SUPRA®
VISION TOUCH™
2018

Owner's Manual



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Product Information

The Supra VISION Touch 2018 display is designed for instrumentation and control on electronically controlled engines communicating via SAE J1939 and NMEA 2000. The display enables boat operators to view many different engine, ballast, transmission parameters and service codes and is a multi-functional tool that provides GPS tracking, a multimedia display, cruise control, and rider profiles. Included with this solution is the HV700 Touch unit



Care and Maintenance

General maintenance is not required; however, a soft cloth can be used for cleaning the units. Window cleaner or alcohol can also be used to clean the glass portion of the display. Do not use harsh or abrasive cleaners on the unit.

Basic Navigation Features

All product features are easily accessed through Quick Access Keys, Touch Point commands and Menus.

Quick Access Keys

A new screen can be accessed quickly by pressing one of the following Quick Access Keys:



Touch Point Commands

Once the desired screen is accessed, navigation within the screen is controlled with Touch Point commands. They are executed by touching the screen in areas that are outlined with a highlighted bezel.

Features

Home Screen

The Gauges screen can be accessed by pressing the Home/Gauges Quick Access Key. This screen shows the:



- Water Depth
- Water Temperature
- **Engine Temperature**
- **Battery Voltage**
- Speedometer/Setspeed
- Fuel Gauge
- Oil Gauge
- Ballast Levels
- Swell Plates/SmartPlate Position
- Rider Name/Time
- River Mode
- Camera
- Swell Surf
- AutoWake
- Save Current Settings (when ZeroOff® is on)



The cruise control can be turned ON or OFF from this screen by touching **[ZEROOFF]** located in the lower right of the screen.

Home Screen Touch Points



Touch Point	Description		
Stereo	Opens the Stereo screen. Other multimedia options and video viewing screens are accessed from this screen. When held down for 2-3 seconds while on the home screen, the active stereo is muted.		
Engine Temp	Displays the engine temperature when touched and held.		
Camera	Activates the camera to view the current rider in action.		
Set speed+/-	Interactive speed control adjustment by touching the + and – icons (GPS Speed Control ON mode) .		
Autowake	Autowake will control the ballast to attempt to achieve and maintain a set pitch and roll (determined by the rider profile and the currently selected surf side).		
Fuel/Run Time	Displays the current fuel level in a percentage, and an estimated engine run time using current fuel level when touched and held.		
Save Settings	Allows the saving of the current settings to the current profile or a new profile.		
Ballast	Displays the current ballast fill levels.		

Touch Point	Description		
GPS Speed Control	Interactive touch toggles from On to Off mode. (Speed adjustment with Set Speed +/-)		
Rider Name / Time	nteractive touch toggles from the rider's name to the rider's time. When the name is touched, ne Profiles page is displayed.		
Swell Surf	Interactive pop-up including toggles for Swell On/Off & Port and Starboard ballast settings. Use the directional icons to select either Port or Starboard. Use Profiles to make adjustments to the surf wave. Swell will only engage when Cruise is on and set speed is between 7 mph and 12 mph.		
Engine Oil Pressure	Displays the Engine Oil Pressure when touched and held.		
Battery	Displays the battery voltage when touched and held.		
River Mode	Interactive pop-up including On/Off touch toggle and automatic River Flow settings.		
Water Temp	Displays the current temperature of the water.		

River Mode

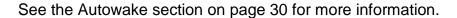


River Mode is a user interface for estimating both upstream and downstream river current without the use of a paddle wheel. The River Flow UP/DN icon switches back and forth during the turns as you turn against or with the current. The river current estimate value will be added to (downstream) or subtracted from (upstream) the base speed set point and should deliver

a reasonably consistent speed over the water. If River Mode is turned off, the set speed will track the normal set speed regardless of direction.

Autowake

Touch the Autowake tab to expand this feature. Autowake may be turned on from here, and will activate once the ballasts are filled to their profile-defined levels, Cruise is ON and the set speed is between 7 and 26 mph.





Swell™ Surf



Swell Surf will cause the trim plates to deploy to create a surfing swell on the side the rider is surfing. Touch the Off button to turn the system on then touch the side on which the surfing will occur.

Swell will only engage if AutoWake is inactive and Cruise is on with the set speed between 7 and 12 mph.

Camera

If so equipped, the boat may have a rear view camera and a tower view camera.

If two cameras are installed, touching the Camera touch point on the main screen will show the following:



To view the second camera feed, touch the in the upper right hand corner and it will toggle to 2. To return Home, touch the Home quick access button.

The GPS screen can be accessed by pressing the GPS Quick Access Key.



