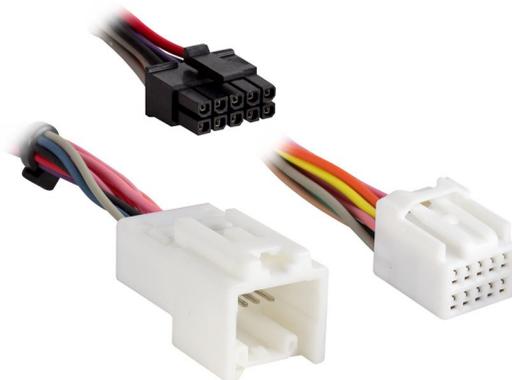




## AXi-TL10-R INSTALLATION MANUAL

**PLEASE REVIEW THIS INSTALLATION MANUAL  
CAREFULLY BEFORE BEGINNING ANY WORK**



**PROUDLY MADE IN USA**

Rev. 4.0 081915

**PLUG & PLAY WIRING HARNESS COMPATIBLE WITH**

**AXi-RGB1**

**AXi-RGB2**

**AXi-RGB3**

**Tech Support: 844-AXX-ESSI [WWW.AXXESSINTERFACES.COM](http://WWW.AXXESSINTERFACES.COM)**



## Table Of Contents

<b>COMPATIBLE VEHICLES.....</b>	<b>3</b>
<b>WIRING LOCATION.....</b>	<b>4-5</b>
<b>VSS WIRE.....</b>	<b>6</b>
<b>RSE WIRING.....</b>	<b>7</b>
<b>PRECAUTIONS.....</b>	<b>8</b>
<b>WIRING CONNECTIONS.....</b>	<b>9</b>
<b>PLUG AND PLAY HARNESS INSTALLATION.....</b>	<b>10</b>
<b>TESTING OPERATION.....</b>	<b>11</b>
<b>VEHICLE REASSEMBLY CHECKLIST.....</b>	<b>12</b>

### **IMPORTANT WARNING**

This product includes instructions for installation which must be carefully followed. The instructions are worded in such a manner to assume that the installer is capable of completing these type of electronic installations. If you are unclear as to what you are instructed to do or believe that you do not understand the instructions so as to properly and safely complete the installation you should consult a technician who does have this knowledge and understanding.

Failure to follow these instructions carefully and to install the interface as described could cause harm to the vehicle or to safety systems on the vehicle. Interference with certain safety systems could cause harm to persons as well. If you have any questions in this regard please call the Metra Help line at 1-844-299-3774 and for ordering questions call Metra at 1-800-221-0932.

**COMPATIBLE VEHICLES**

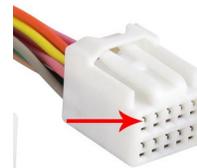
<b>MAKE</b>	<b>MODEL</b>	<b>YEAR</b>
LEXUS	ES	2002-2003
LEXUS	GS	2001-2005
LEXUS	GX	2003-2006
LEXUS	IS	2001-2005
LEXUS	LS	2001-2006
LEXUS	LX	1998-2002
LEXUS	LX	2003-2007
LEXUS	RX	1999-2003
LEXUS	RX	2004-2006
LEXUS	SC	2002-2009
TOYOTA	4RUNNER	2003-2004
TOYOTA	AVALON	2003-2010
TOYOTA	CAMRY	2002-2003
TOYOTA	HIGHLANDER	2001-2007
TOYOTA	LAND CRUISER	1998-2002
TOYOTA	LAND CRUISER	2003-2007
TOYOTA	PRIUS	2001-2003
TOYOTA	PRIUS	2004-2005
TOYOTA	SIENNA	2004

**IMPORTANT NOTICE**

IF YOU SEE THE NAVIGATION IMAGE GHOSTING ON THE SCREEN WHEN ONE OF THE VIDEO INPUTS IS ACTIVATED.

EXAMPLE OF GHOSTING: VIDEO 1 INPUT IS ACTIVATED AND YOU SEE THE FACTORY IMAGE GHOSTING IN THE BACKGROUND.

CUT PIN 6 ON MALE CONNECTOR OF AXI-TL10-R, IT IS LOCATED TO THE RIGHT OF YELLOW WIRE IF LOOKING AT 10 PIN MALE CONNECTOR ON THE WIRE SIDE.





