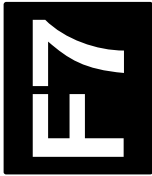




System Operation Manual



F7G2A7WE Car Navigation Multimedia Receiver

Updated information (the latest instruction manual, system updates, new functions, etc.) is available from <https://support.myatoto.com>

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<https://support.myatoto.com> support@myatoto.com

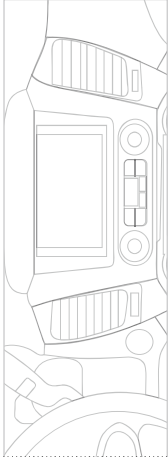
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Precaution

- This manual is applicable to all ATOTO F7G2A7WE models. Some functions mentioned in certain chapter of this manual is only available on selected ATOTO F7G2A7WE models. New released F7G2A7WE models may have extra functions that are not mentioned in this user manual.
- More information about panel operation, wiring connection and installation, as it relates to specific F7G2A7WE models, please refer to specific documentation included in the package;
- The information in this manual may be insufficient. If you have any questions or problems concerning your unit that are not covered in this manual, consult your ATOTO dealer.
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Content Index

1.Home Menu

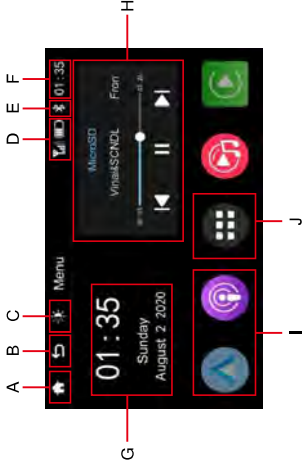


Figure 01

2. Phone Link - Apple CarPlay, Android Auto, AutoLink

NOTES

- (1) If your phone can not connect to F7G2A7WE, successfully, please clear Bluetooth pairing records at F7G2A7WE(Path: Settings>Bluetooth Settings>Clear Records)and delete "F7"from your phone Bluetooth list, then try to connect as above steps again;
- (2) Wireless CarPlay is available on iPhone 5 and later models with IOS 9.0 and higher.
- (3) Wireless Android Auto is compatible with these Android versions:
 - Any phone with Android 11.0;
 - A Google or Samsung phone with Android 10.0;
 - A Samsung Galaxy S8, Galaxy S8+, or Note 8 with Android 9.0.
- (4) If your phone does not support wireless CarPlay or wireless Android Auto, please use wired connection instead.

2.1. Apple CarPlay

2.1.1 How Apple CarPlay works on ATOTO F7G2A7WE

Apple CarPlay feature requires iPhone 5 or higher with the latest version of IOS. There is an <Apple CarPlay> option on the F7G2A7WE's System Menu and once the iPhone connects to ATOTO F7G2A7WE via a specific USB interface, the icon will light up and it will enter into Apple CarPlay connection mode.

2.1.2 Wired CarPlay Connection

- (1). Connect your iPhone to the specific USB port labeled as <Phone Link>, which goes from the rear USB1 interface of the F7G2A7WE.
- (2). The icon of the Apple CarPlay will light up and enter into Apple CarPlay mode automatically. Usually, there will be a CarPlay icon displayed on your phone screen, too.
- (3). Once the CarPlay connection, you will see a pop-up window from your phone screen, and you are required to click <Allow>.



Figure 02

2. 1. 3 Precautions

- (1). For the first connection: Make sure that your iPhone supports CarPlay feature and the CarPlay app isn't restricted. If the CarPlay function isn't restricted, you can see it display on your iPhone Settings (Path: Settings>General>CarPlay). If the CarPlay function has been restricted on your iPhone, enable it in a few steps: Settings>Screen Time>Content & Privacy Restrictions, tap <Allowed Apps> and enable the <CarPlay> app; Or through Settings>General>Restrictions, enter the passcode and enable the CarPlay app. Which way is applicable will depend on the IOS version of the phone.
- (2). It requires the user to use a factory or original USB cable that comes with the phone for CarPlay connection. Non-manufacturer made USB cable may cause connection issues such as black screen, or unstable connection.
- (3). To set independent navigation volume and Siri volume, please refer to chapter 9.3.2.

2.1.4 Wireless CarPlay Connection

- Step 1:** Enable Bluetooth & Wi-Fi on your iPhone and the F7G2A7WE hear unit; Note: Ensure your iPhone and F7G2A7WE do not connect to any other Wi-Fi hotspots or Bluetooth; and make sure your car is in park(P);
- Step 2:** Tap the icon [CarPlay] on the top of the F7G2A7WE screen, allow the two prompts (Figure 02-1 Figure 02-2) on the F7G2A7WE screen;
- Step 3:** Open Bluetooth from your iPhone and click "F7" to pair (Figure 02-3)
- Step 4:** Allow all the consecutive prompts on your phone and F7G2A7WE screens to complete setup (Figure 02-4, Figure 02-5, Figure 02-6, Figure 02-7, Figure 02-8)

Step 5: The connection is complete now. The F7G2A7WE will enter wireless Android Auto mode automatically. If your head unit does not launch CarPlay, check if both Bluetooth and Wi-Fi on your phone are connected to your F7G2A7WE, and check if the CarPlay icon is highlighted (on), as opposed to grey (off), on your F7G2A7WE's screen after tapping . (Figure 02-9)