The functions on the GPS are handled through touch points on the screen. The touch points change depending upon which view of the screen is showing.

To see more options, touch [TRACKING]. The Tracking Menu is displayed on the screen.

Touch [PAN/ZOOM] to return to the previous view.





Touch [CREATE WAYPOINT] to add a waypoint to the map. A keypad is displayed to type the name (10 alpha character limit). When finished typing the name touch [DONE].

The waypoint is now displayed on the map represented by an anchor icon. This anchor icon can be changed to another icon in the Waypoint Manager (for more information on the Waypoint Manager, see GPS Settings under the Settings Menu).

Touch [CLEAR TRACK] to clear currently recording track. This action will restart the track recording from the current position of the boat.



Touch **[SAVE TRACK]** to save the currently recorded track. This action will save the currently recorded track from where the recording started to the current position and restart the track recording from the current position of the boat.

Touch **[MORE]** to view latitude and longitude of the current position of the boat and change the compass to desired position (choices are North up or Course up).

Media

The Stereo screen can be accessed by pressing the

Stereo Quick Access Key.



Stereo Display - Touch Commands

Touch Point	Description
	Volume : Press to increase the volume. Press to decrease the volume.
KK	Previous/Tune: Press to go to the closest saved station to the left. Press to tune the station to the left.
	Next/Tune: Press to go to the closest saved station to the right. Press to tune the station to the right.
[103.3 _{MHz}]	Station Location: This is a digital representation of the station location.
	Scan: Press this button to scan to stations that have the strongest signal strengths.
FM AM WB	Band Selector: Choose between FM, AM or Weather.

Touch Point	Descript	Description			
P a	Save to stations.	Save to Favorites: Touch this button to save the displayed station in your favorite stations.			
04.1 95.5 06.1 07.5	Preset S	stations: This list contains 6 of the previously saved favorite stations.			
FAVORITES		Favorites List – Touch to alternate between List A and List B. This provides 12 presaved favorite stations.			
FREQ PRESET	Tune Mode – Choosing FREQ will allow the scanning of all stations on the dial. Choosing PRESET will only scan the saved favorite stations on the dial.				
	List – Touch this point to expand the following list of icons:				
	Icon	Description			
Switches to the FM band.		Switches to the FM band.			
	((P)) _ AM	Switches to the AM band.			
	MOAA	Displays the Weather band.			

Touch Point	Description				
	*	Displays the Bluetooth utility.			
	\hookrightarrow	Displays the Auxiliary Input display to choose between three channels.			
		Displays the iPod/USB screen.			
	List – To	ouch this point to display a list of the following icons:			
	Icon	Description			
		Displays the Bluetooth Devices screen.			
•		Displays the Sound Control (Equalizer) menu.			
	I.	Displays the Audio Profiles screen.			

Bluetooth

To display the Bluetooth utility, on the left side of the screen, touch then . The screen on the right will display:

Touch and then right will display:



The screen on the



Follow these steps to connect to Bluetooth:

Step	Action
1	Touch Scan For New Devices. The display will begin searching for Bluetooth compatible devices within connection distance. If available devices are found, they will be displayed on the screen.
2	Touch the listed device to which the Supra will be paired. The following screen will appear: El02152
3	Once paired, the source's media files will be viewable and playable on the first screen presented in this section.

Sound Control

To display the Sound Control utility, on the left side

of the screen, touch and then

Sound Control

The screen on the right will

display:

To mute the sound, touch





Adjust the volume with the left and right arrows.

Touch the right arrow to display the Equalizer screen:

The Equalizer is available to control the sounds in five different areas between Bass and Treble.

Touch the + or – OR slide the 0db placeholder in the appropriate direction to adjust the levels.

To adjust the volume, touch the + or - of this area:



Touch Presets to display this screen:

Touch a square on the grid to select a preset sound configuration according to your specific preferences (i.e., Dance is heavy on the Bass, light on Vocals; Classic is heavy on Treble, light on Bass; etc.).

Touch to return to the Equalizer screen.



Touch the blue circle to discard any changes, and the green checkmark to confirm changes.



