

USA·SPEC

PA20-TOY

iPod to Toyota / Lexus car stereo Interface
with song title display

USA·SPEC
iPod INTERFACE

OWNER'S MANUAL

TECH. SUPPORT
(626) 336-3836
9 AM ~ 4 PM PST
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Thank you for purchasing **USA·SPEC** product. This manual describes the functions and operation of PA20-TOY iPod interface for Toyota cars. Please read this manual before installing the product to your vehicle.

!!IMPORTANT!!

- ❖ It is strongly recommended that the unit is installed in an accessible location, so that it can later be easily reset or upgraded.
- ❖ **Eject ALL CDs from the built-in CDP player or CD changer before installation or disconnect the power to radio!!!**
- ❖ **USA·SPEC** sells its products through authorized dealers so we can insure customers will receive proper services from the dealers. **USA·SPEC** reserves the right to offer technical support or warranty only on products purchased through authorized **USA·SPEC** accounts.
- ❖ It is strongly recommended that buy **USA·SPEC** product from sellers **who provide dedicated phone contact support**. **USA·SPEC** will not provide technical support or warranty for purchases made through any unauthorized internet sellers.
- ❖ **SAFETY NOTE:** You should always give full attention to driving. Do not operate iPod in such a way that distracts you while you are driving.

!!CAUTION!!

- In general, iPod has not been designed to withstand temperature extremes in automobiles. Please consult your iPod Owner's Manual regarding acceptable operation and storage temperatures.
- Do not disassemble or alter the cable and interface box.
- Make the connections correctly.
- Do not cut away the wire sheath or use the power for other equipments.
- Do not install in locations which might hinder vehicle operation or create hazards for vehicle occupants.
- Having the wiring and installation done by professionals.
- Arrange wiring so it is not crimped or pinched.
- Do not use this product for purposes other than stated for the vehicle.

Section 1. ABOUT YOUR INTERFACE PA15-TOY

This interface connects an iPod directly to your Toyota audio system. Its on-board software translates commands from your Toyota CD changer controls into commands that the iPod understands. This interface enables the iPod to take the place of a Toyota CD changer and provides the following benefits:

- Directs the iPod's audio output to Toyota vehicle audio system for optimal sound quality playback.
- Controls the iPod via vehicle's radio and steering wheel controls.
- Charges the iPod's internal battery, and charging stops automatically at one hour after iPod is paused. iPod goes to sleep mode when charging stops.

Compatibility

Future firmware updates for your iPod may affect the features and functions described in this owner's manual.

This interface is capable to co-exist with either in-dash CD changer or a Toyota slave CD changer in your car stereo system.

Package Contents

PA1-TOY contains one each of PA20-TOY interface adaptor, CAS-TYi, CAS-TA, and CB-PA100

Text Display of Song information

Artist name and song title can be displayed on radios equipped with a "TEXT" button or a "TITLE" touch key on navigation screen. Text display is supported in Hybrid Mode and Playlist Mode. Track search by artist, song title or album from radio is NOT supported.

Applications

- PA15-TOY is applicable to the following Toyota vehicles:

4Runner	98-08	Land Cruiser	98-08	Sequoia	98-08
Avalon	98-08	Matrix	05-08	Sienna	98-08
Camry	98-08	MR2, Celica	98-04	Solara	98-08
Corolla, Echo	98-08	Prius	04-08	Tacoma	98-08
Fj Cruiser	07-08	RAV4	98-08	Tundra	98-08
Highlander	01-08	Scion	all models	Yaris	07-08

NOTE 1: To display TEXT information of song on some of the Tundra, Avalon and Solara radio, PA20-TOY should be configured to the SAT port of radio. Please see the DIP switch table in section 2-5 of this manual.

NOTE 2: Only when PA20-TOY is configured to SAT port, it requires a cable adaptor to work with factory installed SAT receiver. call **USA:SPEC** @ 626-3363836 to order

NOTE 3: 98-02 Sienna requires cable adaptor CAS-TLC to retain the steering wheel control of radio.

