

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 your 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.

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 as the 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 Microphone

COMPATIBILITY INFORMATION

Bluetooth Device Compatibility

BT45-HON3 Bluetooth Specification: version 2.1 + EDR specification with aptX

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 info display capability. Please see p.5 for details.
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⁾
Solara	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	04 - 06	
GS 350	07 - 09	
GS 430	04 - 07	04-05 Requires CAS-TLC cable ⁽¹⁾
GS 450H	07 - 09	
GS 460	07 - 09	
GX 470	03 - 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)				Music Info Display
	#1	#2	#3	#4	
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.

INSTALLATIONS

Installation Instructions

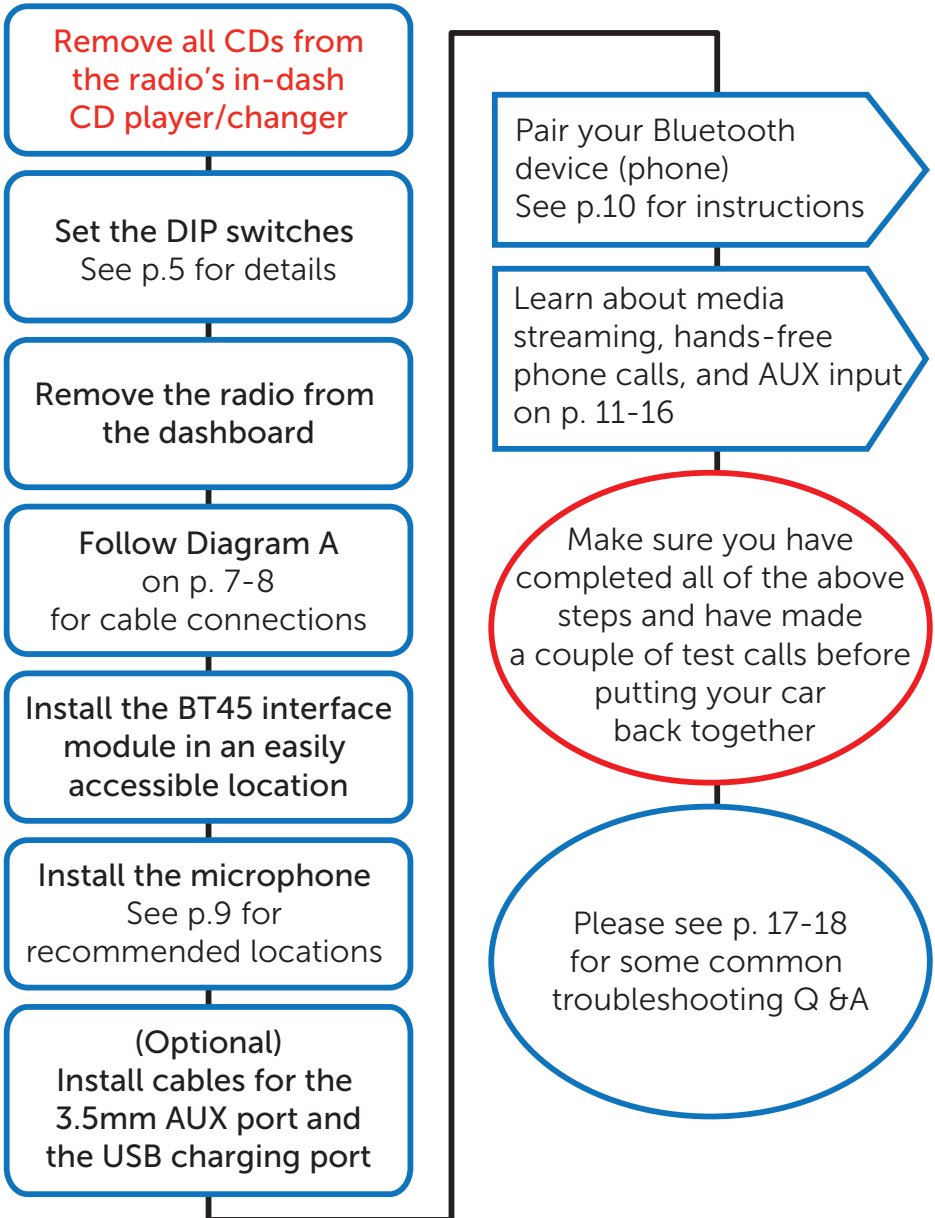


Diagram A: Cable Connection

- The below representations of the radio and the cables are generalized depictions and are not to scale

