

The Saddle Tramp DSP is an interface and DSP combined into a single solution.

Harley Davidson's radios use preprogrammed crossover and equalization settings that are locked into the OE radio. These settings restrict the audio quality when adding aftermarket equipment. The ST-DSP fixes that issue. The interface will reprogram your OE radio to output a flat frequency response curve. During the re-flash process the DSP will load a Pre-tuned equalization curve tuned by Harman Kardon. Interface and DSP set up for Harley Davidson **Street Glide and Road Glide 2014–2022** Infinity and Saddle Tramp six speaker kit

DSP is compatible with these H-D radios.

Not compatible with the Rockford Fosgate OE system



4-button



11-button



GTS Touchscreen

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REV. 7/28/23 INSTINF-STDSP

Re-flashing the OE Radio

Below are the frequency response curves of a stock Harley Davidson non-amplified radio.





Frequency response curve after the Saddle Tramp DSP reflashes the OE radio.





INTERFACE AND DSP SETUP

Not Connected

CETUD INCTDUCTIONS

Quick Setup:

- 1. Now that the motorcycle-specific harnesses are connected to the bike and Infinity product.
- **2.** Download the Saddle Tramp DSP App (Figure A) on your Android device.
- **3.** Use the QR Code provided to quickly locate and download the app. (Figure B)
- **4.** Turn on the ignition of your bike. Make Sure Volume on radio is reduced to one notch, volume of one.
- 5. Open the ST-DSP App on your Android device. (Figure C)

Continued on next page



(Figure A)



(Figure B)

CONSCUENT ADJUST EXAMPLE DELVIADJET DEVIALUET DEVIALUET <thdevialuet< th=""></thdevialuet<>				
The Saddle Tramp DSP is an interface and DSP combined into a single solution. Harley Davidson's radios use pre-programmed crossover and equalization settings that are locked into the OE radio. These settings restrict the audio quality when adding aftermarket equipment. The ST-DSI fixes that issue. The interface will reprogram your OE radio to output a flat frequency response curve. Quick Setup:	CROSSOVER ADJUST			
 Wire up your vehicle specific harness according to the instruction. Turn ignition on. Select the Bluetooth Connection page in the app, hit scan and select your device. Select Configuration page, then Vehicle Type. Select your Flash and hit apply. The STDSP will start the programming sequence. During this process the radio will turn off then bec 	CROSSOVER ADJUST The Saddle Tramp DSP is a Harley Davidson's radios u the OE radio. These setting fixes that issue. The interfa Quick Setup: - Wire up your vehicle spec - Turn ignition on. - Select the Bluetooth Con - Select Configuration pag - The SEDSP will eart the	EQUALIZER ADJUST an interface and DSP combine use pre-programmed crossove gs restrict the audio quality wh ace will reprogram your OE rad cific harness according to the nection page in the app, hit so nergetammin seducere Duri	DELAY ADJUST d into a single solution. r and equalization setting en adding aftermarket ec to to output a flat freque instruction. an and select your devic- tur Flash and hit apply.	INPUT/LEVELS gs that are locked into quipment. The ST-DSP ncy response curve. e. will turn off then back

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RULETOOTH CONNECTION

(Figure C)

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Quick Setup: (cont.)

Not Connected					
SETUP INSTRUC	SETUP INSTRUCTIONS		BLUETOOTH CONNECTION		OUTPUTS
CROSSOVER AD	JUST	EQUALIZER ADJ	UST DELAY ADJUST INPUT/LEVELS		INPUT/LEVELS
CROSSOVER AL SCAN DISCONNECT	Avail	EQUALIZER ADJ	- Turn the ig - Scan - Pre then select t that you are - Disconnec Note: You N	DELAY ADJUST nition on. ss this button to start the Blue he ST-DSP from the available of connected will show in the top t - Disconnects the ST-DSP fro 1UST Lock Down your settings	tooth scanning process, devices list. Confirmation b left corner of the app. m the app. before exiting or
			disconnecti found on the	ng from the ST-DSP. The LOCK Configurations page within th	DOWN button can be e app.