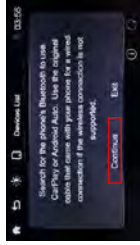


Figure 02-1

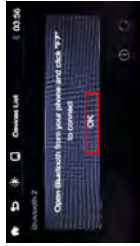


Figure 02-2

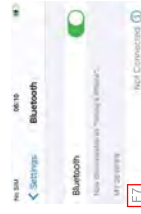


Figure 02-3

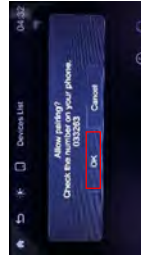


Figure 02-4

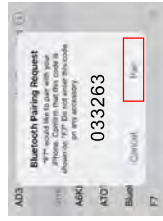


Figure 02-5

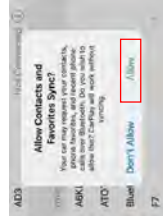


Figure 02-6

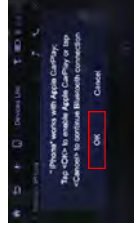


Figure 02-7

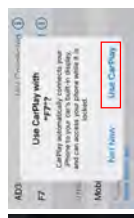


Figure 02-8



Figure 02-9

2.2. Android Auto

2.2.1 How it works on the F7G2A7WE

Android Auto is compatible with Android phones running Android 6.0 or higher. Android Auto may not be available on all devices. You need to install <Android Auto> app on your Android phone before using it on F7G2A7WE. There is also an Android Auto option on the F7G2A7WE, and when the compatible Android smartphone connects to it, the icon will light up and Android Auto is running on the F7G2A7WE screen.

2.2.2 Wired Android Auto Connection

<1>. Connect your Android phone to the specific USB port labeled as <Phone Link>, which goes from the rear USB1 interface of the F7G2A7WE. <2>. The icon of the Android Auto on F7G2A7WE will light up and it will enter into Android Auto mode automatically. Usually, there will be an Android Auto icon displayed on your phone screen. <3>. On the first connection, the screen of the F7G2A7WE will be black, and you will see pop-up windows (see Figure 03) from your phone screen.

You are required to click <CONTINUE> or <ALLOW> to all these requests to complete the settings, then the Android Auto will be running on the F7G2A7WE.



Figure 03

<4>. Your phone's Bluetooth will be turned on automatically when Android Auto is connected. You will also see a pop-up window <Bluetooth connection is now used for Android Auto> on the F7G2A7WE.

2.2.3 Precautions

(1). The Android Auto app should be installed on your phone, and all the permissions to the <Android Auto app> on your phone should be enabled (Settings>Apps>Android Auto>Permissions). The App versions of the <Android Auto>, <Google>, <Google Play Service>, <Google Play Store> should be the latest one, otherwise, it may cause some unknown issues.

(2). It requires the user to use a factory or original USB cable that comes with the phone for the Android Auto connection.

Note: Manufacturer made USB cable may cause connection issues such as black screen or connection failure.

(3). If you see the prompt on your phone about <Android Auto stopped responding>, then it means not all the settings are finished in the first time back in again>, then it means not all the settings are finished in the first time connection. You just need to clear the data and cache of the Android Auto app on your phone, then reconnect your phone, and follow the instructions on the phone to finish the permission settings again.

(4). To set independent navigation volume and Google Assistant volume, please refer to chapter 9.2

2.2.4 Wireless Android Auto Connection(Wireless Android Auto is

only available on certain F7G2A7WE models.)

Before use, make sure that

a). your phone supports wireless Android Auto. (If you are using wireless Android Auto on your phone for the first time, make sure that the wireless Android Auto on your phone for the first time, make sure that the wireless Android Auto option or wireless projection option is on.)

b). you can use wired Android Auto on your F7G2A7WE with your phone. Step 1: Enable Bluetooth and Wi-Fi on your Android phone and F7G2A7WE.

Note: Ensure your Phone and F7G2A7WE do not connect to any other Wi-Fi hotspots or Bluetooth and make sure your car is in park (P).

Step2: Tap the icon  on the top of the F7G2A7WE screen allow the two prompts(Figure03-1, Figure03-2)

Step3: Open Bluetooth from your phone and click <F7> to pair(Figure03-3)

Step 4: Allow all the consecutive prompts on your phone and F7G2A7WE screens to complete setup(Figure03-4, Figure03-5, Figure03-6, Figure03-7 Figure03-8)
Step5:The connection is complete now. The F7G2A7WE will enter wireless Android Auto mode automatically.
If your car stereo does not launch Android Auto, check if both Bluetooth and Wi-Fi on your phone are connected to your F7G2A7WE and check if the Android Auto is highlighted(on), as opposed to grey(off), on your F7G2A7WE's screen after tapping  (See Figure 03-9)



Figure 03-1

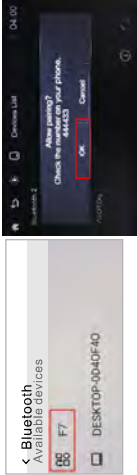


Figure 03-2

Figure 03-3



Figure 03-4

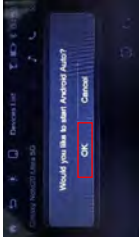


Figure 03-5



Figure 03-6



Figure 03-7



Figure 03-8

2.3. AutoLink

2.3.1 How it works on the F7G2A7WE
For Android phone: You have to install <AutoLink> app which is available from Google Play Store (see Figure 04) to your Android smart-phone before you can use it on the F7G2A7WE.

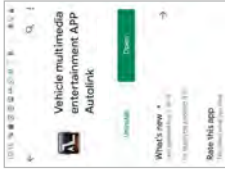


Figure 04

The operation steps are as follows:

- (1). Connect your Phone to the specified USB port labeled as <Phone Link>;
- (2). The icons of <Android Auto> & <AutoLink> on the F7G2A7WE will light up and it will first enter into Android Auto mode automatically.
- (3). Exit Android Auto and then click <AutoLink> icon to run the AutoLink option;
- (4). If F7G2A7WE detects that AutoLink is not installed on your phone, your phone will pop up a prompt to download and install the app manually (see Figure 05). After that (app installation & wire connection), you will also see a pop-up window (see Figure 05-1) from your phone screen for confirmation, and you are required to click <Allow>.



