TCAT ANDROID AVN- SERENA



 Android 7.1 Operating System
Radio, Bluetooth, Reverse Camera, Music, Movie, Smartphone Link, etc
WIFI, Internet Movie, Music, Radio, Browser, Maps and Navigation etc
Responsive Multi Touch Capacitive Touch Screen
High Resolution, High Brightness Display
High Audio Output (45W x 4 CH)

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Product Introduction

This device is a multimedia product designed for automotive use only. Based on the Android 7.1.2 OS, powered by the 1.6 GHz Cortex A9 Quad Core chip, it can be tethered with smartphones at anytime to provide Web browsing, internet video and music as well as many other entertainment and productivity functionalities.

This device is able to start up quickly, typically within 25 seconds. During the start-up, users will be able to utilise the reverse camera screen.

This device does not consume the vehicle battery level as it does not consume any electrical current when it is switched OFF.

With its built-in Wi-Fi transceiver, it can be tethered to smartphones and allow users to freely browse the Web. It also offers Bluetooth calling and music playback.

Any music stored in the phone can be easily accessed via Bluetooth for high clarity and enjoy the rich audio playback quality via the embedded high power 45 W-amplifier.

This device is also equipped with GPS module to automatically detect the location, time and date. With internet tethering, you can access any cloud-based electronic maps and navigation apps.

Notice Before Using

This product may undergo modifications for the purpose of product enhancement without prior notice to the user. Installing applications or software that are unauthorized or are of unknown origins may lead to errors in the product's operations and functionality. The Manufacturer shall not be held responsible for any product malfunction, data damages, or leaked data arising from such use of unauthorized software or applications.

Check the contents of the product set before purchasing any accessories. When purchasing accessories, only use officially certified products.

There may have been changes to the product since the printing of this manual. There may be differences in the product and the images in this manual. Some contents may be missing or different than the actual product features and functionality.

The rights to all contents in the manual are reserved to the Manufacturer and are protected under the Copyright Act of Malaysia. Any unauthorized copying, editing, production, or distribution of this manual without prior written consent may result in legal prosecution.

Check if all the contents of the product set are included during delivery of the product. Contact your dealer if there are problems.

Carefully read and understand all caution and warnings that are related to safety. Adhere to all relevant transportation regulations and act in accordance with actual road conditions when driving. The electronic map provided by the product should only be used as reference.

Although the electronic map was produced in accordance with the latest road situation at the time, actual road conditions may have changed since. Adhere to all relevant transportation regulations and act in accordance with actual road conditions when driving.

Downloading Web-based cloud electronic maps via online providers may require Wi-Fi connection via smartphones. Refer to the Tethering Settings section for information on how to connect via Wi-Fi.

If possible, keep the GPS antenna at least 30 cm from the product. Metallic objects above the antenna or glass-tinting film with metallic content may lead to poor antenna reception.

Adding any LCD protection film may lead the touchscreen to respond less sensitively.

This product is designed to function at from 9V to 16 V. In case of flat battery, this device shall not work. Also, do not attempt to modify this device into a 24V vehicle such as buses, commercial trucks.



Caution / Warning

- 1. Stop or park the vehicle in a safe location before operating this product. Using the product while driving may lead to accidents.
- 2. Browsing the Web or watching videos/DVD while driving may lead to accidents. Do not watch while driving.
- 3. Set the volume low enough to be able to hear sounds outside the vehicle.
- 4. When parking for lengthy durations in hot temperature, make sure to ventilate and cool the vehicle to normal room temperature before operating the product.
- 5. It may take longer to acquire GPS location data when using the product for the first time or after a lengthy period of storage. The GPS reception may also be deterred when using in areas with a high concentration of tall buildings, in tunnels, underground, or heavily wooded areas.
- 6. Covering the product or the reception area with another object may disrupt reception. Any devices that emit electromagnetic waves in the vicinity of the product may also disrupt reception.
- 7. Do not spill liquids on the product. If the product needs cleaning, lightly wipe with dry cloth.
- 8. Do not disassemble the product on your own; in case of problems, contact your dealer.
- 9. This product is based on the open platform, Android OS.
- 10. The product can be tethered to smartphones via Wi-Fi for Web browsing, e-mail, and applications.

(See the section on smartphone tethering.)

11.DO NOT UPGRADE the ANDROID OS. Doing so will violate the Manufacturer's Warranty.

