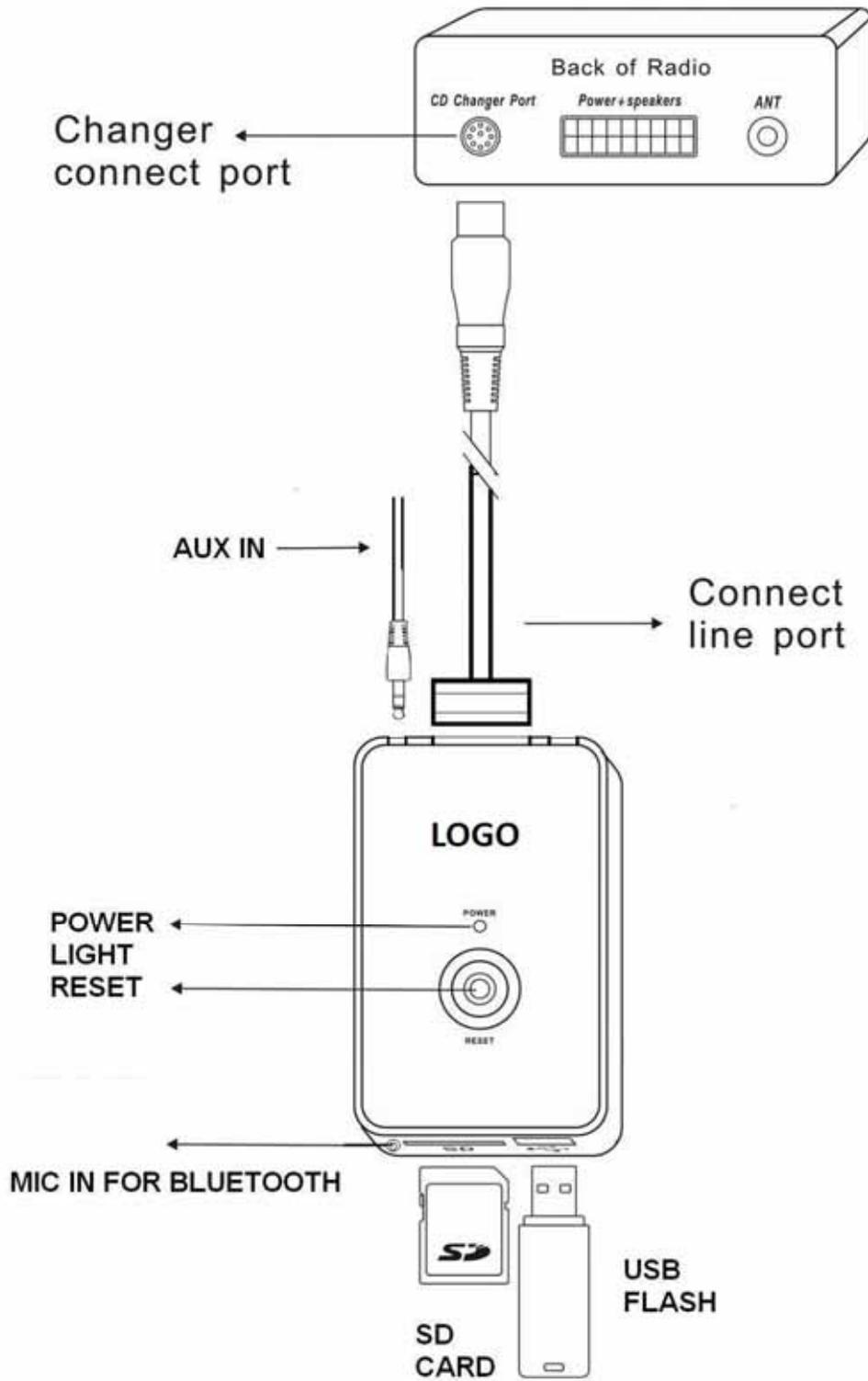