Figure 05



Figure 05-1

For iPhone: No extra App required for connection, and the operation steps are as follows:
(1). Connect your Phone to the specified USB port labeled as <Phone Link>;
(2). The icons of <Apple CarPlay> and <AutoLink> on the F7 will light up and it will first enter into Apple CarPlay mode automatically.
(3). Exit CarPlay and then click <AutoLink> icon to run AutoLink option;
(4). At the same time, you will see a pop-up window (See Figure 06) from your phone screen, and you are required to click <TRUST>
And then you may also see a pop-up window (See Figure 06-01) on your iPhone to ask you to enter a device password. In this case, please enter the iPhone screen lock pass code).

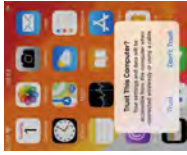


Figure06

3. Radio

3.1. How each option works

- (1) The AutoLink feature requires the phone to support CarPlay or Android Auto feature first. Phones that do not support these two functions cannot use the AutoLink.
- (2) It requires the user to use a factory or original USB Cable that comes with the phone for AutoLink connection. Non-manufacturer made USB cable may cause connection failure.
- (3) Check and make sure Phone Bluetooth is connected to F7G2A7WE. If not, there is no audio out from the F7G2A7WE side when you play multimedia on your Phone.
- (4) AutoLink captures the display content of the mobile phone and displays it on the F7G2A7WE's screen simultaneously. If your phone comes with a curved screen display (Figure 07), the display mirrored on F7G2A7WE will not be full-screen (Figure 08);



Figure 07

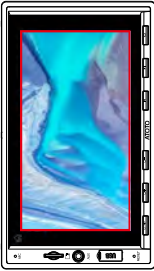


Figure 08

- (5) If you have a problem installing AutoLink to your Android phone, contact ATOTO customer support for requesting download link;
- (6) Phone manufacturers may release new system firmware, and it may cause the AutoLink app to not work properly with new phone firmware. If you have a connecting issue after the phone is updated, please try to update the AutoLink app from Google Play Store, or contact the ATOTO customer support team for a solution;

3.2. Radio Settings

3.2.1. Region selection.

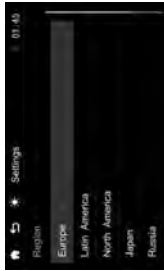


Figure 10

The available regions for selection are Europe, Latin America, North America, Japan, Russia, Australia, China. Different areas may have different radio frequency range and scan step. Select the correct region based on your location, since a wrong radio area chosen may result in less radio station reception.

Please choose the correct one following the below table:

Area	FM range (MHz)	AM range (kHz)	FM step (MHz)	AM step (kHz)
North America	87.5~107.9	530~1710	0.2	10
Latin America	87.5~108	530~1710	0.1	10
Europe	87.5~108	522~1620	0.05	9
Russia	65~108	522~1620	0.03	9
Japan	76~99	522~1629	0.1	9
Australia	87.5~108	522~1710	0.1	9
China	87.5~108	531~1629	0.1	9

Note: When you restore this device to factory settings, the <Radio Area> will also return to the default option. If your area is different from the default area option, remember to select it manually, otherwise, it may not work properly.

3.2.2. <RDS> switch.

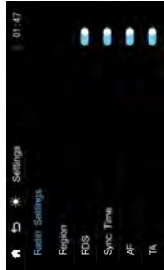


Figure 11

- <RDS> is an abbreviation of Radio Data System. In the U.S, it is called RDS. After turning on this feature, you will also be able to turn on the <AF>, <TA>, or <SYNC TIME> feature depending on your need.
- <AF> switch: <AF> is an abbreviation of Alternative frequency. It is an option that allows the F7G2A7WE to tune to a different frequency that provides the same station when the first signal becomes too weak (e.g. when moving out of range).
- <TA> switch: <TA> is an abbreviation of Traffic Announcement. It refers to the broadcasting of a specific type of traffic report on the Radio Data System.
- <SYNC TIME> switch: An RDS-equipped station broadcasts a time and date sync signal once a minute.

	Europe	Latin America	North America	Japan	Russia	Australia
RDS	✓	x	x	✓	✓	✓
RBDS	x	✓	✓	x	x	x
SYNCTIME	✓	✓	✓	x	✓	x
AF	✓	x	x	x	✓	x
TA	✓	x	x	x	✓	x

3.3. Precautions

- (1) The time provided by an RDS station in certain areas may not be correct. So, if you find the system time updated by RDS is inaccurate, please turn off this option.
- (2) If the radio interface shows "TP seeking" and then skip to another station while you are listening to a favorite one, the time and you turn on TP Option TP (Traffic Programme) is used to allow the user to find only those stations that regularly broadcast traffic bulletins. If you don't need this function, please turn off the TA option.
- (3) F7G2A7WE comes with the RDS (Radio Data System) function on the condition that the radio station of the area transmits the RDS signal. In areas without the RDS signal, the FM/AM will be available automatically.
- (4) The <Radio> option is used as one of four independent audio sources (<Radio>, <BT Audio>, <A/V In>, <SXM>). Every time you turn on F7G2A7WE, it will automatically play from the default audio source. If you don't want it to run the radio every time it starts, click the  to exit.

