#### Introduction and Features

The SR-TAC16HX is a complete radio replacement kit for the installation of the Stinger HORIZON10® modular radio in Toyota Tacoma trucks equipped with either 6" or 7" factory display radios. All modules, cables and adapters are included to retain important features of the factory system, including: steering wheel-mounted radio controls, factory amplifier, factory reverse camera, factory USB port and AM/FM reception. Plug & Play wiring harnesses allow for quick and easy installation without the need to cut or splice any wiring. The display mounting panel allows mounting the 10 inch display without modifying/cutting any part of the vehicle's sub-dash.

#### **Important Notes**

### We recommend reading this manual thoroughly to familiarize yourself with the entire process prior to beginning the installation.

- 1. Adjustment of the vehicle settings through the original radio's vehicle settings menu will be disabled after installation of the new radio. It is advised to make sure all settings are as you desire prior to removal of the original radio.
- 2. The RP4.2-TY11 does not retain Rear Seat Entertainment.
- 3. To retain SiriusXM Radio, a SXV300 Tuner is required and sold separately.
- 4. After installation, if you do not initially hear any audio, you may need to cycle the ignition again to initialize the factory amplifier.
- 5. Speaker fading on factory amplified systems is only supported with the "amplified output" connection of the RP4.2-TY11.
- 6. When using real time fade, if the fader setting is biased more to the front or rear, as the radio turns on the sound may begin at the default setting and then quickly transition to your custom setting.
- 7. Radio features such as High Pass Filters (crossovers) will interfere with proper fader function. In order for the RP4.2-TY11's fader function to work, the audio from the radio's output must match so it can compare the front and rear audio levels and determine the proper fader setting for the factory amplifier.
- 8. If the truck is equipped with a factory 360° camera system, changing camera views using the touch screen will no longer be available. Camera views can be changed using the steering wheel controls only.
- 9. For the HORIZON10 Display to be waterproof, you must install 6 waterproof plugs to the back of the touch panel display in the screw holes not used for mounting.

#### **Recommended Tools**

10mm Socket Flush Cutters Ratchet Painters Tape

Phillips Screwdriver

#### **Included Components**

- 1. HORIZON10 Display Mounting Panel
- 2. Side Brackets (TOYK971/974)
- 3. Main Harness 2019-2021 (SR-TAC19H-HAR)
- 4. 6" Mounting Plate (TAC16H-6)
- 5. Radio Replacement Interface Module (RP4.2-TY11)
- 6. Satellite Radio Antenna Adapter (SAT-02)
- 7. Main Harness 2016-2018 (SR-TAC16H-HAR)
- 8. 7" Mounting Plate (TAC16H-7)
- 9. GPS Antenna Adapter (SR-GPS-TY01)
- 10. AM/FM Antenna Adapter (SR-BAA44)
- 11. Differential Video Adapter (RPA-VA1)
- 12. USB Adapter (USBC-TY1)
- 13. USB Adapter (USBC-TY3)
- 14. Main Harness Adapter (SR-SRK-ADAPT-IX2XX)

