
AUTOANCHOR

AutoAnchor 550 v1.9 Chaincounter and Windlass Control

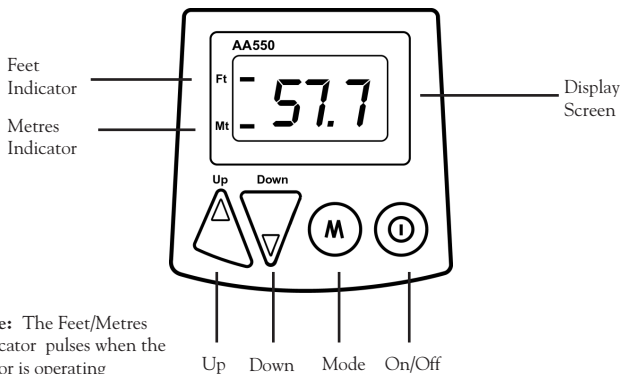
Operation Manual



CONTENTS

Important Information	i-iii
Part 1 Features	2
Part 2 Calibration	3
Part 3 Operation	7
Safety Lock	8
Manual Operation	8
Automatic Operation	9
Reset Display to Zero	11
Change Backlighting Level	12
Reset Factory Default Settings	12
Part 4 Troubleshooting & Maintenance	13
Index	20

AutoAnchor 550 Diagram



Note: The Feet/Metres Indicator pulses when the sensor is operating

IMPORTANT INFORMATION

AA550 Documentation

The documentation supplied with the AA550 includes this Operation Manual plus the Installation Instructions & Wiring Diagrams. The Operation Manual includes calibration and testing instructions, plus operation and troubleshooting information.

AutoAnchor 550 Installation

The AA550 should only be installed by a qualified marine electrician. Do not attempt to install the AA550 unless you are suitably qualified. Technical specifications, installation instructions and wiring diagrams are supplied with the AA550. Non compliance with these instructions could impair windlass and AA550 operation, and could result in personal injury and/or damage to your boat. Non compliance with the instructions will negate the manufacturer's warranty.

Windlass & Anchor Installation

The windlass must be installed according to the windlass manufacturer's instructions with the correct size chain. The AA550 will not count correctly if the windlass is not standard (eg it is installed with a different chainwheel or motor). It must also be regularly serviced and lubricated.

For smooth operation, the windlass requires a good quality, properly fitted bow roller and a swivel should be connected to the anchor where it joins the chain.

Calibration and Testing

Before using the AA550 it must be calibrated to the windlass and rode on the boat and tested in a safe environment.

Electromagnetic Compatibility (EMC)

The AA550 meets and exceeds the CE standard for EMC (EN60945). These standards are intended to provide reasonable protection against interference by other emission generating products on the boat.

However, compliance with these standards is no guarantee that interference will not occur in a particular installation. The installation instructions must be followed to minimise the potential for interference.

AA550 Use

It is the owner's sole responsibility to ensure the AA550 is installed, used and maintained in a manner that will not cause accidents, personal injury or property damage. When using the AA550 the operator must use safe boating practices and safe windlass and anchoring operation.

Before using the AA550 the operating instructions must be read and understood and the AA550 must be calibrated and tested.

The AA550 makes anchoring less stressful but nothing can replace good seamanship and safe boating practices.

The user of the AA550 must:

- **use the windlass strictly according to the windlass manufacturer's instructions;**
- **personally control and supervise all windlass and anchoring operations; and**
- **always ensure the anchor is fully docked and secured before moving the boat**

The AA550 manufacturer and supplier accept no liability for personal injury or property damage resulting from failure to follow the installation instructions or the use of the AA550 in a way that may cause accidents or damage or that may violate the law.

PART 1 - FEATURES

The AA550 provides easier windlass control and security in knowing how much anchor rode has been released.

SAFETY FEATURES

- The safety lock reduces the chance of unintentional windlass operation from the console
- The safety cutout allows you to press any button on the console unit to stop windlass operation when using the automatic function
- The anchor retrieval stopping point (when using the automatic function) stops the windlass motor before the anchor reaches the boat and the AA550 beeps to warn the operator to change to manual operation for final docking of the anchor.
- During final docking the AA550 beeps continuously while the operator is pushing the up button

DIAGNOSTICS

Electronic fault diagnostics help to identify problems with:

- The power supply
- The wiring
- The sensor
- Windlass rotation

MEASUREMENT

- Anchor rode measurement is in feet or metres
- Settings and measurements are retained if the unit is turned off or the battery fails
- The counting operation continues if the windlass is operated by another switching mechanism on the boat (eg deckswitches)

TECHNICAL SPECIFICATIONS - AA550 v1.9

Power Supply: 12V or 24V DC

Current Consumption: 50mA


Temperature Range: 23°F to 140°F (-5°C to 60°C)


Solenoids: Max 4 Amp draw

Maximum Voltage: 30V DC

EMC: CE 60945

PART 2 - CALIBRATION

 The AA550 must be installed and operated in accordance with the instructions supplied. Non compliance with any of these instructions could impair windlass and AA550 operation and will negate the manufacturer's warranty.

