

# Wakeboard

The Recreational Wakeboarding screen has the following information.



Name	Description
Logo Box	
Actual Boat Speed	MPH or KPH speed that the boat is actually travelling
Set Speed	Changes the set speed for the boat
Page Icon	Selects Recreational, Tournament, and Timing Recap screens. NOTE: Recreational, Tournament, or Timing Recap screens are also available from the Main Menu bar, SCRN option.
ON / OFF	Turns the cruise control On and Off

## Set Boat Speed

1. From the Recreational Trick screen, TAP SELECT button to highlight the Set Speed.

2. To increase the setspeed:

TAP UP button to increase by increments of .01,  
HOLD UP button to increase with larger increments

3. To decrease the setspeed:

TAP DOWN button to decrease by increments of 10,  
HOLD DOWN button to decrease with larger increments

## Waypoint

You can use Way Point to map a location on the lake. The location can be a favorite skiing spot or a location that you want to remember for the next boating season.

From the Recreational screen, Zero Off automatically enables Waypoint mode. If a waypoint has been mapped and is within a 1-mile radius of the boat, the system displays the name and distance away. Also the directional arrow is displayed showing which direction to steer the boat to reach the waypoint.

Start driving the boat and the directional arrow indicates the direction to steer the boat to find the waypoint. The Waypoint screen has the following information.



Name	Description
Time and Date	Time format is XX:XX:XX Date format is MM/DD/YY
Number of Satellites	X = Number of satellite fix, (1through 12). D = Differential, if present.
Page Icon	Selects Recreational, Tournament, and Timing Recap screens. NOTE: Recreational, Tournament, or Timing Recap screens are also available from the Main Menu bar, SCR�N option.
Directional Arrow Waypoint Event	Directional Arrow: Active when no waypoint is selected. Directional arrow will show what direction the boat is moving in. Arrow freezes when boat velocity is less than 1 mph (1.6 km/h). Different rounded arrow is active when waypoint is selected and points in the direction of the waypoint.
RPM Set Speed	Increases or decreases the set speed by 10RPM or larger increments.
RPM Actual Speed	RPM speed that the boat is actually going.
Boat Set Speed MPH or KPH	Sets the MPH or KPH boat speed.
Actual Boat Speed	MPH or KPH speed that the boat is actually going.
Distance to Waypoint	If a waypoint is selected, DIST will equal the distance to the waypoint in units selected. If no waypoint is selected latitude and longitude are shown.
Waypoint Map	Name of the currently selected waypoint map.

## Set Event Type to Waypoint

1. From the Recreational screen, TAP SELECT button to highlight the Event Type.
2. With Event Type highlighted, TAP UP button until you see Wpt. Wpt is the Event Type for Waypoint.

## Set Boat Speed

1. From the Recreational screen, TAP SELECT button to highlight the Set Speed. The Set Speed is highlighted.



2. To increase the setspeed:

slowly, by increments of 0.1, TAP UP button.  
quickly, with larger increments, HOLD UP button

3. To decrease the setspeed:

slowly, by increments of 0.1, TAP DOWN button.  
quickly, with larger increments, HOLD DOWN button.

The boat speed is adjusted according to the selected speed.

## Set RPM Boat Speed

1. From the Recreational screen, TAP SELECT button to highlight the RPM Set Speed. The RPM Set Speed is highlighted.



2. To increase the RPM speed:

slowly, by increments of 10, TAP UP button.  
quickly, with larger increments, HOLD UP button

3. To decrease the setspeed:

slowly, by increments of 10, TAP DOWN button.  
quickly, with larger increments, HOLD DOWN button.

The RPM boat speed is adjusted according to the selected speed.

# Diagnositics

## Diagnostic Screen

The Diagnostic Screen displays the Error Codes. The error codes assist you in isolating any issues you are having with the system.

To display the Diagnostic screen,

1. HOLD ON/OFF MENU button to display the main menu bar.
2. TAP UP or DOWN button to highlight SCRIN.
3. TAP SELECT button to display the list of screens.
4. TAP UP or DOWN button to highlight Diagnostics.
5. TAP SELECT button. An asterisk is next to Diagnostics.
6. TAP ON/OFF MENU button twice. The main menu bar is cleared and the Diagnostic screen is displayed.

Diagnostic Screen	Description
P/N	Part Number of the system
S/N	Serial Number of the system
SW	Software version loaded on the system
SEL to Clear	TAP SELECT button to clear the error codes
??Active Column	1 <sup>st</sup> column of Error Codes. Lists the most recent error codes. Header line shows how many codes are present (??)
??Historic Column	2 <sup>nd</sup> column of Error Codes. Lists the archived error codes that have been generated for the system. Header line shows how many codes are present (??)

7. To clear the error codes, TAP SELECT button.
8. TAP UP or DOWN buttons to move to the Recreational screen.
9. HOLD ON/OFF MENU to return to the main menu bar.

## Error Codes

The Diagnostic Error Codes are described in the following table.

Error Code	Description
V_max	Battery supply Voltage too high (> 32 volts)
V_min	Battery supply Voltage too low (< 9.5 volts)
VE5_max	5V output supply too high (>5.4 volts)
VE5_min	5V output supply too low (>4.6 volts)
COPfail	Main CPU timeout failure, should be very rare
RTI1	Main CPU failure, should be very rare
RTI2	Main CPU failure, should be very rare
RTI3	Main CPU failure, should be very rare
ADloss	Main CPU failure, should be very rare
interrupt	Main CPU failure, should be very rare
flash_fail	Main CPU flash memory failure, should be very rare
RAM_fail	Main CPU RAM memory failure, should be very rare
J1939_Txfai	CAN link failure, probably not connected
J1939_Rxfai	CAN link failure, probably power supply related or poor connections
V_CONTR_max	LCD display contrast voltage too high, indicates circuit Board failure
V_CONTR_min	LCD display contrast voltage too low, indicates circuit Board
Xout_max	Onboard sensor voltage high, indicates circuit board failure
Xout_min	Onboard sensor voltage low, indicates circuit board failure
Yout_max	Onboard sensor voltage high, indicates circuit board failure
Yout_min	Onboard sensor voltage low, indicates circuit board failure
Zout_max	Onboard sensor voltage high, indicates circuit board failure
Zout_min	Onboard sensor voltage low, indicates circuit board failure
GPS1_fail	Primary GPS antenna communications not established, either bad wiring or failed primary GPS antenna
GPS2_fail	Secondary GPS antenna communications not established, either bad wiring or failed secondary GPS antenna, only on 3Event systems
GPS1_GPS2_s	Secondary GPS data substituting for primary, not critical and should be transparent to user
GPS1_In_sub	System estimating data to substitute for primary GPS, not critical and should be transparent to user
GPS2_In_sub	System estimating data to substitute for secondary GPS, not critical and should be transparent to user
LCD_fail	LCD display failure
GPS_BadPos	System detects unusual variation in GPS position measurement, not critical and should be transparent to user
EE_Write	Onboard permanent memory write failure, indicates circuit board failure
EE_Read	Onboard permanent memory read failure, indicates circuit board failure