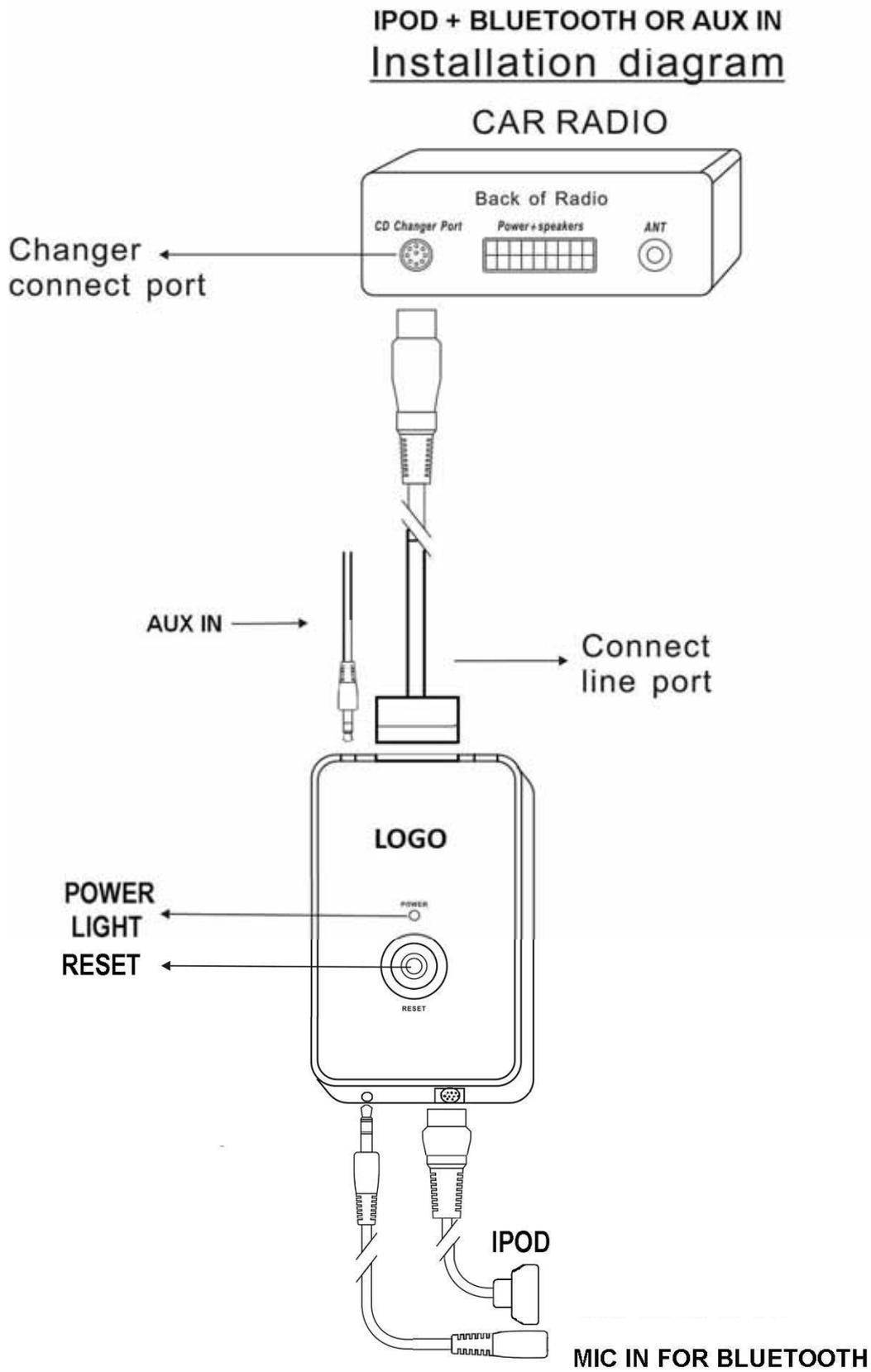
Chapter 3- Usage manual