ACCESSORY GROUND REV		
MAKE	MODEL	YEAR
LEXUS	ES	2002-2003
LEXUS	GS	2001-2005
LEXUS	GX	2003-2006
LEXUS	IS	2001-2005
LEXUS	LS	2001-2006
LEXUS	LX	1998-2002
LEXUS	LX	2003-2007
LEXUS	RX	1999-2003
LEXUS	RX	2004-2006
LEXUS	SC	2002-2009
TOYOTA	4RUNNER	2003-2004
TOYOTA	AVALON	2003-2010
TOYOTA	CAMRY	2002-2003
TOYOTA	HIGHLANDER	2001-2007
TOYOTA	LAND CRUISER	1998-2002
TOYOTA	LAND CRUISER	2003-2007
TOYOTA	PRIUS	2001-2003
TOYOTA	PRIUS	2004-2005
TOYOTA	SIENNA	2004

**Accessory, Reverse and Ground wires are found in t**

Table.1



REVERSE WIRE LOCATION		
ACCESSORY	GROUND	REVERSE
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. GREEN/YELLOW
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. BLUE
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. PINK	PIN17. WHITE/BLACK	PIN 14. RED
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. YELLOW/RED
PIN 18. GRAY	PIN17. BROWN	PIN 14. RED/YELLOW
PIN 18. GRAY or BLUE	PIN17. WHITE/BLACK	PIN 14. BLUE OR BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. YELLOW
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK
PIN 18. GRAY/RED	PIN17. BROWN	PIN 14. RED/BLACK
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED
PIN 18. GRAY	PIN17. WHITE/BLACK	PIN 14. RED/BLACK

**in the 18 pin connector at the navigation DVD-ROM**

VEHICLES SPEED SENSOR WIRE			
MAKE	MODEL	YEAR	VSS
LEXUS	ES	2002-2003	PIN 5. VIOLET/WHITE
LEXUS	GS	2001-2005	PIN 5. VIOLET/WHITE
LEXUS	GX	2003-2006	PIN 5. VIOLET/RED
LEXUS	IS	2001-2005	PIN 5. WHITE/BLUE
LEXUS	LS	2001-2006	PIN 5. VIOLET
LEXUS	LX	1998-2002	PIN 5. VIOLET
LEXUS	LX	2003-2007	PIN 5. VIOLET
LEXUS	RX	1999-2003	PIN 5. VIOLET/WHITE
LEXUS	RX	2004-2006	PIN 5. BLUE
LEXUS	SC	2002-2009	PIN 5. WHITE/RED
TOYOTA	4RUNNER	2003-2004	PIN 5. VIOLET/RED
TOYOTA	AVALON	2003-2010	PIN 5. VIOLET OR BROWN
TOYOTA	CAMRY	2002-2003	PIN 5. VIOLET/WHITE
TOYOTA	HIGHLANDER	2001-2007	PIN 5. ORANGE
TOYOTA	LAND CRUISER	1998-2002	PIN 5. VIOLET
TOYOTA	LAND CRUISER	2003-2007	PIN 5. VIOLET
TOYOTA	PRIUS	2001-2003	PIN 5. VIOLET/WHITE
TOYOTA	PRIUS	2004-2005	PIN 5. VIOLET
TOYOTA	SIENNA	2004	PIN 5. VIOLET/WHITE

**VEHICLE SPEED SENSOR WIRE:** This connection is not required for this installation, it is simply provided as reference material for your convenience.

Vehicle speed sensor wire is located in the 18-Pin connector behind the DVD-ROM computer, in the same connector where accessory, ground and reverse wires are found.

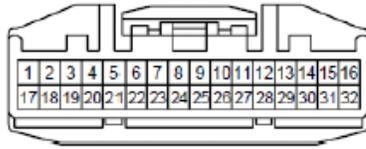
Cut the vehicle speed sensor wire in half and extend the wires, install toggle switch in the preferred location.

When vehicle speed sensor wire is open, navigation system address entry can be performed by passengers when vehicle is in motion.

Please note when vehicle speed sensor wire is open navigation system track vehicles location only using GPS signal. Please advise customer to close the switch as soon as address entry task is complete.

## RSE CONNECTIONS

Rear Seat Entertainment Wires-below you can find drawings of connectors at the DVD video players and video signals locations.