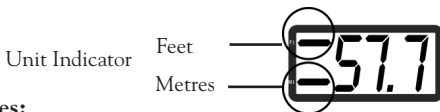
 Before operation the AA550 must be calibrated to comply with the boat's windlass and anchor rode and then tested in a safe environment.

It is useful to record the calibration settings in the spaces provided so that they are available for future reference.

You will need to clear the safety lock before any calibrations can be entered. To do this turn the AA550 on, hold down the MODE button until ζ clears, then release the MODE button. (Refer to the diagram on page 7 to see the buttons). For further information about the safety lock refer to page 8.

Select Feet or Metres

The AA550 displays measurements in feet or metres. The unit indicator shows the unit of measurement selected.



To select feet or metres:

Step 1 Turn the AA550 on.

Step 2 Clear the safety lock. When the safety lock is on the display shows ζ . To clear it hold down the MODE button until ζ clears, then release the MODE button. The unit indicator will show the current setting.

Step 3 Hold down the MODE button until the indicator has changed position (approximately 5 seconds). Note: The ζ will appear and disappear as the indicator changes position.

After selecting feet or metres, enter calibration mode as follows:

Step 1 Turn the AA550 off.

Step 2 Hold down the MODE button and press and release the ON/OFF button. Release the MODE button. The AA550 will flash between Item 1 and the current setting. (Refer below).

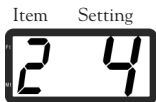


Item 1: Safety Lock

Default Setting is ON

Record Calibration Entered: _____

The safety lock should be left ON at all times. If you choose to disable the safety lock use the UP or DOWN button to change the display setting to OFF. To set the safety lock again press the UP or DOWN button to reset to ON. Press the MODE button to advance to the next item. The display will flash between Item 2 and the current setting for Item 2.

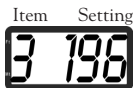


Item 2: Anchor Retrieval Stopping Point

Default Setting 4 ft or 1.5 m

Record Calibration Entered: _____

This sets the length of rode to be retrieved by manual operation of the unit after the automatic upward control has stopped. For safety the anchor retrieval stopping point cannot be set below 2 ft (0.7 m). Use the UP or DOWN buttons to enter the value in feet or metres. The setting is accurate to +1 chainwheel revolution. Press the MODE button to advance to the next item. The display will flash between Item 3 and the current setting for Item 3.

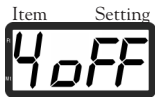


Item 3: Total Length of Rode on Board

Default Setting 196 ft or 60 m

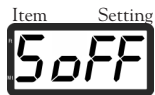
Record Calibration Entered: _____

Use the UP or DOWN buttons to enter the total length of the rode. The minimum setting is 32 ft (10m). Press the MODE button to advance to the next item. The display will flash between Item 4 and the current setting for Item 4.



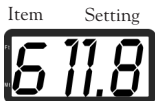
Item 4: This setting is not used for the AA550. It cannot be changed from OFF.

Press the MODE button to advance to the next item. The display will flash between Item 5 and the current setting for Item 5.



Item 5: This setting is not used for the AA550. It cannot be changed from OFF.

Press the MODE button. The display will flash between Item 6 and the current setting for Item 6.



Item 6: Chainwheel Circumference

Default Setting 11.8 in or 300mm

Record Calibration Entered: _____

Use the UP or DOWN buttons to enter the chainwheel circumference. If you selected feet use inches (in increments of 0.10). If you selected metres use millimetres. The chainwheel circumferences for some windlasses are listed on page 19. If your chainwheel circumference is not there, follow the instructions below to calculate it.

Follow steps 1 - 7 to calculate the chainwheel circumference.

Step 1 Use adhesive tape to place a mark on the chainwheel (See Fig 5).

Step 2 Use adhesive tape to place a mark on the chain coming out of the chain wheel (See Fig 5).