Handling of the the LCD

- 1. Do not expose the LCD to any form of liquid. Warranty will be void if any liquid marks are found internally.
- 2. Hard metallic objects or sharp tools may damage the LCD and the touch panel. Use soft objects or fingers to operate the product.
- 3. Use a dry cloth when removing pollutants or cleaning the product. If needed, lightly wet a dry cloth to remove stronger stains. Alcohol or other chemicals may dissolve the paint or morph the plastic.
- 4. Devices that emit electronic waves, such as mobile phone antennas and devices that produce electromagnetic waves, may affect the video signal of the LCD screen. Keep such devices at least 6 inches away from the product if possible.

Product Contents



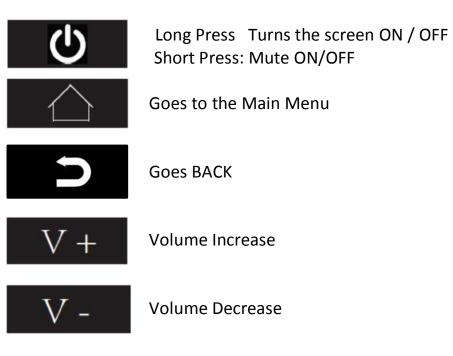
AVN

GPS Antenna

Sub Harness

* Caution: the manufacturer shall not take responsibility for use of any unauthorized peripherals.

How to Use : Definitions of side Touch keys



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Main Screen

(The interface is similar to that of Android-based tablets or smartphones, but optimized for vehicle usage.)



① Move to the "All applications" screen.

(2) Move to the Main Screen.

(3) Move to the Main Screen.

* Drag left or right in any screen to access. Touch each icon to run.

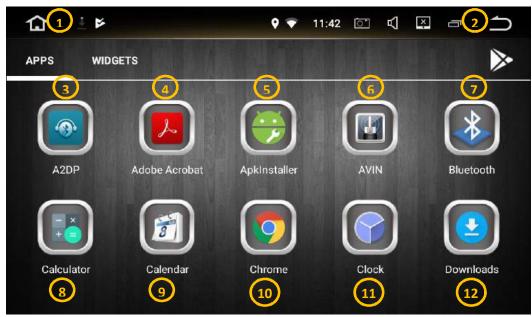
(The interface is similar to that of Android-based tablets or smartphones, but optimized for vehicle usage.)



[Main Screen]

Return to the Main Screen.
Back to the Previous Screen.
Opens the default Navi app.
Opens the Radio Tuner function.
Shows all the other apps.
Opens the Bluetooth Handsfree function.
Opens the system settings.

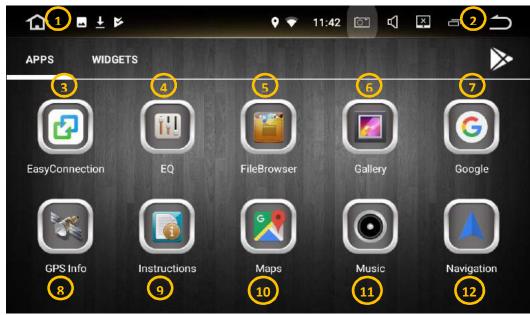
(The interface is similar to that of Android-based tablets or smartphones, but optimized for vehicle usage.)



[All Applications Screen]

 Return to the Main Screen.
Back to the Previous Screen.
Opens the Bluetooth Music app.
Opens PDF reader app.
Opens the Special APK installer APP (Factory use only).
Opens the Aux-In function.
Opens the Bluetooth function.
Opens the Calculator app.
Opens the Calendar.
Opens the Calculator app.
Opens the Downloaded files folder

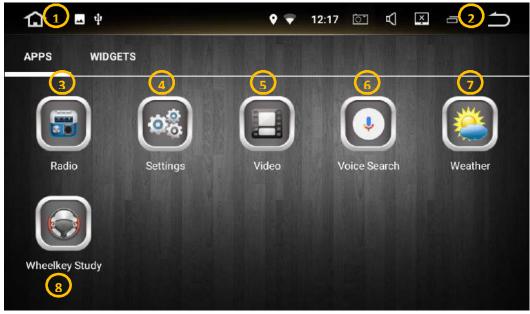
(The interface is similar to that of Android-based tablets or smartphones, but optimized for vehicle usage.)