3.1 Supported operations

For most car radio, the following operations will be supported. **Please note** that controls interfaces for some cars can differ substantially therefore the following operation manual should act only as a reference guide to assist the user in determining the correct controls for his / her particular make of car or stereo.

- Disk Change

When you select Disk number or DISC+, DISC-, MP3 or iPod™ will jump to the playlist (folder). In bluetooth version, it will be used to transfer a call between phone and bluetooth. For example:


- Next track

When pressed on car stereo, MP3 or iPod™ will jump to the next song and car stereo track number will represent song number in a current playlist (folder). In bluetooth version, it will be used to answer a call. For example:
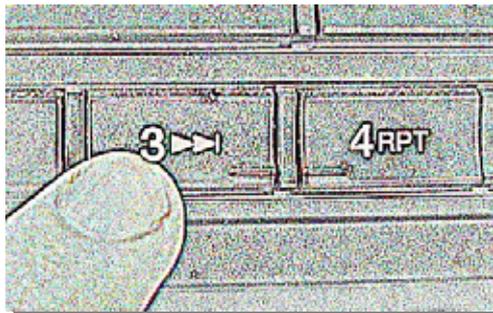
- Previous track

When pressed on car stereo, MP3 or iPod™ will jump to the previous song and car stereo track number will represent song number in a current playlist (folder). In bluetooth version, it will be used to reject or end a call. For example:
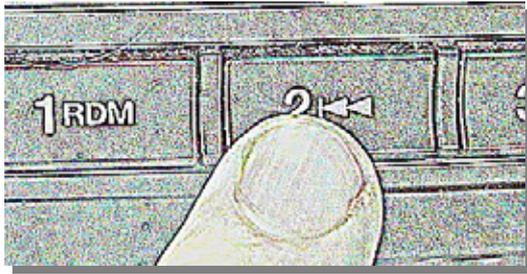
- Fast Forward

When pressed, MP3 or iPod™ will start rewinding current track forward. Time on car stereo will represent actual position within the audio track, If iPod™ is simple mode, iPod™ will jump to current track+5. For example:
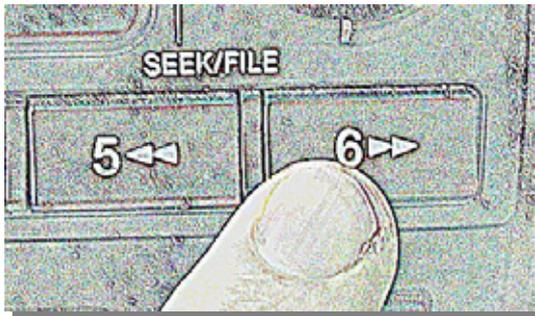
- Fast Reverse

When pressed, MP3 or iPod™ will start rewinding current track backward. Time on car stereo will represent actual position within the audio track, If iPod™ is simple mode, iPod™ will jump to current track-5. For example:

- Play/Pause

 The MP3 or iPod™ will automatically start play or pause if already playing.

-Repeat

When the button is pressed, it will be used to receive or end a call in Bluetooth version. For example:

-Scan

If the stereo doesn't have a **Repeat** button, it will be used to receive or end a call in Bluetooth version. For example:
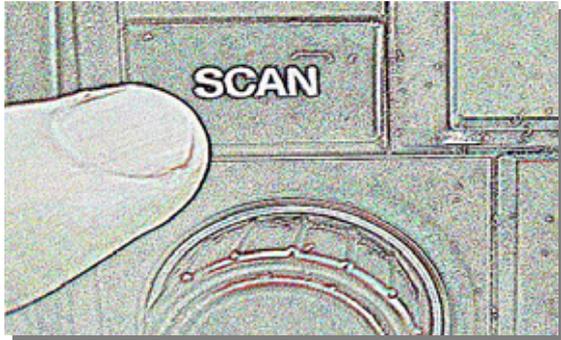
-Disk / Mode / CDC / SOURCE / AUX

It will switch between The Stereo Interface and FM/AM and it will receive (switch to The Stereo Interface) or end (switch to FM/AM) a call in bluetooth version. For example:

3. 2 AUX IN

AUX IN is used to load auxiliary audio equipment like PC, PSP, MID, mobile phone and navigator etc via 3.5mm jack plug into the head unit. Once AUX IN audio signal detected, The Stereo Interface will pause the USB/SD or iPod music and start to play AUX IN audio. When AUX IN audio stops, USB/SD or iPod will resume to play automatically. It is very convenient for navigation device. However, AUX IN audio will be played normally if no USB/SD card or iPod plugged in.

3.3 iPod™ interface introduction

iPod™ can be controlled via clicking wheel and stereo controls. Information on car stereo is **not** accurate and does not represent the actual song, so the display information on car screen only for reference. The stereo and steering wheel controls make use of **relative** referencing so absolute references will not display on the car stereo i.e. the controls can be used to move along (up and down) songs and playlists but cannot be used to pinpoint by name a particular playlist or song.

For example, if current disc (playlist) is 2, you press disc 5, iPod™ will jump to playlist 3, not playlist 5, but display info on screen of car radio is disc 5. And then if you press disc 4, iPod™ will jump to playlist 2, not playlist 4, but display info on screen of car radio

is disc 4. Track is same as disc if iPod™ in simple mode, so the track number and playlist number is no limited.