4. Bluetooth

4.1. Bluetooth Settings

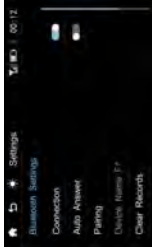


Figure 12

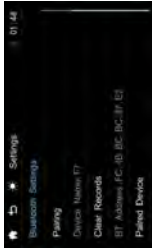


Figure 13

<Connection> Switch: When it is enabled, the F7G2A7WE's Bluetooth is turned on.

<Auto Answer> Switch: When it is enabled, the incoming call will be automatically answered in 3 seconds if there is no operation from the user.

<Pairings>: Click this option to make F7G2A7WE enter the pairing mode, and the phone can detect or discover F7G2A7WE's Bluetooth.



Figure 14

<Clear Records>: Clear the Bluetooth devices records from the F7G2A7WE.

<BT Paired Device List>: All cell phone devices paired to the F7G2A7WE will be displayed in the list.

4.2. Bluetooth Connection

Steps are as follows:

- (1). Open <BT Audio>, or enter into <Bluetooth Settings> on the F7G2A7WE;
- (2). Enable the <Connection> option, and <Auto Answer> and you will find the BT icon on the upper left corner of the F7G2A7WE screen;
- (3). Enable the Bluetooth on your phone, a Bluetooth device named <F7> will display on the <Available devices> list;
- (4). Click the <F7> to build a Bluetooth connection; There will be a prompt up on both ends for confirmation. Once it is connected successfully, the Bluetooth icon on the upper left corner on the F7G2A7WE screen will also light up;



Figure 15

4.3. Bluetooth Hands-free



Figure 16

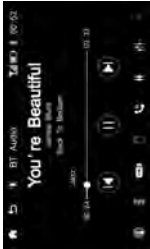


Figure 17

4.4. Precautions

- (1) If your phone can not find the Bluetooth of F7G2A7WE, please disable the <Connection> option in the settings and turn it on again.
- (2) When a phone connects to F7G2A7WE via Bluetooth option for the first time, F7G2A7WE will send a request for sync phone contacts once you click this icon. You need to select <YES> for all prompts on your phone and the F7G2A7WE.

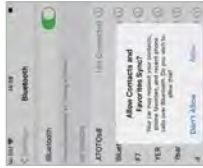


Figure 18

- (3) To let any changes for your contacts on the phone be synchronized to F7G2A7WE, you need to clear the records from both sides (click <Unpair> from the phone side, and <Clear Records> from F7G2A7WE's Bluetooth settings) and build a connection again.

5. Mobile Media Playback (USB / MicroSD)

5.1. Device requirements

MicroSD storage: up to 512GB; USB flash drive: up to 2TB
Compatible file system: FAT32 / NTFS; exFAT is not supported

5.2. How each button/icon app works

	Short press it to skip to the previous track.
	Pause/Play button.
	Short press it to skip to the next track.
	Press it to select between Repeat All, Repeat One, or Repeat Directory
	Press it to select between <random play> and <play in order>
	Press it to view available files from an external storage device (USB/micro SD)
	Files or folders filtered by Audio Format
	Files or folders filtered by Video Format
	Files or folders filtered by Image Format
	Return to <Now Play> menu
	Adjust picture brightness
	Adjust picture contrast
	Adjust picture color
	Rotate the picture 90 degrees counterclockwise



Figure 19

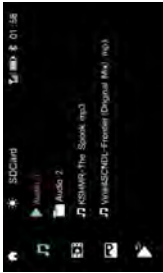


Figure 20

Notice:

- (1). If you insert a USB storage and a Micro-SD storage device on F7G2A7WE at the same time, the media player will auto play from the last one. You can switch to the other one manually from the <Menu>;
- (2). If your media files are organized in folders, and you need to browse and play files in other folders, you may need to click the  to browse all folders available in the device, and then scroll and select the one you want;
- (3). Audio Playback in this option has memory function and can play from where it is left last time. To add all the latest music files in the external storage into the playlist, it will automatically scan the device every time after plug-in.
- (4). When using USB or MicroSD to update the system firmware, please format it as <FAT32> before proceeding, otherwise, the update process may fail;

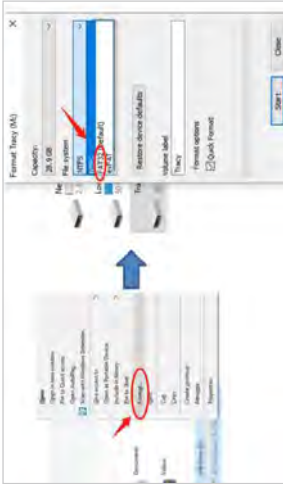


Figure 21

6. AV in

6.1 Audio/Video Input

There are 3 RCA jacks from the back of F7G2A7WE for AV input connection

- Video input (labeled as <VIN>); and the other two for audio input (labeled as <LIN> & <RIN>)

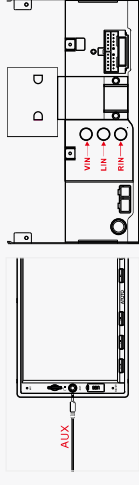


Figure 22

For selected F7G2A7WE models, there is also a <AUX> jack on the operation panel, which is equivalent to the <LIN> & <RIN> on the back, only accepting 3.5mm audio input. When it is connected, the two from the back end will be disconnected;

6.2 How it works

Connected devices that can output audio or video (or both) signal with RCA jack. The indication for playing this audio or video (or both) is <AUX> option from the <Menu>.

