Source Calibration Operation

Source Calibration Overview

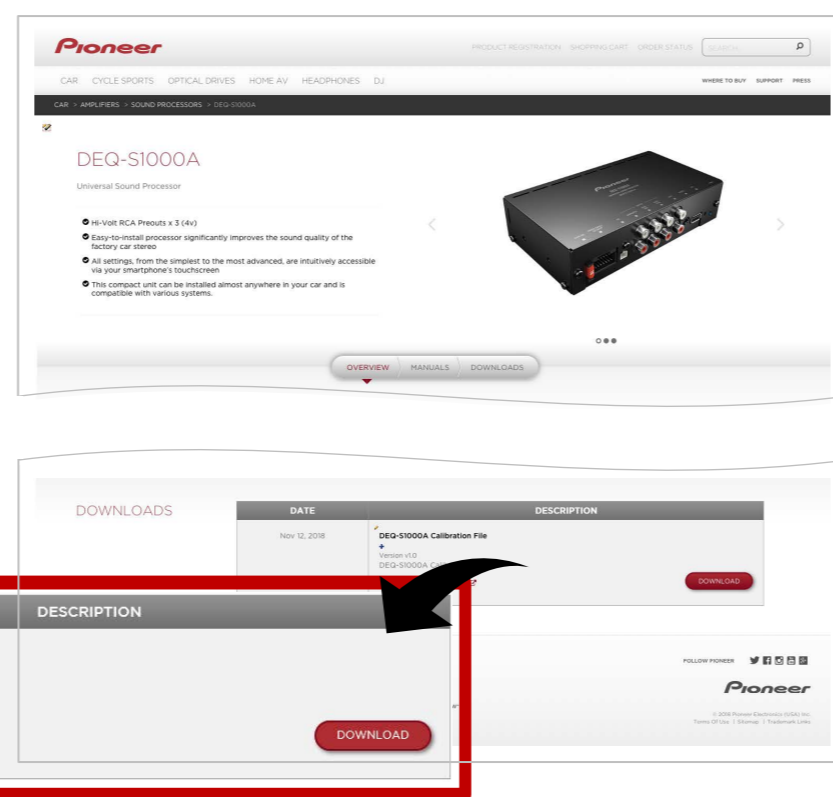| Download the Pioneer calibration file and save to physical media | Download the Pioneer Sound Tune app and connect your smartphone | In the Pioneer Sound Tune app, launch the Source Calibration function | Play the Source Calibration file through the original headunit | After system analysis and signal correction, Source Calibration is complete |

Step 1: File preparation (calibration file download)

The Pioneer Sound Tune app uses a series of test signals to analyze and correct the frequency response of the original headunit during the Source Calibration function. These test signals must be downloaded and stored in a format and physical media that can be played back using the original headunit as the source (USB, SD card, CD-ROM, audio CD, etc.). The test signals are provided as a 16-bit / 44.1kHz WAV file. Not all original headunits support WAV file playback and therefore file conversion may be necessary*.

Determine the file format and physical media compatible with your original headunit (USB, SD card, CD-ROM, audio CD, etc.).
↓
Access the Pioneer download link on a PC, download the Source Calibration file and save it on compatible physical media.

* File conversion may require 3rd party software. For instructions and guides, please consult the software provider for more information. Always use the highest quality setting supported by your original headunit. Heavily compressed or low quality conversions of the Source Calibration file may cause the Source Calibration operation to fail.
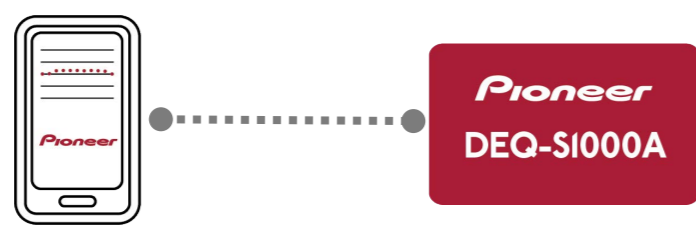
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- Source Calibration file download link location
  - Visit www.pioneerelectronics.com and use the search bar in the upper right corner to find the model of your Pioneer Universal Sound Processor
  - Click "DOWNLOADS" in the product navigation bar, centered below the product images.

