



#### INSTALLATION INSTRUCTIONS / OWNER'S MANUAL: AUDIO SHADE OFF-ROAD TOP FOR POLARIS RANGER CREW MODELS

www.hoppeindustries.com 22667 FM 15 Troup, TX 75789 (262) 552-2770 Thank you for choosing the Hoppe *Audio Shade* off-road top. We hope you enjoy the off-road top and we ask that you follow these instructions very closely. Doing so will save you time and ensure that your experience with the new *Audio Shade* is a positive one.

# We strongly suggest that you read the complete instructions before beginning the installation process to eliminate the possibility of performing unnecessary work.

Having a safe and clean environment and using the proper tools is essential for a successful installation.

#### It is critical that proper eye wear, ear protection, and protective clothing is worn throughout the top installation.

When you receive your *Audio Shade* off-road top, please check to ensure that all parts and hardware are included. If there are any parts missing or if you have any questions concerning the top at this time call Hoppe at (262)-552-2770 Mon-Thur. 8am-5pm CST or Friday 8am -12pm CST. Or you can email us at <u>tech@hoppeindustries.com</u>.

Hoppe reserves the right to change specifications, equipment, or designs at any time without notice and without incurring obligation.



## **TABLE OF CONTENTS**

SECTION 1 – Tools Required	4
SECTION 2 – About your Audio Shade Top	
2.1 Applicable Year Models:	
2.2 Audio Equipment Details:	4
2.3 Warranty:	5
2.4 Care and Maintenance:	5
2.5 Warnings:	6
SECTION 3 – Pre-Installation Inspection	7
SECTION 4 – Installation	



## <u>SECTION 1 – Tools Required</u>

- Socket wrench set
- Combination wrench set
- Wire cutters
- Drill with 3/8" bit

In addition to the above items, you may need shop supplies such as electrical tape, wire ties, thread locking compound.

#### <u>SECTION 2 – About your Audio Shade Top</u>

#### 2.1 Applicable Year Models:

This Audio Shade off-road top is designed to fit the following Ranger Crew models:

- 2015-2020 RANGER CREW 1000, RANGER 900, & RANGER DIESEL (all versions)
- 2015-2016 RANGER CREW 570 FULL SIZE (with Pro-Shield Cab)
- All versions means it includes sub models such as XP, North Start, Premium, EPS, Texas, and High Lifter editions.
- This top is compatible with most front / rear windshields and cab systems.

#### 2.2 Audio Equipment Details:



Your *Audio Shade* off-road top is powered by **Constant of Shade** using their premium quality power sports series audio equipment. This equipment is designed to function in all weather conditions with an IPX6 water resistance (powerful water jet) rating. The stereo is specifically engineered to provide excellent sound quality and volume in an open air power sports environment so you can enjoy your music on the go.

To learn more details about your stereo system, you can access product information and manuals for the stereo equipment here:

- KMC2 receiver: <u>https://www.kicker.com/kmc2</u>
- Sub-woofer amplifier: <u>https://www.kicker.com/pxa5001-500-watt-compact-powersports-mono-amplifier</u>
- Speaker amplifier: <u>https://www.kicker.com/pxa3004-4-channel-compact-powersports-amplifier</u>
- Sub-woofer: <u>https://www.kicker.com/comp-rt-10-2-ohm-subwoofer</u>
- Speakers: <u>https://www.kicker.com/42PSC654</u>



Your amplifier gains comes pre-adjusted from the factory and are tuned for optimum sound quality and system protection. This means you can feel free to crank the volume without much worry of harming your system. However, it is wise to use a little common sense. If you hear any distortion, back off a little. We recommend you do not adjust the gains from the factory settings without first consulting Hoppe.

Please note that your subwoofer will take 20 to 30 hours of play time to fully break in and reach its maximum output. You do not need to do anything different during this break in period. In fact, the more you listen and the louder you turn it up, the quicker you will reach the maximum potential. Use the equalizer settings in your KMC2 receiver to adjust the bass as needed throughout the break in period.

### 2.3 Warranty:

Your *Audio Shade* comes equipped with a 1 year limited warranty covering the lights, the stereo equipment, and the fiberglass top. The date of warranty coverage will be determined by the registration date of the warranty card or online warranty registration.

