

# LEXP2



## Purpose

The SoundGate LEXP2 lets you connect and control an Apple iPod directly from the controls on your factory Lexus radio.

## Features

The LEXP2 uses a simple “Y” harness for installation using factory connectors. There is no need to cut or splice any wires, including power and ground!



### *The LEXP2 works in the following vehicles:*

<b>LEXUS</b>	ES300/330*	2002–2006	All
<b>LEXUS</b>	ES350	2007–2008	All
<b>LEXUS</b>	GS300/430**	2001–2005	All
<b>LEXUS</b>	GS300/350/430/450H	2006–2009	All
<b>LEXUS</b>	GX470	2003–2008	All
<b>LEXUS</b>	IS300**	2001–2005	All
<b>LEXUS</b>	IS250/350	2006–2008	All
<b>LEXUS</b>	LS430	2001–2006	All
<b>LEXUS</b>	LS460	2007–2008	with Navigation
<b>LEXUS</b>	LX470**	2001–2003	All
<b>LEXUS</b>	LX470	2004–2007	All
<b>LEXUS</b>	LX570	2008	All
<b>LEXUS</b>	RX300*	2001–2003	with Navigation
<b>LEXUS</b>	RX330/350/400H	2004–2008	All
<b>LEXUS</b>	SC430*	2005–2008	All

\*audio systems without navigation do not display text

\*\*does not display text

**NOTE:** MP3 emulation mode is available only for 2006-2009 models with mp3 playback supported 5th Gen Navigation

**Check [www.soundgate.com](http://www.soundgate.com) for the most current compatibility information.**

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All other trademarks are the property of their respective owners.

**[www.soundgate.com](http://www.soundgate.com)**

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If you experience problems, call SoundGate Technical Support at 800-256-0808, or email us at [sgtech@soundgate.com](mailto:sgtech@soundgate.com).

iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

## Before You Start

### **WARNING**

#### **DO NOT DISASSEMBLE OR ALTER**

Doing so may result in an accident, fire or electric shock.

#### **Do not block your view**

Do not mount product or any added audio and/or video equipment where it can block your view through the windshield or your view of dashboard indicators and displays.

#### **Do not block the airbag**

Do not mount product or any added audio and/or video equipment where it can obstruct the operation of the safety device such as the airbag.

#### **Distraction warning**

Do not let product or any added audio and/or video equipment to distract you while you are driving.

#### **BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL**

Before starting any installation work, you must wait 90 seconds after turning the ignition switch to the LOCK position and disconnecting the negative (-) terminal from the battery. The supplemental restraint system (airbag) is equipped with a backup power source. If installation work is started less than 90 seconds after disconnection of the negative (-) battery terminal, the SRS may deploy. When the negative (-) terminal cable is disconnected from the battery, the clock and audio systems memory will be erased. Before starting installation work make a record of the clock and audio systems memory settings. When installation is complete, reset the clock and audio systems to their previous settings. Power tilt, power telescopic steering column, front power seats, power mirrors, and power shoulder belt anchorage are equipped with a memory function. The rear power seat is not equipped with a memory function.

When installation is complete, it is necessary to readjust the features to their previous settings

Never use a backup power supply (such as another battery) during installation work to avoid losing these memory settings.

### **CAUTION**

#### **DO NOT SPLICE INTO ELECTRICAL CABLES**

Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

#### **DO NOT ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS**

Cables or wiring that obstruct or get caught on the places such as the steering wheel, shift lever, brake pedals, etc. can be extremely hazardous.

#### **DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST**

Moisture or dust may result in product failure.

#### **HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS**

The wiring and installation of this product requires special technical skills and experience.

#### **USE ONLY SPECIFIED ACCESSORY PARTS**

Use of other than specified parts may damage product internally.