NOTE 4: 01-03 Lan Cruiser requires cable adaptor CAS-TLC for installation.

- PA20-TOY is applicable to the following Lexus vehicles:

ES 300/330/350	IS 250/300/350
02-03 (requires CAS-LEX cable)	01-05 (requires CAS-LEX cable)
04-08	06-08
GS 300/350/430/450	LX 470
02-03 (requires CAS-LEX cable)	04-08
04-08	
GX 470	RS 300/330/350/400H
03-08	01-03 NAV only (requires CAS-LEX cable)
	04-08

- * **USA:SPEC** verified the published radio and vehicle application to the best of our ability. Due to uncontrollable factors, **USA:SPEC** can not 100% guarantee every published application. These factors include variables such as, anomalies within a factory radio, factory radio heretofore unknown to **USA:SPEC** and partial model year changes.

Section 2. HYBRID MODE, DIRECT MODE and AUX OPTION

PA15-TOY provides three ways to control your iPod through the car radio, namely *Hybrid Mode*, *Playlist Mode* and *Direct Mode*. Between Playlist Mode and Hybrid Mode, only one of them will be activated automatically by PA20-TOY depends on the model or type of iPod

2-1 Direct Mode: Search and select music on iPod directly just as you would in portable use.

The music will play back through your car stereo. Use the track up/down, fast forward, and reverse buttons on your radio to control music playback. DISC #8 is dedicated to Direct Mode use. Use your iPod in Direct Mode by selecting DISC #8 with disc up or button on radio.

2-2 Hybrid Mode: Operate and control the iPod like it is a CD changer. This mode allows you to access up to six playlists on the iPod. The instructions for playlist creation and playback controls are in Section 5 of this manual. **Additionally, while in Hybrid Mode, the key pads on iPod can be operated directly as if it were in Direct Mode.**

2-3 Playlist Mode: Access the Playlists on iPod in the same way as it is in Hybrid Mode. However, iPod's screen will only display "OK to disconnect" or "Attached to accessory" and, iPod's keypads are not function.

- If the playback of a Playlist is manually interrupted by using the iPod's key pad, and a song or music in a new category is played, the interface module memorizes the last played track number of the new category. "New category" means file, or folder, or Playlist, or artist, etc. which is different from the Playlist being played. When you return to the same DISC on radio later, the interface module will use the "memorized" track number (note: just the track number, not the last played song in the new category) to playback the Playlist related to this DISC.
- When the iPod is connected to the interface module, the iPod will take approximately 30 seconds to complete its external control mode configuration. During this period of time, the iPod screen's display will continue change until the configuration is completed.
- iTouch, iPhone and G3 iPods are **NOT** applicable to Hybrid Mode.

2-4 RCA AUX INPUT

Besides iPod, PA20-TOY also can connect a second audio source to radio. Connecting the second audio source to the RCA jack labeled **AUX INPUT**. AUX input is enabled by setting the DIP switch #1 at the side of this adaptor should be at ON position. When radio is in CD mode, AUX input is accessed at CD9-1.

2-5 DIP Switch setting summaries

Switch setting	Function	Remark
# 1= ON	Enabel RCA AUX input	Swieth #2, # 3 & #4 are unrelated to this function
# 1= OFF	Disabel RCA AUX input	Swieth #2, # 3 & #4 are unrelated to this function
# 2= ON & # 3= ON & # 4= ON	To access iPod with CD or DISC button on Toyota or Lexus radio	Display text on radilo has "TEXT" or "TITLE" button
# 2= ON & # 3= ON & # 4= OFF	To display TEXT on Tundra or Solara radio thru "SAT" band	Access iPod with SAT/AM button and use radios CD button for functions.
# 2= ON & # 3= OFF & # 4= OFF	To display TEXT on Avalon radio (w / tape player) thru "SAT" band	Access iPod with SAT/AM button and use radios CD button for functions.
# 2= OFF & # 3= OFF & # 4= OFF	To display TEXT on Avalon radio (w / o tape player) thru "SAT" band	Access iPod with SAT/AM button and use radios CD button for functions.

