USA SPEC

BT45-TOY

Lexus & Toyota

the newly engineered innovative
Bluetooth® music & phone interface

Product Manual

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PRODUCT OVERVIEW

The BT45 seamlessly integrates your vehicle's OEM sound system with Bluetooth (HFP) devices for **hands- free phone calls** and **media streaming.** You can wirelessly connect your A2DP Bluetooth profile equipped smartphone or tablet to play stored music or stream the audio from your favorite media apps such as, iHeart Radio,Pandora, Spotify, and YouTube. The built in **echo & noise cancellation** feature will give you **crystal clear sound quality** on your hands free phone calls. The **all-speaker playback** feature will give you a **rich & dynamic music streaming quality.** The BT45 has an additional **3.5 mm auxiliary audio port,** so you can play music stored in your non-Bluetooth devices. It also has a **USB charging port** so you can keep you devices charged and ready to go.

The BT45's **plug & play technology** takes advantage of the OEM radio's ability to accept an external CD changer or Satellite Radio by converting it into Bluetooth phone/audio streaming/AUX input source. This design innovation allows you to **maintain functionality of existing factory installed options** such as, Bluetooth HandsFreeLink, LiveTraffic, Navigation, CD changer, Satellite radio, RSE (rear seat entertainment system), and AUX/USB input.

NOTICE

USA SPEC solely distributes its products through authorized dealers in order to ensure its customers receive proper services and information from the dealers. USA SPEC reserves the right to only offer technical support or warranty services for products purchased through authorized USA SPEC dealers. Please refer to our website www.usaspec.com for a list of authorized dealers.

Installation/Operation Precautions:

- DO read the entire manual before starting the installation. We recommend that the BT45 be installed by a qualified professional since all installations will require the removal of some parts of the vehicle such dashboard, backseat, etc.
- DO install the interface securely using Velcro or wire ties (not included) and keep away from any moving parts such as the gas pedal.
- DO NOT open, disassemble, or modify the BT45 in any way. Such attempts will void the warranty on the product.
- DO NOT expose the interface to extreme temperature, humidity, or direct sunlight.
- DO NOT operate the Bluetooth device while driving. Always give full attention to the road while driving.

BT45-TOY PACKAGE CONTENT

- 1 Product Manual
- 1 BT45 Interface Module
- 1 BT-TOY Cable + 1 CAS-TA Cable
- 1 Microphone

COMPATIBILITY INFORMATION

Bluetooth Device Compatibility

BT45 is compatible with most Bluetooth wireless technology enabled devices currently on the market such as iPhone, iPad, iPod Touch, Android smartphones & tablets, Windows smartphones & tablets, and Blackberry. Devices must have Bluetooth profile A2DP (Advanced Audio Distribution Profile) and AVRCP (Audio/Video Remote Control Profile) 1.4 or higher for audio streaming and music info display.

Note: Due to the difference in Bluetooth technology, some Bluetooth enabled devices may be incompatible or may not support all of BT45's features.

Radio & Device Compatibility for Music Info Display

The display of artist, album, and song title information on the radio is determined by the following 3 factors

1. Your radio's text display capability. Please see p.6 for detail.
2. Your device's (smartphone) operating system: iOS 6 or higher, Android 4.0 (Ice Cream Sandwich) or higher
3. Your device's Bluetooth profile: AVRCP 1.4 or higher

Vehicle Compatibility: Toyota & Scion

Toyota		
4Runner	98 - 12	05 & older models with RSE (Rear Seat Entertainment) requires BT-TOYR cable (1)
Avalon	98 - 10	
Camry	98 - 12	
Celica	98 - 06	
Corolla	98 - 12	
Echo	98 - 12	
FJ Cruiser	07 - 12	
Highlander	01 - 12	06 & older models with RSE (Rear Seat Entertainment) requires BT-TOYR cable (1)
Land Cruiser	02 - 09	02-04 models requires CAS-TLC cable (1)
Matrix	05 - 12	
Prius	04 - 11	
Rav4	98 - 11	
Sequoia	98 - 12	07 & older models with RSE (Rear Seat Entertainment) requires BT-TOYR cable (1)
Sienna	98 - 14	98-02 models with steering wheel control requires CAS-TLC cable (1) 05 & older models with RSE (Rear Seat Entertainment) requires BT-TOYR cable (1)
Solora	98 - 11	
Tacoma	98 - 12	
Tundra	98 - 12	06 & older models with RSE (rear Seat Entertainment) requires BT-TOYR cable (1)
Venza	09 - 11	
Yaris	07 - 11	
(1) CAS-TLC and BT-TOYR cables are not included in the package must be purchased separately.		