#### **FOLLOW THE OPERATIONAL AND INSTALLATION MANUALS.**

YOU SHOULD READ AND FAMILIARIZE YOURSELF THOROUGHLY WITH THE FOLLOWING INFORMATION PRIOR TO INSTALLING AND USING THIS UNIT. IN ADDITION, YOU MUST CAREFULLY READ AND FOLLOW THE INSTALLATION SCHEMATICS/INSTRUCTIONS FOR THE PRODUCT AND THE VEHICLE IN WHICH IT IS BEING INSTALLED. FAILURE TO FOLLOW INSTALLATION INSTRUCTIONS MAY DAMAGE THE PRODUCT AND THE VEHICLE, WILL VOID THE PRODUCT WARRANTY, MAY VOID THE VEHICLE WARRANTY

#### **CHECK YOUR LOCAL LAWS**

Some States/Provinces or other governmental jurisdictions (such as cities) may have laws that prohibit the operation of a video screen within the sight of the Driver. If you have purchased such a product, you should use the product only in locations where it is legal to do so, and if you do use the product, set up the screen so it is only visible to passengers.

#### **TROUBLESHOOTING**

Should this product fail to operate properly, please contact your Dealer or SoundGate Technical Support.

## Before You Start

### IMPORTANT

This unit is an interface adapter for Lexus head unit to control an iPod, iPod mini, iPod Photo, and fifth generation "Video" iPod.

iPod is a registered trademark of Apple Computer, Inc., registered in the United States and other countries.

This unit supports only iPod software versions after the October 2004 update.

**The iPod has NOT been designed to withstand automotive temperature extremes. You may damage your iPod if you leave it inside the vehicle on a hot or cold day. For further information please refer to the iPod manual.**

### About iPod Operation

The iPod is charging as long as it's connected to the LEXPD2 unit and the vehicle's ignition is "ON" or in the "Acc" position. The head unit does not have to be "ON".

The iPod automatically turns ON when you turn the ignition key into the "ON" or "Acc" position.

The iPod automatically turns OFF when the vehicle's ignition key is turned OFF. (The iPod is paused and goes into Sleep mode after two minutes of inactivity).

➤ iPod interface mode is displayed in the same way as a factory CD-changer or MiniDisc-changer.

➤ "Ok to disconnect" is shown on the iPod display while it is connected to this unit. The keys and wheel on the front of the iPod are disabled when in this mode.

If the iPod is disconnected from the unit, it will begin normal operation within one minute.

This unit is equipped with:

Built-in Electronic Ground Noise Isolator to eliminate unwanted car engine noise and iPod hard drive noise.

Electronic Source Level Adjustment (allows you to adjust sound level for each source independently)

### About iPod Settings

We strongly recommend that you organize your songs into playlists for proper operation of this unit.

**To avoid improper track number display(Do NOT place more than 99 songs into single playlist) if iPod does not have playlists/songs it may cause unpredictable outcome and improper operation of the unit. EMPTY PLAYLISTS MAY ALSO CAUSE UNPREDICTABLE BEHAVIOR, ESPECIALLY EMPTY PLAYLISTS THAT ARE LOCATED IN THE MIDDLE OF ALL PLAYLISTS.**

This unit does not support iPod Equalizer. We recommend that you set the iPod Equalizer to be "OFF", before connecting the iPod to the unit to prevent unwanted sound distortions.

We recommend that you set "Sound Check" on the iPod to "ON".