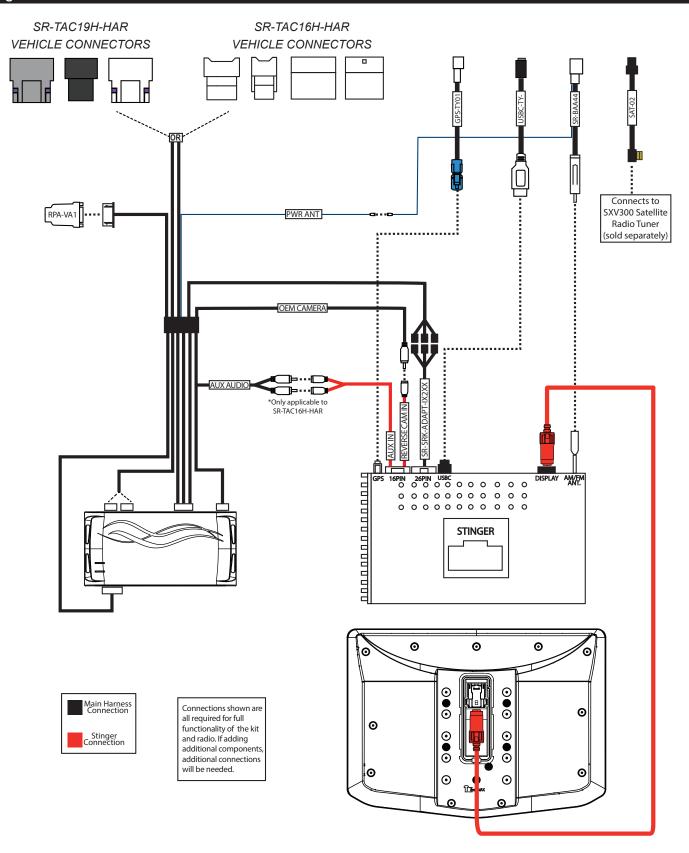
NOTE: Along with the SR-TAC16HX components, additional hardware and wire harnesses from the HORIZON10 (ix210) kit will also be used in the installation. Refer to the ix210 Installation Guide for harness and hardware descriptions.



Included double-sided tape, zip ties and M4 x 12 Zinc Screws (6x) not shown.



#### Wiring Overview



This installation manual will cover the necessary order of procedures to complete the installation efficiently and to avoid redoing any steps. The order will be as follows; Disassembly, In-Vehicle Harness Connections, Display Mounting Panel Preparation, Radio Module Preparation, Interface and Main Harness Connections, In-Vehicle Connections and Radio Unit Installation.

The installation steps shown are all required for full functionality of the radio. If adding additional components; cameras, amplifiers, satellite radio, etc., additional steps and harnesses will be needed.

#### Section 1: Disassembly

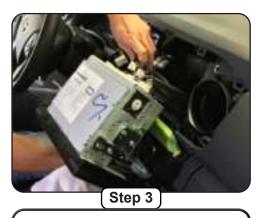
Before removing the factory radio, ensure that all vehicle settings that are programmed using the factory radio are set to the desired settings.



Using your hands or soft tool, pull and remove the radio trim and air vent panel.

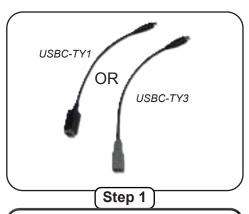


Remove the four 10mm bolts securing the radio. Remove the radio from the sub-dash.



Remove all connectors and cables from the back of the radio.

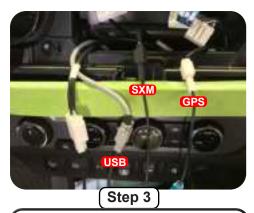
#### Section 2: In-Vehicle Harness Connections



From the SR-TAC16HX kit, locate the correct USB adapter: 2016-2018 uses *USBC-TY1* 2019-2021 uses *USBC-TY3* 



From the SR-TAC16HX kit, locate the *GPS Antenna Adapter* and *Satellite Radio Antenna Adapter* if installing a SXM tuner.



Connect the adapters to the matching colored connectors removed from the factory radio.

#### Section 3: Display Mounting Panel Preparation



Step 1

Remove the tabs in the middle opening of the Display Mounting Panel.



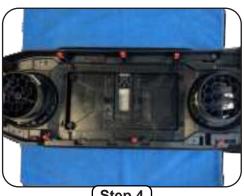
Step 2

Place the HORIZON10 Touch Panel Display into the Display Mounting Panel. Carefully turn the panel over while holding the display in place.



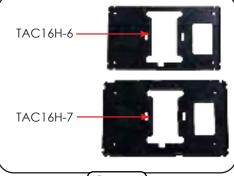
Step 3

With the Touch Panel Display face down on a soft surface, attach the Display Mounting Panel using four M4 x 12 screws from the SR-TAC16HX hardware pack.



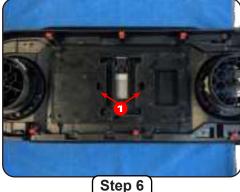
Step 4

Place the factory radio/air vent panel face down on the back of the Display Mounting Panel as shown.