2-6 Summary of iPod Model vs. Operating Modes

At.....	radio plays.....	and it is in.....	Remark
DISC # 1	1st Playlist	Hybrid or playlist Mode (depends on iPod model)	
DISC # 2	2nd Playlist	Hybrid or playlist Mode (depends on iPod model)	
DISC # 3	3rd Playlist	Hybrid or playlist Mode (depends on iPod model)	
DISC # 4	4th Playlist	Hybrid or playlist Mode (depends on iPod model)	
DISC # 5	5th Playlist	Hybrid or playlist Mode (depends on iPod model)	
DISC # 6	6th Playlist	Hybrid or playlist Mode (depends on iPod model)	
DISC # 7	All Songs on iPod	Hybrid or playlist Mode (depends on iPod model)	
DISC # 8	All Songs (no text display)	Direct Mode	
DISC # 9	AUX Input		If DIP switch #1 is set to ON

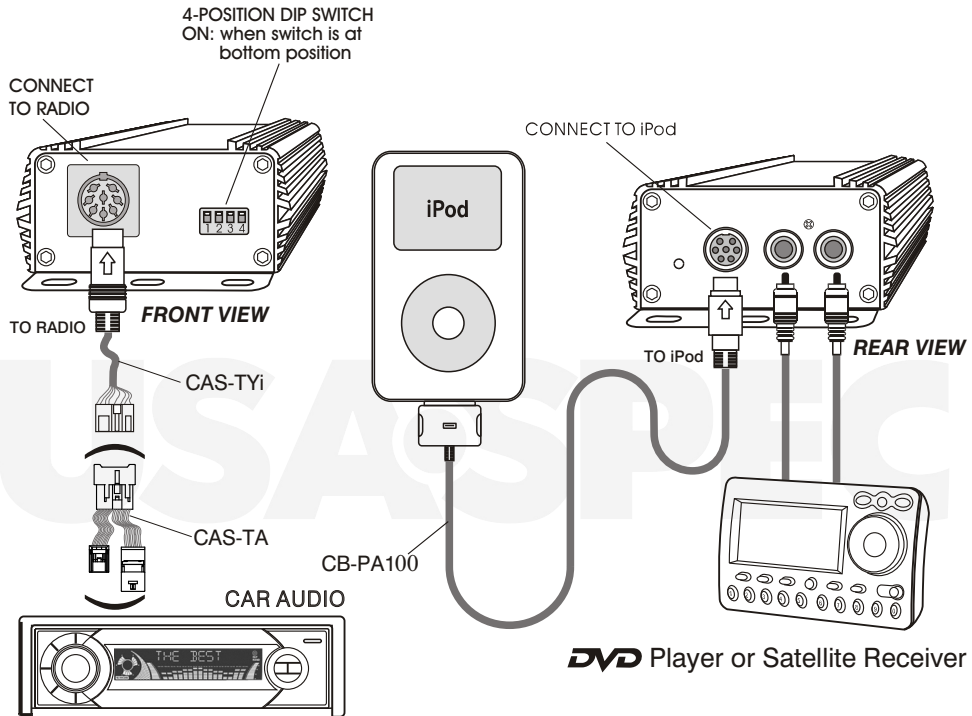
NOTE: To those iPod models which support *Hybird Mode*, DISC # 8 or *Direct Mode* is skipped or omitted by PA20-TOY automatically.