**32-pin connector  
At RSE**

**LEXUS GX:** In 32 pin connector at RSE

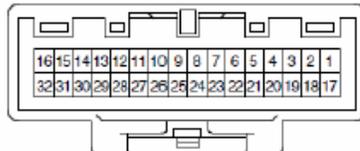
Video+: PIN21. YELLOW

Video-: PIN20. BROWN

**TOYOTA HIGHLANDER:** In 32 pin connector at RSE

Video+: PIN21. YELLOW

Video-: PIN20. BROWN

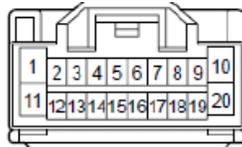


**32-pin connector  
At DVD Changer**

**TOYOTA 4RUNNER:** In 32 pin connector at DVD Changer

Video+: PIN21. YELLOW

Video-: PIN20. BROWN



**20-pin connector  
At DVD Changer**

**LEXUS LX** In 20 pin connector at DVD Changer

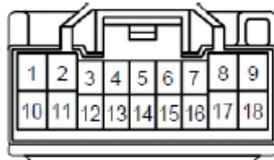
Video+: PIN9. RED

Video-: PIN8. RED/WHITE

**TOYOTA LAND CRUISER:** In 20 pin connector at DVD Changer

Video+: PIN9. RED OR WHITE

Video-: PIN8. RED/WHITE OR BLACK



**18-pin connector**  
Accessory, Reverse, Ground  
and VSS wires are found in  
**18 pin connector** behind the  
navigation DVD-ROM



**PRECAUTIONS:** Please read before you start the installation.

- Please study these instructions carefully before installing AXXESS.i plug and play wiring harness.
- Many new vehicles use low-voltage or data-bus systems that can be damaged by test lights and logic probes. Test all circuits with a digital multi-meter before making connections.
- Do not disconnect the battery if the vehicle has an anti-theft-coded radio, unless you have the radio code.
- If installing an external push button switch, check with the customer about where to install the switch.
- To avoid accidental battery drainage turn off the interior lights or remove the dome light fuse.
- Roll down a window to avoid being locked out of the car.
- Use of this product in a manner different to its intended way of operation may result in property damage, personal injury, or death.
- Set Parking brake.
- Remove the negative battery cable.
- Protect fenders before starting.
- Using protective blankets to cover front seats, interior of the vehicle and center console.
- Always install a fuse 6-12 inches away from AXXESS.i interface, 5 amp fuse should be used.
- Always secure AXXESS.i interface with Velcro or double side tape to prevent rattling of the interface.
- When securing AXXESS.i interface make sure that panels can be closed back easily.
- Use electrical tape on all you connections and splices, do not leave any exposed connections.
- Route all wires along factory harnesses, try not to drill or make any unnecessary holes.
- Make sure you are not connecting to any data wires; always check your connections with a multi-meter.
- Always use help of a professional installer to prevent any damage to the vehicle or AXXESS.i interface.



## WIRING CONNECTIONS

- Before making your connections, plan entire wire routing inside the vehicle prior to starting the installation.
- There are few acceptable ways of making a wire connections:

Solder connections, strip and tape connections and crimp connectors. When soldering connection be careful not drop solder on interior dash panels. When doing strip and tape wiring method, best way is to strip insulation off a wire, make a hole in a wire and route a wire thru a hole and then use tape to insulate. When using crimp connectors make sure not to crimp to insulation as this may cause wire to break.

- Low quality electrical tape is not a reliable insulator. It often falls off in hot weather, always use high quality electrical tape.
- Never twist and tape wires together without soldering.
- Never use fuse taps as they can damage fuse box terminals.
- If you use wire-tap connectors such as T-Taps, avoid using them. These connectors are inferior in quality and should be avoided.
- For help locating accessory , ground and reverse wires please see table.1 on page 4-5
- If vehicle is equipped with factory RSE (rear seat entertainment) system and customer would like to display factory installed RSE system on the front navigation screen, it is possible to get it done. Simply tap in to the factory video signal with the RCA wire and connect that RCA wire to video 1 input of an AXXESS.i AXi-RGB1/AXi-RGB2/AXi-RGB3 video interface.  
For help locating RSE system video signal see page 7.

**NAVIGATION DVD-ROM LOCATION:** Connection of the AXi-TL10-R plug and play harness is done at the navigation DVD-ROM. see page 10 for details.

**Toyota/Lexus sedan:** Navigation DVD-ROM is located in the trunk.

**Toyota/Lexus SUV and Minivan:** Navigation DVD-ROM is located under front passenger seat or driver seat.



## Plug & Play Harness Installation

### **PLUG & PLAY AXi-TL10-R HARNESS INSTALLATION:**

**All connections of the AXi-TL10-R plug and play installation harness in TOYOTA/LEXUS vehicles are done at the navigation DVD-ROM.**

**Step 1:** Locate TOYOTA/LEXUS DVD-ROM and gain access to the connectors, see page 5 for the DVD-ROM location.

**Step 2:** Disconnect white 10-pin connector from back of the navigation DVD-ROM computer.

**Step 3:** Insert male connector of the AXi-TL10-R plug-and-play harness back into the navigation DVD-ROM computer.

**Step 4:** Insert previously disconnected factory 10-pin connector into female connector of AXi-TL10-R plug-and-play harness.