Step 5

From the SR-TAC16HX kit. choose the appropriate Mounting Plate. TAC16H-6 is used when replacing a 6" factory display and TAC16H-7 is used when replacing a 7" factory display radio.



With the arrow pointing up, align the Mounting Plate to the locking clips (1) and push down until both clips engage. Move the panel side-to-side to ensure the mounting panel is centered.

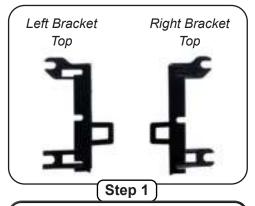


#### Step 7

Secure the Mounting Plate to the Display Mounting Panel using four M4 X 12 screws provided in the SR-TAC16HX kit.



#### Section 4: Radio Module Preparation



Locate the *Side Brackets* (*TOYK971/974*) included in the SR-TAC16HX kit and four M5 X 10 screws from the HORIZON10 hardware.

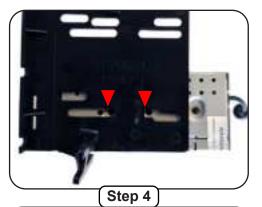


Step 2

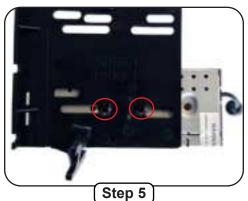
Remove the tabs located on the inside of the left and right **Side Brackets**.



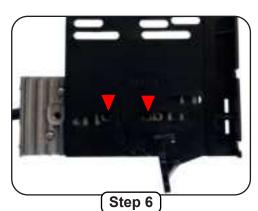
The *HORIZON10 Radio Module* will be mounted using the lower slots on the *Side Brackets*. The *Radio Module* will be inverted and set back <sup>3</sup>/<sub>4</sub>".



Position the right side bracket as shown and align the bracket to the mounting holes indicated.



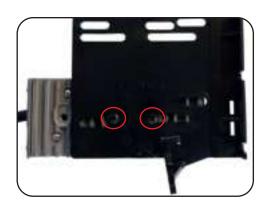
Secure the right side bracket using two M5 x 10 screws from the HORIZON10 hardware.



Position the left side bracket as shown and align the bracket to the mounting holes indicated.

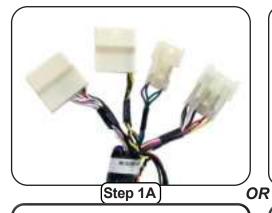
#### Step 7

Secure the left side bracket using two M5 x 10 screws from the HORIZON10 hardware.

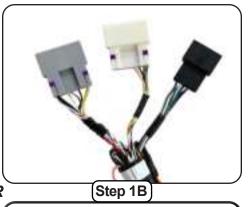




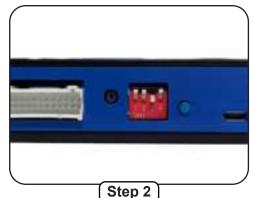
#### Section 5: Interface and Main Harness Connections



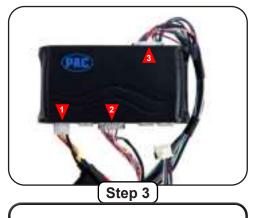
For 2016-2018 Tacoma, the SR-TAC16H-HAR (4-Plug) Main Harness will be used.



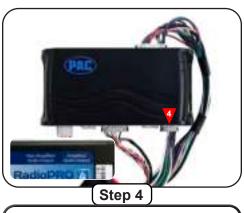
For 2019-2023 Tacoma, the SR-TAC19H-HAR (3-Plug) Main Harness will be used.



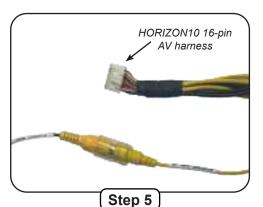
Set dip switch #3 to the down (ON) position on the side of the *Radio Replacement Interface Module* (RP4.2-TY11).



Plug in the 3-pin (1), 20-pin (2) and the 24-pin (3) plugs on the *Main Harness* to the appropriate ports on the *RP4.2-TY11*.