Touch Point	Description			
MUTH	Deletes (after confirmation) the currently displayed Rider Profile.			
ACTIVATE RIDER PROFILE	Activates the currently displayed Rider's prowith the displayed settings.	file, and changes the boat settings to align		
EGIT EGG	Displays the Edit Rider screen: Touch each field to be edited, then adjust	SWELL SURF LEFT		
	the settings with the – and + buttons. Touch Done when complete.	10.8 25 SURF		
		7.5 -4.0 100 0 95		
		- DONE +		

Touch Point	Description					
0	Rotates through the saved profiles.					
0						
BACK TO DOCK	Returns back to the Home screen.					
♣ NEW RIDER	Displays a keyboard to type the new ric adjust the settings.	ler's name. To	uch Don	e, then	Edit t	0
STATS	Displays the Rider Statistics screen.	NOTES STATE		*	-	
~ ~	To reset the number of rides, press and and the number will reset to 0.	WAKEBRD	1 0	0.0000	********	hold
	To reset the length, press and hold and time will reset to 00:00:00.	SUPP SWELL	0 0	00000	****	the
	To provide a rating, touch the stars for desired star to be lit up.	Sil .	حلونطم	00000	_	each
	Touch Profiles to return to the Profiles screen.	S PROPLES	0	(2	
	Touch the UP and DN arrows to view other	statistics.				

Lights

The Lights screen can be accessed by pressing the Lights Quick Access Key. On this screen the following lights can be turned on and off:

- **Navigation Lights**
- **Anchor Lights**
- Storage Lights
- Dome Lights
- **Docking Lights**
- **Tower Lights**
- Floor Lights
- Mid-Level Lights
- **Speaker Lights**
- Underwater Lights/Strobe
- All Off/All On



NOTE: If the cell is gray, this indicates the lights are OFF. If the cell is green, this indicates the lights are ON.

Ballast

The Ballast screen can be accessed by

pressing the Ballast Quick Access Key. This screen displays the current state of the ballasts and is interactive for immediate settings.

To adjust the Ballast settings slide finger up the tank to the desired level or tap the **UP** or **DOWN** arrows below the tank. As an example, the illustration shows the Center tank filling to achieve 51 percent and the left and right ballasts have achieved 50 percent tank capacity.



The following functions can also be accomplished from this screen:

- FILL ALL touch to fill all the ballasts
- DRAIN ALL touch to drain all the ballasts
- STOP ALL touch to stop all filling or draining activity
- SAVE touch to save the current settings to the current profile or a new profile

Comfort

The Comfort screen can be accessed by

pressing the Comfort Quick Access Key. On the Comfort screen, touch a cell to activate. Touch it again to change the setting or use the arrows. The following comfort settings can be made if the option is installed on your boat package:

- Heater HIGH/LOW/OFF
- Seat Heater ON/OFF
- Seat Height UP/DOWN

These settings can also be set for specific boat drivers through the driver presets.



NOTE: If the cell is gray, this indicates the settings are OFF. If the cell is green, this indicates the settings are ON.

Driver Presets

The Driver Presets screen can be accessed by

pressing the Driver Presets Quick Access Key. This feature displays preferences for the boat drivers and is interactive for needed changes.

Setting up Driver's Preferences

To enter a driver's preset, press the Driver Presets



Quick Access Key.



If you need additional Driver Presets, you can add them to the list by touching **New Driver**.

Follow the directions below to set the Driver's Presets.

Step	Action
1	Touch Edit, then to name the driver.
2	Touch Theme, and if a different color is desired, utilize the + and – buttons to scroll through the available colors.
3	Touch Texture, and if a different texture is desired, utilize the + and – buttons to scroll through the available textures.
4	To set a preference on lights, seat heater or heater for this driver, touch the desired square and utilize the + key to turn them On or Off.
5	To adjust the seat height, touch that square and utilize the + key to adjust.
6	Touch Done when complete.



Delete Driver Preset

To delete a Driver Preset, press the Driver Preset preset to delete, and confirm the deletion.





AutoWake[®]

AutoWake* is a patented system that will manipulate the ballast levels in order to achieve and maintain the best possible wake for surfing and wakeboarding. Using an inclinometer (a device that measures angles of pitch and roll), the boat will orient itself for the best boating experience.

When a rider profile is active, AutoWake will activate once the ballasts are filled to their predictive angles, cruise is ON and the set speed is between 7 and 26 mph.

Changes to the pitch and roll set points can be saved to the currently activated profile by touching the disk icon on



the home screen. Select either Save to Current Profile or Save to New Profile. Each rider can have differing set points for Surf Port and Surf Starboard. The Amplitude Potential bar is used to achieve the optimal surf number and wave size.

^{*} The AutoWake® patented technology is covered by U.S. Patent Nos. 8,798,825; 9,689,395 and other patents pending. See www.skierschoice.com/patentstrademarks/

Main Settings Menu

The Main Menu screen can be accessed by pressing the Main Menu Quick Access Key. The contents of this screen are described on the next page.