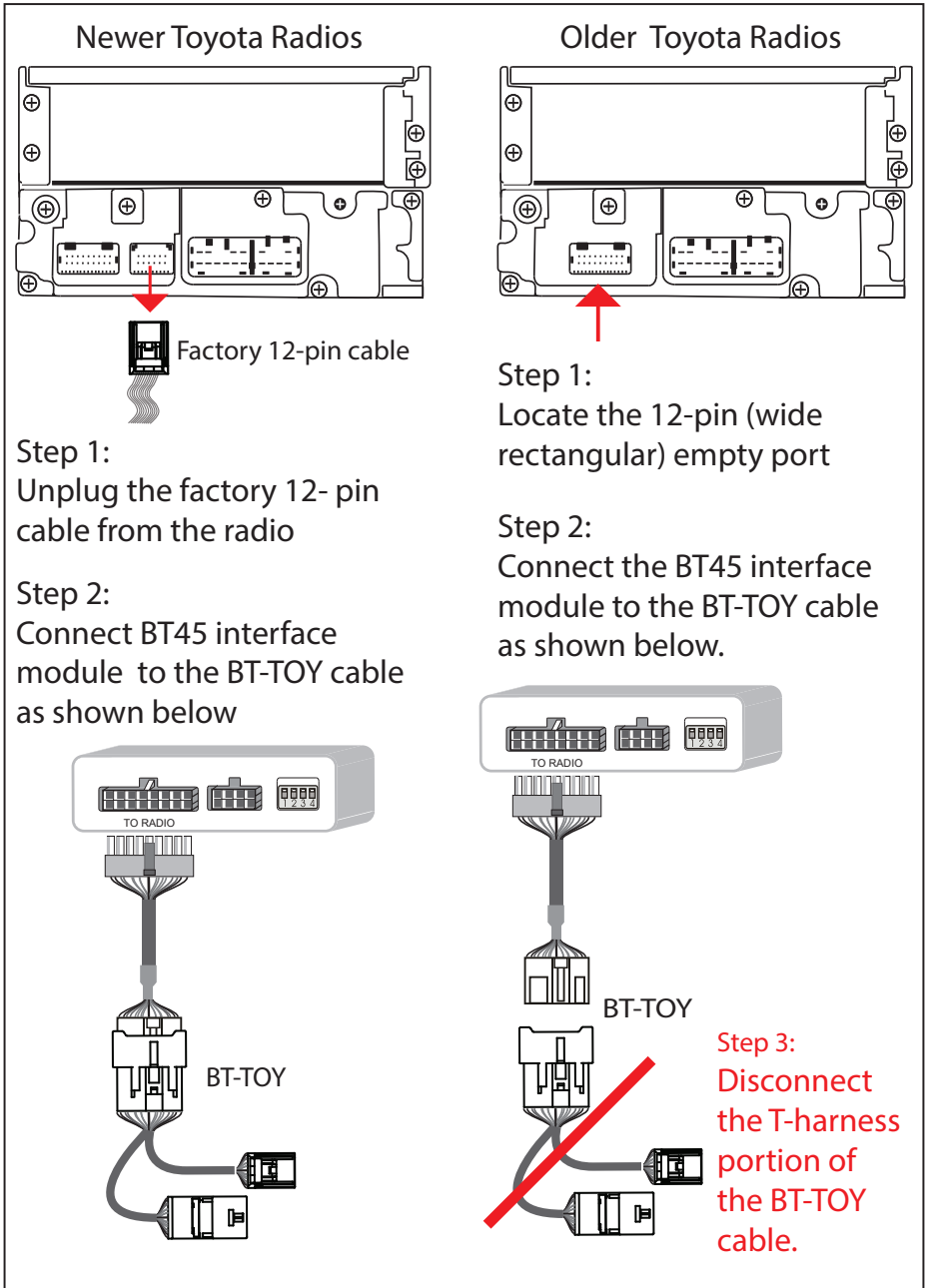


Diagram A: (continued from p.7)