Scion	
xA, xB	04 - 11
tC, xD	04 - 11

Vehicle Compatibility: Lexus

LEXUS		
ES 300	02 - 03	Requires CAS-LEX cable (1)
ES 330	04 - 06	
ES 350	04 - 10	
GS 300	05 - 06	
GS 350	04 - 09	
GS 430	05 - 07	Requires CAS-TLC cable (1)
GS 450H	07 - 09	
GX 470	04 - 09	06 & older models with RSE (Rear Seat Entertainment) require BT-TOYR cable (1)
IS 250	06 - 09	
IS 300	01 - 05	01-03 models require CAS-LEX cable (1)
IS 350	06 - 09	
LS 430	01 - 06	01-03 models require CAS-LEX cable (1)
LS 460	07 - 09	
LX 470	2001	For navigation radios only, requires CAS-LEX cable (1)
LX 470	02 - 08	02-03 models require CAS-LEX cable (1)
LX 570	2009	
RX 300 (non-Nakamichi sys only)	00 - 03 with Nav	Requires CAS-LEX cable (1)
	00 - 03 without Nav	Requires CAS-TLC cable (1). Must disconnect the 6 disc CD changer and connect CAS-TLC (1).
RX 330	04 - 06	Models with RSE (Rear Seat Entertainment) require BT-TOYR cable (1)
RX 350	07 - 09	
RX 400h	06 - 08	
(1) CAS-LEX, CAS-TLC, and BT-TOYR cables are not included in the package, must be purchased separately.		

DIP SWITCH SETTINGS & EMULATION MODE

Pick one of the emulation mode by setting the DIP switches on the BT45 module according to the chart below. By picking an emulation mode you are telling the radio which mode (CDC, CDC1, MP3, MD, DVD, or SAT) you want to use for the BT45's Bluetooth phone/audio source.

Emulation Mode	DIP Switches (down position is ON)				
	#1	#2	#3	#4	Music Info Display
CDC (default setting)	ON	OFF	OFF	ON	Yes: radios with logo
CDC1	ON	ON	ON	ON	Yes: radios with logo
MP3	ON	OFF	ON	OFF	Yes
MD	ON	ON	OFF	ON	Yes
SAT	ON	ON	ON	OFF	Yes
DVD	ON	OFF	ON	ON	Yes: for 05 & newer vehicles with "MP3" logo Nav radio

- If the radio has trouble recognizing the BT45-TOY, please follow the above chart and try the other emulation modes by changing the DIP switches accordingly.
- **Use DVD mode for 05 & newer models equipped with navigation radios with MP3 logo printed on the face.**
- For Delphi radios (radio face-code that begins with the letters "AD", usually printed in white on the radio face) use either MD or SAT emulation mode.