[All Applications Screen]

 Return to the Main Screen.
Back to the Previous Screen.
Opens the Smartphone Link App.
Opens Audio EQ settings.
Opens the File Explorer
Opens the Gallery App
Opens the Google Browser.
Opens the GPS Reception App.
Opens the USER MANUAL.
Opens the Music App.
Shortcut to default Navigation App (User to select)

(The interface is similar to that of Android-based tablets or smartphones, but optimized for vehicle usage.)



[All Applications Screen]

 Return to the Main Screen.
Back to the Previous Screen.
Opens the Radio Tuner function.
Opens System Settings.
Opens the Video Function.
Opens the Google Voice Search App (internet required)
Opens the Weather App (internet required).
Opens the Steering Wheel Key setting (Factory use only).

Smartphone Hotspot Setup

(You can connect the AVN to a smartphone via Hotspot to get internet connection in order to browse the Web, listen to internet music, watch videos etc)

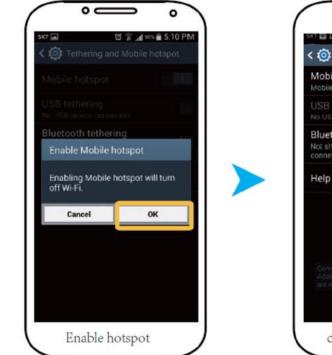
* General guide on how to set up your smartphone's hotspot.



Settings > More networks> Tethering and Mobile hotspot > Mobile hotspot -> ON

Smartphone Hotspot Setup







Easy connection Instruction



Android mobile





Android mobile









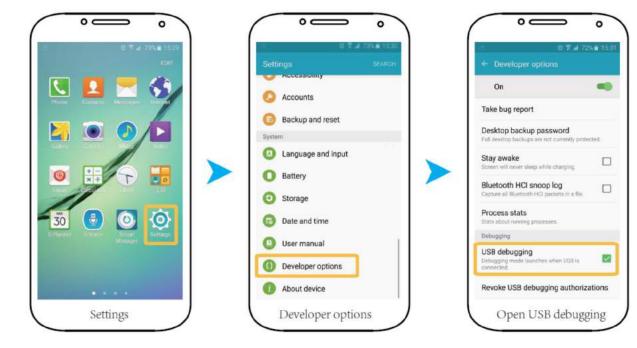
- 1. Support Android mobile 2 way control and Iphone 1 way control
- Support Android 7.0 phone and iPhone iOS 10.2+
- 3. Support connection by Android USB. Android WIFI & iPhone WIFI(Airplay)

How to connect Android smartphone to AVN via USB Cable

Step 1: Enable the Developer Option on the Smartphone. (Kindly browse for Online instructions to do this, as different smartphones has difference procedures.

Step 2: Enable USB debugging

Step 3: Connect Smartphone USB cable to AVN USB port



Step 4: Open the Easy connection app.



Step 5: Select Android USB (for first time connection)



Step 6: Wait for connection while your phone automatically download and installs the required app from internet.



Step 7: Smartphone screen is displayed on AVN. You can control the smart phone from the AVN touch screen.



Note: Bluetooth must be paired in order to hear from car speakers.

How to connect Android smartphone to AVN via WIFI

Step 1: Enable the smartphone hotspot as explained earlier in this manual.

Step 2: Connect the AVN WIFI to the smartphone hotspot.

Step 3: Connect Smartphone USB cable to AVN USB port (for first time connection) as per earlier instructions. Ensure the connection is successful via USB cable first.



Step 4: Remove the USB cable. Go back to main screen and restart Easy connection.



Step 6: Smartphone screen is displayed on AVN. You can control the smart phone from the AVN touch screen.



Note: Bluetooth must be paired in order to hear from car speakers.

Step 5: Click Android WIFI.

How to connect Apple iPhone to AVN via Airplay

Step 1: Enable the iPhone hotspot as below



Step 2: Connect the AVN to the iPhone hotspot. Step 3: Open Easy connection and select iPhone WIFI



Step 4: Turn on Airplay by swiping up from bottom or screen and select the AVN device.(EC-Mirror-xxx)



Step 5: iPhone screen is displayed on AVN. Control method is from the iPhone, NOT AVN touch screen.



Note: Bluetooth must be paired in order to hear from car speakers.

Connect the Bluetooth

After connecting the device to Bluetooth, you can make calls, receive calls, access call records and the phonebook, and even play the music stored in the phone.