  - Click the red "DOWNLOAD" button and read the END USER LICENSE AGREEMENT.
    - If you agree, click "AGREE" and your download will begin.
    - If you do not agree, click "DISAGREE", close the page and contact your Pioneer Authorized Dealer for assistance with the Source Calibration procedure.

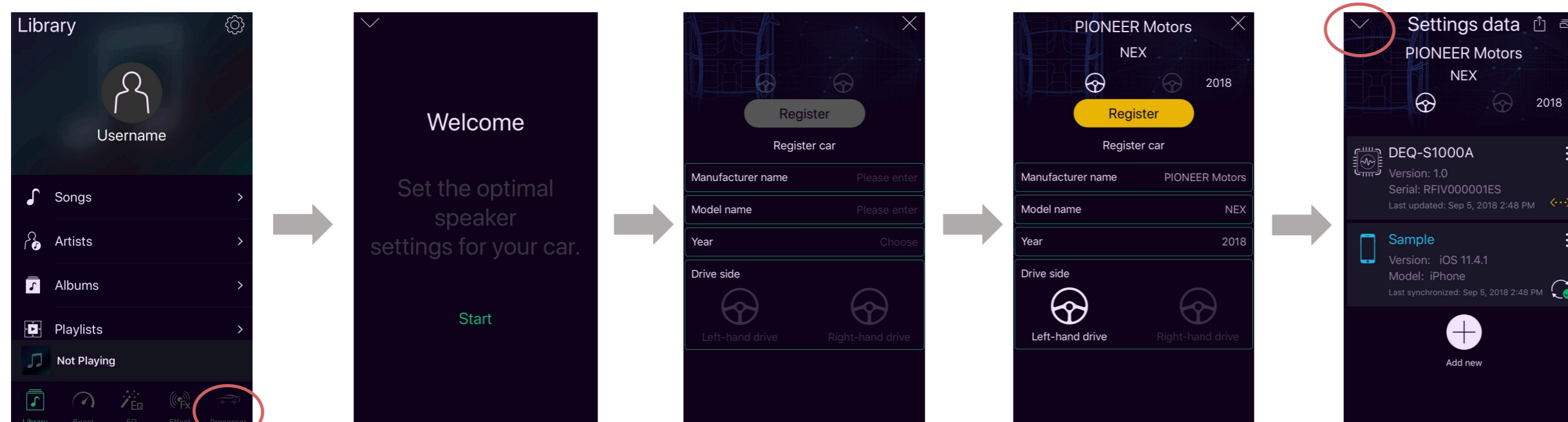## Step 2: Prepare the system for Source Calibration

· Complete Step 1 (above) before proceeding.

2A   Download and install the Pioneer Sound Tune app on your Android or iOS smartphone. Launch the app and connect your smartphone to the Pioneer Universal Sound Processor via the USB port.
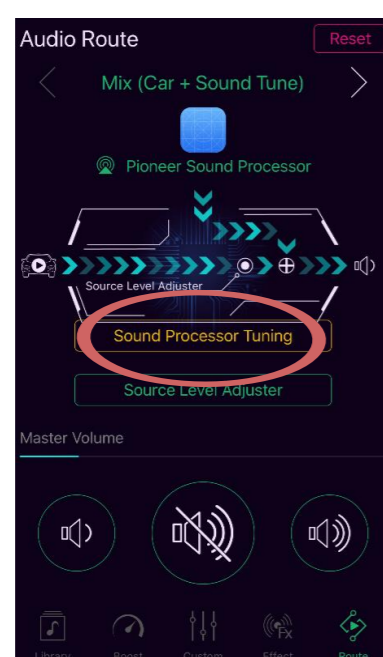