#### http://www.motortrike.com/TrikeAccWarranty.aspx

If the warranty is not registered with Hoppe, the warranty period will begin when the Audio Shade was shipped from Hoppe's factory.

#### 2.4 Care and Maintenance:

Your off-road top does not require any maintenance other than an occasional cleaning. To clean your top, simply hose off or power wash from a distance. If needed, use a mild automotive soap and sponge or brush. Use common sense. Do not use a high pressure power washer up close where it could cut, scar, or force water beyond the design intent of the top, lights, or stereo equipment.

The fuse boxes can be accessed by removing the fuse cover plate located just behind the sub-woofer.





FUSE BOX A 30A MINI FUSE (2X) 10A MINI FUSE (2X)

#### Figure 1: Fuse location.

- Fuse 1 Box A: 30 amp mini fuse for rear light bar
- Fuse 2 Box A: 10 amp mini fuse for interior light
- Fuse 3 Box A: 30 amp mini fuse for front light bar / radio receiver power.
- Fuse 4 Box A: 10 amp mini fuse for illumination / radio receiver ignition.
- Fuse Box B: Each amplifier uses a 40 amp J-Case fuse located under the black plastic cover shown in Figure 1.

#### 2.5 Warnings:

This off-road top adds up to 160 lbs. to your vehicle and is located up high on the roll cage. This increases the vehicles center of gravity and changes the vehicle dynamics and handling characteristics. Use extra caution as you learn the driving characteristics of your vehicle with your new off-road top installed. High speed cornering, off camber or side hill, acceleration, and braking performance will be negatively impacted by the weight of the top.

Do not listen to your stereo at an uncomfortable volume for extended periods of time. Potential hearing loss may result.

The driving lights provided with your Audio Shade are blinding to oncoming drivers. These are made for off road use only, and should be turned off when another vehicle is approaching on the trail.



## **SECTION 3 – Pre-Installation Inspection**

Included in your off-road top are the following components:

- Pre-assembled *Audio Shade* off-road top. (All speakers and electronics come preinstalled with interior wire harness.)
- Chassis wire harness.
- Hardware bag.

If any of the parts are missing, damaged, or you have any questions concerning them, please call Hoppe at (262)-552-2770 Mon-Thur. 8am-5pm CST.

In addition to accounting for all of the parts that you should receive with the top, you should inspect the vehicle in the following ways.

- Ensure that the vehicle is equipped with the factory roll cage, and the roll cage has not been bent out of shape in a roll over.
- Make sure the vehicle does not have any aftermarket accessories that are incompatible with the top. Note: This top fits over the factory windshield visor and is compatible with windshields that interface with this visor.
- Make sure the battery is in good condition and holds a charge.
- Make sure the charging system is in good condition.



## **SECTION 4 – Installation**

1. Remove the cage clamps and 3/8"-16 bolts and washers that come pre-installed on the top. Save the hardware for installation. See Figure 2 and Figure 3.



Figure 2: Remove the 2 clamps from the top.





Figure 3: Close up of cage clamp hardware.

1. Spread the clamps by hand and slide them over the cage tubing. Place them on the cage in the approximate locations shown in Figure 4. Note the orientation of the clamp tab pointing towards the rear of the vehicle. It must line up flat against the top on the correct side of the tubing.



Figure 4: Approximate clamp locations.



2. Clean the surface of the cage to remove dirt and residue before installing the foam cab sealing tape. Use a mild detergent or paint safe solvent and allow to completely dry. Place the supplied foam tape across the surfaces highlighted in Figure 5 below.

Note: This step is critical to sealing a cab system with windshields and doors.



Figure 5: Areas to apply foam tape.

3. Using a few assistants, set the *Audio Shade* off-road top on the cage. The top is contoured such that the cage fits inside the grooves on the top. **Note: The top weighs up to 160 lbs. depending on your configuration. Since you will have to lift and reach, it is helpful to have 4 to 6 people for this step.** See Figure 6.







Figure 6: Install the top on the cage.