**Step 5:** Connect AXi-TL10-R plug-and-play harness to the universal AXi-UNIHAR-R harness supplied with AXi-RGB1/AXi-RGB2/AXi-RGB3.

**Step 6:** Connect black ground wire of AXi-UNIHAR-R harness directly to chassis ground of the DVD-ROM ground wire. (see table 1 on pages 4-5)

**Step 7:** Connect red wire of AXi-UNIHAR-R harness to a +12v accessory power source in the vehicle. (see table 1 on pages 4-5)

**Step 8:** Connect gray wire of AXi-UNIHAR-R harness to emergency brake in the vehicle. (connection is not required if only installing the back-up camera)

**Step 9:** Connect orange wire of AXi-UNIHAR-R harness to a reverse light in the vehicle. (see table 1 on pages 4-5) If an aftermarket back-up camera is not going to be installed or vehicle is already equipped with a factory back-up camera, DO NOT connect Orange wire.

**Step 10:** Connect yellow wire of AXi-UNIHAR-R harness to the push button switch, and connect other side of the push button switch to a +12V accessory power source. (connection is not required if only installing back-up camera)

Momentary normally open push button should be used for this purpose.

**Step 11:** Connect AXi-UNIHAR-R harness to AXi-RGB1/AXi-RGB2/AXi-RGB3 AXXESS.i video interface.

If installing an aftermarket back up camera connect it to video input 2, If an external video source is being installed connect it video 1 input.

If installing AXi-RGB2/AXi-RGB3 and blue wire is not used, insulate the end of blue wire with electrical tape.

If installing AXi-RGB3 with HDMI video source you have an option of audio output via 3.5 mm audio jack located next to the main interface plug.



## Testing AXXESS.i Operation

**Step 1:** Turn on the ignition switch, check to see if status LED is on.

**Step2:** Test operation of video 1 input/smartphone input (AXi-RGB3), engage the parking brake and press the push button once, video 1 or smartphone(AXi-RGB3) input should turn on. OSD (on screen display) on the screen will display "Video 1" or "smartphone input" (AXi-RGB3) on the top left corner of the vehicles screen, connected video source will display on the screen, if no video source is connected OSD on the screen will display a "no signal" message.

**Step 3:** If an aftermarket back-up camera was installed, test proper operation of the back-up camera by shifting vehicle into reverse gear. Camera will display on video 2, if no camera is connected OSD on the screen will display a message "no camera connected". Static distance camera lines can be turned ON or OFF, to turn the camera lines OFF, please see installation manual of the (AXi-RGB1/AXi-RGB2/AXi-RGB3) interface you are installing for details.

To go back to the factory navigation/information screen, press and hold the push button for 2 seconds or more. If camera is desired to be displayed while vehicle is driving forward, please connect your camera to accessory power and select video 2 via push button.

**Step 4:** If video 2 is used as an input for an external video source, turn the static parking lines OFF, please see installation manual of the (AXi-RGB1/AXi-RGB2/AXi-RGB3) interface you are installing for details.

## After The Installation

- Test all functions of AXXESS.i Interface.
- Check operation of all dashboard components such Heat and AC controls, hazard lights, headunit operation etc.
- Check to see if all reinstalled panels are mounted properly.
- See page 12 for detailed checklist.



## Vehicle Reassembly Checklist

**When performing vehicle reassembly, please make sure to go over the list and checkoff check mark boxes :**

- Check to see if all connectors behind the screen, radio, HVAC etc. were reconnected.
- Check that LCD screen shuts off with key off, and turns back on with key on.
- Check touch-screen operation.
- Check Heat and AC controls operation.
- Check AM/FM/SAT radio reception.
- Check CD player/changer operation.
- Check GPS signal reception.
- Check cigarette lighter or +12V power source for accessory or constant power.
- Check to see if any other panels that were removed during installation and now being reassembled have all and any electrical connectors reconnected.
- Turn on parking light and check all dashboard lights operation.
- Check all panels for proper fit, make sure no gaps in panels are left behind.

**If all steps above are checked off, you will save time, money and have an extremely happy customer.**

**All above steps eliminate any unnecessary customer comebacks to your shop.**

**If you require any further assistance please call our tech support line, email or go online [WWW.AXXESSINTERFACES.COM](http://WWW.AXXESSINTERFACES.COM)**

**1-844-299-3774**

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