- Android smartphone: OTG USB cable connection is required/recommended
- iOS smartphone: Lightning-to-USB cable connection is required

2B   Select "Processor" in the lower right corner of the Sound Tune app user interface. The first time the Source Calibration procedure is performed, you must input your vehicle information. Once complete, click the down arrow in the upper left corner of the Sound Tune app user interface to return to the Sound Calibration procedure. If you have already saved your vehicle information, you can proceed to Step 2C below.
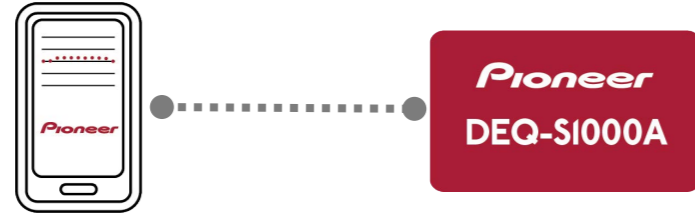

2C   Select "Sound Processor Tuning" in the center of the Sound Tune app user interface.
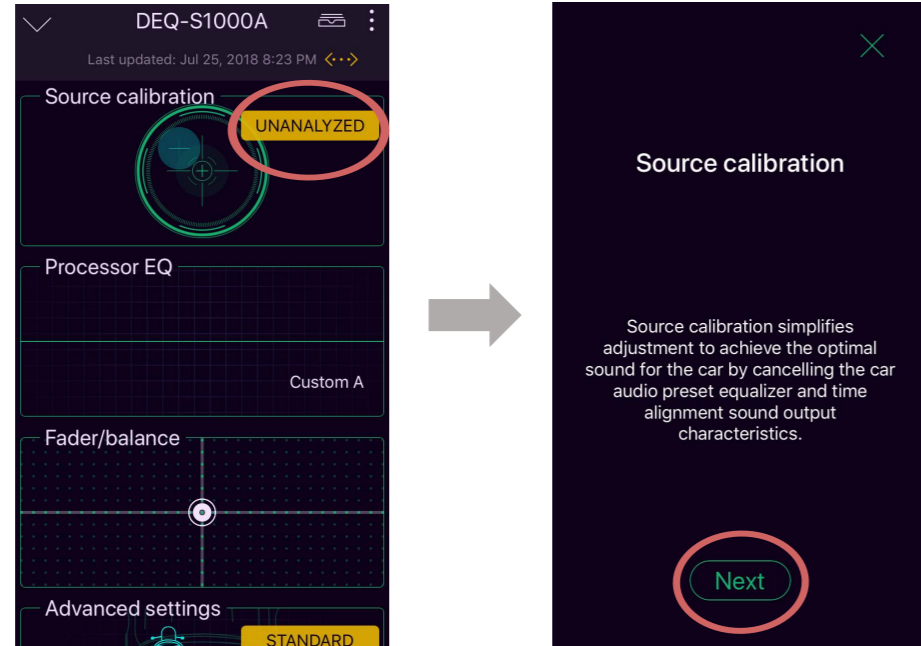
Step 3: Source Calibration Procedure

· Complete Step 1 and 2 above. Ensure you have the Source Calibration file available and ready for playback through the original headunit.

