







# BTH-JAG98

QUICK START BLUETOOTH INSTALL GUIDE FOR LATE 1997-06 XK (X100) AND 1998-03 XJ (X308) WITH CD CHANGER

(Not applicable to other model/years)

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#### PRODUCT SAFETY & DISCLAIMER

READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING, FAILURE TO DO SO MAY CAUSE PERSONAL INJURY OR DAMAGE TO PRODUCT AND/OR PROPERTY

- This installation guide is provided as a GENERAL installation guide, some vehicles vary and may require additional steps. We do not accept responsibility for third party labor charges or modifications. Exercise due-diligence when installing this product.
- We do not accept any responsibility for vehicle damage or personal injury resulting from the installation of this product.
- Careless installation and operation can result in equipment damage.

# Requirement:

### Fully functioning CD auto changer in trunk/hatch

### Introduction

This easy to install Bluetooth hands-free, streaming and charging kit is essential to keeping your classic as stock possible with up-to-date Bluetooth features. This module supports Bluetooth 4.2 and sounds great for mobile conversations, streaming music and more.

The NEW! wireless remote is used to pause, play, next/previous tracks, answer/end calls and switch between sources and easily mounted to dashboard area. In addition, the built-in USB port provides 5V/2.1A current to keep those power-hungry devices charged while on the road.

Keep original radio and CD changer while enjoying Bluetooth features only available in newer cars.

**Note**: The BTH-JAG98 <u>does not interfere</u> with functionality of existing AM/FM/radio, CD changer, GPS navigation; however, a functioning 6-disc auto changer is required.

See Frequently Asked question at the end of this quide for more details.

### Installation

1. For XJ: Remove carpet trim piece surrounding audio rack (See **Fig. 1**). If navigation is missing (**Fig. 2**): use open space to access the auto CD changer connecting plug, but if vehicle has navigation (**Fig. 1**), accessing the auto CD changer

plug will require unlocking the "inner frame": Remove (2) 7mm bolts on right and left side (See **Fig. 2, 3**)

Remove (2) 7mm bolts from top (See Fig. 2, 3)



Fig. 1



Fig. 2



Fig. 3

- 2. Pull inner frame out.
- 3. On CD changer, locate short black pigtail cable (it's the only cable on CD changer) See **Fig. 4**



Fig. 4

- 4. Disconnect CD changer from vehicle plug (don't twist)
- 5. Female connector (from changer) and male plug (to amplifier or radio ( (See **Fig. 5**)



Fig. 5

 Connect factory male plug (Fig. 5) to installation harness female connector (See Fig. 6). Hold one cable in each hand, align markers (triangle) on both and push inward. (Do not twist to connect).



Fig. 6

7. Connect 90-degree male plug (See **Fig. 7**) to the CD changer female connector (See **Fig. 5**)

**Warning:** The right-angle male plug on install harness (See **Fig. 7**) does not have an alignment marker; Align imaginary (triangle) marking shown in **Fig. 5**, align with marker on female connector from CD auto changer (See **Fig. 4**) and mate by pushing straight (do not twist)



Fig. 7

### Noteworthy:

There are multiple Ai-Net type plugs/connectors behind the audio rack especially in vehicles with premium sound (e.g., Amplifier, Navigation, etc.). In premium audio systems; the BTH-JAG98 installation harness connects between the CD auto changer and amplifier. In standard audio systems (no amplifier), the BTH-JAG98 connects between the CD changer and the radio.

To minimize connecting errors, locate CD auto changer pigtail – (See Fig. 6) Connecting to something other than the CD auto changer will result in low or no audio playback, no power etc.

8. Crimp accessory RED wire to included Add-a-Fuse Tap circuit (See Fig. 8)



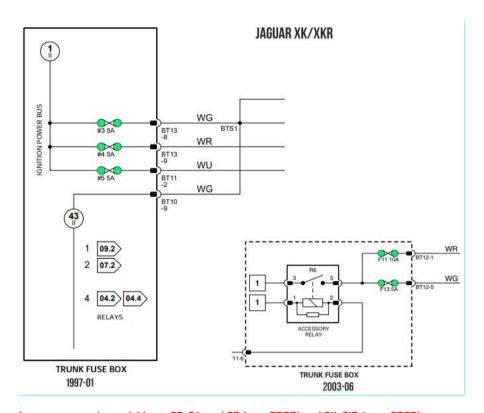
Fig. 8



Fig. 9

 Remove factory fuse from fuse box position: F5 (XJ/R) or F3, F4, F5, F11, F13 (XK/R) (Or any circuit able to supply switched 12V)

**Alert:** If the aforementioned fuse slot was empty (no fuse), the "new circuit fuse" slot on add-a-fuse circuit remains empty, however; if factory fuse position had a fuse, said fuse must be relocated into 'factory fuse" slot on the Add-a-fuse circuit. (See **Fig. 9**)



# Accessory supply available at: F3, F4, and F5 (pre-2002) and F11, F13 (post 2002) XK/XKR F3, F5 (XJ)

Please start engine, turn on the radio, press CD button to test for noise prior to finalizing install.