### IMPORTANT



#### Important Please Read!



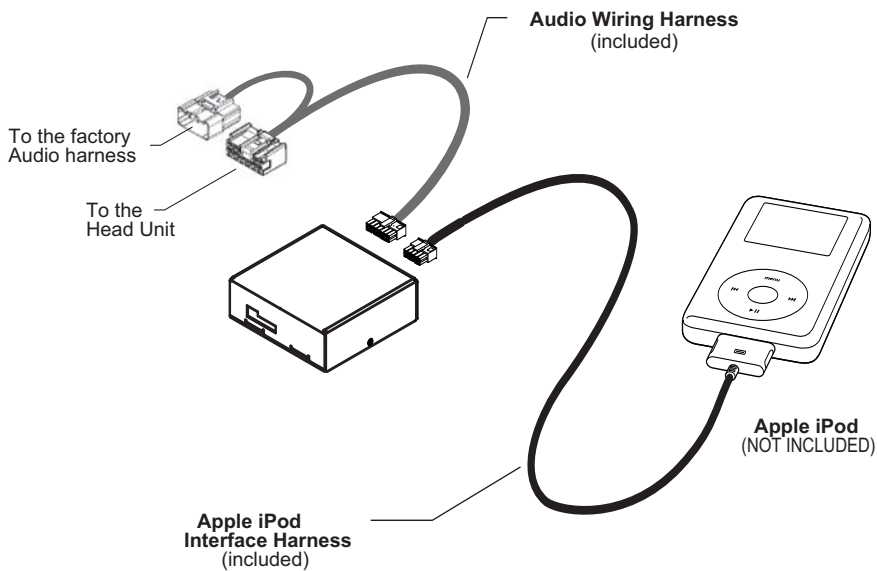
(1) After a delay of five seconds, this product will automatically bypass the automobile manufacturer's on-screen warnings concerning use of the onboard navigation system. These warnings are: "Caution, Drive safely and obey traffic rules. Watching this screen while vehicle is in motion can lead to a serious accident. Make selections only while stopped. Some map data may be incorrect. Read safety instructions in Navigation Manual."

**(2) PLEASE PRE-NOTIFY EVERY DRIVER OF THIS VEHICLE OF THE CONTENT OF THE AUTOMOBILE MANUFACTURER'S WARNING.**

**(3) IF YOU PREFER THAT THIS PRODUCT NOT ELIMINATE THE FOREGOING WARNINGS, YOU MAY DISABLE THIS FEATURE BY FOLLOWING THE INSTRUCTIONS IN THIS OWNER'S MANUAL, OR CALL SOUNDGATE TECHNICAL SUPPORT.**

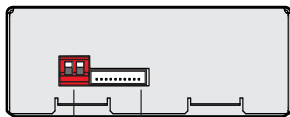
## Connections

### Connecting the LEXPD2

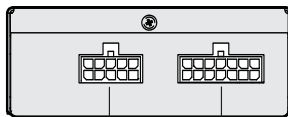


### Connecting the units

Model: LEXPD2

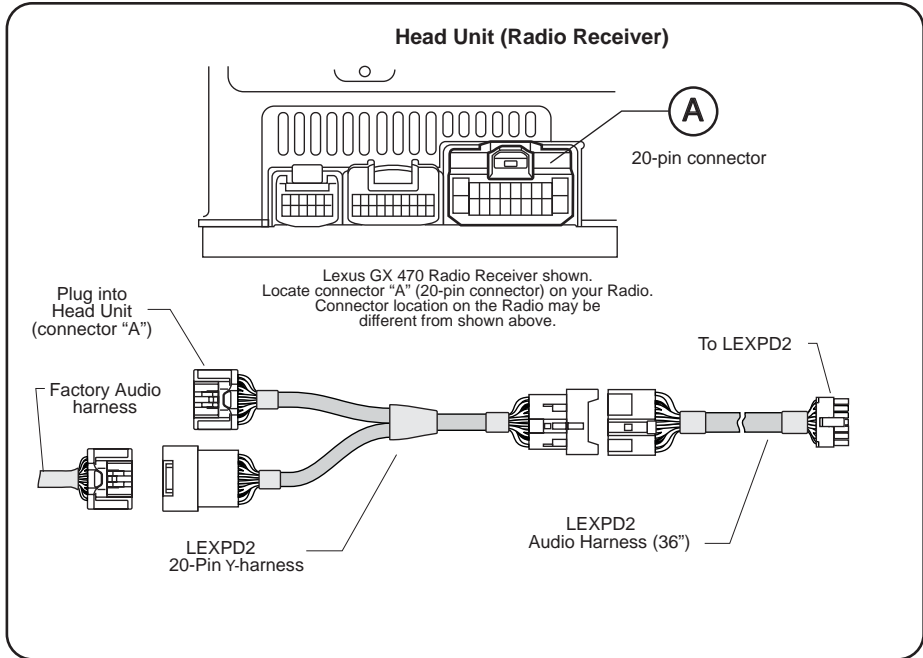


Used for programming  
Service Port



Apple iPod interface harness  
Power and Audio wiring harness

## Connecting the LEXPD2 to head unit (for Lexus vehicles)



**⚠ WARNING**

To Un-plug any connector do NOT pull it by the wires.

