

The HDMI connection found on many 2014 Kenwood multimedia receivers offers advanced smartphone connectivity. This connectivity varies between iPhone and Android devices as well as the DNN, DNX and DDX receivers. This white paper should explain the differences.

DNN/DNX HDMI ENABLED RECEIVERS:

DNN991HD DNX891HD DNX691HD DNX771HD DNX571HD



iPhone5 connects using an HDMI cable and the Apple HDMI/ Lightning adaptor. A Bluetooth connection is also required for control.

Operation- The HDMI connection only provides audio and video to the Kenwood receiver. To control the iPod, Pandora and iHeartradio sources a Bluetooth connection is required along with the HDMI connection. Go to the App Setup in the receivers menu.



Android devices connect using the Kenwood KCA-MH100 HDMI to MHL cable + Bluetooth SPP control. There are a few cases where a phone adapter is required. See the cable chart for reference.

Operation- The KCA-MH100 transfers audio and video as well as charges the connected android device. For controlling the Pandora and iHeartradio sources a Bluetooth connection is required. Go to "App Setup" in the receivers menu.



HDMI/MHL SOURCE

The HDMI/MHL source provides screen mirroring and video. The parking brake must be engaged to view this source.



APPS SOURCE

The APPs source also provides screen mirroring and can be accessed while in motion. The driver must agree to a disclaimer before use.

DDX HDMI ENABLED RECEIVERS - IPHONE5

DDX8901HD DDX5901HD DDX7701HD



iPhone5 connects using an HDMI cable and the Apple HDMI/ Lightning adaptor. A Bluetooth connection is also required for control.

Operation- The HDMI connection only provides audio, video transfer to the Kenwood receiver. To control the iPod, Pandora and iHeartradio sources a Bluetooth SPP connection is required along with the HDMI connection. Go to "App Setup" in the receivers menu.

The WAZE navigation app for iPhone5 can be controlled from the DDX receivers touchscreen and can be accessed while the vehicle is in motion. Waze provides a cost effective navigation solution for the DDX receivers.



iPhone 5 HDMI CONNECTIVITY

	IPHONE SCREEN MIRRORING	WAZE APP CONTROL	IPOD CONTROL	PANDORA RADIO CONTROL	IHEARTRADIO CONTROL
DNN991HD	✓	VIEW ONLY	✓	✓	✓
DNX891HD DNX691HD DNX771HD DNX571HD	✓	VIEW ONLY	✓	✓	✓
DDX8901HD DDX5901HD DDX7701HD	✓	✓	✓	✓	✓



WAZE is a free navigation application that incorporates elements of social media that is growing in popularity.

See the WAZE setup guide for iPhone5 on page 5 of this document.

DDX HDMI ENABLED RECEIVERS - ANDROID

DDX8901HD DDX5901HD DDX7701HD



DDX receivers with an HDMI input also have HID technology. The HDMI connection only supports the audio and video, it offers no control. That is where HID comes in. What is HID (Human Interface Device)? In simple terms, it is a Bluetooth profile that allows the DDX receivers touch screen to remotely control most Android devices via the "Kenwood Smart Phone Control App". Using this app on an Android phone running OS4.1 or newer you can mirror the controls of the phone on the Kenwood screen and operate almost any app or function from its touch screen.

Kenwood Smartphone Control Application



The Kenwood Smart Phone Control App can be found on the Google play store. It is free to download.



ANDROID HDMI CONNECTIVITY

	SCREEN MIRRORING	HID - TOUCH CONTROL	PANDORA RADIO CONTROL	IHEARTRADIO CONTROL
DNN991HD	✓		✓	✓
DNX891HD DNX691HD DNX771HD DNX571HD	✓		✓	✓
DDX8901HD DDX5901HD DDX7701HD	✓	✓	✓	✓

Android devices connect using the Kenwood KCA-MH100 HDMI to MHL cable + Bluetooth SPP/HID control. There are a few cases where a phone adapter is required.
Download the cable chart for reference.

Operation - The KCA-MH100 MHL cable provides both audio and video as well as charging for the connected android device. The receiver will control the same functions as with the iPhone 5 including Pandora and iHeartradio. The connected Android display will be mirrored to the DDX receiver and through Bluetooth HID it can also be fully controlled. HID control is only available while the vehicles parking brake is engaged.