INSTALLATION

Installation Instruction

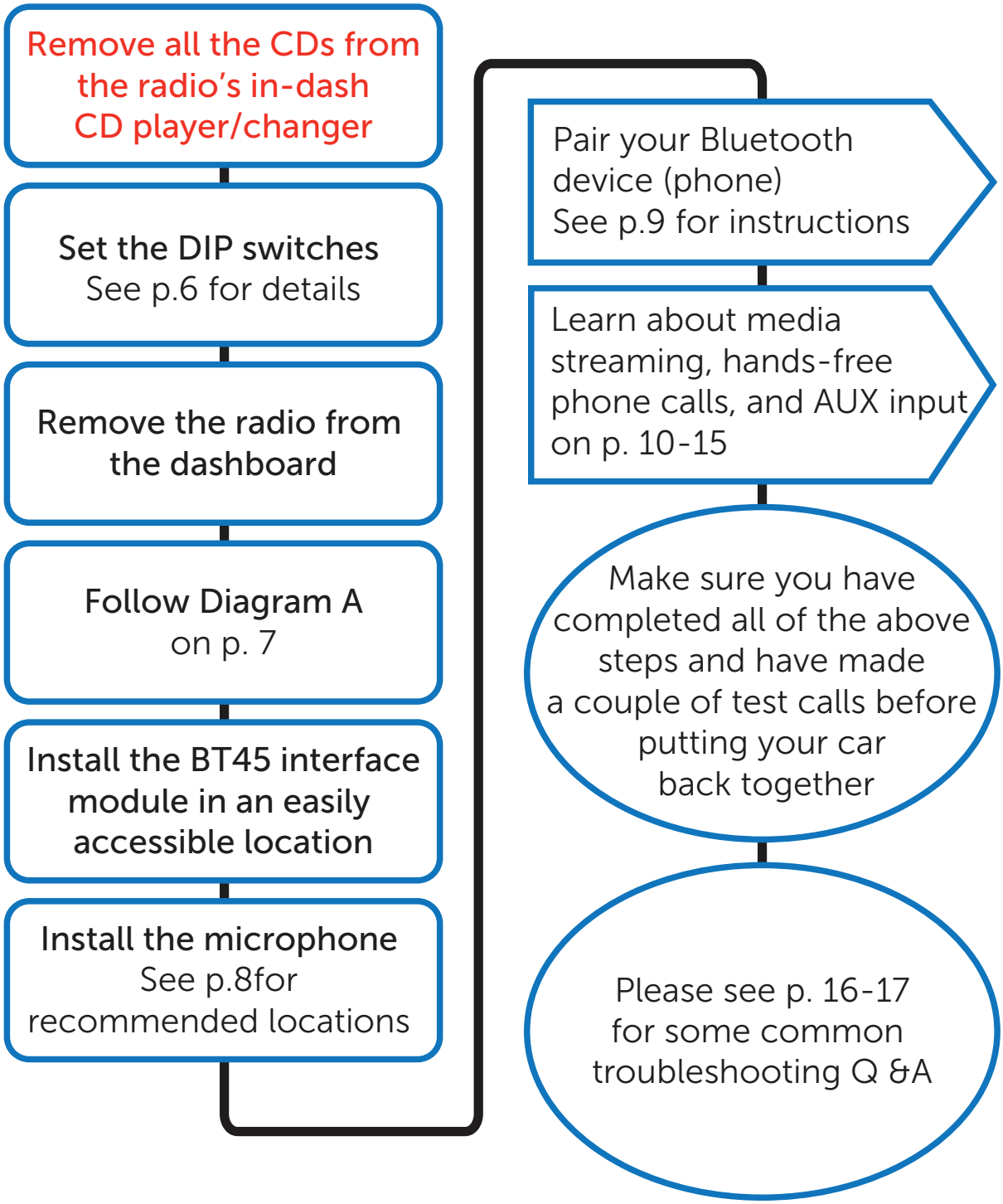