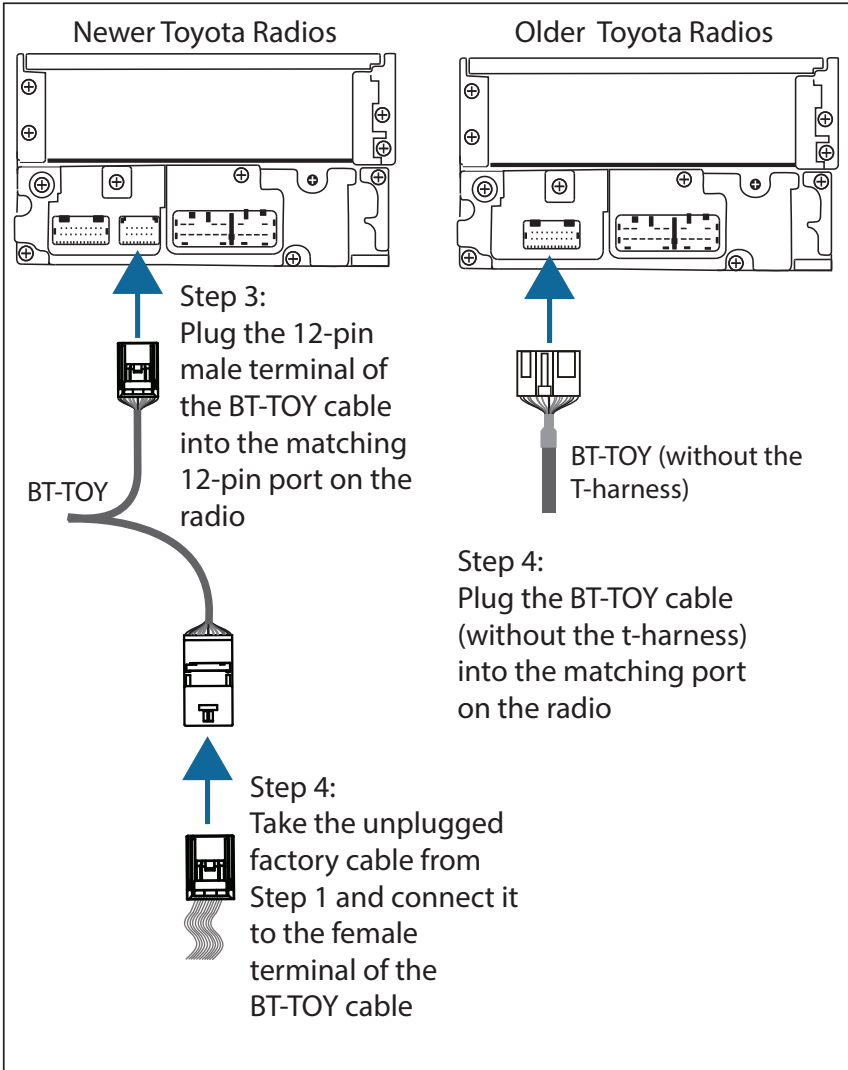
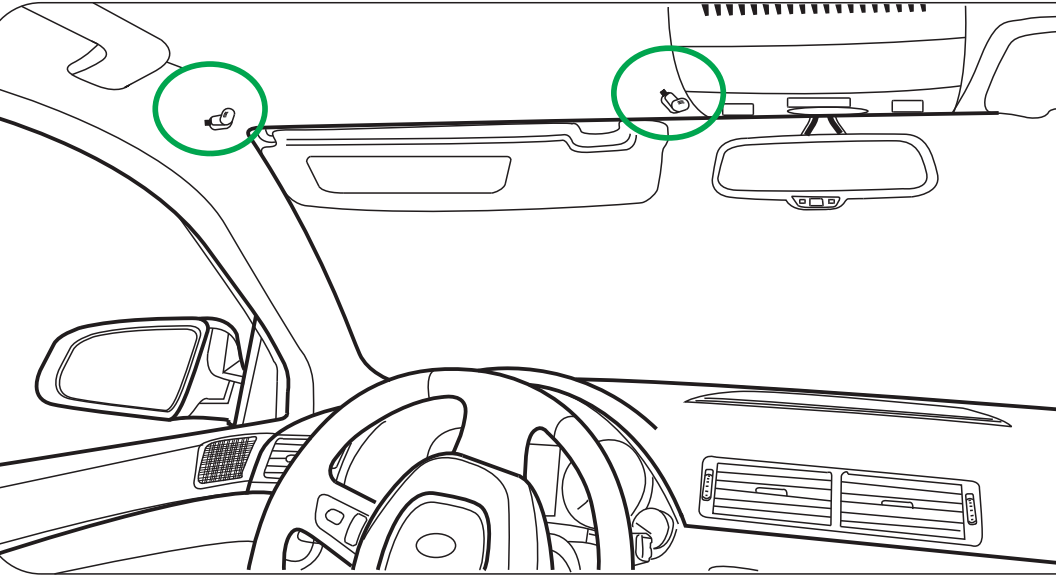