More about AUX cable connection, refer to another user manual named as <Panel Operation /Ports connection and Installation Instructions> in the package; AUX Video Playback can only work when the vehicle is not in motion. Check if <parking brake> wire from the power cable is correctly connected, or you need to disable <Video Prohibition Switch> option;

7. Sirius XM / Dab+ Tuner Connection

7.1. Sirius XM Connection

(1) Sirius XM service is only available in North America (United States & Canada). The F7G2A7WE for other marketplace does not have this option;
(2) This option is only available on selected F7G2A7WE models, and a SiriusXM Vehicle Tuner (i.e. SiriusXM SXV300AZV) Satellite Radio Tuner Kit, not included in the package) and Subscription are required. For more information, visit www.siriusxm.com.



Figure 23

7.1.2. SXM Operation Guide

More about SXM operation, refer to <SXM Operation Manual>;

7.2 Dab+ Tuner Connection

7.2.1 Requirements

(1) Dab+ radio service is only available in European areas;
(2) The F7 for non-European marketplace does not have this option;
Dab+ tuner is required.

7.2.2 Dab+ Operation Guide

More about Dab+ operation, refer to another user manual named as <Dab+ Operation Manual>;

8. Rear Camera/Front Camera Connection

8.1. Rear Camera Connection

8.1.1. Camera Compatibility Requirements

Below are the compatible cameras list:

- (1). ATOTO AC-HD02LR 720P (Analogue HD signal) Rear-view camera;
This product model supports LRV (Live Rear-View) feature, allowing the user to view the rear-view video via <R-Camera> option when the vehicle is not in reverse gear;
- (2). ATOTO AC-4486/AC-0587N (CVBS) Rear-view camera;
(3). Aftermarket Rear-view camera that comes with a standard RCA plug, CVBS video signal output, and dedicated reversing signal wire;
- (4). Volvo Aftermarket Rear-view camera with a standard RCA plug, CVBS video signal output, and dedicated reversing signal wire for connecting to a head-unit;

8.1.2. Two methods of Rear Camera Wiring Connections

8.1.2.1 Typical/regular wiring method: You can see the image of the rear camera on the screen only when you put the vehicle into reversing gear.

This method applies to cameras mentioned in (2), (3), (4) of 8.1.1.
The steps are: (1). Connect the power wires of the backup camera to the backup lights;
(2). Connect the RCA cable of the backup camera to the RCIN port on the back of the F7G2A7WE;
(3). Connect the signal wire of the backup camera to the <Rear Camera+> wire on the power harness of the F7G2A7WE. See Figure 24 for details;

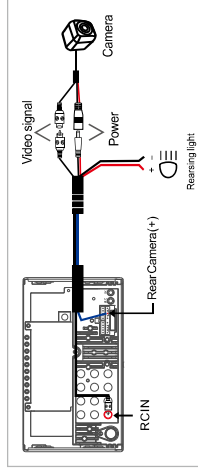


Figure 24 (The chassis layout varies by model.)

8.1.2.2 This method is applicable to connecting to cameras mentioned in (1) of 8.1.1;

With this wiring method applied, you can see the image of the rear camera on the screen when you put the vehicle into reversing gear. Besides, you can also see the image of the rear camera on the screen when the vehicle is in reversing gear (aka Live Rear-View, LRV). See Figure 25 for wiring connection details;

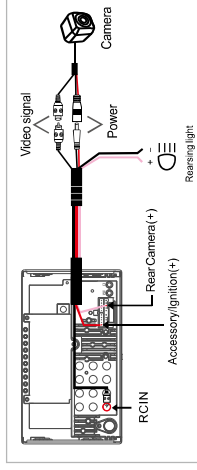
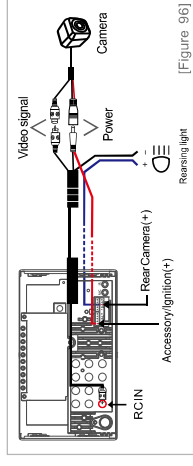


Figure 25 (The chassis layout varies by model.)

If you want the LRV feature to work with typical/regular rear cameras (mentioned in (2), (3), (4) of 8.1.1), you need to make some changes for the wiring connection.

- (1). Connect the positive pole of the camera's power cord to the F7G2A7WE's ACC wire, instead of the reversing light. The ground wire of the camera can still be connected to the reversing light.
- (2). Users may need to add an extra lead as the power wire of the aftermarket rear camera is not long enough for distance connection.
- (3). Add an extra extension wire between the 'Rear Camera+'* (one pin in the F7G2A7WE power harness) and the positive power wire of the backup light, so that the camera's original power wire does not be routed to F7G2A7WE's <Accessory/Ignition> wire. See Figure 26 for details;



[Figure 96]

Figure 26 (The chassis layout varies by model.)

8.1.3 Note:

- (1). The rear-view camera for connecting to F7G2A7WE must have a reversing signal wire which informs F7G2A7WE of the status of the reversing light through the connection. Without it, the F7G2A7WE does not know when to switch and you will not see rear-view video display even if your vehicle is in reverse gear.
- (2). The video output signal of some factory cameras are not CVBS type, or its video output interface is not RCA type. In this case, you need a specific wiring converter or video signal converter to complete the installation.
- (3). To access the rear-view quickly while using the LRV feature, you can set one key of your steering wheel (if applicable) as a shortcut in system settings (Steering Wheel Control Select > Key Settings). This could act as a streaming rear-view mirror and increase driving safety. It is only available on selected F7G2A7WE models;
- (4). The rear-view camera is supplied separately;

8.2 Front Camera Connection

8.2.1 How it works on F7G2A7WE

This option is only available on selected F7G2A7WE models. There is a specific video input labeled as <FCAM>, and a system option named as <F-Camera> on F7G2A7WE, and the user needs to install a compatible camera to the front of the vehicle for viewing surroundings ahead;

Below is the compatible camera list:

- (1). ATOTO AC-HD02LF 720P (Analogue HD signal) Front-view camera;
- (2). An aftermarket Rear-view camera can also be used for front-view, but users need to add an extension cable so that the power supply of the camera can be changed from reversing lamp to F7G2A7WE's <Accessory/ignition> wire;

8.2.2 Camera Wiring Connections

Connect the active front-view camera to the vehicle's accessory/ignition(+12V) in the car fuse box; connect the ground wire of the front camera to the vehicle's chassis ground(GND) in the car fuse box. See Figure 27 for details.