Confirm the Pioneer Sound Tune app is still open and running on your Android or iOS smartphone and your smartphone is still connected to the Pioneer Universal Sound Processor via the USB port.
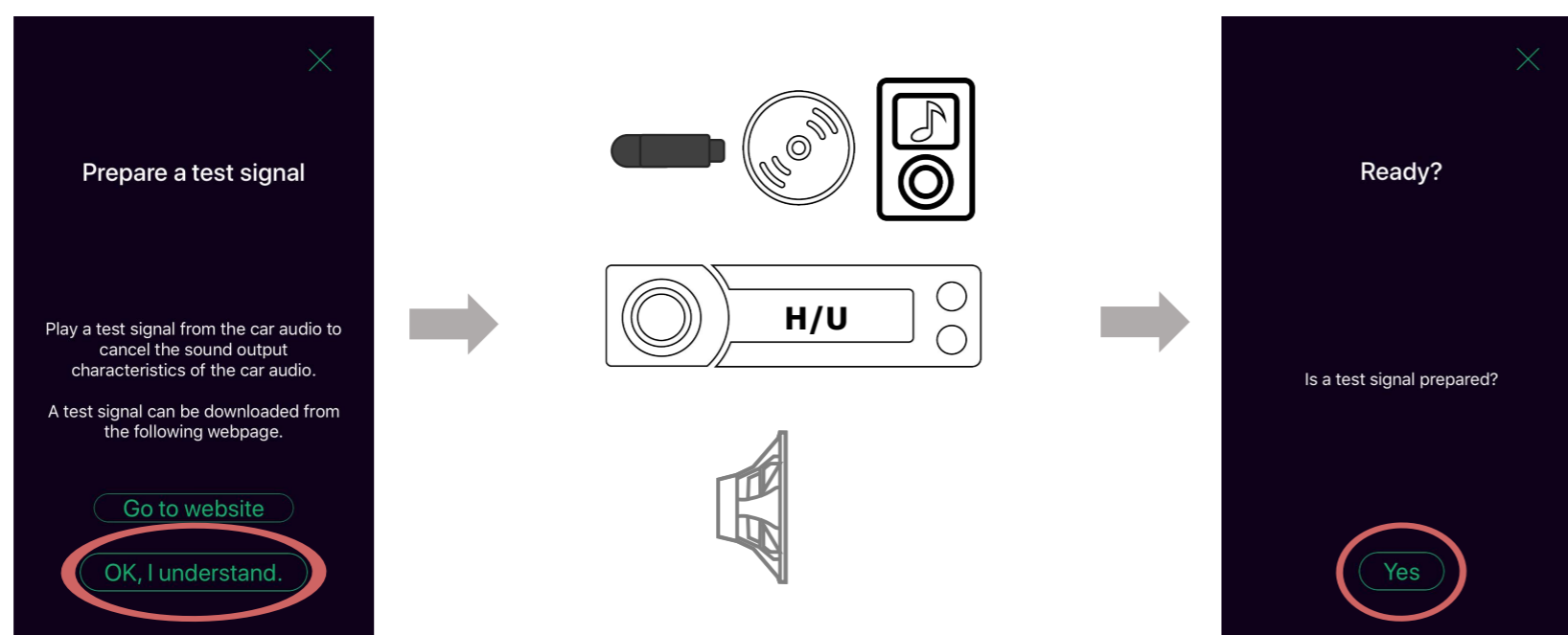

- Android smartphone: OTG USB cable connection is required/recommended
- iOS smartphone: Lightning-to-USB cable connection is required