Function	Description/Action		
User Settings	Displays ambient light and brightness settings, US/Metric settings, etc.		
Engine Diagnostics	Displays a list of engine fault codes and descriptions; on some engines, corrective action will be shown.		
GPS Utilities	ontains options to set up track and position, chart and time and waypoint manager. so displays satellite status.		
System Information	Provides information about the software version.		
Ballast/Smart- plate Settings	Displays ballast times and calibration, smart plate settings and swell assisted settings.		
Audio Settings	Displays notifications settings, remote pairing settings, etc.		
Dealer Settings	Dealer Access Only		
PDM Diagnostics	Displays short circuits, open circuit, over current, in/out of range and faults within the system outputs, switch inputs, analog inputs and CAN communication.		

User Settings

On the Main Menu screen, touch **[USER SETTINGS]** to access the User Settings screen. The User can set viewing preferences for the display.



To edit the settings, touch the field to be changed. For Shutdown Time and Minimum Depth, touch the or arrows to adjust the settings. Touch [Back] to save the settings and return to the Main Menu screen.

Function	Description/Action		
Auto Backlight	The choices are: Enable or Disable. NOTE: Enabling the Auto Backlight will reduce the screen brightness when the Nav Light is ON.		
Brightness	Touch and slide your finger along the brightness bar to adjust the setting.		
Color Scheme	Touch one of the colors to change the color scheme of the display.		
Background Texture	Touch one of the background textures to change the texture of the display.		
Units	Touch that field and toggle between US STD or Metric.		
Shutdown Time	Tap or to adjust the setting.		
Minimum Depth	This allows you to choose a minimum depth (measured from bottom of keel) to give an alarm if the vessel comes into a minimum depth situation. Tap or to adjust the setting. Choosing zero turns this option OFF.		

Engine Diagnostics

On the Main Menu screen, touch **[Engine Diagnostics]** to access the Engine Diagnostics screen. When choosing this selection, the display queries the engine's ECU and displays feedback on any diagnostic codes that have been activated and stored in the ECU for service needs.



Function	Description/Action
Get Faults	Touch [GET FAULTS] to show the number of active faults and the fault number currently being displayed.
Arrows	The Left and Right arrows at the top of the page scroll through messages.
Diagnostic Message and Description Field	Most common SPNs and FMIs have text for the description stored in the display. If there is no text, then this SPN and FMI must be defined by referring to the engine manufacturer or the SAE J1939 standard.
Source	Indicates the source of the message.
SPN	Suspect Parameter Number - fault code If not translated into text by the display, see the engine manufacturer's literature for the definition of the SPN number.
FMI	Failure Mode Indicator - fault code The FMI is defined by SAE J1939. If not translated into text, see the SAE standard or the engine manufacturer's literature.
Count	Number of messages.
ENG Hours	Number of in-use engine hours.
Corrective Action	Suggested action for correction.

GPS Utilities

On the Main Menu screen, touch **[GPS Utilities]** to access the GPS Utilities screen. The GPS Utilities includes the following:

- Depth and Position
- Waypoint Manager
- Chart and Time
- Track Manager
- Satellite Status



Depth and Position Settings

On the GPS Utilities screen, touch [Depth and Position] to access the Depth and Position screen. This feature allows you to define the amount of detail to display for longitude and latitude information on the GPS map and depth display.



Waypoint Manager

On the GPS Utilities screen, touch [Waypoint Manager] to access the Waypoint Manager screen.

Waypoints allow you to mark specific locations by latitude and longitude. Once the waypoints are established, the Waypoint Manager allows you to associate an icon with them for identification. You can delete a single waypoint by using the **[Delete]** key or all of them at once with **[Delete All]**. Pressing the **[Go To...]** key displays the GPS screen containing the currently highlighted waypoint.



Function	Description/Action
Waypoints	Displays a list of existing waypoints that have been set. Use the [Up] and [Down] keys to highlight the desired waypoint.
Waypoint Title	Edit the waypoint title.
Waypoint Icon	Assign one of four different icons to any of the waypoints listed.
Go To	Displays latitude and longitude values for the currently highlighted waypoint on the list. When touched, it will jump to the maps application and the location of the selected waypoint.
Delete	Delete a single waypoint.
Delete All	Delete all waypoints at once.

Chart and Time Setup

On the GPS Utilities screen, touch [Chart and Time Setup] to access the Chart and Time Setup screen. This menu option allows you to setup viewing options for the GPS Display.