**Note:** Fuse F5 (XJ) protects Jaguar cigar lighter sockets and prone to engine noise especially if used as a USB-type charging port.

 Carefully route the 16-pin plug on the other end of the install harness to center console (armrest/center glovebox) area. These areas are where we recommend connecting the module (black box) seen in Fig. 15

# Routing installation cable (Sedan)

Use pry tool to open gap between window pillar and rear deck as seen in Fig. 11
 From inside trunk fish installation harness 16-pin plug (See Fig. 8) and optional AUX jack into the cabin. (See Fig. 11). Please do not pull on the plug or aux jack.





Fig. 11

2. Pull excess cable and tuck (hide) under backrest, seat cushion as you work towards the center glove box (armrest) See Fig. 12







Fig. 12

- 3. Continue fishing installation harness under center glove box and into storage bin.
- 4. **To remove storage bin**: Open the center glove box and remove 2 Philips head screws from latch cover and two more from hinge then remove the single screw on retainer bracket.
- 5. Lift to remove storage bin and set aside.
- Locate installation harness 8-pin female fed through in step 3 and gently pull excess cable.

**Note:** The aforementioned steps apply to sedan (XJ). X100 (convertibles) requires additional steps not part of this quide.

# **Module installation**

We recommend installing the Bluetooth module (black box) in center armrest (Fig. 13) or behind the radio/dashboard.



Fig. 13

1. Connect the installation harness 16-pin plug (See **Fig. 14)** to the module 16-pin connector (See **Fig. 15**)



Fig. 14



Fig. 15

### Playback options explained

These are the options available at checkout:

- 1. Retain changer playback (default)
- 2. Auxiliary input (instead of changer playback)

## 1. Retain changer playback:

This default option allows users to retain use of the 6-disc CD auto changer. **Proceed to installation step 3 below.** 

### 2. AUX input (instead of CD playback):

Instead of being able to play CD's (from 6-disc changer); this option provides a wired AUX input jack (See **Fig. 17**) to which users are able to connect and play portable audio devices (e.g., Sat radio kit, Car play, Alexa, iPod, MP3 etc.)

Warning: The Aux input option replaces CD playback; however, the <u>CD changer is still</u> required, remains connected and will no longer play.

The aux jack may remain freestanding or custom installed to dash or panel. To custom installed:

- 1. Drill a ¼ inch hole to dashboard or panel
- 2. Insert aux jack through hole and secure with nut. (See Fig. 17)





Fig. 17

 Connect one end of included 3.5mm audio cable (See Fig. 18) or similar to "AUX" jack (See Fig. 17) and connect the other end to audio device (within 3 ft.)



Fig. 18

- Attach microphone and bracket mounting bracket to headliner, sun visor etc.
- 5. Route microphone cable down pillar, under dashboard and into center armrest where module is installed.
- 6. Connect microphone right angle plug to module "MIC" input. (See **Fig. 19**) Wind noise will negatively affect phone audio. Users are advised to install microphone away from wind/ventilation ducts etc.





Visor microphone



Fig. 19

# Optional USB extension cable installation

**Note**: a. Optional 6 ft. USB dash mount extension cable is not required for operation, however it is used to extend the module USB charging port (See **Fig. 18**) to dashboard, glovebox etc.

#### b. The USB port supports charging only.

Drill a ¾" hole to dash or panel using a step drill bit or equivalent (See Fig. 20)
 As an alternative; use the included bracket (See Fig. 25) to mount USB without drilling.



Fig. 20

Fish USB cable terminal (See Fig. 21) through hole created in step 1 and plug into USB port on module (See Fig. 22)



**Fig. 21** USB cable



Fig. 22

3. Snap header (See Fig. 23) to surface until flush (See Fig. 24)



Fig. 23



Fig. 24



Fig. 25

Tuck and secure any extra wires from moving parts and proceed to next step

## Pairing module

Pairing varies among devices but basic steps are the same. This process is done upon initial install and will not have to be repeated

- l. Turn ignition and radio "ON"

  From your Bluetooth enabled device, turn the Bluetooth ON and search for Bluetooth devices.
- 2. When a list of available Bluetooth devices appears on your Bluetooth device, select "DisCarSt" (See **Fig. 26**)
- 3. Confirmation "tone" is heard on car speakers.
- 4. The unit will automatically enter the BT Audio source and you can now start streaming audio from your Bluetooth enabled device.