6. Go to the Bluetooth Connection page within the app, tap on "Scan," and select your device from the list. (Figure D)

Continued on next page

(Figure D)



Quick Setup: (cont.)

Connected to ST-DS	P-X 370E537E (-56)				
SETUP IN	STRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS	
CROSSO	CROSSOVER ADJUST EQUALIZER ADJUST DELAY ADJUST INPUT/LEVE				
IDENTIFY	Click this button to confirm that the interface is connected properly. If it is, a chime will be heard from the front left speaker. * * Only installations where the interface is connected to a front left speaker.				
RESET TO DEFAULTS	Resets the interfa	ce to factory settings. During the rese programing option.	t process the amplifiers will sh	utoff for 5-10seconds.	
EQUALIZER TYPE	User has the optic	on of optimizing the motorcycles soun	d quality with a Graphic or Para	ametric equalizer	
LOCK DOWN	Stores the current configuration into the ST-DSP Atention(This button must be selected before closing the app or cycling the key, otherwise, all settings will be lost				
SAVE CONFIG	Saves the current configuration to your device				
RECALL CONFIG	Recalls a configuration from your device				
ABOUT	Displays Informat	ion about this App and the ST-DSP			
SET PASSWORD	Changes passwor Note: A 4 digit only page	d for accessing the ST-DSP monthmuch be closer collection. The interface of			

7. Navigate to the Configuration page. (Figure E)

Continued on next page

(Figure E)

Quick Setup: (cont.)

Connected to ST-DS	P-X 370E537E (-57)			
SETUP IN	STRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSO	VER ADJUST	EOUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS
IDENTIFY	Click this button to confir speaker. * * Only installat	Select Vehicle T and OE Amp Opt	ype s, a chime wil iion left speaker.	l be heard from the front left
RESET TO DEFAULTS		Make: Harley Model: 4.3/6.5GT Infinity Tune	and Flash	utoff for 5-10seconds.
VEHICLE TYPE		GTS Radio Infinity Tune	and Elash	
EQUALIZER TYPE	User has the option of op	Return 4.3/6.5GT to OE	Curve	ametric equalizer
LOCK DOWN	Stores the current configu Attention This button must be set	Return GTS Radio to OE	Curve	
SAVE CONFIG	Saves the current configu	ration to your device		
RECALL CONFIG	Recalls a configuration fro	om your device		
ABOUT	Displays Information abo	ut this App and the ST-DSP		
SET PASSWORD	Changes password for ac	cessing the ST-DSP		e.

8. Select the appropriate Vehicle Type and choose your desired Flash option (Figure F)

Continued on next page

(Figure F)



Quick Setup: (cont.)

Connected to ST-DS	SP-X 370E537E (-57)		WARNING: Settings have changed - Mak	e sure to 'Lock Down' before Exiting App
SETUP IN	ISTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSO	VER ADJUST	EOUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS
IDENTIFY	Click this button to confir speaker. * * Only installat	Select Vehicle and OE Amp Op	Гуре s, a chime wi otion left speaker.	ll be heard from the front left
RESET TO DEFAULTS	Resets the interface to fa	Make: Harley Model: GTS Radio Infinity Tun	e and	nutoff for 5-10seconds.
VEHICLE TYPE	Select the vehicle progra	Flash		
EQUALIZER TYPE	User has the option of op	○ Without OE Amp ◎ W	/ith OE Amp	ametric equalizer
LOCK DOWN	Stores the current confige	CANCEL A	PPLY	1
SAVE CONFIG	Saves the current configu	ration to your device		
RECALL CONFIG	Recalls a configuration fro	om your device		
ABOUT	Displays Information about	ut this App and the ST-DSP		
SET PASSWORD	Changes password for ac	cessing the ST-DSP		

9. Apply the settings. The ST-DSP will initiate the programming sequence. During this process, your radio will turn off and then turn back on. It is crucial not to turn off the bike's ignition at this stage. The process can take up to 1 minute. (Figure G)

Continued on next page

(Figure G)

Quick Setup: (cont.)