Step 3 Use adhesive tape to place a mark on the deck below the mark on the chain (See Fig 5).

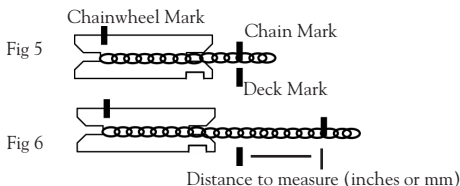
Step 4 Carefully release the chainwheel so that it can be turned by hand to feed the chain out.

Step 5 Using the mark on the chainwheel as a guide, turn the chainwheel one revolution, causing the chain to be released on to the deck.

Continued on Page 6.

Step 6 Measure the length of chain from the mark on the deck to the mark on the chain. (See Fig 6). This measurement is the setting to enter.

Step 7 Use the UP or DOWN buttons to enter the setting. The setting is entered in inches (in increments of 0.10) or millimetres.



After 1 turn of the chainwheel to feed chain out

Item 6 is the final calibration. Now save the settings:



Save

To save the settings, hold down the MODE button until **Prog** is displayed, then release the MODE button. The unit will then return to normal operation.

To Abort and Re-start Calibration

Press and hold the ON/OFF button until **Abrt** is displayed. Release the ON/OFF button. The AA550 is now off. Hold down the MODE button, and press and release the ON/OFF button. Release the MODE button to restart calibration at Item 1.

TESTING

Before the AA550 is used for anchoring, it is important to test it in a calm, safe environment as follows: After the calibrations are saved, follow the instructions to raise and lower the anchor using both manual and automatic operation. See Part 3 of this Manual. If the AA550 does not count, stop, start or operate exactly as specified in the instructions or any diagnostic messages appear on the LCD, refer immediately to Troubleshooting (Part 4 in this Manual) or to your supplier for assistance.

PART 3 - OPERATION



WARNING

Before using the AA550 the operating instructions must be read and understood, the AA550 must be calibrated to the windlass and rode on the boat and it must be tested in a calm, safe environment.

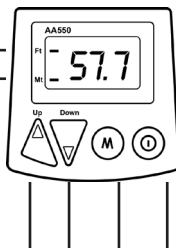
When using the AA550 you must:

- use the windlass strictly according to the windlass manufacturer's instructions;
- personally control and supervise all windlass and anchoring operations; and
- always ensure the anchor is fully docked and secured before moving the boat

Feet
Indicator

Metres
Indicator

Note: The Feet/Metres Indicator pulses when the sensor is operating



Display
Screen

Up Down Mode On/Off

HOW TO OPERATE YOUR AA550

SAFETY LOCK (ℓ)

The AA550 is fitted with a safety lock to help protect against unintentional windlass operation. Before operating the windlass the safety lock must be released. When the safety lock is on, the screen shows ℓ and the UP and DOWN buttons will not operate.

To Release the Safety Lock: Turn the AA550 on, hold down the MODE button until ℓ clears from the screen, then release the MODE button.

Note: The safety lock automatically reactivates 5 minutes after the AA550 was last operated. It can also be reactivated manually at any time. To do this hold down the MODE button until ℓ is displayed on the screen. Release the MODE button and the safety lock is set. The safety lock reactivates automatically when the console unit is turned off.

The AA550 can be operated manually or by using the unique automatic function.

Always ensure the AA550 display reads 0.0 before releasing the anchor from the docked position.

MANUAL OPERATION

To Release the Anchor and Rode - Using Manual Operation

Step 1 Turn the AA550 on.

Step 2 Clear the safety lock if necessary. (See above).

Step 3 Press and hold the DOWN button to start the windlass and release the anchor and rode.

Step 4 Release the DOWN button to stop the windlass operation.

To Retrieve the Anchor and Rode - Using Manual Operation

Step 1 Turn the AA550 on.

Step 2 Clear the safety lock (Refer to page 8).

Step 3 Press and hold the UP button to start the windlass and retrieve the anchor and rode.

Step 4 Release the UP button to stop the windlass operation when the anchor is fully retrieved and docked.

Step 5 Ensure the anchor is fully docked and secured before moving the boat

Note: During retrieval the AA550 will beep to warn the operator the anchor has passed the preset anchor retrieval stopping point. (Refer Item 2, page 4). **Extra care must be taken at this stage of retrieval.**

AUTOMATIC OPERATION

The AA550 has a unique automatic function. Using this function the operator can:

- Preset the length of rode to be released
- Control the operation of the windlass with a single touch of the button
- Retrieve the anchor automatically to a preset stopping point

Note: If there is a sensor error. (Refer to Troubleshooting page 14) the automatic function will not operate. If this occurs the windlass can still be operated using manual operation but the AA550 will not count accurately.