3.4 Bluetooth function introduction

3.4.1 Specification

Chip Set	CSR BC05-MultiMedia External
Bluetooth Version	V2.1 + EDR specification
Frequency band	2.402GHz~2.480GHz ISM Band
Support Profiles	HSP/HFP and A2DP
Class of can of exit	Class 2 and Class 3
Valid Distance	10 meters maximum 30 feet

However, interoperability between The Stereo Interface and other Bluetooth-enabled products is not guaranteed because it depends on compatibility. Check with the manufacturers of other devices to determine their compatibility with this device.
Your mobile and other devices need support the following profiles:
• Bluetooth Hands-free profiles or headset profiles (HFP/HSP).
• Bluetooth Advance Audio Distribution Profiles (A2DP).
• For AL-1080C iPod Bluetooth version, if your iPhone, iPad connected via 30PIN iPod docking cable and connected via Bluetooth, the device name of your iPod, iPhone, iPad for bluetooth shall include the character string like " iPod" "iPhone" or " iPad" accordingly. Otherwise, it will cause confusion sometimes.

3.4.2. Pairing

Using a compatible phone, pair The Stereo Interface to activate the Bluetooth function:

1) Enter the Bluetooth menu of your phone and make sure that the Bluetooth feature is activated.
2) Search for Bluetooth devices on your phone.
3) Turn on your engine, The Stereo Interface will be searched.
4) Select the "Bluetooth kit" from the list of phone.
5) Enter pairing code "2345" or "0000", Bluetooth function is active now.

3.4.3. Disconnecting

You can disconnect The Stereo Interface from your phone in following ways:
• Power off the stereo interface.
• Disconnect the stereo interface in the Bluetooth menu of your phone.
• Move the stereo interface more than 10 meters away from the phone.

3.4.4. Bluetooth Troubleshooting

If you cannot connect the stereo interface to your phone, do as follows:
• Make sure the stereo interface is powered on and paired with your phone.
• Make sure that the Bluetooth feature is activated on your phone.
• Make sure the stereo interface is within 10 meters of your phone and no obstructions between the stereo interface and phone, such as walls or other electronic devices.
•One time only connect one Bluetooth device.

3.4.5. Basic function

When the stereo interface is connected to your phone, you can either use your phone as you would under normal circumstances or you can control the phone via the car stereo.

■ Making a call

Dial with your phone as you would under normal circumstances.

■ Rejecting/Ending a call

If you want to end the currently active call, you can:
a) Press "Previous Track" button
b) Press "Repeat " or "Scan" button **twice**
c) Press Source, AM or FM button in CDC mode. (if phone mute function is effect, they can not reject/end the call)

Answering a call

While the call comes, the music will be paused automatically and start to receive the ring. If you want to answer the call, you can:
a) Press "Next Track" button
b) Press "Repeat " or "Scan" button
c) Press "Source" or "CDC" button if in FM or AM mode

Transferring a call

If you want to transfer the call between phone and bluetooth, you can press "Disc+" or "Disc-" or other disc change button.

■ Music function

The Stereo Interface can play the music of bluetooth device while connected, and can press "Previous Track "and "Next Track" to control Bluetooth A2DP music via car radio panel or steering wheel.