3A Tap the "UNANALYZED" key (if this is not the first time performing the Source Calibration procedure, this key will be labled "ANAYLYZED"). Select "Next".
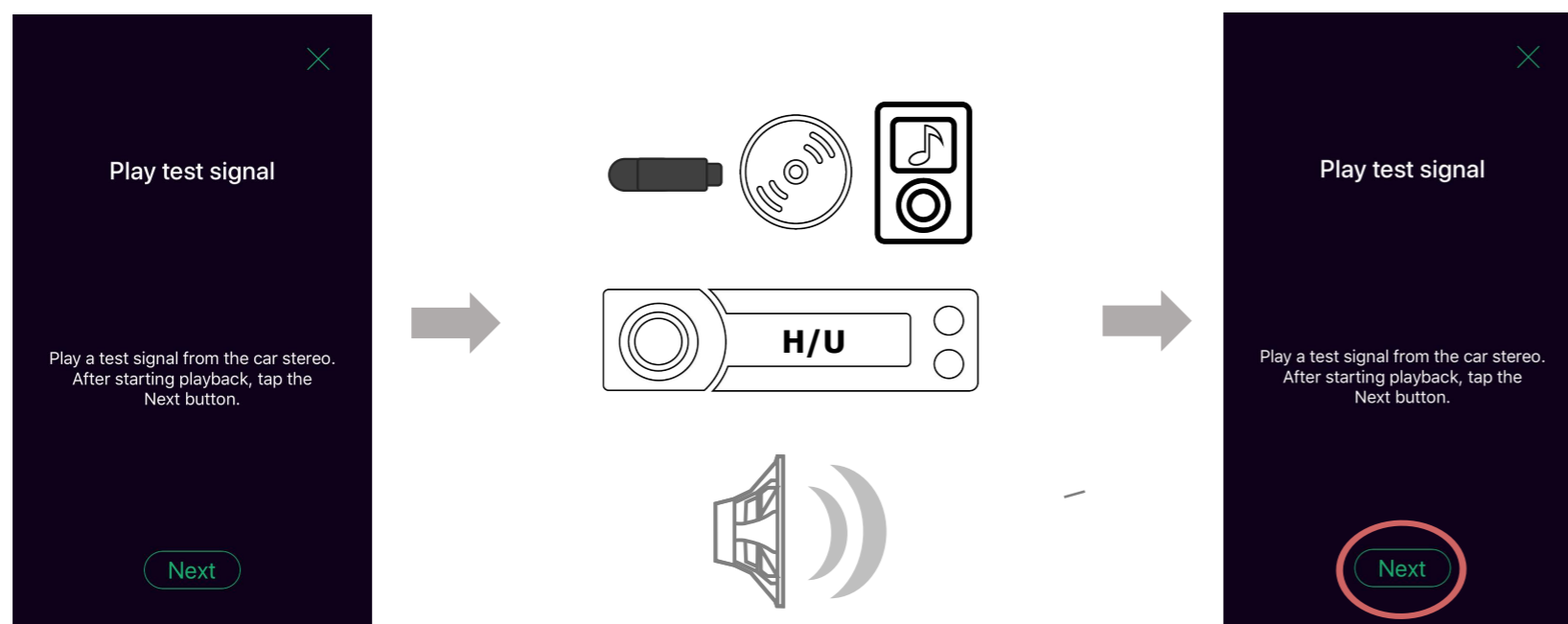

3B Confirm you have downloaded and prepared the Source Calibration file from Step 1 and select "OK, I understand.". Prepare the original headunit to play the Source Calibration test signal file and select "Yes".
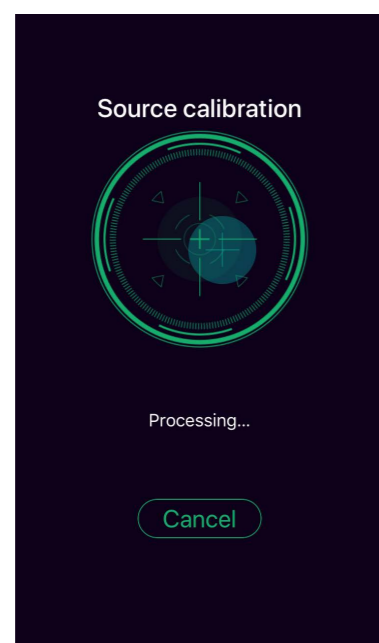