Diagram B: Recommended Microphone Locations



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 compatibility (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

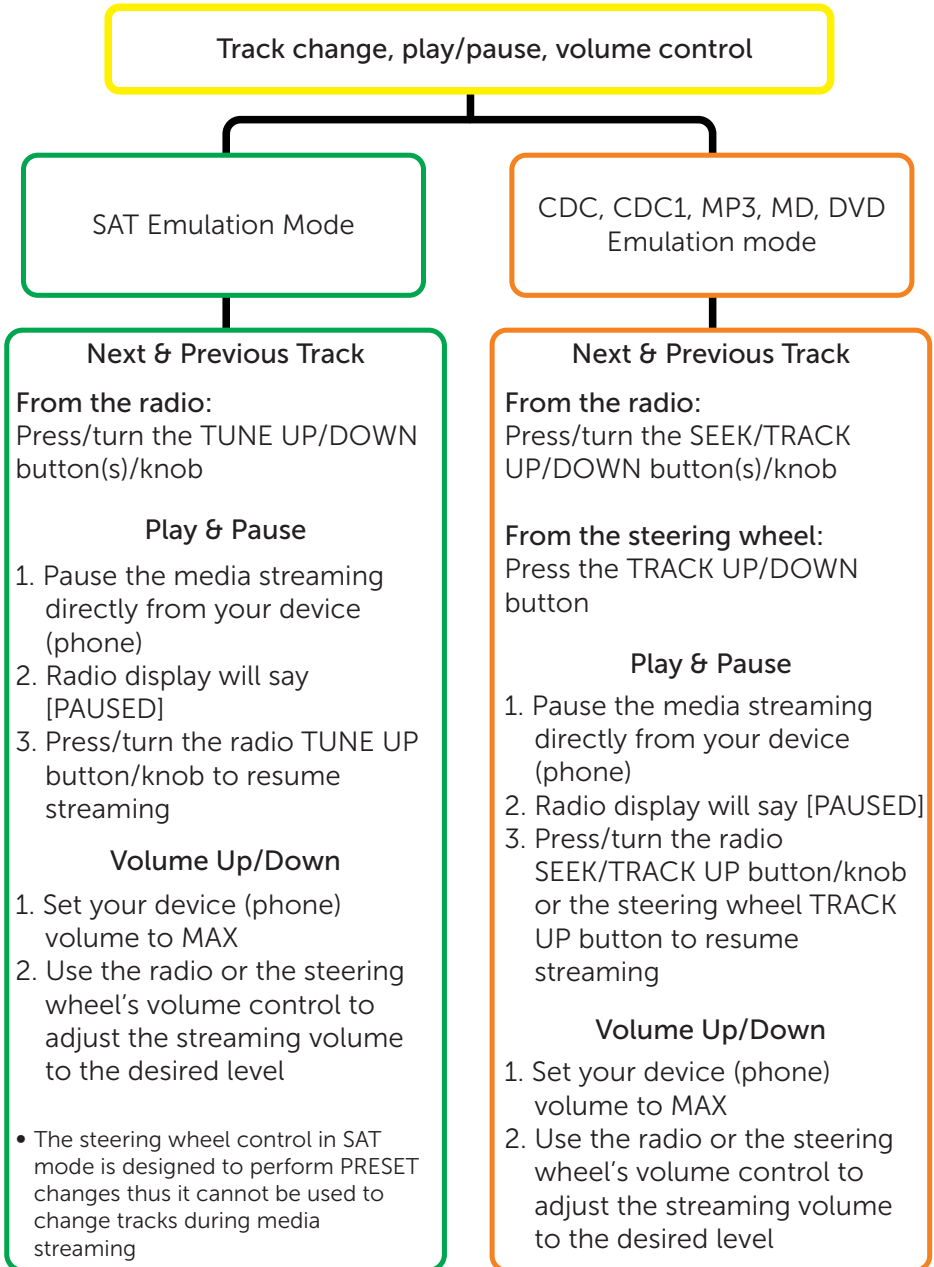
SAT Emulation Mode

CDC, CDC1, MP3, MD, DVD
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.

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 sources 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 supported 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. 15 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 answering 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 SEEK/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

Transferring an active call from Hands-free to Handset

SAT Emulation Mode

While on a call

1. Press/turn the radio TUNE UP button/knob to transfer the call from hands-free to handset
2. Press the same button again to transfer the call back to hands-free mode

CDC, CDC1, MP3, MD, DVD Emulation mode

While on a call

1. Press/turn the radio SEEK/TRACK UP button/knob or the steering wheel TRACK UP button to transfer the call from hands-free to handset
2. Press the same button again to transfer the call back to hands-free mode

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

Aux 3.5 mm Audio Input

- You'll need a 3.5mm to headphone jack cable (not included in this package)

SAT Emulation Mode

1. Press the TYPE/FOLDER UP button or the PRESET 6 button to access the audio device connected to the AUX port

CDC, CDC1, MP3, MD, DVD Emulation mode

1. Press the DISC UP button for the DISC-6 button to access the audio device connected to the AUX port

USB CHARGING PORT

**Maximum charging output: 2.1 amps at 5 volts
(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 models with RSE you'll need to purchase a separate BT-TOYR cable (see p. 3-4).
- **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 CANNOT be used to answer calls or to change tracks during media streaming. In some vehicles you might be able to perform those functions by pressing and holding 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.5).
- **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.

USA·SPEC BT45-TOY

Bluetooth® Music & Phone Interface for Lexus & Toyota



HANDSFREE
PHONE CALL



WIRELESS MEDIA
STREAMING



USB
CHARGING



ALL SPEAKER
PLAYBACK



3.5 MM
AUX INPUT

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
GS 460	07-09
GX 470	03-09
IS250/300/350	01-09
LS430/460	01-09
LX470	02-08
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.