

Test

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After determining that your content is appropriate for in-vehicle use, ensuring that your application properly interacts with the Human Machine Interface (HMI), the system, and the user is the most important requirement.

We cannot stress enough the necessity to thoroughly test every aspect of the AppLink™ command and control for each feature in your connected application. It is frustrating to have applications crash while sitting on the couch, so you can imagine the frustration if the same happens while on the road.

Prior to submitting your application for approval, it is imperative that you perform and pass the full suite of tests provided on this site. You are required to submit records of your validation tests along with your approval request that Ford will use as a reference while completing our validation of your application.

You will want to make sure that you are accurately performing and passing the validation tests as any apps that fail testing will incur a fee for subsequent submissions. The team here wants nothing more than to help you make your AppLink™-enabled application available for Ford owners, but we are a small team and just can't perform trial and error bug fixing.

Requirements

There are three generic requirements that you must follow for validation of your application:

- Number of Test Passes
- Multiple Devices
- Multiple Operating Systems Versions

Android™

Number of Test Passes

You must complete and submit 12 (twelve) test passes.

Multiple Devices

You must validate with at least 1 (one) device from each of the following major manufactures:

- Samsung
- HTC
- Motorola
- LG

It is recommended you also use the following manufactures:

- Sony
- Pantech

Multiple Operating System Versions

You must validate against the following operating systems:

- 2.3.x (Gingerbread)
- 4.x (Ice Cream Sandwich)

iOS

Number of Test Passes

You must complete and submit 6 (six) test passes.

Multiple Devices

You must validate with at least 1 (one) device from each of the following devices:

- iPhone 3GS
- iPhone 4
- iPhone 4S
- iPhone 5

Multiple Operating System Versions

You must validate against the following operating systems:

- 5.1.1
- 6.x

Test Cases

Please refer to the following for the specific validation guideline your application must pass along with checklists for submission.

- [AppLink™ Validation Guideline](#)
- [AppLink™ Android™ Validation Checklist](#)
- [AppLink™ iOS Validation Checklist](#)

Note: Tests will not cover functionality of your application, and it is your responsibility to ensure your application behaves appropriately in all conditions.

Hardware

We would love to be able to send every developer a brand new Mustang in order to test AppLink™ enabled apps. We would all love to have salaries in the \$1M per month range, as well. Unfortunately that first part...is about as feasible as the second part, so Ford Development has created a developed a tool to help you out.

TDK

The Technical Development Kit (TDK) is the physical representation of what you experience in vehicle. It has the same software, voice command, and radio faces and buttons that appear in a production vehicle. A proprietary Ford software program allows a developer to recreate nearly any combination of variable states that a vehicle on the road can enter in order to test the controls of a mobile app, driver interaction and driver effort.

Request a TDK

A limited number of TDKs are available through the Ford Developer Program. To request one, please fill out and submit this form. [insert form, or the link]

Quick Overview

Once you receive and unbox your TDK, there are a few key items you will need to know including the set up and configuration and any special caveats. Also, please save the box and the foam inside in the event you ever have to ship it back for repairs or upgrades.

Initial Setup

Place your TDK on a solid surface such as a table or desk, and plug in the power cable to a nearby outlet.

Next to the power outlet on the back of the TDK, there is a switch to control the power supply of the device. Make sure that is flipped on. This switch simulates a full power gain and/or loss to the vehicle and its modules (e.g. a Battery unplug or plug in event).

You will start to hear the power supply hum, but even though the unit has power, you may need to configure the front plate of switches to get the screen to turn on.

To turn the screen on, you will have to set the following switches to the 'ON' position:

- I-CAN
- HS-CAN
- IGNITION
- DOORS
- SPEED

Various Simulations

Not all the front switches are needed for your application, but there are few important sequences to remember while you are developing and testing.

Ignition On Event

To simulate someone getting into his or her vehicle, perform the following sequence:

1. Ensure all the switches on the front are in the 'OFF' state except for the following:
 - a. I-CAN
 - b. HS-CAN
2. Set the DOORS to OPEN
3. Set the DOORS to CLOSED
4. Set the IGNITION to RUN

The display will turn on, and the system will try to connect to any previously paired devices.

Driver Distraction Events

As the Driver Distraction state change will impact your application's access to certain APIs, it is important to know how to trigger this event and notification.

To simulate the vehicle moving over the Driver Distraction threshold, set SPEED to 12 km/h.

To simulate the vehicle coming to a stop or traveling under the threshold, set SPEED to PARKED.

In both instances, your application will get a notification indicating which change took place.

Voice Session Event

To begin the voice session event and simulate various voice commands, simply press the Push-To-Talk (PTT) button located in the middle of the steering wheel control buttons. The button's icon is that of a person speaking.

Ignition Off Event

To simulate someone turning off his or her vehicle, perform the following sequence:

1. Ensure all the switches are in the 'ON' state:
 - a. I-CAN
 - b. HS-CAN
 - c. DOORS
 - d. IGNITION
2. Set the IGNITION to KEY-OFF

The system will now remain on for a set period of time and maintain connectivity to connected devices.

Exiting the Vehicle

Now, to simulate someone getting out his or her vehicle, perform the following sequence after performing the 'Ignition Off' event:

1. Set the DOORS to OPEN

The display will now turn off, and the system will begin to disconnect all devices.

FAQ

Module will not power up

Be sure that the power cord is connected, and the power switch on the back of the device is set ON.

Ensure the following switches or toggles set:

- IGNITION is set to RUN
- I-CAN is set to ON
- HS-CAN is set to ON

Phone won't pair

Make sure that the speed switch is set to PARKED.

Phones cannot be paired while vehicle velocity more than 12 km/h, so the signal must be sent that the "vehicle" is not moving.

Support

Everybody can use a little support sometimes.

We have filled this site with as many resources as possible to make developing for in-vehicle connectivity available for nearly any developer. Tools, like the API Reference, test suites, and community forums are excellent ways to find answers to questions that may come up during the development period. Please familiarize yourself with the many ways the Ford developer site can help in your development efforts.

If you exhaust all of the options available and still require additional support, such as speaking with a member of the Ford Developer team, review of specific code or API interactions, please do not hesitate to [contact us](#).