If you have not downloaded and prepared the Source Calibration file, you can select "Go to website" to review and download the file (you can also return to Step 1 of this guide and complete the required actions).
If you are having trouble, contact your Pioneer Authorized Dealer for assistance with the Source Calibration procedure.
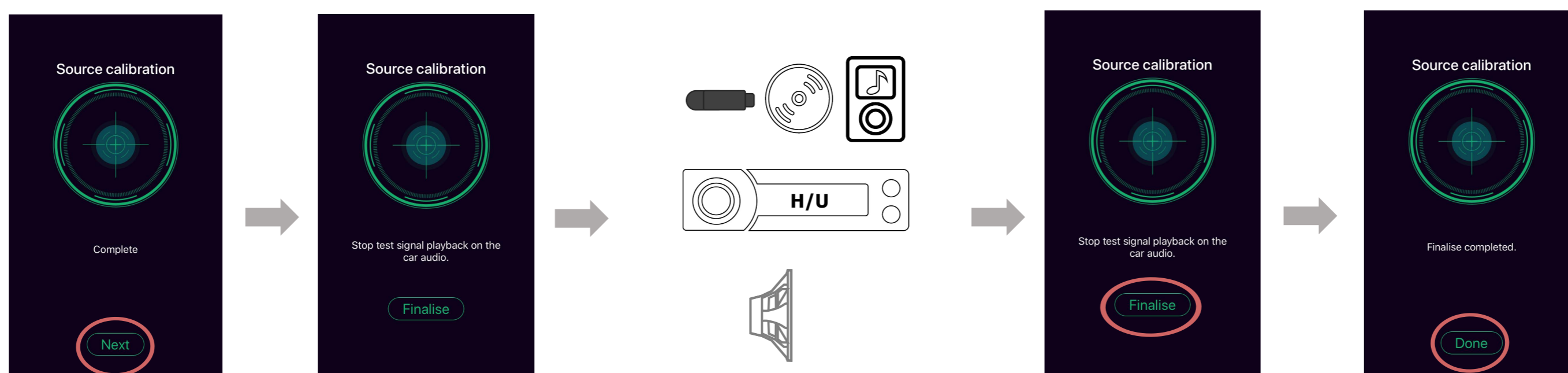
3C Start the playback of the Source Calibration test signal file on the original headunit and select "Next" in the Sound Tune app user interface.

3D The Sound Calibration procedure analyzes and compares the signal received from the original headunit to the Pioneer Source Calibration test signal file. If any frequency response anomalies are identified, the Pioneer Sound Tune app will adjust the settings of the Pioneer Universal Sound Processor to compensate for these anomalies. This process may take several minutes.

3E Once the analysis and adjustment is completed, the Pioneer Sound Tune app UI will display the "Complete" message. Select "Next" to continue. Stop the playback of the Source Calibration test signal file on the original headunit and select "Finalise" to continue. The Sound Calibration procedure is complete, select "Done" to return to the Sound Tune app main screen.

Error Code	Occurs during	Action / Solution
502	Step 3D: Source calibration processing	Please close and restart the SoundTune app
503	Step 2: Prepare the system for Source Calibration	Please close and restart the SoundTune app
504	Step 2: Prepare the system for Source Calibration	Please close and restart the SoundTune app
505	Step 2: Prepare the system for Source Calibration	Please close and restart the SoundTune app
506	Step 3D: Source calibration processing	Please check the following items and repeat Step 3 1. Increase the volume of the original headunit 2. Confirm the Universal Sound Processor input is correctly connected to the original headunit output
507	Step 3D: Source calibration processing	Please check the following items and repeat Step 3 1. Increase the volume of the original headunit 2. Confirm the Universal Sound Processor input is correctly connected to the original headunit output
508	Step 3D: Source calibration processing	Please close and restart the SoundTune app
509	Step 3D: Source calibration processing	Please check the following items and try again. 1. Confirm the Source Calibration file downloaded in Step 1 is being used 2. Confirm that playback of the Source Calibration file downloaded in Step 1 functioning (check file type compatibility) 3. Confirm the Universal Sound Processor input is correctly connected to the original headunit output
530	Step 3D: Source calibration processing	Please check the following items and try again. 1. Confirm the Source Calibration file downloaded in Step 1 is being used 2. Confirm that playback of the Source Calibration file downloaded in Step 1 functioning (check file type compatibility) 3. Confirm the Universal Sound Processor input is correctly connected to the original headunit output
531	Step 3D: Source calibration processing	Confirm the Universal Sound Processor input is correctly connected to the original headunit output
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533	Step 3D: Source calibration processing	Confirm the Universal Sound Processor input is correctly connected to the original headunit output
534	Step 3D: Source calibration processing	Please close and restart the SoundTune app
535	Step 3E: Source calibration complete	Please close and restart the SoundTune app
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