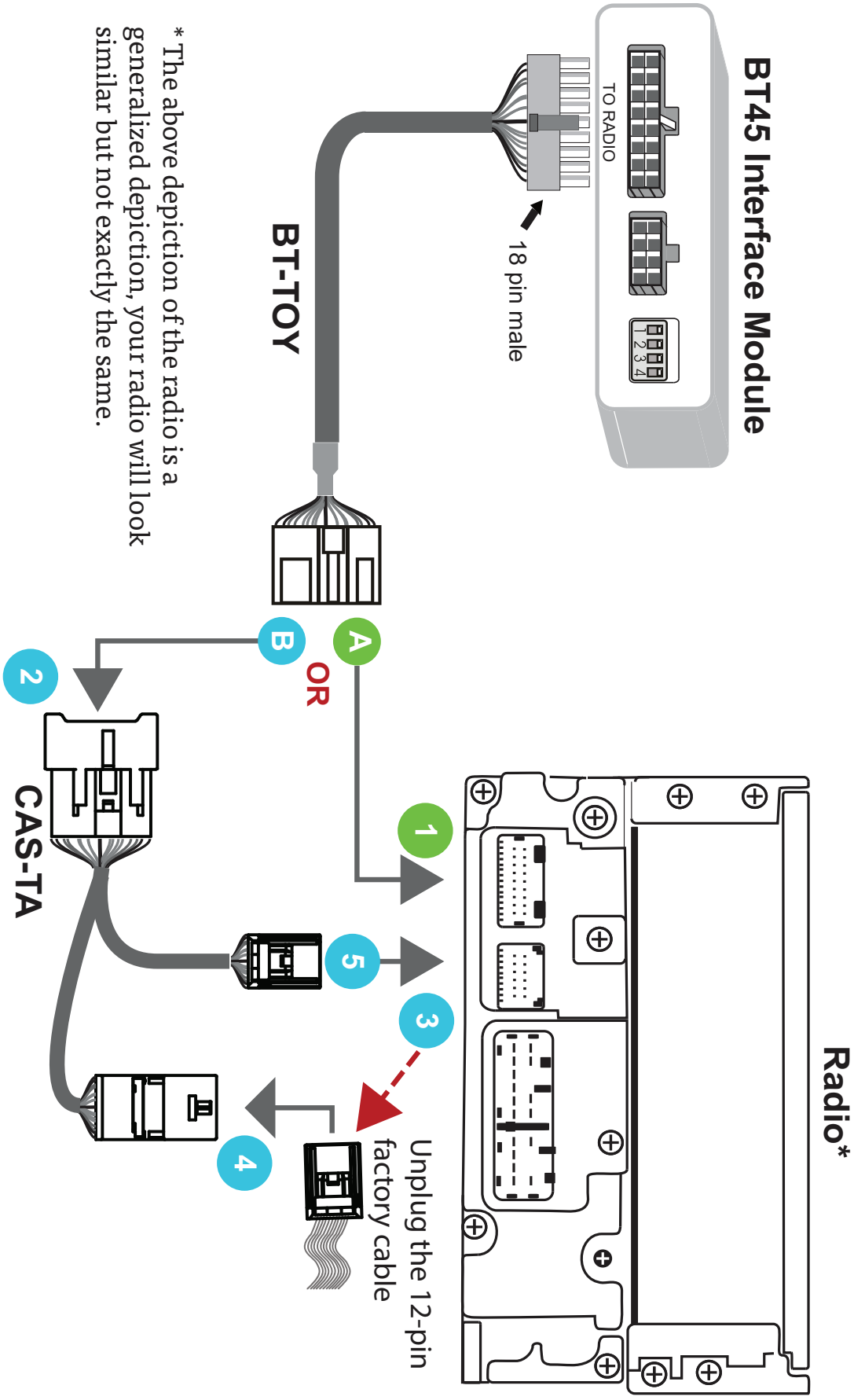
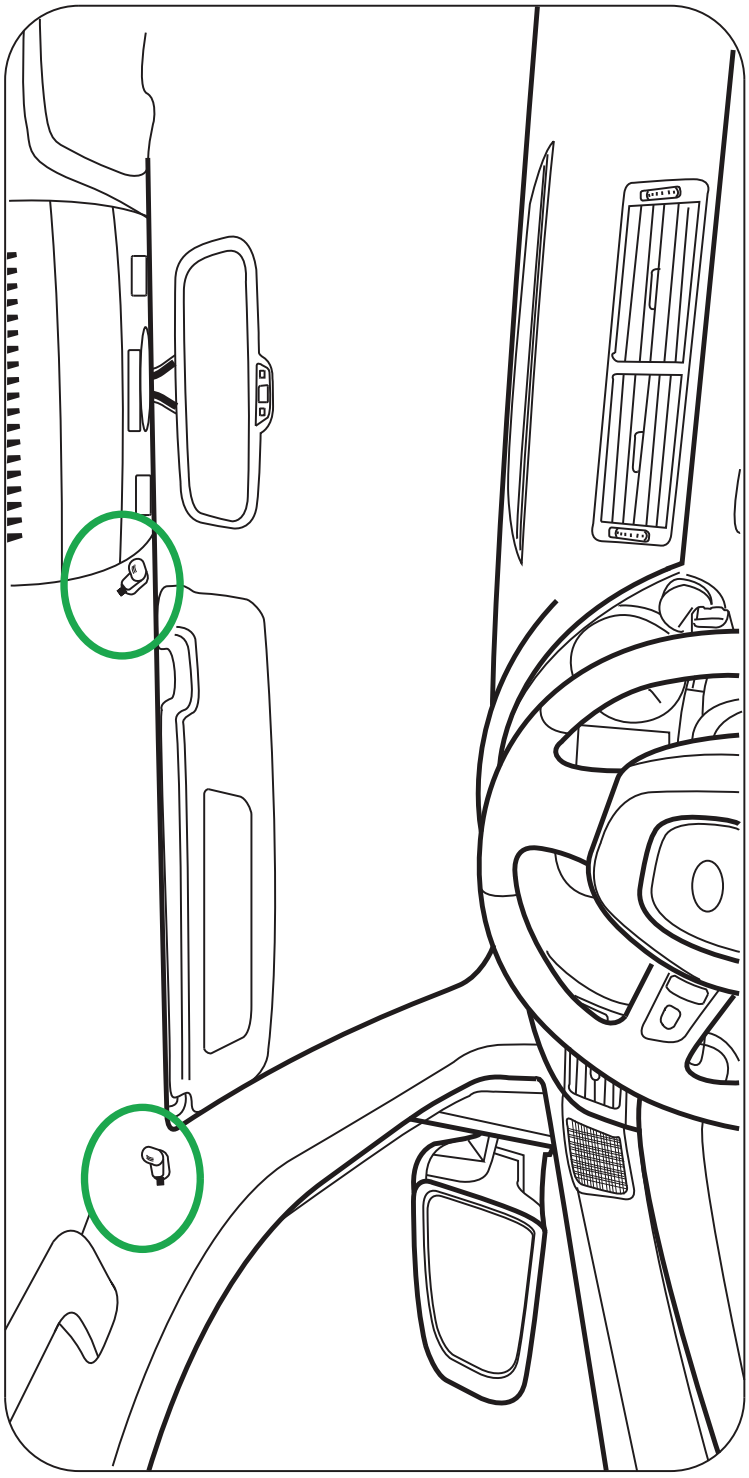