Section 3. WIRE CONNECTION

- Step 1- Remove radio from the dash.
- Step 2- Plug the round din plug of the CAS-TYi to PA20-TOY interface adapter box where it is labeled "RADIO"
- Step 3- Plug the other end of CAS-TYi cable to the receptor at back of radio. (For some of recent year models, plug CAS-TA to the back of radio and connect CAS-TYi to the other end of CAS-TA.)
- Step 4-a- Connect the audio output of your auxiliary devices to AUX input jack on PA20-TOY adapter box if the additional AUX option is selected by setting the DIP swich#1 to "ON" position.
- Step 4-b- Set the DIP switch #2, #3 and #4 according to the table in Section 2-5.
- Step 5- Plug CB-PA100 cable to PA20-TOY adaptor box where it is labeled "iPod "
- Step 6- Reinstall radio to the dash.

WARNING!!

Use only the iPod connection cable which comes with PA20-TOY interface adaptor.
iPod Connection cables from other sources may look similar, but they may damage your iPod.



Section 4.

(Blank on purpose)

Section 5. CONNECTING & PLAYING of iPod

5-1 Connecting iPod to the interface

After iPod connect to PA20-TOY, iPod will take a few moments to get into the external control mode. During the initialization, iPod screen may shift or change continuously for approximately 25 seconds

5-2 Select iPod mode on Toyota radio

Press the AUX or DISC button on radio repeatedly until "CD 7-x" appears on the radio display (x is the track number of "Now Playing" song on iPod). This display confirms that iPod mode has been completely synchronized and activated. Synchronization timing varies according to the number of Playlists on your iPod.

If iPod was playing previously before radio or ACC power was OFF, and the iPod was not disconnected, playback resumes from where it was stopped.

5-3 Disconnecting iPod from the interface

If your iPod is disconnected during playback in iPod mode, the radio will automatically switch to AM/FM mode.

After disconnecting, iPod screen changes from the external control mode screen back to the normal menu. Press and hold the Play/Pause button on iPod may get the normal menu back faster.

5-4 Playback of songs on iPod

All audio tracks on your iPod will be played at disc 7. Track order is determined by the default order on your iPod. Selecting disc 1 to disc 6 on radio will allow playback of 6 Playlists on iPod. If iPod was playing any of its Playlist right before the connection, the same Playlist will continue to play and repeated at disc 7 and iPod will switch to "All" after the last track in this playlist is played.

5-5 Selecting a Playlist

Press DISC UP (Λ) or DISC DOWN (V) button to select a Playlist. The selected Playlist will begin playing and the Playlist number and track number will be displayed. In rare cases, this may take up to few seconds for the completion of synchronization.

After playing the last song in the current Playlist, playback will start again from the first track of this Playlist.

Playlist naming

- When iPod is connected to your radio via PA20-TOY interface adapter, the adapter scans all available Playlists on iPod and look for designated Toyota Playlists which are created for direct access with the DISC controls on Toyota radio. The designated Toyota Playlists are related to DISC number in the following manner:

DISC 1: TOYOTA1...
DISC 2: TOYOTA2...
DISC 3: TOYOTA3...
DISC 4: TOYOTA4...
DISC 5: TOYOTA5...
DISC 6: TOYOTA6...
DISC 7: ALL SONGS on iPod

The naming of designated Toyota Playlists in iTunes for PA20-TOY interface must be exactly as shown. Toyota must be in capital letters and there can be no spaces between Toyota text and number.

However, you may add any text after the correct naming of a Playlist. (i.e. Toyota1-Jazz, Toyota3_Favorite3 are acceptable Playlist names for PA20-TOY iPod interface.)

- If no designated Toyota Playlists are created, PA20-TOY adapter automatically relates to the first five Playlists on **iPod** to DISC number 1 to 6 regardless Playlist naming.
- If less than six designated Toyota Playlists are created, PA20-TOY adapter automatically fills up the rest of DISC numbers beginning with the first available Playlist on **iPod**.
Example: if only three designated Toyota1, Toyota3 and Toyota5 Playlists are created, the disc number on radio will be:

DISC 1: Toyota1...
DISC 2: (1st available Playsit on **iPod**)
DISC 3: Toyota3...
DISC 4: (2nd available Playlist on **iPod**)
DISC 5: Toyota5...
DISC 6: (3nd available Playlist on **iPod**)

The **iPod** interface does not recognize a Playlists that contains no audio tracks regardless of Playlist naming. The **iPod** interface also does not recognize the "On-The-Go" Playlist on your **iPod**.