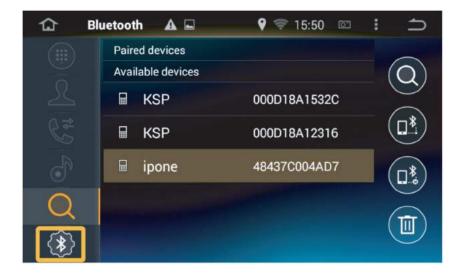
Select the B/T icon.



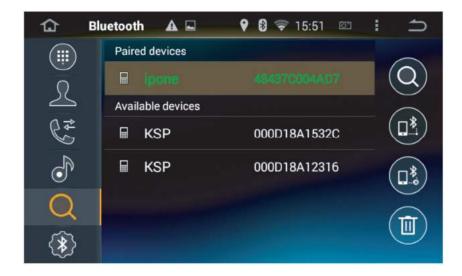
Search the available phones.

Connect the Bluetooth

After connecting the device to Bluetooth, you can make calls, receive calls, access call records and the phonebook, and even play the music stored in the phone.



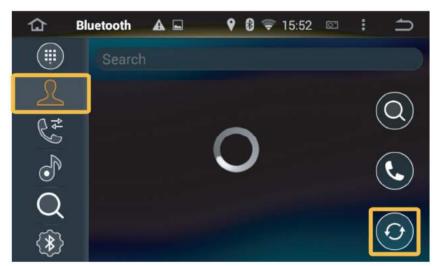
The pairing code is "0000". You can change the code and the device name inside the Bluetooth Setting.



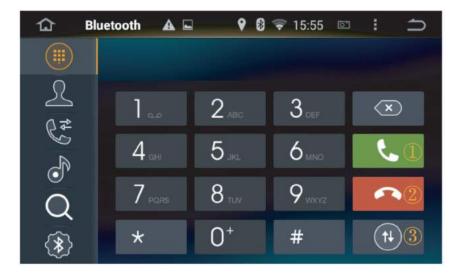
Completed B/T Connection.

Connect the Bluetooth

Phonebook Download.



Click the Refresh button to start downloading the phone's contacts. Keep the screen on this page until the download is completed.



(1) Click the CALL button after entering the number to call. If no number is entered, the call will be placed to the last dialled number.

2 End Call.

③ Switch between phone speaker or car microphone.

Using the Radio

(Built-in radio tuner which can receive FM/AM radio broadcasts)



(1) Move to the previous Screen.

(2) The current frequency being played.

(3) Go to the EQ functions.

(4) Displays automatically saved stations. Selecting one of the frequencies plays the respective broadcast.

(5) Move to the previous channel. Press and hold to keep scrolling.

6 Move to the next channel. Press and hold to keep scrolling.

⑦ Scans for frequencies with good reception. You can save up to six frequencies per band.

8 Automatic Frequency Saving.

(9) Long range/ short range frequency

10 Toggle AM.

(1) Toggle FM.

Troubleshooting Guide

(An error in method of using the device may cause problems that may be mistaken for a problem in the device itself. See the Q&A below to better diagnose and resolve the problem. If the problems persist, contact your dealer or designated support centre.

Q) There is no sound or image being played.

A) Make sure the car's ACC is switched ON, and that the device isn't switched OFF.

Q) There is image but no sound.

A) Check if the volume is set too low or if MUTE is enabled (quick press the Power icon)

Q) The sound is coming out of only one side.

A) Is the sound balanced to only one side in the Audio EQ Settings menu?

Q) The USB memory device is not detected.

A) The USB memory itself may be damaged. Try formatting it in FAT32 before using. Clear the USB plug (contact points) of any dust or foreign particles.

Q) The GPS signal is weak or is unable to connect.

A) Is the GPS receiver covered by a metallic object? Excessive metallized glass tinting may also interfere with the GPS signal reception.

Q) The GPS shows a different location from where I really am.

A) GPS signals are detected via directed reception (toward the sky). Certain terrains or environments may lead to weakened or interference of the signal. This is normal. Such environments may include the following:

- When repeatedly moving and stopping at traffic jams or crossings, or when driving slowly;

- When driving on a curved road;

- Right after entering a regular road after exiting an underground parking lot or multi storey parking space;

- Places concentrated with high buildings;

- Right after exiting a tunnel or when crossing through a bridge.

Technical Support

For technical assistance or support, kindly contact : TC AUTO TOOLING SDN. BHD No.249, Jalan Segambut, 51200 Kuala Lumpur, Malaysia Tel: +603-6251 0904 Fax: +603-6251 4014 Email: Enguiry@tanchonggroup.com