Connected to ST-DSP-X 370E537E (-56)						
SETUP IN	STRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS		
CROSSO	VER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS		
IDENTIFY	Click this button to speaker. * * Only i	o confirm that the interface is connect nstallations where the interface is cor	ed properly. If it is, a chime wil nected to a front left speaker.	l be heard from the front left		
RESET TO DEFAULTS	Resets the interfa	ce to factory settings. During the rese	t process the amplifiers will sh	utoff for 5-10seconds.		
VEHICLE TYPE	Select the vehicle	programing option.				
EQUALIZER TYPE	User has the optic	on of optimizing the motorcycles soun	d quality with a Graphic or Para	ametric equalizer		
LOCK DOWN	Stores the current	configuration into the ST-DSP ust be selected before closing the app or cycling t				
SAVE CONFIG	Saves the current	configuration to your device				
RECALL CONFIG	Recalls a configur	ation from your device				
ABOUT	Displays Informat	ion about this App and the ST-DSP				
SET PASSWORD	Changes passwor	rd for accessing the ST-DSP		s'		

- Once the programming is complete, go to the CONFIGURATION page and LOCK DOWN your settings. Ensure that the bike's ignition remains on during this step. (Figure H)
- **11.** After the LOCK DOWN process finishes, you're all set. Reassemble your bike, and enjoy the updated features.
- **12.** If you wish to fine-tune your audio, refer to the advanced setup section of the manual.

(Figure H)



Bluetooth Connection screen

Not Connected					
SETUP INSTRUC	TIONS	BLUETOOTH CONN	ECTION	CONFIGURATION	OUTPUTS
CROSSOVER AD	JUST	EQUALIZER ADJ	DJUST DELAY ADJUST INPUT/LEVELS		INPUT/LEVELS
CROSSOVER AD	CROSSOVER ADJUST EQUALIZER ADJUST DELAY AD. SCAN Available Devices - Turn the ignition on. DISCONNECT - Scan - Press this button to sthen select the ST-DSP from that you are connected will sthat you disconnecting from the ST-DS found on the Configurations provide the ST-DS found on the Configuration of the ST-DS found on the ST-DS found on the Configuration of the ST-DS found on the Configuration of the ST-DS found on the Configuration of the ST-DS found on the ST-D		DELAY ADJUST nition on. ss this button to start the Blue the ST-DSP from the available of connected will show in the top at - Disconnects the ST-DSP fro /UST Lock Down your settings of from the ST-DSP. The LOCK e Configurations page within th	INPUT/LEVELS tooth scanning process, devices list. Confirmation b left corner of the app. m the app. before exiting or DOWN button can be he app.	

- Turn the ignition on.
- Scan Press this button to start the Bluetooth scanning process, then select the ST-DSP from the available devices list. Confirmation that you are connected will show in the top left corner of the app.
- Disconnect Disconnects the ST-DSP from the app.

Note: You MUST Lock Down your settings before exiting or disconnecting from the ST-DSP. The LOCK DOWN button can be found on the Configurations page within the app.

Configuration screen

Not Connected					
SETUP IN	ISTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS	
CROSSOVER ADJUST				INPUT/LEVELS	
IDENTIFY	Click this button to confirm that the interface is connected properly. If it is, a chime will be heard from the front le speaker. ** Only installations where the interface is connected to a front left speaker.				
RESET TO DEFAULTS	Resets the interface to factory settings. During the reset process the amplifiers will shutoff for 5-10 seconds.				
VEHICLE TYPE	Select the vehicle programing option.				
EQUALIZER TYPE	User has the optic	on of optimizing the motorcycles soun	d quality with a Graphic or Para	ametric equalizer	
LOCK DOWN	Stores the current	configuration into the ST-DSP ust be selected before closing the app or cycling t			
SAVE CONFIG	Saves the current configuration to your device				
RECALL CONFIG	Recalls a configur	ation from your device			
ABOUT	Displays Informat	ion about this App and the ST-DSP			
SET PASSWORD	Changes passwor	d for accessing the ST-DSP			