Diagram A: Cable Connection



* The above depiction of the radio is a generalized depiction, your radio will look similar but not exactly the same.

Diagram B: Recommended Microphone Locations



BLUETOOTH SETUP

Bluetooth Device Pairing Instructions

1. Enable the Bluetooth function on your device (phone)
2. Turn your vehicle's ignition ON
3. Scan/search for available device from your phone.
   - It may take up to 60 seconds for your phone to locate the BT45-TOY

SAT Emulation Mode

4. Your radio will automatically switch to SAT/XM audio source

5. Select BT45-TOY from the list of available devices your phone has detected.

6. Allow the pairing process to take place

7. Once pairing is complete you will hear the "CONNECTED" voice prompt from your vehicle's audio system and the radio will briefly display the name of your device, i.e. USA SPEC Test Phone.

CDC, CDC1, MP3, MD, DVD Emulation mode

4. Your radio will automatically switch to CDC, CDC1, MP3, MD, or DVD audio source

5. Select BT45-TOY from the list of available devices your phone has detected

6. Allow the pairing process to take place

7. Once pairing is complete you will hear the "CONNECTED" voice prompt from your vehicle's audio system and the radio (if compatible) will briefly display the name of your device, i.e. USA SPEC Test Phone.

Note: Some devices may ask for a Pin # during the pairing process.
Pairing Pin # = 1234

MEDIA STREAMING

- If you have music stored in your device, it will begin to play right after the "CONNECTED" voice prompt. If playback does not start automatically, press TUNE UP or SEEK/TRACK UP to initiate playback.
- You can also proceed to manually start playback from your preferred media app such as Pandora, YouTube, or Podcast app.

- If your radio is unable to display music info due to app or device compatiblity (see p.2 for details) then the BT45-TOY will assign track numbers to the currently playing audio tracks

Switching from AM/FM, CD, XM, & etc. to Bluetooth Source

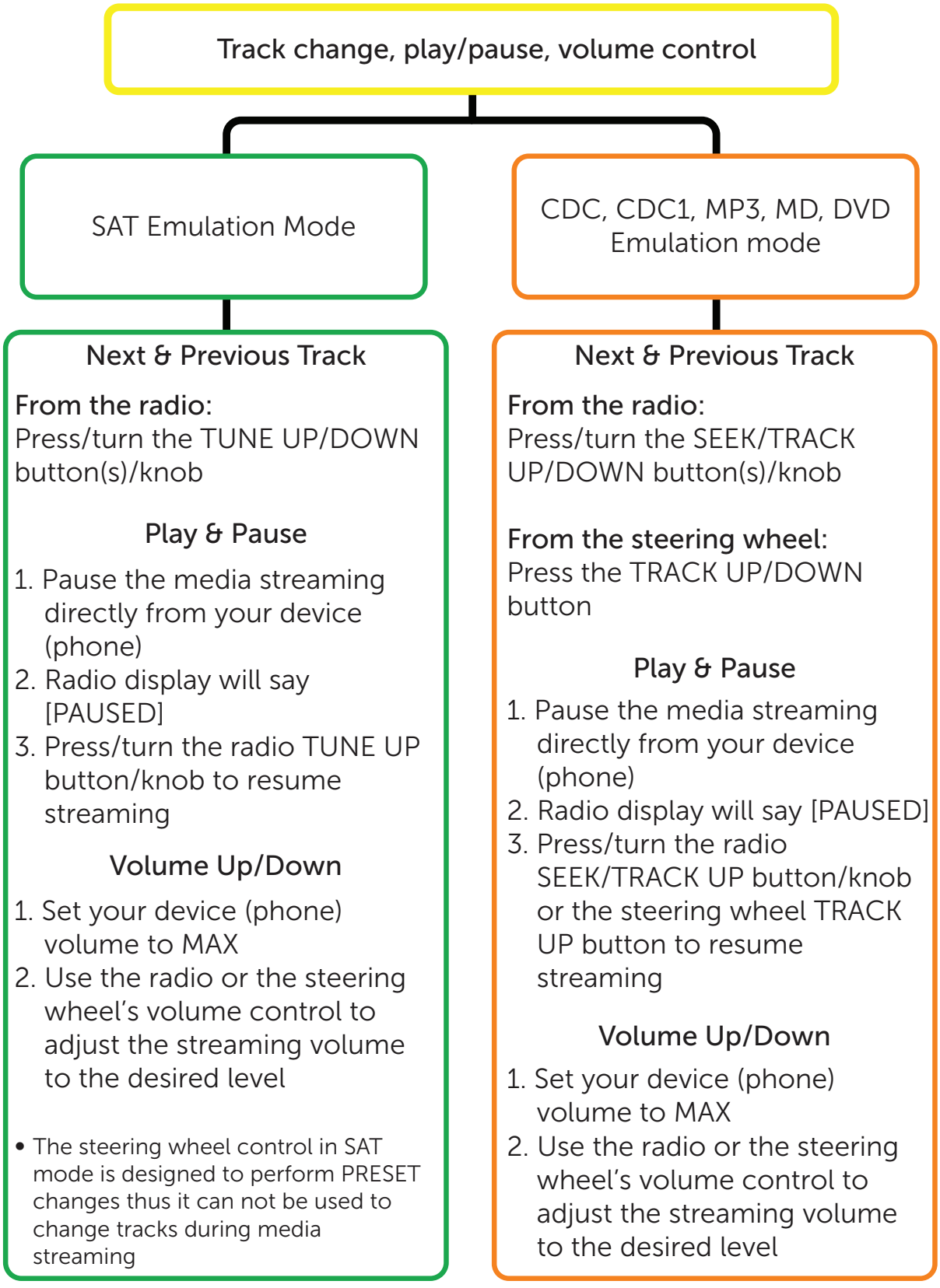
SAT Emulation Mode

Press the SAT button to access SAT/XM for Bluetooth source. Once the BT45 is connected, SAT/XM will become the Bluetooth audio source.