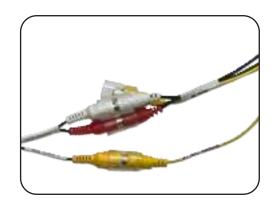
Referencing the sticker on the back, connect the 12-pin connector (4) to the appropriate port. Amplified if the truck has a factory amplifier, Non-Amplified for base audio.



Connect the "OEM Camera" RCA on the *Main Harness* to the "Reverse Cam In" RCA on the HORIZON10's 16 Pin AV Harness (PSEH-2103).

#### Step 6

For 2016-2018 Tacoma, connect the pair of RCA's labeled "AUX Audio" from the *Main Harness* (*SR-TAC16H-HAR*) to the "AUX IN" RCA's on the HORIZON10's *16 Pin AV Harness*.

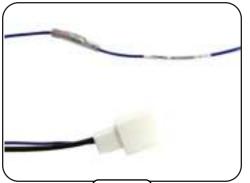


#### Section 5: Interface and Main Harness Connections (Continued)



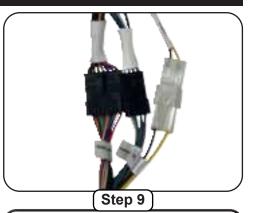
Step 7

From the SR-TAC16HX kit, connect the *Differential Video Adapter (RPA-VA1)* to the 6-pin plug on the *Main Harness*.

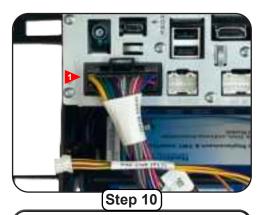


Step 8

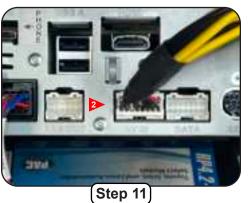
Connect the blue wire on the AM/
FM Antenna Adapter (BAA44) to
the blue "POWER ANTENNA +" lead
on the Main Harness.



Connect the *Radio Harness Adapter* (SR-SRK-ADAPT-IX2XX) to the *Main* Harness (from step 1).



Insert the *Radio Harness Adapter* 26 pin connector into the "Power" connector (1) on the *HORIZON10 Radio Module*. The "PAC-LINK (PL1)" 3 pin connector will not be used.



Connect the 16 Pin A/V Harness (PSEH-2103) (2) to the "AV IN" connection on the back of the HORIZON10 Radio Module.

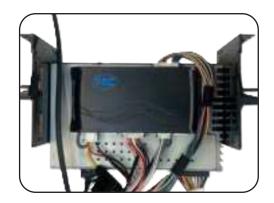


Step 12

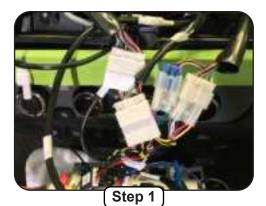
Connect the AM/FM Antenna to the "ANT" input (3) on the Radio Module. Connect the LVDS Display Cable (PSEH-2101) into the "DISPLAY" connection (4) on the Radio Module.

#### Step 13

Using the supplied two-sided tape, mount the *Radio Interface* (*RP4.2-TY11*) to the top of the *Radio Module*. Position the interface so that it does not cover the vent holes.



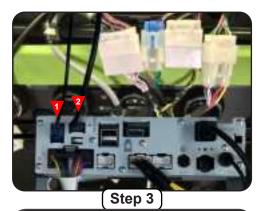
#### Section 6: In-Vehicle Connections and Radio Unit Installation



Connect the three or four vehicle side connectors on the *Main Harness* to the vehicle's radio plugs. (*SR-TAC16H-HAR* is shown)

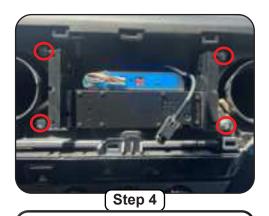


Connect the *AM/FM Antenna Adapter (SR-BAA44)* to the vehicle's antenna connector.



Connect the *GPS Antenna* (1) to the "GPS" input. Connect the *USB Adapter* (2) to the USB-C input.