3.5 File Setup and Edit

The Stereo Interface support multi folder playback, one directory is mapped to one disk and one file is mapped to one track. The music file on root directory will display CD01 on car radio screen, the music file on sub-directory will display CD02, CD03…CD98, the order is according to the time that you save on SD card or USB Disk. The folder name can be English letter or Arabic numerals or the others. For example:
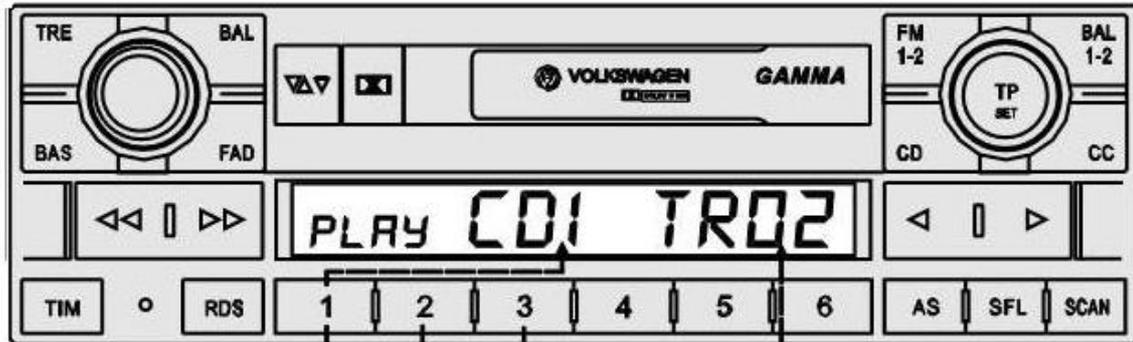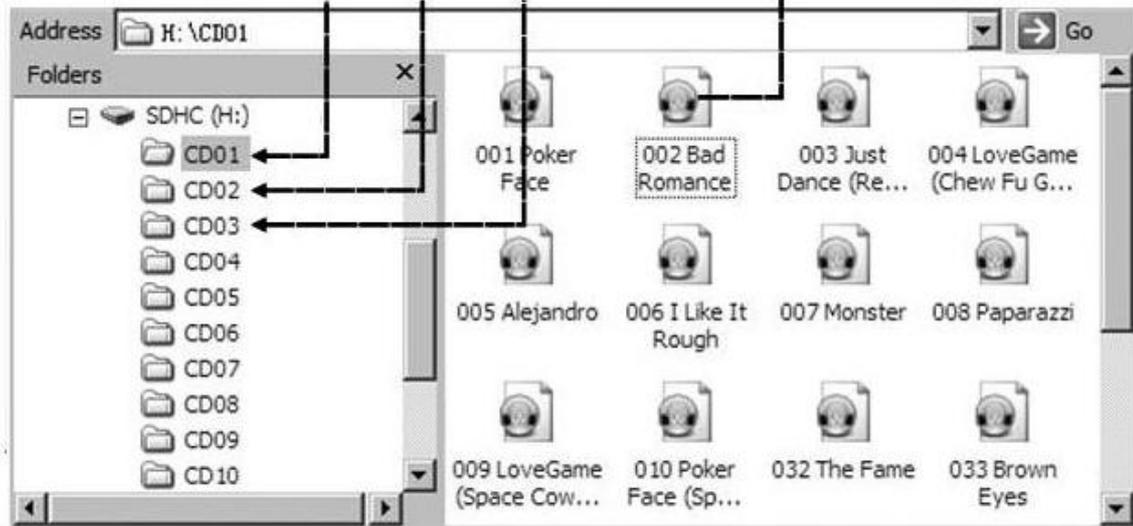
3.6 Troubleshooting

1. Radio can not identify The Stereo Interface
(1)   Check the DIP switch whether be set on the correct position.
(2)   Check all cable whether connected correctly.

2. Audio play normally but screen display is not work (play time, disk number not display on screen)
(1) Check the DIP switch whether be set on the correct position
(2) Press 'RESET' bottom to check whether work normally.
Note: Sometimes The Stereo Interface will not display or out of control, you just need press "RESET" button, then it will get right.

3. Screen display is normal but without voice or single voice channel

(1)Check SD card or U disk whether plug firmly and save WMA/ MP3 format files. Moreover, some inferior SD card or U disk may not be compatible.

(2) Check Radio volume whether switch on or is on the 'MUTE' mode

(3) Check Radio sound field mode whether set on the equilibrium position

(4) Press switch key to switch to CDC or FM mode.

4. Audio play and screen display normally, but can't change disk

(1) Check whether set up multi-directories in memory devices

5. For some VW radios, when press "PRE TRACK" or " Track Skip Knob", the tack may skip out of order, we suggest change DIP to Audi Navigation (OFF OFF OFF OFF) or Audi/Volkswagen(MP3) (OFF ON OFF OFF).

Chapter 4- Technical Specification

Input voltage (VDD)	7 to 18VDC
+ACC voltage	3VDC to VDD
-ACC voltage	0 to 1 VDC
Current	~ 60 mA (12V)
Standby current	< 1 mA
USB Power supply	5V, 500mA
Supported memory	up to 32GB SDHC/SD/USB
File format	WMA, MPEG1/MPEG2 audio layer2/3(MP3)
WMA sampling rate	8Kbps to 320Kbps
MP3 sampling rate	Extension to MPEG lower sampling rate, variable bit rates and free-format bit-stream
AUX In	1.0Vrms (10k Ohm)
Audio output	2.0Vrms (10k Ohm)
Audio S/N	>90 dB (1kHz,0 dB)
Dynamic range	>80 dB (1kHz,0 dB)
THD	0.04%
Cross Noise	>80 dB (1kHz,0 dB)
Environment	-20°C ~ 70°C
Dimension (L x W x H)	10.5 x 6.6 x 1.8 cm
Weight	~ 100 g