CDC, CDC1, MP3, MD, DVD Emulation mode

Press the DISC or CD button to access CDC, CDC1, MP3, MD, or DVD for Bluetooth source. Once the BT45 is connected, depending on how you have set the dip switches, one of the above mentioned source will become the Bluetooth audio source

Music Playback Control



HANDS FREE PHONE CALLS

Answer & End Calls

When there is an incoming call:

1. The BT45 will automatically mute the audio source you are in (AM/FM, CD, XM, & etc.) and switch into Bluetooth source.
   This feature is not supoorted by Delphi radios with radio face-codes that begin with the letters "AD" (usually printed in white on the radio face).
2. You will hear "you have a call from (caller #)" or "Private" if caller ID is not available. If the voice prompt* feature is disabled you will only hear the phone's ringtone

* See p. 16 on how to enable/disable the voice prompt feature

SAT Emulation Mode

Answer Calls

From the radio:
Press/turn the TUNE UP button/knob

* Delphi radios: press the SAT button to manually switch to Bluetooth source before initiating a call

End or Reject Calls

From the radio:
Press/turn the TUNE DOWN button/knob

Once a call has ended it will remain in the Bluetooth source, you must manually select the source you wish to go back to

CDC, CDC1, MP3, MD, DVD Emulation mode

Answer Calls

From the radio:
Press/turn the SEE/TRACK UP button/knob

From the steering wheel:
Press the TRACK UP button

End or Reject Calls

From the radio:
Press/turn the SEEK/TRACK DOWN button/knob

From the steering wheel:
Press the TRACK DOWN button

Once a call has ended it will remain in the Bluetooth source, you must manually select the source you wish to go back to

Make Calls

SAT Emulation Mode

Make Calls

1. **Dial calls directly from your phone**

* **Delphi radios:** press the SAT button to manually switch to Bluetooth source before initiating a call

2. **Or use your phone to** engage its voice dialing function (Siri/ Google Now). Once engaged, your voice command will be picked up by the BT45's microphone(1)
3. As soon as an outgoing call is dialed, the BT45 will automatically switch the audio source to Bluetooth (XM1)
4. Press the radio TUNE DOWN button to end a call

Once a call has ended it will remain in the Bluetooth source, you must manually select the source you wish to go back to.

CDC, CDC1, MP3, MD, DVD Emulation mode

Make Calls

1. **Dial calls directly from your phone**

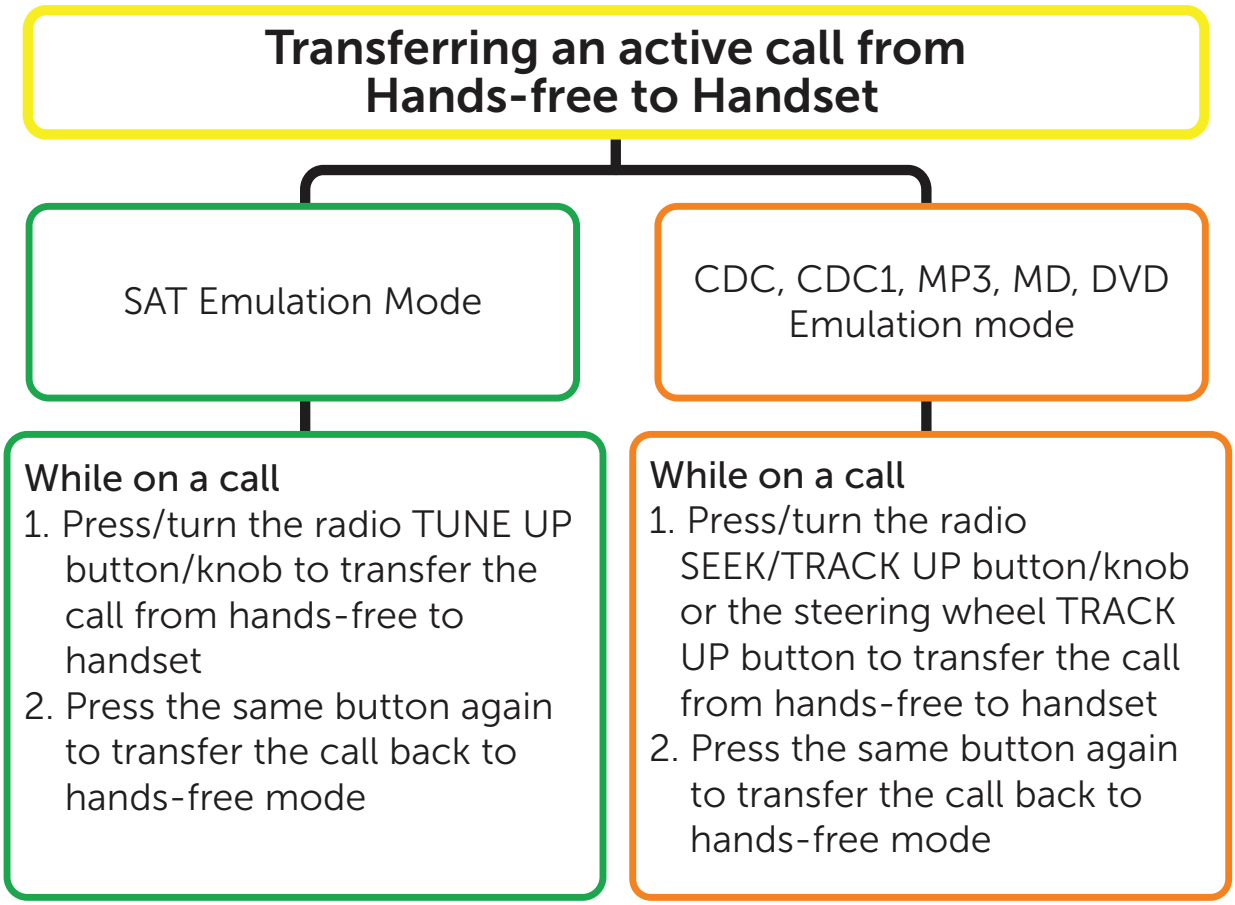
* **Delphi radios:** press the CD or DISC button to manually switch to Bluetooth source before initiating a call