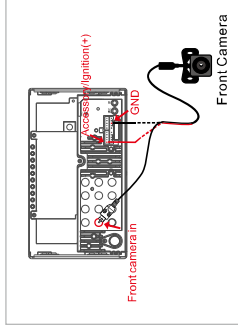


Figure 27 (The chassis layout varies by model.)

If you use a regular rearview camera for front view connection:

- (1). Connect the camera's power cord to the F7G2A7WE's ACC & Ground wire, and the video signal cable to the FCAM input;
- (2). Users may need to add an extra lead as the power wire of the rear camera may be not long enough for distance connection. See Figure 28 for details.

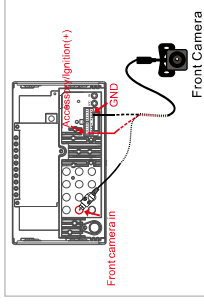


Figure 28 (The chassis layout varies by model.)

8.2.3 Notice

- (1). The front-view camera is sold separately;
- (2). This option is only available on selected F7G2A7WE models;
- (3). To quickly access the front view, you can set a key of the steering wheel (if applicable) as a shortcut in the system settings (steering wheel control selection> key settings).

8.3. Camera Settings

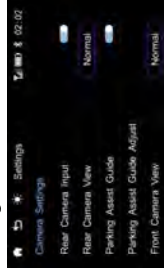


Figure 29

<Rear Camera Input> Switch: On/Off

Enables the rear camera view or disables the rear camera view. It applies to the rear camera that displays left-right reversed;

<Parking Assist Guide> Switch: On/Off

Enable this option to add guideline lines on the screen when rear camera images display. It applies to the rear camera that does not have guidelines on the display;

<Parking Assist Guide Adjust>



Figure 30

Touch to adjust Parking Assistant Guideline right or left, touch to adjust up or down. Touch to store the settings. Touch to restore to default settings.

<Front Camera View> switch: Normal view or Reverse view;
Enable this option to display a left-right reversed image of the front camera. It applies to the front camera that displays left-right reversed;

9. Settings

9.1. System Settings

9.1.1. Language

There are 8 system languages available from this menu: English, Spanish, French, German, Portuguese, Russian, Japanese, Italian; New languages may be added in future firmware update;

9.1.2. Date & Time

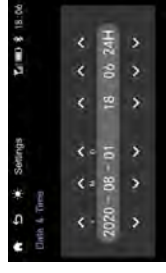


Figure 31

- (1). Touch and to set date, time, and time format(24H, AM, PM);
- (2). In addition to manual time setting, F7G2A7WE also allows to update the system time via <SXM>, <CarPlay> Connection or <SYNC TIME> option from RDS settings;

9.1.3. Beep Tone:Touch Sound Switch. Click to disable or enable this option.

9.1.4. Steering Wheel Position

This option allows you to change the display/layout of Apple CarPlay to adapt left-hand/right-hand drive vehicles.

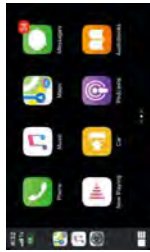


Figure 32

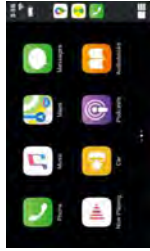


Figure 33

9.1.5. Steering Wheel Control Select

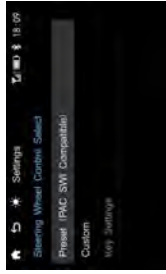


Figure 34

- (1) Two Modes available for steering wheel control
Press: To use the PAC SWI interface, select the F7G2A7WE and the vehicle to retain the steering wheel control feature, select this option and then follow the instructions of PAC SWI to finish the setup. The PAC SWI interface is provided by a third-party company, and is not included. Here is the link for more information: <https://pac-audio.com/swi-guide-center/swi-guides>
Custom: This option allows you to map or custom the steering wheel control keys manually.

- (2). The process of mapping steering wheel audio keys:
Step 1: Follow the instruction <Press and hold. Select One from list> (Figure 35), select one button on the list and hold it until the frame becomes blue, and the text on the screen changes to <Press and hold. Match with steering wheel button> (Figure 36)



Figure 35

- Step 2:** Follow the instructions <Press and hold. Match with steering wheel button>, select one button on the car steering wheel, press it until the whole button on the F7G2A7WE screen becomes purple (see Figure 37), which means this button has been mapped successfully.



Figure 36



Figure 37

- Step 3:** Follow the same operations to complete the rest buttons learning.
Step 4: Exit the menu and the settings will be saved automatically.
 If you want to remove all the saved settings and remap the keys, just exit and re-enter the <Key Settings> option, then follow the step 1 and step 2 above to start again.

- (3). Note:
 This feature requires your car to have a factory steering wheel audio control option (shorted for SWC, based on resistive analog signal input only); if your vehicle uses a digital CANBUS data signal, and you can find an applicable vehicle audio interface converter from a third-party supplier, SWC feature can still be realized.
 More information about SWC related wiring connection, refer to the second user manual named as <Panel Operation /Ports connection and Installation Instructions> in the package.
 There are two options (,) that are useless currently. They are reserved for future development.