DDX - HDMI AND APP SOURCE



HDMI/MHL SOURCE

The HDMI/MHL source provides screen mirroring and video but does not offer control of any applications. The parking brake must be engaged to view this source.



APPS SOURCE

The APPs source provides screen mirroring and touchscreen control of applications. The APPs source can be accessed while in motion but control is only available while the parking brake is engaged. The driver must agree to a disclaimer before screen mirroring can be viewed.

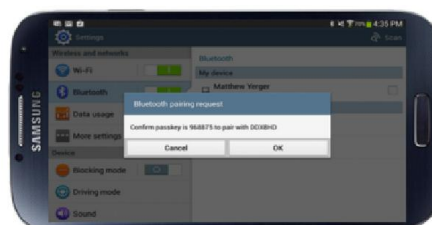
DDX HID CONTROL SETUP GUIDE

DDX8901HD DDX5901HD DDX7701HD



Step 1. Connect the Android device to Bluetooth

For an Android device to communicate with the DDX receivers a Bluetooth connection must be made. Search for the DDX receiver on the Android device and press the pair button.



Step 2. Set the device connection type

Set the DDX receiver into the "Standby" mode. Enter the setup menu (1), and select "System" (2) then APP "Setup" (2) and enter the "APP connection Setup" (3).



1. SETUP MENU

2. SYSTEM SETUP / APP SETUP

3. APP CONNECTION SETUP

The app connection setup defaults to an iPod/iPhone connection. Select the "change" key (4) to set it for an Android device. Select "Android/Other" as the device type (5), then select HDMI/MHL + BT as the connection method (6), and finally select the Bluetooth device from the paired device list (7). The last page will display a confirmation screen, press "Done" (8).



4. CHANGE APP SETTINGS

5. SELECT ANDROID

6. SELECT HDMI/MHL + BLUETOOTH



7. SELECT BLUETOOTH DEVICE

8. FINISHED APP SETUP

DDX HID CONTROL SETUP GUIDE

DDX8901HD DDX5901HD DDX7701HD

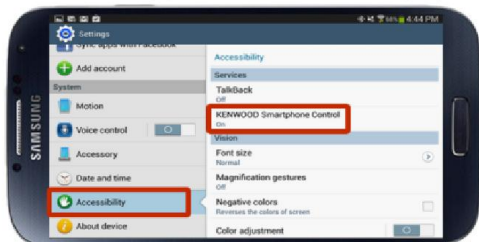


Step 3. Install the Kenwood Smartphone Control APP

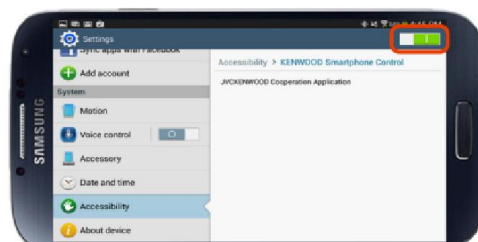
Download the Kenwood Smartphone Control Application from the GooglePlay store (1). Once installed enter the phone settings menu and Scroll down to Accessibility. (2) Select on the Kenwood Smartphone Control app and turn it on(3).



1. INSTALL APP



2. GO TO ACCESSIBILITY IN SETTINGS



3. TURN ON KENWOOD APP

Step 4. Connect Android the device to HDMI/MHL

Connect the Android device to the KCA-MH100 MHL cable. Open the Kenwood Smartphone Control APP, and select the "APPs" source on the DDX receiver.



TIP ADAPTER

Required for:
Samsung GalaxyS3/S4
Samsung Galaxy Note2/3



KCA-MH100



Engage the vehicles E-Brake and select "Agree" after reading the CAUTION disclaimer(1). The Kenwood Smartphone App will connect after a few seconds (2) and another CAUTION screen will appear, after reading the disclaimer press "AGREE". (3)



1. PRESS AGREE



2. CONNECTING TO APP



3. PRESS AGREE



Finished!

This completes the Android HID control setup guide for Kenwood DDX receivers.

The HID touchscreen control is only available when the parking brake is engaged.