2. **Or use your phone to** engage its voice dialing function (Siri/ Google Now). Once engaged, your voice command will be picked up by the BT45's microphone(1)
3. As soon as an outgoing call is dialed, the BT45 will automatically switch the audio source to Bluetooth (CDC)
4. Press the radio SEEK/TRACK DOWN or the steering wheel TRACK DOWN button to end a call

Once a call has ended it will remain in the Bluetooth source, you must manually select the source you wish to go back to.

(1) Please keep in mind that the environment inside a moving vehicle tends to be noisier than your average environment. This will affect how accurately your phone's voice recognition function such as Siri picks up your voice commands .

Hands-free to handset

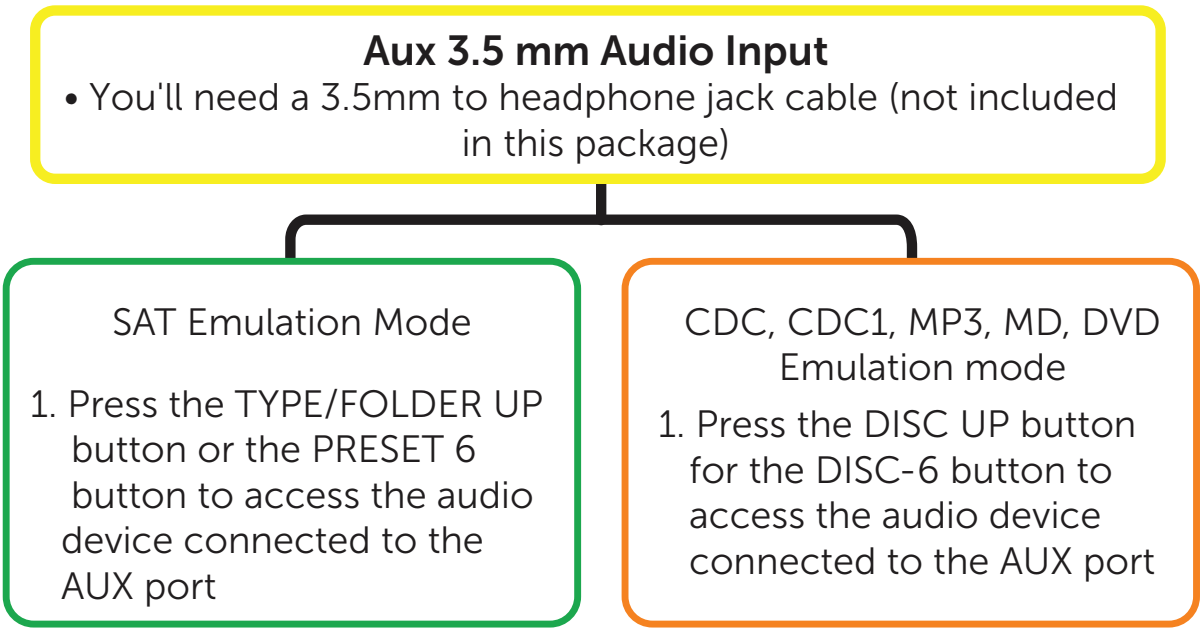


ENABLE & DISABLE VOICE PROMPT

1. Turn your vehicle's ignition ON
2. go to Bluetooth source (SAT/XM or CDC & etc.)
3. Disable the Bluetooth function from your phone's setting
4. Wait 5 sec, then turn the TUNE or the SEEK/TRACK knob to the right to ENABLE. Turn the same knob to the left to DISABLE

* The above steps will disable both the voice prompt and the caller # announcement features.