# Installation

## IMPORTANT

We strongly recommend that you install the unit in easily accessible location. So you can later upgrade the unit or re-program it in case of incorrect programming.

### Installation

Gain access to the back of you vehicle's Head Unit.

Find the same port as our Audio Harness (see "Connecting LEXPD2 to head unit" )

Disconnect the existing connector and plug in our Audio connector into this port, then plug female end of Audio Harness to the plug in for your factory connector. Audio harness female connector is not used In some vehicles.

Plug the other end of Audio cable into designated port on LEXPD2.

Connect iPod cable as shown in the "Connecting LEXPD2" picture.

Setup proper Emulation Mode for this unit (see "Emulation Mode Selection")

Turn the car on and check LEXPD2 functionality and (especially Text capability) before the final assembly.

### Emulation Mode Selection

#### MD Changer Emulation Mode programming steps:

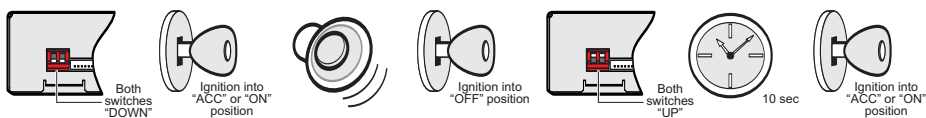
Properly install this unit.

Put both programming switches in "DOWN" position.

Put ignition switch into "ACC" position.

Wait for long beep followed by a few short beeps. This take up to one minute.

Put ignition switch into the "OFF" position.



#### CD Changer Emulation Mode programming steps:

Properly install this unit.

Put "Right" programming switch in the "DOWN" position.

Put ignition switch into the "ACC" position.

Wait for long beep followed by a few short beeps. This may take up to one minute.

Put ignition switch into the "OFF" position.



## IMPORTANT

Improper Emulation Mode setting may cause this unit to be unrecognized by head unit.

CD or MD Changer Emulation Mode Programming **MUST BE DONE** in order for the unit to find proper address location in the vehicle Audio/Video network.

# Installation

## CD-MP3 Emulation Mode Selection (CD-MP3 emulation)

CD-MP3 Emulation Mode programming steps:

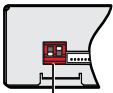
Properly install this unit.

Put "Left" programming switch in "DOWN" position.

Put ignition switch into the "ACC" position.

Wait for long beep followed by a few short beeps. This may take up to one minute.

Put ignition switch into the "OFF" position.



Left switch  
DOWN



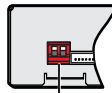
Ignition into  
ACC or IONO  
position



Wait for long beep



Ignition into  
OFF position



Both switches  
UP

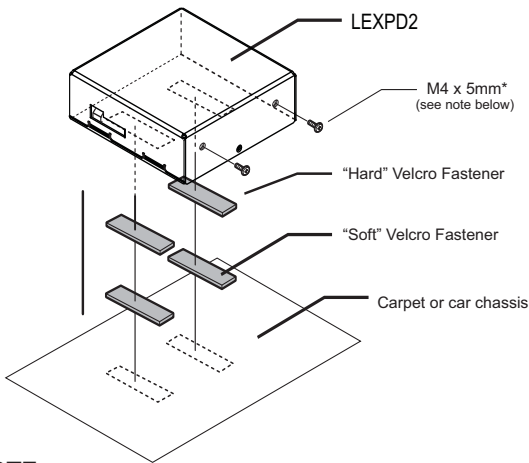


Wait 10 sec



Ignition into  
ACC or IONO  
position

## Mounting unit using Velcro fasteners



### NOTE

Velcro Fasteners are not included

SoundGate strongly recommends grounding the unit to the car chassis for best results.