  Note: If the mobile phone doesn't support SSP (Simple Secure Pairing)

  Profile, please enter the pass code of "DDD"

| Bluetooth                                    |               |  |
|--|---------------|--|
| Now discoverable as "King Solomon's iPhone". |               |  |
| MY DEVICES                                   |               |  |
| DisCarSt                                     | Connected (i) |  |

Fig. 26

## Feature comparison

### Bluetooth hands-free and streaming modules:

| Feature                 | BTH-JAG98     | BTH-JAG98R | BT3-JAG98 |
|-------------------------|---------------|------------|-----------|
| CD changer retention    | ✓             | ✓          | Χ         |
| Requires CD changer     | ✓             | <b>√</b>   | Х         |
| Audio input (AUX)*      | Optional      | Optional   | Х         |
| Charging (USB)          | Built-in      | Built-in   | Built-in  |
| Visor microphone        | ✓             | ✓          | ✓         |
| Requires 12V ACC wire   | ✓             | <b>√</b>   | Х         |
| Hands-free calls        | ✓             | <b>√</b>   | <b>√</b>  |
| Audio streaming         | ✓             | <b>√</b>   | <b>√</b>  |
| Radio button controls   | Х             | Х          | <b>√</b>  |
| Wireless remote         | ✓             | <b>√</b>   | Х         |
| Module install location | Armrest/radio | Radio      | Radio     |

<sup>\*</sup>Aux input replaces CD playback

### Bluetooth streaming modules (Not for hands-free calls)

| Feature                 | BT2-JAG98   | BT2-JAG98R | BTA-JAG98   |
|-------------------------|-------------|------------|-------------|
| CD changer retention    | χ           | χ          | ✓           |
| Requires CD changer     | Х           | χ          | ✓           |
| Audio input (AUX)*      | χ           | Х          | Optional    |
| Charging (USB)          | Χ           | X          | Built-in    |
| Visor microphone        | Х           | χ          | Х           |
| Requires 12V ACC wire   | Х           | Х          | ✓           |
| Hands-free calls        | Х           | Х          | Х           |
| Audio streaming         | <b>√</b>    | ✓          | ✓           |
| Radio button controls   | <b>√</b>    | ✓          | Х           |
| Wireless remote         | Х           | Х          | <b>√</b>    |
| Module install location | Trunk/hatch | Radio      | Trunk/hatch |

<sup>\*</sup>Aux input replaces CD playback

## **Bluetooth operation**

- 1. Turn ignition to "ACC" or "ON"
- 2. Turn radio ON.
- 3. Press "CD" button on radio to switch to Bluetooth mode
- 4. Launch smartphone music streaming application
- 5. Use remote control (See **Fig. 27**) or device built-in controls or touch screen to for track selection, adjust volume, pause/play etc.
- 6. Place phone call or ask someone to call.
- 7. To answer call; tap **Previous track** on remote control.
- 8. To end call, tap Next track remote control.
- 9. To switch to CD changer; tap Pause/Play button
- 10. To switch back to streaming; tap Pause/Play button
- II. If correct operation is confirmed go ahead and reinstall radio.



If correct operation is confirmed go ahead and reinstall radio.

**Warning:** Playlist/Track selection \*NOT\* possible from Jaguar radio buttons. Use audio device built-in controls or included remote to access and control audio files. Muting works only when radio is in "CD/Bluetooth" mode. If in AM/FM mode, radio does not mute upon initiating or receiving calls.

## Frequently asked questions & troubleshooting

1. What is the difference between the BTH-JAG98 and BTH-JAG98R?

The <u>BTH-JAG98R</u> connects to the CD port on the radio (behind the dash) and applicable to vehicles with standard audio system (1997\*-99 XK and XJ and 2000-06 XK and 2000-03 XJ)

The BTH-JAG98 works in the same vehicles (Standard or Premium audio systems) and connects to the CD plug in trunk/hatch and Bluetooth module installs in armrest.

Note: 2000+ vehicles with Premium audio system (amplifier in trunk—See Fig. 28) requires our BTH-JAG98. To be clear, 2000-03 XJ and 2000-06 XK premium audio (amplifier in trunk) requires the BTH-JAG98.