DDX WAZE CONTROL SETUP GUIDE

DDX8901HD DDX5901HD DDX7701HD

Apple iPhone 5

Step 1. Connect iPhone5 to Bluetooth

For the iPhone5 to communicate with the DDX receivers a Bluetooth connection must be made. Search for the DDX receiver on the iPhone and press the pair button.



Step 2. Set the device connection type

Set the DDX receiver into the "Standby" mode. Enter the setup menu (1), and select "System" (2) then APP "Setup" (2) and enter the "APP connection Setup" (3).



1. SETUP MENU



2. SYSTEM SETUP / APP SETUP



3. APP CONNECTION SETUP

The app connection default setting is for a KCA-IP202. Select the "change" key (4) to enter the connection setup. Select "iPod/iPhone" as the device type (5), then select HDMI + Bluetooth as the connection method (6), and finally select the Bluetooth device from the paired device list (7). The last page will display a confirmation screen, press "Done" (8).



4. CHANGE APP SETTINGS



5. SELECT IPOD/IPHONE



6. SELECT HDMI + BLUETOOTH



7. SELECT BLUETOOTH DEVICE



8. FINISHED APP SETUP

DDX WAZE CONTROL SETUP GUIDE

DDX8901HD DDX5901HD DDX7701HD

Apple iPhone 5

Step 3. Install and open the free WAZE iPhone application

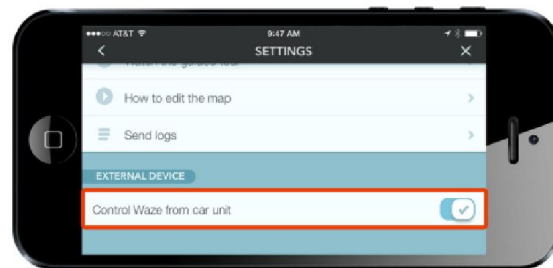
The free WAZE navigation application is available for download on the iTunes app store (1). Once installed open the app and enter the settings menu (2). Scroll to the bottom and turn on "Control Waze from car unit" (3). (Once turned on it will stay on)



1. INSTALL APP



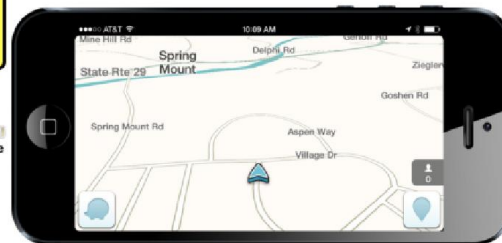
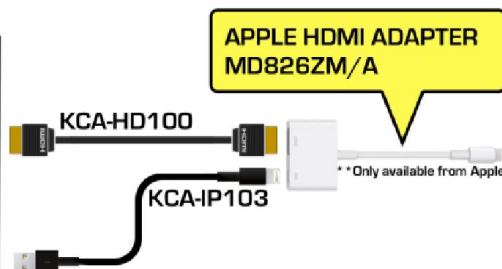
2. GO TO WAZE SETTINGS



3. TURN ON CONTROL IN SETTINGS

Step 4. Connect iPhone5 to HDMI

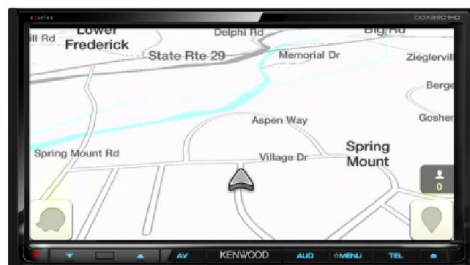
Using the required Apple lightning to HDMI adapter, the KCA-HD100 HDMI cable, and the KCA-IP103 lightning to USB cable, connect the iPhone to the receiver. Open the "APP's" source on the DDX receiver.



After reading the CAUTION disclaimer press "agree" (1). The WAZE app will connect after a few seconds (2). Waze can now be controlled from the Kenwood receiver.



1. PRESS AGREE



2. WAZE CONNECTS TO DDX RECEIVER



Finished!



The Waze app can be operated while the vehicle is in motion, however the IOS keyboard cannot be accessed from the Kenwood receiver. Addresses and POI's will have to be entered from the iPhone5.