9.1.6. Factory Reset

- Please note this operation will erase all user settings.
 You can restore the system to factory settings via this option, which will remove all personal data and settings.
 -To protect your privacy, when you need to return this product, it is recommended that you reset the device to factory default before requesting a return or exchange.

9.1.7. About Device/System Update

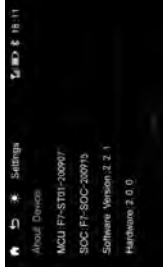


Figure 38

- After the release of ATOTO F7G2A7WE, we will release system firmware from the official website. Users can check the version of the device. When the new system firmware update is available, the notification will be put up in the notice section of the <https://support.myatoto.com> website, providing detailed update instructions;
 It is recommended that users register a user account to receive email notifications of possible upgrades.

9.2. Display Settings



Figure 39

9.2.1. Daylight Dimming Level

- Adjust Daylight mode to the desired level.
 Night Dimming Level: When the <Lighting Detect> is enabled, you can adjust the dimming level for Night Mode

9.2.2. Panel Key Lighting

- Select color for the panel key among Amber/Yellow/Blue/Green/White /Orange/Black



Figure 41

9.2.3. Wallpaper

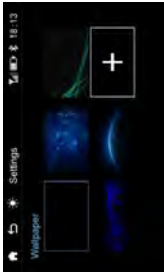


Figure 42

(1). Two ways to set a wallpaper for F7G2A7WE
Preset: There are 5 preset wallpapers, and it will apply immediately when selected
Add manually: The system allows users to put qualified images in a USB flash drive and click to add it to system wallpaper. Images in MicroSD can not be added. The resolution of the image should be 1024x600.

9.2.4 Video Prohibition Switch

(1). For your safety, users cannot watch videos while driving the vehicle. There is a specific cable labeled as <Parking Brake> from the back of F7G2A7WE for detecting the status of your vehicle's hand brake (if applicable). When it is correctly connected and this option is enabled, you will see a notice on the video playback screen (Figure 43) while your vehicle is in motion, and it will disappear once your vehicle is parked and your hand brake is applied;

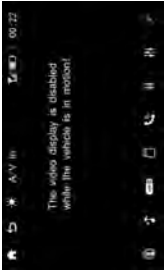


Figure 43

(2). This option only applies when you run <AUX>, <F-Camera>, or Play video via <Mobile Media Playback> option;

9.3. Audio&EQ settings

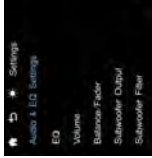


Figure 44



Figure 45

(Note: on certain models, the subwoofer settings are not available.)

9.3.1. EQ

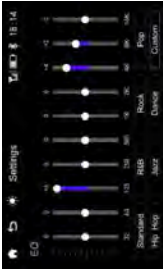


Figure 46

7 preset EQ sound effects are <Standard>, <R&B_Rock>, <Pop>, <Hip_Hop>, <Jazz>, <Dance>. Manual changes of any one from the preset will be automatically saved in <Custom>;

9.3.2. Volume



Figure 47

F7G2A7WE allows the user to adjust the volumes of different audio channels separately.

Multimedia	Audio volume of system multimedia playback
Ringtone	Ring tone volume when a phone call comes in
Hands-free	Audio volume of Hands-free talking
Navigation	Audio Volume of the voice navigation prompt in CarPlay or Android Auto
Voice Assistant	Audio Volume of the Siri in CarPlay, or Google Assistant in Android Auto

9.3.3. Balance/Fader



Figure 48

Touch or to move the to adjust the listening position.
The value of Balance: Left 15- Right 15
The value of Fade: Front 15- Rear 15
Touch <Reset> to restore.

9.3.4. Subwoofer Output

(Note: on certain models, the subwoofer settings are not available.)
<Subwoofer Output> Switch: Touch it to turn on or turn off subwoofer output. This option is applicable to vehicles that have a Subwoofer Amplifier;

9.3.5. Subwoofer Filter

If <Subwoofer Output> is turned on, you can select one (<50Hz>, <80Hz>, <120Hz>, <160Hz> or <OFF>) that you need it to be filtered from the subwoofer output.

9.3.6. Subwoofer Level

Touch to adjust the subwoofer level that will be output from the subwoofer.
9.3.7. Enable Audio in Rear View
If this option is turned on, the media volume won't be muted when the car is in reversing gear; If it is turned off, the media playback will be muted once you are in reversing gear.

9.4. Radio Settings. Refer to Chapter 3.2;

9.5. Wi-Fi Settings



Figure 49

This Wi-Fi option is only for data transmission; it does not support to access Internet.

9.5.1. Wi-Fi Switch

If the Wi-Fi switch is turned on, the Wi-Fi option is activated for data transmission.

9.5.2. Device Information

Check Wi-Fi information of the device on this interface: network name and MAC address;

9.5.3. Connection Status

Tap to check the current Wi-Fi connection status;

9.5.4. Password

Display the current Wi-Fi password;

9.5.5. Password reset

Tap to reset the current Wi-Fi password;

9.6. Bluetooth Settings. Refer to Chapter 4.1;

9.7. Camera Settings. Refer to Chapter 8.5;

10. Capabilities Expansion

With lots of inputs, outputs, slots, F7G2A7WE can connect to a variety of external devices. These accessories for connecting to the F7G2A7WE to extend its functionality are not included in the package. They are provided separately. Some are customized by ATOTO, others are not provided by ATOTO, and users need to get them by themselves.

10.1 Connect to a regular aftermarket rear-view camera, or a specific ATOTO HD rear-view camera for Live Rear-View, or a specific front camera. See Chapter 8 for details.