5-6 Playback function controls

You can control playback with several functions. These functions are generally cancelled when you press select radio buttons; disconnect the **iPod**, or POWER OFF the radio or ACC.

SCAN

Press the scan button, each track in the current Playlist play for 10 seconds. If SCAN is pressed at DISC 6, it will play all songs in **iPod** for 10 seconds each.

Random (Shuffle)

Press the "RDM" random button, songs and Playlist will playback in random order. Some radio models use the "P scan" button to activate random mode.

Repeat

Repeat of a song being played is not supported.

Track Up/Down

Press the "NEXT" button to advance to the next track in the Playlist. Press the "PREV" button to go to the beginning of the track that is being played. Press the track down button twice to go to the previous track.

If the track up or track down buttons is pressed quickly in repetition, the track numbers displayed may change unevenly. You may also hear short bits of audio during repeated presses of track up and track down buttons.

If your Toyota radio currently displays a maximum of two digits for track number. Track number 100 will be displayed as 01, track 101as 02, track 102 as 03...

Fast Track search (X10)

Presses the fast forward or fast reverse button (◀◀ , ▶▶), it will advance or retreat through the tracks in the Playlist in increments of 10 (i.e., 04, 14, 24.....). When the end of the Playlist is reached, the search will stop at track 1, and then continue by increments of 10 (i.e., 19, 29, 1, 11.....)

When PA20-TOY is configured to SAT port, press on Fast Forward button starts the 10 track jump and requires a second press on the FF button to stop the track jump. To stop the fast retreat, a second press on Fast Rewind button is required.

Changing source to AM/FM, CD, Cassette

When a source other than the iPod is selected on radio, the iPod will pause.

Note: iPod, iPod mini, iPod nano, iPod photo, iPod video and iTunes are registered trademarks of Apple Computer, Inc.
Toyota and Lexus are registered trademarks of Toyota Motor Corporation.
Design and specifications are subject to change without notice.
XM is a registered trademark of XM Satellite Radio Inc.

LIMITED WARRANTY

Thank you for choosing a **USASPEC** product. LTI Enterprises Inc., is committed to providing high quality defect free products. All **USASPEC** products are tested before leaving the factory and are warranted against defects in materials and workmanship for a period of one year to the original owner. The one-year warranty period begins at the date of manufacture or the date of original installation. Please see installation registration below.

PRODUCTS COVERED :

Products and related accessories supplied by LTI Enterprises Inc. with the brand name of **USASPEC** are covered by this warranty. Only products purchased in the U.S.A. is covered.

WARRANTY DOES NOT COVER :

1. Damage due to improper installation, operation, accident, negligence, abuse, or not following instructions, warnings, and acceptable industry procedures.
2. Damage caused during the shipment or transportation of the product. All claims of this nature must be presented to the carrier.
3. Damage caused by acts of God, War, or civil disturbance, including without limitation, flood, fire, storms, earthquake or other acts of nature.
4. Any expenses or cost to remove or reinstall products.
5. Any product without the original serial number and factory seal, or has been serviced or modified without the authorization of LTI Enterprises Inc.
6. Any product not distributed by an authorized LTI Enterprises Inc. Dealer.

TO OBTAIN WARRANTY SERVICE :

Contact the Customer Service center printed on the back of this manual for assistance. A detailed description of the problem(s) is required for service. Proof of purchase is also required when sending a product for warrant service. If the problem cannot be resolved and the product must be returned for service you will receive an authorization from the service center. The product must be delivered pre-paid to the service center. LTI Enterprises Inc. will, at our option, repair the product or replace it with new or reconditioned product, and if it was shipped to the service center, the return shipping will be pre-paid free of charge provided the repairs are covered by the warranty. The product must be packed securely for shipment to the service center in order to preserve the warranty and prevent damage.