Fig. 28

- 2. Can I pair more than one device to Bluetooth module?
  - **YES**; pairing multiple devices is possible, however only one device can connect at a time. Disconnect first device to allow pairing to another device.
- Will I be able to use both music and Navigation apps at the same time?
   YES! When streaming and Navigating (e.g., Waze etc.); music will mute during
   navigation guidance and return to previous state when guidance ends. If a call is
   made or received, both Navigation guidance and streaming are muted until call
   is ended.
- 4. After installing and testing, everything works; but there is engine "whine". (Increases with RPM) What can I do to fix this?

Ensure all connections are snug. If powering module with cigar lighter: remove any charging (e.g., USB) device from cigar lighter port.

Relocate accessory wire (see phone plug chart on page 5)

Install suitable noise filter. Go to question 17

- How do I listen to the CD changer or AUX device?
   To listen to CD's or AUX, press play/pause button on remote or from audio device.
- 6. Can I connect the BTH-JAG98 to the back of the radio?
  NO; the BTH-JAG98 harness plugs into the CD changer plug in luggage compartment or hatch and the module installs beneath armrest.
- 7. What is the vehicle application and where does audio module connect?

  The BTH-JAG98 is specific to the following Jaguar vehicles:
  1997\*-03 (x308) (To CD changer plug in luggage compartment)
  1997\*-06 (x100) (To CD changer plug in luggage compartment)
- 8. I hear clicking sounds as I use my device, how can I stop this?
  Go to device settings and disable touch sounds.
- My module does not always pair when entering vehicle. How to I remedy this?

Module may not pair if already paired to another device (last connected device). Should this happen, check that no other device has already paired, turn ignition off and back on or disable/re-enable Bluetooth on device.

- 10. Playback is distorted, how do I fix this?

  One likely cause for distorted playback is high volume setting on audio device. To fix, ensure device volume is set to between 80-90%.
- 11. Callers can hear me, but I can't hear them- why? One likely reason is the Smartphone call volume is set too low. Please raise call volume level on your device to comfortable level.
- 12. Does this kit mute the radio (AM/FM) when calls are made or received?

  NO. This module does not mute the speakers if radio is in AM/FM mode. When phone rings, press "CD" button on radio to switch to Bluetooth mode. Your smart device will mute speakers if radio is in "CD" mode (Bluetooth mode).
- 13. Does it integrate to the steering control or does it have a separate pad? Steering wheel controls do not apply. Use included remote to control select Bluetooth functions (skip, answer/reject calls, volume etc.)
- 14. Do I need to connect a microphone or does it is integrated to the factory installed microphone?

  The included microphone must be installed. Optional wise barross may be
  - The included microphone must be installed. Optional wire harness may be available to allow use of the factory mic. See product page for details.
- Does call number, song name etc. show on the display?
   NO. Radio does not display callers name, number or song text.

# Audio plays on only <u>on</u> one\_side of the car<del>-plays</del>, <del>does respond</del>radio "CD" button is not responding or no power. What could be causing these issues?

- -- Check that factory plug (See **Fig. 3**) is snug to our connector (Page 2-3).
- Inspect the pins in our female connector (See **Fig. 4**). These may need "adjusting" because the pins on the factory male plug over time/temperature changes may become rigid, no longer "flex and developed a "memory position" especially if it never disconnected/separated from female connector.

### To remedy the no power or "CD" button not responding issue:

Get a ¼"/25mm flat head screwdriver (or the largest you can fit into the connector) and flex (bend) the "U-shaped" pin holder tab upward or as seen in

Fig. 24. Reconnect and if issue remain, repeat this step if necessary.

#### To remedy the no sound on one or all sides issue:

Get a  $\frac{y''}{25}$ mm flat head screwdriver (or the largest you can fit into the connector) and place above the <u>flat pin holder</u> tab and flex (bend) downwards as seem in **Fig. 24** 

Flexing the pin holders (up/down) allows for the pins to move closer to those on factory plug (which is rigid and no longer flexing)

This is a one-time adjustment that will not have to be repeated.



Fig. 29

# 16. I'm experimenting annoying engine noise (alternator whine that increases with engine speed) is there a fix for this?

Before anything, ensure battery terminals are clean, otherwise try finding a different power source for the accessory wire. If alternator whine is still present, we recommend installing our in-line BT63-NF (See **Fig. 30**) noise filter. This plug-n-play noise filter fits between the radio harness and module. <u>Click here</u> to purchase.

**Alert:** If the noise source is not a power source, this filter will not be of help. Audio related issues may be answered in question #16.



Fig. 30

\*Late 1997 with Ai-NET CD plug only. Early 1997 with 8-pin DIN plug do not apply.

#### Disclaimer

- This product has no affiliation with Jaguar
- We're not liable for misuse of this product.
- Professional installation recommended

#### For help email support@discountcarstereo.com

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