### IMPORTANT



### Important Please Read!



(1) After a delay of five seconds, this product will automatically bypass the automobile manufacturer's on-screen warnings concerning use of the onboard navigation system. These warnings are: "Caution, Drive safely and obey traffic rules. Watching this screen while vehicle is in motion can lead to a serious accident. Make selections only while stopped. Some map data may be incorrect. Read safety instructions in Navigation Manual."

**(2) PLEASE PRE-NOTIFY EVERY DRIVER OF THIS VEHICLE OF THE CONTENT OF THE AUTOMOBILE MANUFACTURER'S WARNING.**

**(3) IF YOU PREFER THAT THIS PRODUCT NOT ELIMINATE THE FOREGOING WARNINGS, YOU MAY DISABLE THIS FEATURE BY FOLLOWING THE INSTRUCTIONS IN THIS OWNER'S MANUAL, OR CALL SOUNDGATE TECHNICAL SUPPORT FOR MORE INFORMATION.**

### Activate / Deactivate "I Agree" Automatic Bypass Function

Put your device in Simple Mode by rapidly pressing the [SCAN] button 8 times (MUST BE DONE within 1-2 seconds). Push DISC REPEAT button to hear a long beep to toggle the "I Agree" Automatic Bypass Function ON and OFF. (For vehicles not equipped with DISC REPEAT as a physical button, push and hold the REPEAT button until you hear a long beep to toggle the "I Agree" Automatic Bypass Function ON and OFF.

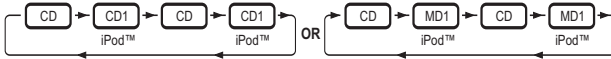
# Head Unit Controls

## Source Selection

Select desired source by pressing **DISC** button on the head unit or **MODE** on the steering wheel control. (See diagram below)

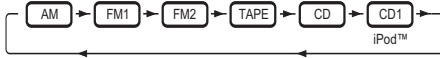
### Head Unit:

To switch between the unit sources you need to use "DISC" or "CD" button on the radio (Diagram below assumes factory CD changer is present).



### Steering Wheel control:

To switch between the unit and radio you need to use the "MODE" button on the steering wheel control. (Diagram below assumes following sources are present).



## Functionality Description

Audio input dedicated for Apple iPod can only be used for Apple iPod integration. Control of Apple iPod is done through your head unit or the steering wheel controls (explained below). This unit supports fourth generation Apple iPod, iPod Mini, iPod Photo, iPod Nano and fifth generation "Video" iPod.

This unit can be programmed in CD changer emulation mode, MD changer emulation mode and Mp3 Emulation. Please see attached chart to determine which emulation mode is compatible with your vehicle.

### MD changer emulation

For Radio Receiver with LCD



Apple® iPod™



Apple® iPod™ (MD-TEXT)

### CD changer emulation

For Radio Receiver with LCD



Apple® iPod™

For Radio Integrated into Navigation System



Apple® iPod™

(Radio Integrated into Navigation System)  
CD-Text support

### For Radio Integrated into Navigation System



Apple® iPod™ (Radio Integrated into Navigation System)  
Direct disc selection  
MAY NOT look/operate or be available on different year and model



Song Title, Artist Name  
or Album Name  
(see "DISC SCAN" function) Playlist Title

**TRACK+** and **TRACK-**

Select the desired track

(Maximum number of tracks is 999 for CD-MP3 changer Emulation mode).

You can fast switch through tracks by repeatedly pressing the [TRACK+] / [TRACK-] button.

The track will change after a brief pause when you stop pressing the button.

**NOTE:** If a playlist only contains one track, the [TRACK+] / [TRACK-] buttons will not function.

**FOLDER+** and **FOLDER-**

Select the desired playlist (Maximum number of playlists is 99).

You can fast switch through playlists by repeatedly pressing the [FOLDER+] / [FOLDER-] button.

The new playlist will start after a brief pause when you stop pressing the button.