- IDENTIFY: Click this button to verify proper connection of the interface. If connected correctly, a chime will be heard from the front left speaker. * * This applies only to installations where the interface is connected to a front left speaker.
- RESET TO DEFAULTS: Restores the interface to its factory settings. During the reset process, the amplifiers will shut off for 5-10 seconds.
- VEHICLE TYPE: Select the vehicle programming option.
- EQUALIZER (EQ) TYPE: Choose between a Graphic or Parametric equalizer to optimize the motorcycle's sound quality.
- LOCK DOWN: Click this button to save the selected settings.
- Attention! This button must be selected before closing the app or turning off the key; otherwise, all settings will be lost.

- SAVE CONFIGURATION: Saves the current configuration to the mobile device.
- RECALL CONFIGURATION: Retrieves a configuration from the mobile device.
- ABOUT: Displays information about the app, vehicle, interface, and mobile device.
- SET PASSWORD: Assign a 4-digit password to lock the interface. If no password is desired, use "0000" to clear any currently set password. Locking down the interface is not necessary when setting a password.
- Note: Only a 4-digit password is valid for this device. If a different password is chosen, the interface will display "password not valid for this device." If the password is forgotten, the DSP can be reset by updating the interface with the Axxess Updater Windows software.



ABOUT:

Connected to ST-DS	P-X 370E537E (-56)				
SETUP IN	STRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS	
CROSSO	CROSSOVER ADJUST EQUALIZER ADJUST		DELAY ADJUST	INPUT/LEVELS	
IDENTIFY	Click this button to speaker. * * Only i	o confirm that the interface is connec nstallations where the interface is cor	ed properly. If it is, a chime wil inected to a front left speaker.	l be heard from the front left	
RESET TO DEFAULTS	Resets the interfa	ce to factory settings. During the rese	t process the amplifiers will sh	utoff for 5-10seconds.	
VEHICLE TYPE	Select the vehicle	programing option.			
EQUALIZER TYPE	User has the optic	on of optimizing the motorcycles soun	d quality with a Graphic or Para	ametric equalizer	
LOCK DOWN	Stores the current Attention!This button m	configuration into the ST-DSP ust be selected before closing the app or cycling t			
SAVE CONFIG	Saves the current	configuration to your device			
RECALL CONFIG	ECALL CONFIG Recalls a configuration from your device				
ABOUT	Displays Informat	ion about this App and the ST-DSP			
SET PASSWORD	SET PASSWORD Changes password for accessing the ST-DSP				

 ABOUT: Displays information about the app, vehicle, interface, and mobile device. (Figures A, B on next page)

(Figure A)

ABOUT: (cont.)

Connected to ST-DSP-X 370E537E (-59)		
SETUP INSTRUCTIONS	About	ION OUTPUTS
CROSSOVER ADJUST	App Info	ST INPUT/LEVELS
Click this button to o speaker. ** Only ins	on Name: ST_DSP_X tall Version: 1_1	a chime will be heard from the front left ft speaker.
RESET TO DEFAULTS Resets the interface	to SDK: 31 Vehicle Data Version: 1.23	fiers will shutoff for 5-10seconds.
VEHICLE TYPE Select the vehicle p	ogr Updated: 05/17/2023, 10:09 (Downloaded)	
EQUALIZER TYPE User has the option	of CVehicle Info	phic or Parametric equalizer
	Type: Harley No Flash - 2014 to 2020 (170-800) Has OE Amp: Yes	
LOCK DOWN Attention This button mus	DSP Info	ngs will be lost
SAVE CONFIG Saves the current co	nfi Model - Address: ST-DSP-X 370E537E Board#: 257508	
RECALL CONFIG Recalls a configurat	on Version: 3.2. Filter: 24	
ABOUT Displays Information	Interface: ANALOG	
SET PASSWORD Changes password	for HW Version: 1 FW Version: 730	D for this device
	Device Info	
	Model: samsung SM-X200 OS: 13 - Т ок	

(Figure B)