Figure 50(AC-4486)



Figure 51(AC-HD02LR)

Connection Method: Specific RCIN video input

10.2 Work with ATOTO AC-44F5 Wireless Steering Wheel Remote

For cars without steering wheel audio control, ATOTO AC-44F5 wireless Remote is highly recommended for safe operation. Connection Method: Wireless (Transmitter) * Specified 3.5mm jack (Receiver).

10.3. Connect to headset monitors

The built-in Video Output feature allows users to connect up to 2 monitors (Figure 53) to F7G2A7WE via RCA Video Out interface, and what's displayed on the F7G2A7WE will be synchronized on the headset monitors.

The headset monitor connected to F7G2A7WE should accept RCA CVBS signal video input.

Connection Method: Specific video Output. This option is only available on selected F7G2A7WE models

10.4. Attention

The above are the common optional accessories for F7G2A7WE. They are provided separately. Some are customized by ATOTO and are available from ATOTO, and users need to get them by themselves.



Figure 52(AC-44F5)

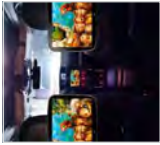


Figure 53

Specifications	
Part	Specifications
Operating System	Linux Gemini Ver. 4.9.217
SOC chipset	QT Ver 5.6.3 LY8368
Monitor	Screen Size (inch): Depending on the specific F7 model, it can be from 6.2 In to 10.1 inches (diagonal)
	Display Resolution: HD 1024*600 or 1280*720 depending on the specific model
	Display system: Depending on the specific model, it can be TN-LCD, IPS-LCD, or OLED (quantum film LED -backlit LCD technology).
Radio	Lighting Brightness: 450 - 600 cd/m2
	FM: 65-108MHz, detailed band range varies by regions; Preset station: 3*6=18 stations AM: 522-1710KHz; detailed band range varies by regions; Preset station: 2*6=12 stations
RDS Decoder	YES
Stereo Audio DAC	YES
Bluetooth	Bluetooth Version: 4.2 or 5.0 depending on the specific model
	Protocol: HFP, HSP, A2DP, AVRCP, PBAP
	A2DP Audio playback support: SBC, ACC
Channel output: Stereo, Mono	

DSP Acoustics	Chipset: DSP AK7602
	EQ Band: Standard, R&B, Rock, Pop, Hip Hop, Jazz, Dance, Custom
	Frequency: 32/63/125/250/500/1.0k/2.0k/4.0k/8.0k/16.0k (Hz) Gain: -6/-5/-4/-3/-2/-1/0/1/2/3/4/5/6 (dB)
Pre-Amplifier	Subwoofer Filter: OFF/50Hz/80Hz/120Hz/160Hz (12dB/oct) (Note: on certain models, the subwoofer settings are not available.)
	For F7 basic models: 4 x 45w/ 4 Ω max. 4 x 25w RMS/4 Ω @ 14.4 V, 1 kHz, THD 10 %; Impedance: 4-8Ω
	Power Output For selected F7 models: 4 x 45w/ 4 Ω max. 4 x 25w RMS/4 Ω @ 14.4 V, 1 kHz, THD 10 %; Impedance 2-8Ω
Media Playback	Output Frequency Band Audio DAC 20-22000Hz
	Audio/Video/ Image D/A Converter: 24Bit Audio: MP3, M4A, FLAC, WAV, WMA Video: Xvid, MPEG-4, WMV, FLV, MKV, H.264 Image: BMP, JPEG, PNG
USB Interface	Phone Link USB 1 (labeled as <Phone Link>) supports CarPlay, Android Auto and AutoLink (MirrorLink) Connection
	Phone Charge USB 1 supports charging the phone while running Phone Link.
	Portable Media Playback Phone Charging Protocol is BC 1.2, which can provide 1.5A current Both USB1 & USB 2 support Media Playback, and can read up to 2TB portable SSD device (FAT32/NTFS)

Output & input	Audio Out	4 x RCA Out (2V/10KΩ): Labeled as <FL>/<RL>/<RR>
	AUX Audio Input	1 x RCA Subwoofer Out(800mV/10KΩ): Labeled as <SUB>
	AUX Video Input	2 x RCA Audio Input (Left/ Right) (Max 2V/25KΩ): Labeled as <LIN>/<RIN>
	AUX Video Input	1 x RCA Video Input (1Vp-p/75Ω): Labeled as <VIN>; It supports both CVBS signal and Analog HD signal video source;
	FCAM video input	1 x RCA Video Input (1Vp-p/75Ω) : Labeled as <Front Camera In>; It supports both CVBS signal and Analog HD signal video source. This option is only available on selected F7 models.
	Rear View Camera Input	1 x RCA Video Input (1Vp-p/75Ω) : Labeled as <RCIN>; It supports both CVBS signal and Analog HD signal video source;
	Video Output	2 x RCA Video Out (1Vp-p/75Ω). Labeled as <Video Out 1> / <Video Out 2>
General	SXM Ready	It works with SiriusXM SXV300AZV1 Satellite Radio Tuner Kit, which is not included. SXM service is only available in North America; This option is only available on selected F7 models;
	SWC Jack	Works with ATOTO AC-44F5 Steering Wheel Remote Control
	Operation Voltage: 12v DC car battery	
	Rated Current Consumption: 15A; Standby Current:10mA	
Operation Temperature Range: -20℃ - +60℃		

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.

Note

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 their 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.

The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance, such as modifications that void the user's authority to operate the equipment. The device has been evaluated to meet general RF exposure requirement. To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation configurations of the transmitter and its antenna(s)."