**NOTE:** If there are no songs in a playlist the unit will jump to the next playlist.

**SCROLL UP** and **SCROLL DOWN**

Fast Forward/Rewind the song

**NOTE:** For vehicle not equipped with [DISC+] and [DISC-] buttons, if "SCAN" function is active use [SCROLL UP] and [SCROLL DOWN] as [DISC+] and [DISC-] to select the desired playlist (in this case [DISC+] and [DISC-] will work as a [FOLDER+] and [FOLDER-])

**RPT**

Activates iPod "Repeat One" function

**FOLDER RPT**

Press and hold the RPT button to activate playlist repeat. This mode will cause the current playlist to start over with the first track after the last track has been played, instead of moving on to the next playlist.

**NOTE:** Repeats all songs in active playlist.

**RAND**

The RAND button activates the playlist randomizer function. All tracks in the current playlist will be placed into a new, random order. The currently selected track will be renumbered to Track 1, and all subsequent tracks will be random selections from the playlist. After activating the playlist randomizer, the displayed track number does not map to the physical track number in the playlist, but rather to the new, randomized order.

**NOTE:** Shuffle all songs in the active playlist. iPod starts playing songs from your entire playlist in random order, skipping audiobooks.

**FOLDER LIST**

The FOLDER button will bring up a new display that allows you to scroll through the playlists and tracks on your iPod device. [Folder Up] or [Folder Down] will scroll through playlists, while [File Up] or [File Down] will scroll through tracks. If a playlist contains a large number of songs, it may take some time for the data to be transferred to the head unit.

This can cause the scroll buttons to become unresponsive during rapid scrolling, until data has been loaded from the iPod.

**NOTE:** Some vehicles' head units do not support the Folder/File display function. In this case when you press FOLDER you will see a blank display in the Folder and File lists.

**DETAIL**

Pressing the DETAIL button will bring up details on the current track. It will display Album Title, Track Title, and Artist. Genre is not supported and will always be blank.

**NOTE:** You can switch tracks while in DETAIL view, but it will not display the current track number.

**Displayed Errors (available only as a TEXT message)**

Check iPod... iPod is not connected

**TRACK+** and **TRACK-**

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**Displayed Errors (available only as a TEXT message)**

Check iPod... iPod is not connected

## iPod controls

### Simple Mode

Enable/Disable "Simple mode"- press the [SCAN] button 8 times (**MUST BE DONE** within 1-2 seconds). You will hear a short beep.

This feature will allow you to control the iPod™ manually. [Track+], [Track-] on your Head Unit will still select the desired Track, but all other control can only be done through the iPod.

**Playlist and track information will not be displayed on the head unit in "Simple mode".**

The unit will keep this mode in memory (even after vehicle ignition is turned OFF and back ON) until this mode is turned OFF (disabled).

### iPod Sound Level Adjustment

Enable "Simple mode"

Start playing desired song by pressing the [Play/Pause] button on the iPod

Activate "SCAN" function on the head unit

Set the desired volume on the head unit

While "SCAN" is active use [SCROLL UP] to increase volume and [SCROLL DOWN] to decrease volume.

**NOTE:** Remember, a high sound level may result in noticeable sound distortion.

## *Why SoundGate Dealers have the edge...*

The technologies used in today's vehicles are as sophisticated as any laptop computer. At SoundGate we believe these new technologies are full of opportunities for mobile electronic dealers across the nation. We make it a high priority to not only research these new systems, but to understand them and their impact on the aftermarket car audio industry. Armed with this knowledge, we are well equipped to help you integrate new components into these systems with our innovative, high-performance interfaces and unparalleled technical support.

## *Be sure to ask your autosound specialist about these other exciting SoundGate products...*

- Auxiliary Input Interfaces and Docking Stations which allow you to input audio from MP3 Players, DVD/Video, Satellite Radio, and more to OEM and aftermarket car audio systems
- High-performance Radio Replacement
- Interfaces for seamlessly integrating new receivers or CD players into OEM audio systems
- Competition-Grade Interfaces for adding amplifiers
- Remote Audio Control Interfaces that let you control aftermarket receivers and CD players from your factory rear seat, or steering-wheel mounted audio controls.
- And many others!

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# Simple-fi.™

[www.soundgate.com](http://www.soundgate.com)