FEATURES BY SCREEN

SAVE CONFIGURATION:

Connected to ST-DS	P-X 370E537E (-56)				
SETUP IN	STRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS	
CROSSO	CROSSOVER ADJUST EQUALIZER ADJUST DELAY ADJUST INPUT/LEVELS				
IDENTIFY	Click this button to speaker. * * Only i	o confirm that the interface is connect nstallations where the interface is cor	ed properly. If it is, a chime wil nected to a front left speaker.	be heard from the front left	
RESET TO DEFAULTS	Resets the interfa	ce to factory settings. During the rese	t process the amplifiers will sh	utoff for 5-10seconds.	
VEHICLE TYPE	Select the vehicle	programing option.			
EQUALIZER TYPE	User has the optic	on of optimizing the motorcycles soun	d quality with a Graphic or Para	ametric equalizer	
LOCK DOWN	Stores the current	t configuration into the ST-DSP			
SAVE CONFIG	Saves the current	configuration to your device			
RECALL CONFIG	Recalls a configur	ation from your device			
ABOUT	Displays Informat	ion about this App and the ST-DSP			
SET PASSWORD	Changes passwor	rd for accessing the ST-DSP			
(Figure C)					

• SAVE CONFIGURATION: Saves the current configuration to the mobile device. (Figures C, D on next page)

SAVE CONFIGURATION: (cont.)

Connected to ST-DS	P-X 370E537E (-60)		WARNING: Settings have changed - Mak	e sure to 'Lock Down' before Exiting App
SETUP IN	ISTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSO	VER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS
IDENTIFY				
RESET TO DEFAULTS				
VEHICLE TYPE				
EQUALIZER TYPE				
LOCK DOWN		Click on the File Name Box to File Name: <mark>SaddleTrampRocks</mark>	create a new file	
SAVE CONFIG		CO	SAVE	
RECALL CONFIG	Recalls a configura	ation from your device		
ABOUT	Displays Informati	on about this App and the ST-DSP		
SET PASSWORD	Changes passwor	d for accessing the ST-DSP		

(Figure D)



RECALL CONFIGURATION:

Connected to ST-DS	P-X 370E537E (-56)				
SETUP IN	STRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS	
CROSSO	VER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS	
IDENTIFY	Click this button to speaker. * * Only i	o confirm that the interface is connec nstallations where the interface is col	ted properly. If it is, a chime wil nnected to a front left speaker.	l be heard from the front left	
RESET TO DEFAULTS	Resets the interfa	ce to factory settings. During the rese	t process the amplifiers will sh	utoff for 5-10seconds.	
VEHICLE TYPE	Select the vehicle	programing option.			
EQUALIZER TYPE	User has the optic	on of optimizing the motorcycles sour	d quality with a Graphic or Para	ametric equalizer	
LOCK DOWN	Stores the current Attention This button m	configuration into the ST-DSP ust be selected before closing the app or cycling t			
SAVE CONFIG	Saves the current	configuration to your device			
RECALL CONFIG	Recalls a configur	ation from your device			
ABOUT	Displays Informat	ion about this App and the ST-DSP			
SET PASSWORD	Changes passwor	d for accessing the ST-DSP			

• RECALL CONFIGURATION: Retrieves a configuration from the mobile device. (Figures E, F on the next page)

(Figure E)

RECALL CONFIGURATION: (cont.)

Connected to ST-DS	SP-X 370E537E (-59)	WARNING: Settings have ch	anged - Make sure to 'Lock Down' before Exiting App
SETUP INSTRUCTIONS		Click on a File to Recall It	J OUTPUTS
CROSSOVER ADJUST		SaddleTrampRocks	INPUT/LEVELS
IDENTIFY			hime will be heard from the front left speaker.
RESET TO DEFAULTS	Resets the interface		rs will shutoff for 5-10seconds.
VEHICLE TYPE	Select the vehicle pro		
EQUALIZER TYPE	User has the option o		ic or Parametric equalizer
LOCK DOWN	Stores the current co		will be lost
SAVE CONFIG	Saves the current cor		
RECALL CONFIG	Recalls a configuration		
ABOUT	Displays Information		
SET PASSWORD	Changes password f		n this device"