Function	Description/Action
Chart Setup Parameters	Use the [Plus/Minus] soft keys to select the information you want displayed on the GPS screen.
Time Setup Parameters	Select correct time zone and clock mode for either 12-hour or 24-hour time formats. You can also enable DST (Daylight Saving Time) by using the [Plus/Minus] soft keys to select the box.



Track Manager

On the GPS Utilities screen, touch [Track Manager] to access the Track Manager screen. Multiple tracks for displaying on the GPS map can be set up. The Track Manager allows you to select tracks to show on the map or hide a map you are not currently using. You may [Delete] one track or [Delete All] tracks at once.

Select [Clear on Startup] to erase any non-saved tracks.

Satellite Status

On the GPS Utilities screen, touch [Satellite Status] to access the Satellite Status screen. This screen is an information-only screen that displays the location of detectable satellites.





System Information

On the Main Menu screen, touch **[System Info]** to access the System Information screen. This information-only screen provides the following:

- Application version and part number
- Operating system version and part number
- Bootloader version and part number
- Software version
- PDM Software Version Address(es)

Ballast and SmartPlate™ Settings

On the Main Menu screen, touch [Ballast/SmartPlate Settings] to access the Ballast and SmartPlate Settings screen. This screen provides default fill times for ballasts and default settings for the SmartPlate.

To access the edit points of the Ballast and SmartPlate settings, with the cell highlighted, touch the **[Up]** or **[Down]** arrows to change the setting.

NOTE: The [Crossover Point] defaults to 50 percent of your set speed. This is the point at which the SmartPlate will be automatically driven to the active profile set point. If no set point is active, the SmartPlate will be driven to the [SmartPlate Up] setting (default 50 percent). The [SmartPlate Down] setting (default 100 percent) is the position that the SmartPlate is driven to below the crossover setting. Having the SmartPlate deployed to 100 percent when the boat is at rest and then automatically retracting to the SmartPlate set



point at the crossover is what helps the boat keep the bow down and on plane during acceleration.

If additional time is required to empty the Ballast tanks, add percentage to the [Ballast Drain Time Adder] to increase the drain time. Or set the [Ballast Drain Time Adder] to 0 percent for no additional time.

The [Ballast Calibration] normally is not changed.

The **[Ballast Calibration]** function recalibrates the ballast level displayed to read Full (100 percent) or Empty (0 percent). The Ballast display levels are based on time to level calculations.

For example: The driver has filled the ballasts to Full and then installed a new version of software. This new version of software would default the Ballast Levels back to Empty (0 percent). Since the driver knows that the boat has Full ballasts, the driver can use this calibration feature to set the display level to Full (100 percent).

Audio Settings

On the Main Menu screen, touch [Audio Settings] to access the screen that contains text message and incoming call notification settings, auto volume intensity, wireless remote pairing, etc.

Function	Description/Action
Tuner Region	Select the appropriate region to which the radio frequencies will be tuned.
Auto Volume Intensity	Use the up and down arrows to select the automatic volume level.
Notifications	Touch the Enabled box to turn on notifications when incoming text messages or calls arrive.



Function	Description/Action		
Wireless Remote Pairing	Tap to enable the pairing of a wireless remote to the Supra Vision Touch. Touch the circled X to clear all paired remotes.		
Bluetooth Settings	Provides a way to Bluetooth Devices to be paired. See the Bluetooth section beginning on page 17.		
Audio Profiles	Provides six available audio profiles to select and three to edit: Profiles named Custom (1, 2 and 3) can be edited for the volume levels by highlighting the Front, Back, Tower or Sub area and touching + or – until the desired volume level is achieved. Touch Done when finished.		

PDM Diagnostics

On the main Menu screen, touch **[PDM Diagnostics]** to access the PDM Diagnostics screen. The screen displays short circuits, open circuit, over current, in/out of range and faults within the system outputs, switch inputs, analog inputs and CAN communication.

Touch the **[PDM2]** or **[PDM3]** buttons to view alternate screens. Touch **[Back]** to return to the main menu. Touch the **[Auto Retry on Fault]** button to automatically retry the circuit when a fault appears.



General Troubleshooting Guide

Display appears not to work or doesn't come ON.

- 1. Display could be in *sleep* mode. Touch a key on the keypad to activate the display.
- 2. Check for loose connections at battery and display unit.
- 3. Check for reversed polarity on the power connections.
- 4. Verify battery has a minimum voltage of 6 Volts.

Display resets or goes OFF when starting engine.

- 1. Check display supply wires are connected properly to battery.
- 2. Verify battery is charged properly.
- 3. Check battery for efficient starter current.

Display has no backlight.

Contact your Supra service center.

Display has no keypad backlight.

Contact your Supra service center.