- 4. Remove the four 6.5" speakers located in the far corners so you can reach your hand inside the top. The speakers are held in place with Philips screws. Once the screws are removed, lower the speaker by hand to reach behind and remove the speaker wires.
- 5. The top is mounted using the indicated holes in the factory cage. See Figure 6. Be sure the top is fully seated on the cage and in its final position. Drill a 3/8" hole through the fiberglass using the cage as a template at each location.
- 6. Bolt the top to the cage using the supplied 5/16" hardware. Make sure and use the nylock nut and washer inside the top and use a bolt and washer outside. Torque to 15 to 20 ft.\*lbs. See Figure 7.





Figure 7: Install the hardware in the top.

- 7. Slide the loop clamps into position so they line up with the threaded holes in the top. For both clamps, install the 3/8-16 bolt with washer through both clamp tabs and into the threaded hole in the top. Use blue Loctite 243 (medium strength) and torque the bolts to 25 ft.\*lbs. See Figure 3.
- 8. Re-install the speakers. Be sure to place the large quick disconnect on the <sup>1</sup>/<sub>4</sub>" speaker tab and the small quick disconnect on the 3/16" speaker tab. Re-use the Philips head screws you removed previously. Do not over torque the speaker screws with an impact driver (hand tighten only). See Figure 8.





Figure 8: Speaker wire orientation.

9. Fold the seat forward to access the battery. With the seat folded forward, pull out the passenger side storage tray. See Figure 9.



Figure 9: Fold seat forward and remove tray for battery access.



10. Route the chassis wiring harness along the down tube on the passenger's side rear corner of the cage. The ends with the battery terminals extend behind the seat backrest and into the corner of the battery compartment. See Figure 10.



Figure 10: Route the battery cable wiring.

11. Connect the red power wire to the positive terminal of the battery. Connect the black ground wire to the negative terminal of the battery. Use the supplied M6 nut to clamp the cable down to the accessory posts on the battery terminal. See Figure 11.





Figure 11: Attach the power wires.

- 12. Locate the cigar light style power point just in front of the battery near the cup holders. Pry the power point out to access the wiring on the back. Remove the 12V ignition wire from the power point (orange wire with white stripe). Connect one end of the pink ignition wire on the Audio Shade chassis harness to the ignition wire from the power point. Connect the other end of the Audio Shad chassis harness to the power point. Push the power point back into the housing. See Figure 11.
- 13. Line up the terminals on the chassis harness connector with the bulk head connector located on the back driver's side corner of the top. Plug the connector in and rotate the <sup>1</sup>/<sub>4</sub> turn collar to lock the connector together. See Figure 12.





Figure 12: Align connector terminals and rotate 1/4 turn.

- 14. Use zip ties to secure the chassis harness to the frame and cage. Make sure the wires are secured away from any moving suspension components or hot exhaust. Work your way from the bulk head connector on the top to the battery.
- 15. You are now ready to enjoy the music, lighting, and shade provided by your *Audio Shade* off-road top. Basic operation works as follows:
  - Turn the vehicle ignition switch on to power up the stereo system.
  - Press the mode button on the stereo receiver to select the input source from AM/FM radio, Bluetooth, or Auxiliary.
  - Hold the mode button to access additional menus.
  - The front and rear light bars can be used with or without the vehicle's ignition switch on. Press the toggle switches to activate each component. Warning: extended use of the light bars without the vehicle's charging system functioning will deplete the battery and the engine may not start.
  - To control the interior light color or make them dance to the music, download the Bluetooth app to your iOS or Android device. The app information is included with your Audio Shade and is located in the zipper pocket.

To learn about the more advanced features and operation of your stereo, visit the Kicker website links found in <u>SECTION 2 – About your Audio Shade Top</u> of this document.



Thank you for choosing Hoppe *Audio Shade* off-road top for you Polaris Ranger UTV. We hope you enjoy your new sound system, top, and lighting. We invite you, in your travels, to stop by our manufacturing plant in Troup, Texas, for a factory tour and to meet the people who designed and manufactured your Audio Shade off-road top. This will also

give you an opportunity to check out our sister company with and our extensive line of trike conversions, motorcycle, and power sports accessories.

We believe you will be impressed by what you witness and the people you will meet.