(Figure F)



SET PASSWORD:

Connected to ST-DS	Connected to ST-DSP-X 370E537E (-56)							
SETUP INSTRUCTIONS		BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS				
CROSSOVER ADJUST		EQUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS				
IDENTIFY	Click this button to confirm that the interface is connected properly. If it is, a chime will be heard from the front speaker. ** Only installations where the interface is connected to a front left speaker.							
RESET TO DEFAULTS	Resets the interfa	ce to factory settings. During the rese	t process the amplifiers will shu	utoff for 5-10seconds.				
VEHICLE TYPE	Select the vehicle	programing option.						
EQUALIZER TYPE	User has the optic	n of optimizing the motorcycles soun	d quality with a Graphic or Para	metric equalizer				
LOCK DOWN	Stores the current configuration into the ST-DSP AttentionThis button must be refer ted before cleans the use or cycling the key otherwise all settings will be fost							
SAVE CONFIG	Saves the current configuration to your device							
RECALL CONFIG	Recalls a configuration from your device							
ABOUT	Displays Informati	on about this App and the ST-DSP						
SET PASSWORD	Changes passwor	d for accessing the ST-DSP						

SET PASSWORD: Assign a 4-digit password to lock the interface. If no password is desired, use "0000" to clear any currently set password. Locking down the interface is not necessary when setting a password.

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Note: Only a 4-digit password is valid for this device. If a different password is chosen, the interface will display "password not valid for this device." If the password is forgotten, the DSP can be reset by updating the interface with the Axxess Updater Windows software. (Figures G, H on the next page)

(Figure G)

SET PASSWORD: (cont.)

Connected to ST-DSP-X 370E537E (-60)						RNING: Settings	s have changed	 Make sure to 'Lock Dowr 	
SETUP IN		BLUETOOTH CONNECTION		CONFIGURATION		OUT	PUTS		
CROSSOVER ADJUST			EQUALIZER ADJUST			DELAY	ADJUST	INPUT,	
IDENTIFY			hat t E s wh	Inter New	Passwor	d ly. If i a fro			
RESET TO DEFAULTS			_{ry se} Pa	issword		the a			
VEHICLE TYPE			g op						
EQUALIZER TYPE			izing			vith a			
				CANCEL	ок				
LOCK DOWN		t configurat	ion into t	ne or bor					
SAVE CONFIG		configurati		ur device					
٢	ľ			<u> </u>	Tè		Õ	\$	
			1	2	3	\otimes			
			4	5	6	Done			
			7	8	9				
				0		1			

(Figure H)



Output screen

Connected to ST-DSP-X 370E537E (-60) WARNING: Settings have cl					WARNING: Settings have changed - Make	e sure to 'Lock Down' before Exiting App
SETUP INSTRUCTIONS			BLUETOOT	TH CONNECTION	CONFIGURATION	OUTPUTS
	CROSSOVER ADJUS	т	EQUAL	IZER ADJUST	DELAY ADJUST	INPUT/LEVELS
		1		Output Chanr	<u>iels</u>	
	# Location		Group			
ł	Left Front	-	Front	- M 🗌 Invert 🗖	/lute	
	2 Right Front	-	Front	- 🔍 🗌 Invert 🔲	/lute	
	3 Left Rear	-	Left Rear	- M 🗌 Invert 🔲	/lute	
	4 Right Rear	-	Left Rear	👻 🥚 🗌 Invert 🔲 N	/lute	
	5 Left Front Mid	-	Right Rear	👻 M 🗌 Invert 🔲 N	/lute	
	6 Right Front Mid	-	Right Rear	🕘 🗌 Invert 🔲 N	/lute	
ł	7 Left Rear	-	Rear	- M 🗌 Invert 🔲	/lute	
	B Right Rear	-	Rear	- 😑 🗌 Invert 🔲 N	/lute	
	9 Not Used	-	None	Invert	/lute	
1	0 Not Used	-	None	Invert	/lute	