AUX PORT



USB CHARGING PORT

Maximum charging output: 2.1 amps at 5 volt (charging cable not provided)

TROUBLESHOOTING

- **My vehicle has RSE and after connecting the BT45-TOY using the cable that came with the package the volume has become very low.**
  For certain year model with RSE you'll need to purchase a separate BT-TOYR cable (see p. 4-5).

- **How do I know if my car has RSE (rear seat entertainment) system?**
  If your vehicle has a DVD player in the back then it has RSE.

- **My hands-free phone call volume is very low.**
  First adjust your phone volume to MAX then use the radio volume controls to adjust to desired level.

- **I'm unable to pair my smartphone/device.**
  1. Delete/forget the BT45-TOY from your phone's Bluetooth setting. Reset your phone and try the pairing process again.
  2. If you have an Android device, make sure the "Only visible to paired devices" option is UNCHECKED. Sometimes it can take up to 30 seconds for the BT45 to be detected by your smartphone/device.

- **I'm unable to use my steering wheel controls to answer calls or control media playback.**
  The steering wheel control in SAT emulation mode is designed to perform PRESET changes thus it CAN NOT be used to answer call or to change tracks during media streaming.
  In some vehicles you might be able to preform those functions by press and hold the steering wheel control's TRACK UP/DOWN button.
  * If steering wheel control feature is important to you then you can use the CDC emulation mode (you'll need to make changes to the dip switch settings, see p.6).

- **My radio is not displaying any music info such as song titles.**
  Confirm that your device is equipped with Bluetooth profile AVRCP 1.4 or higher, it has iOS 6.0 or higher, or Android 4.0 or higher.
  Music streaming apps' info display capabilities vary thus some might not display properly on your radio.

- **The BT45's USB port will not charge my device.**
  Please use data SYNC and CHARGE (USB 2.0 capability) cables. Not all USB cables on the market support charging.

- **I have a device connected through BT45's AUX input and the volume is very low.**
  Turn the volume on the actual device to MAX then use the radio's volume control to adjust the level.

For help with any additional issues, please contact tech support at
(626)336-3836 Mon-Fri: 9am-5pm PST
or e-mail us at info@usaspec.com
Additional troubleshooting Q&A are available at
http://www.usaspec.com/t-faq.aspx

LIMITED WARRANTY

Thank you for choosing a USA SPEC product. USA SPEC, Inc., is committed to providing high quality defect-free products. All USA SPEC products are tested before leaving the factory and 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 purchase from an authorized dealer.

PRODUCTS COVERED:
Products and related accessories supplied by USA SPEC, Inc. with the brand name of USA SPEC are covered by this warranty. Only products purchased in the USA are covered.

WARRANTY DOES NOT COVER:
1. Damage due to improper installation or operation, negligence, abuse, or not following instructions, warnings or 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 USA SPEC.
6. Any product not distributed by an authorized USA SPEC dealer.

TO OBTAIN WARRANTY SERVICE:
Contact the Customer Service center for assistance at (626) 336 - 3836. A detailed description of the problem(s) is required for service. Proof of purchase is also required when sending a product for warranty service. If the problem cannot be resolved and the product must be returned for service, you will receive an authorization form from the service center. The product must be delivered pre-paid to the service center. USA SPEC will, at our option, repair the product or replace it with a 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. THE ABOVE WARRANTY TERMS AND CONDITIONS ARE VALID ONLY IN THE U.S.A.

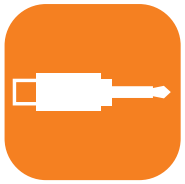
USASPEC BT45-TOY

HandsFree Phone Call

Wireless Media Streaming

USB Charging

All Speaker Playback



3.5 mm AUX Input

Bluetooth® Music & Phone Interface for Lexus & Toyota

Features:

- Android, Apple, Blackberry, & Windows compatible.
- Plug & Play installation and seamless integration with OEM entertainment systems.
- Incoming number announcement & display (on supported radios)
- Built in noise cancellation for crystal clear call quality.
- Full & rich all speaker playback for media streaming with music info display (on supported radios).
- USB charging port and 3.5mm AUX port.

TOYOTA				
4Runner	98-11		Prius	04-11
Avalon	98-10		Rav4	98-11
Camry	98-12		Sequoia	02-12
Celica	98-06		Sienna	98-14
Corolla/Echo	98-12		Solara	98-11
FJ Cruiser	07-12		Tacoma	98-12
Highlander	01-12		Tundra	98-12
Land Cruiser	02-09		Venza	09-11
Matrix	05-12		Yaris	07-11

LEXUS	
ES 300/330/350/400H	02-10
GS 300/350/430/450H	05-09
GX 470	04-09
IS250/300/350	01-09
LS430/460	01-09
LX470	01-08
LX570	2009
RX 300/330/350/400H	00-09

Scion	
XA, XB, XD	04-11
tC	05-11

* Vehicles with RSE & 01-03 Lexus require additional cables that must be purchased separately

Above application charts are for general references only. Please check our website www.usaspec.com to verify specific application.

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