NO IMPLIED WARRANTY, INCLUDING MERCHANTABILITY AND FITNESS FOR USE, APPLIES TO THIS PRODUCT AFTER THE ONE YEAR PERIOD AS DEFINED ABOVE, AND NO OTHER EXPRESSED WARRANTY OR GUARANTEE, EXCEPT AS MENTIONED ABOVE, GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THIS PRODUCT SHALL BIND THE WARRANTOR. NEITHER THE WARRANTOR NOR ANY OTHER PERSON, FIRM OR CORPORATION, IS RESPONSIBLE FOR LOSSES OR INCONVENIENCES, OR FOR ANY CONSEQUENTIAL DAMAGES CAUSED BY THE PRODUCT. SOME STATES/PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, AND SOME DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES.

This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state and province to province. Some of the limitations or exclusions may not apply to you.

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PA20-TOY

iPod to Toyota / Lexus car stereo Interface
with song title display

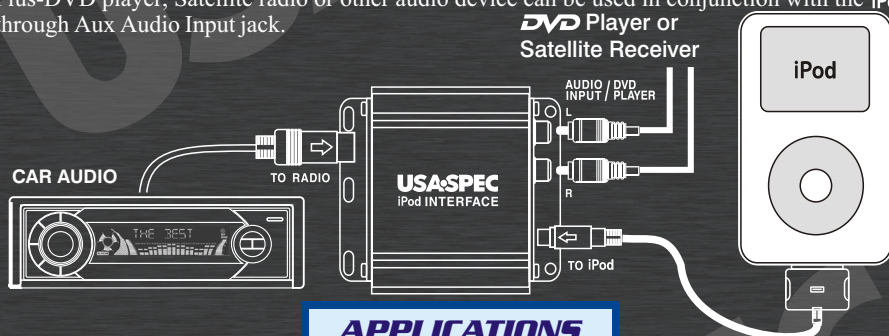
PLAY, CONTROL & CHARGE

Your iPod through Toyota Car Stereo System!

KEY FEATURES

This interface connects an iPod or iPod mini directly to your Toyota audio system with following benefits :

- Connect directly iPod's audio output to Toyota vehicle audio system for optimal sound quality playback.
- Display artist name and song title on rdios equipped with TEXT button. (*This features is supported in Playlist Mode and Hybrid Mode.*)
- **Hybrid Mode:** Playlist and songs on iPod can be accessed either by using radio's CD change button, as well as by using iPod's klik wheel.
- **Playlist Mode:** Select songs and Playlists on iPod with CD changer button on radio.
- **Direct Mode:** Search and select songs directly on iPod.
- Maintain current Playlist when switching from portable to in-car use.
- Charge the iPod battery while playing, charging automatically ends at one hour after iPod is paused to prevent car battery drain.
- Plus-DVD player, Satellite radio or other audio device can be used in conjunction with the iPod through Aux Audio Input jack.



APPLICATIONS

PA20-TOY is applicable to following Toyota models :

4Runner	98-08	Land Cruiser	98-08	Sequoia, Taundra	98-08
Avalon	98-08	Matrix	05-08	Sienna	98-08
Camry	98-08	MR2, Celica	98-04	Solara	98-08
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GS 300/350/430/450	01-05(requires CAS-LEX cable)	06-08	ES 300/330/350	01-03 NAV only(requires CAS-LEX cable)	04-08
GX 470	03-08	LX 470	04-08		

For application to earlier than 2005 Lexus vehicles, a cable adaptor is required. Please contact

USA·SPEC @ 626-3363836 for detail.

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X M is a registered trade mark of X M Satellite Radio Inc.

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