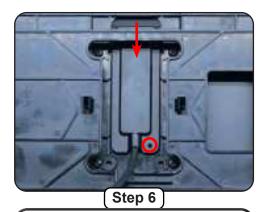
These are the connections for the basic installation. If adding additional components such as a second USB, SXM tuner or additional cameras, those connections should be made at this point, before mounting the radio module.



With the display cable routed over the top of the radio assembly, slide the assembly into position and reinstall the four factory 10mm bolts.



Connect the *LVDS Display Cable* into the back of the *Touch Panel Display*.



Place the *LVDS Connector Rear Cover* in the top of the opening on the back of the *Touch Panel Display*. Push the cover down until the screw hole opening is visible. Insert the M2.6x6.5 screw to secure the cover.

#### Section 6: In-Vehicle Connections and Radio Unit Installation (continued)

#### Step 7

Re-install the factory radio/air vent panel by aligning the retaining clips and pushing until all the clips engage.



#### **Testing and Verification**

- 1. Turn on the radio and check volume, balance and fade. If you do not hear any audio you may need to cycle the ignition to initialize the factory amplifier. If there is still no audio, reset the interface according to the procedure in the next section.
- 2. For JBL systems, if the overall volume is too low, use the gain adjustment on the side of the RP4.2 interface to set it to the desired level. The best way to do this is to turn the volume on the radio to 3/4 volume, then turn the gain on the RP4.2 until some distortion is heard, then back it down a little.
- Verify that all SWC are functioning properly. If any of the SWC are not functioning properly you may need to reset the interface.
- 4. Verify AM/FM Reception, Bluetooth, USB, Apple Carplay, Android Auto and Camera(s) are functioning correctly.

#### Firmware Updates (Stinger HORIZON10)

To update the Stinger radio firmware, refer to the HORIZON10 product page at: stingersolutions.com/products/stinger-horizon10-10in-radio

#### RadioPRO App

### Use of the RadioPRO App allows you to do the following:

- Configure User Interface Options such as:
  - Aftermarket radio Parking Brake Sequencing
  - Factory amplifier settings (Bass, Mid, Treble, Gain, Fader and Balance)
  - Real Time Fading
- · Update Product Firmware
- · Read Firmware/Hardware Versions
- Access Product User Manuals



#### **PLEASE NOTE:**

The interface must be connected to the vehicle when using the following features of the Radio PRO App:

Factory Amplifier Settings

The interface does not need to be connected to the vehicle when using the following features of the Radio PRO App:

- Firmware Updates
- Reading firmware/hardware versions



#### RadioPRO App (continued)

#### Infotainment/Factory Amplifier Settings

The RadioPRO app will also allow you to adjust the settings of the factory amplifier. You can adjust Amp Gain, Fader, Balance, Bass, Mid and Treble and real time fade. When real time fade is enabled in amplified systems, it will allow fading to be controlled directly from the aftermarket radio. Restoring factory settings on the module will default all values back to middle.

#### **Firmware Updates**

The RadioPRO app will also allow you to update the interface with new firmware as it becomes available. Please visit www.pac-audio.com or contact our tech support department to see if there is a firmware update for your interface.



In order to update the interface all DIP switches must be set to the down position. Connect the interface to your PC and select "Update Firmware". Now select "Select File". Finally, browse to the place where you saved the file and select it. This will begin the updating process. Once finished, disconnect the interface from the PC and set the DIP switches back according to the radio you have installed.





#### Restoring Factory Settings

You can restore the RP4.2-TY11 interface to factory default settings by pressing and holding the programming button on the side of the module until the status LED starts blinking red. Once the LED starts blinking red, release the button. You must release the button while the LED is blinking red in order to perform the reset. Please note, the LED will go through two stages before it starts blinking red. First it will blink green, then amber, then red.

This reset will restore the following settings to their factory defaults:

- SWC Mapping
- Parking Brake Output Settings
- Factory Amplifier Settings
- Real Time Fade will be reset to on

#### **Technical Support**

Email: support@.com Phone: 727-592-5991