- The screen is used for speaker configuration and provides the option to group speakers together, simplifying the process of equalizing multiple speakers simultaneously.
- The numbers (#) from 1 to 10 on the left side of the screen correspond to the RCA outputs on the DSP Harness.
- Location: Displays the selected location for each respective RCA output number.
- Group: Enables the grouping of speakers for simultaneous equalization.
 For example, when Front Left and Right LOCATIONS are GROUPED under "Front," both the left and right channels are equalized together.
- Invert: Inverts the output polarity of each channel.
- Mute: Silences the output of the channel for testing purposes or when adjusting the EQ.

Crossover Adjustments screen



 After completing the programming, the crossovers are preset for your system.
 If you wish to fine-tune the crossover points, you can make adjustments from this screen.

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- Choosing High Pass and Low Pass will allow you to adjust one crossover frequency. Band Pass should only be selected if you are installing front speakers with a dedicated amplifier for the woofers/mids, a separate amplifier for the tweeters, and a subwoofer.
- Select your desired crossover slope: 24 dB, 36 dB, or 48 dB. A higher slope indicates a steeper cutoff.



Equalizer Adjustments screen



- After completing the DSP programming, the Harman Kardon equalizer settings will be preloaded for all speakers. If further adjustments are needed, it is recommended to use an RTA (Real-Time Analyzer) for precise adjustments.
- Each channel of the DSP features a 31-band graphic EQ with an adjustable level control.
- To reset all EQ adjustments, simply select the FLAT button located in the top left corner.

Time Delay Adjustments screen

Connected to ST-DSP-X 370E537E (-55) WARNING: Settings have changed - Make sure to 'Lock Down' bef					
SETUP INSTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS		
CROSSOVER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS		
Di	stance from each speaker to 'He	ead' position (in inches)			
Left Front 30					
Right Front 30					
Left Rear 28					
Right Rear 28					
Left Front Mid 38					
Right Front Mid 38					
Left Rear 34					
Right Rear 34			and the second		
Measure the distance from e	ach speaker to the desired 'Head' posit Maximum distance	ion and enter those values in tl is 99".	ne corresponding boxes.		

This feature allows you to apply a delay to each channel. The settings are preset after programming and further adjustment is not needed unless preferred by the listener. If you wish to add a delay, start by measuring the distance (in inches) from each speaker to the listening position. Then, input these values for the corresponding speakers. To delay a specific speaker further, add the desired additional distance (in inches).

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NOTE: For riders who primarily have a passenger in the rear seat, Harman recommends modifying the time delay by adding 10 inches to the front speakers and subtracting 10 inches from the rear speakers.



Input/Levels screen



- Clipping Level: Use this feature to protect sensitive speakers, such as tweeters, from being pushed beyond their capabilities. If the input signal of the ST-DSP clips, the audio will be automatically reduced by 20 dB. Lowering the volume will restore the audio to a normal level. The sensitivity of this feature can be adjusted according to the user's listening preference.
- Turn-on Delay: By default, a 9-second delay is preprogrammed. This delay can be shortened, but if any popping sound is heard when turning the system on or off, increase the delay until the popping is no longer audible.

Configuration Lockdown screen

Connected to ST-DSP-X 370E537E (-59)								
SETUP INSTRUCTIONS		BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS				
CROSSOVER ADJUST		EQUALIZER ADJUST	DELAY ADJUST	INPUT/LEVELS				
IDENTIFY								
RESET TO DEFAULTS								
VEHICLE TYPE								
EQUALIZER TYPE								
LOCK DOWN	Stores the current	configuration into the Locking Down I	Data cotherwise, all settings will be lost					
SAVE CONFIG		configuration to you 38						
RECALL CONFIG	Recalls a configura	ation from your device						
ABOUT	Displays Informati	ion about this App and the ST-DSP						
SET PASSWORD	Changes passwor	d for accessing the ST-DSP						

Last and the most important...

You MUST lock down your configuration!!!