WARNING

There is an inherent risk when using any automatic function on a boat. If you choose to use the AA550 automatic functions, you must still control and supervise all windlass and anchoring operations.



AUTOMATIC ANCHORING

Enable Automatic Operation: The AA550 is supplied with the length of rode to be released set to OFF. The automatic function cannot be used until a “rode to be released” value is entered. (See Step 3 below). Once a “rode to be released” value has been entered the AA550 remains enabled for automatic operation. The setting is retained by the AA550 even if the battery fails. To disable the automatic operation use the DOWN button to reset the “rode to be released” to OFF.

To Release the Anchor and Rode

Step 1 Turn the AA550 on.

Step 2 Clear the safety lock if necessary. (Refer to page 8).

Step 3 Press the MODE button once. The value flashing shows AUTO and the preset length of rode to be released. If this value is correct go to Step 4 below.

To change the rode to be released setting: Press MODE again. The display will flash between SET and the current value. (The default setting is OFF). Use the UP or DOWN buttons to change the setting. Press the MODE button again to return to AUTO and go to Step 4 below to release the anchor. Or press the MODE button twice to return to normal operation. If you do not change the SET value, press the MODE button once to return to normal operation.

Step 4 Press and release the DOWN button. The windlass will deploy the anchor and rode. The windlass will stop and the AA550 will beep when the preset length of rode has been fully released.

SAFETY OVERRIDE - Press any button on the AA550 to stop the windlass during automatic release or retrieval. To restart press the **MODE** button once to enter automatic operation again and resume rode and anchor release or retrieval.

IN AN EMERGENCY SHUT OFF THE POWER TO THE WINDLASS USING THE ISOLATING/BREAKER SWITCH.

To Retrieve the Anchor and Rode

Step 1 Turn the AA550 on.

Step 2 Clear the safety lock if necessary. (Refer to page 8.)

Step 3 Press the **MODE** button once. The value flashing shows **AUTO** and the length of rode out.

Step 4 Press and release the **UP** button. The windlass will retrieve the rode and anchor. The windlass will stop and the AA550 will beep when the rode and anchor has been retrieved to the anchor retrieval stopping point. (Refer to page 4).

Step 5 Now manually operate the **UP** button to fully complete retrieval. The AA550 will beep during this process.

Step 6 Ensure the anchor is fully docked and secured before moving the boat.

OTHER SETTINGS


Reset Display to Zero

Turn the AA550 on. Clear the safety lock if necessary. Press and hold the **ON/OFF** button. A rapid beeping will be heard. Release the **ON/OFF** button when the display shows 0.0.

Change Backlighting Level (This is best done in low light).

Turn the AA550 on. Clear the safety lock if necessary. Press and hold the ON/OFF button down. The AA550 will start to beep. Press and hold the UP or DOWN buttons to adjust the light level. When you reach the desired level release the UP or DOWN buttons before you release the ON/OFF button. **Note:** If the ON/OFF button is held down for longer than 2 seconds without starting the adjustment this will reset the AA550 display to zero.

Reset Factory Default Settings

 **This setting should only be used if the AA550 settings have been corrupted. Using this setting will remove all your calibration settings.**

To apply the factory reset: Turn the AA550 off. Hold down the MODE and UP buttons together. While holding these buttons press and release the ON/OFF button. When the LCD display reads **LoAd** release the MODE and UP buttons. The unit will turn itself off and the factory default settings will be reset.

Now re-enter the calibration settings for your unit. Refer Part 2.

ELECTROMAGNETIC COMPATIBILITY (EMC)

The AA550 meets and exceeds the CE standard for EMC (EN60945). These standards are intended to provide reasonable protection against interference by other emission generating products on the boat. However, compliance with these standards is no guarantee that interference will not occur in a particular installation. The installation instructions must be followed to minimise the potential for interference. AA550 equipment must be installed to maintain the following distances away from any equipment transmitting or cables carrying radio signals eg VHF or SSB radios, cables and antennas or radar antennas: The console at least 1m (3ft), except for SSB radios and radar antennas where it must be 2m (6ft) away; and the cables at least 500mm (1.5ft) away.

PART 4 - TROUBLESHOOTING & MAINTENANCE

POWER SUPPLY



THE POWER SUPPLY MUST BE DISCONNECTED BEFORE MAKING ANY CHANGES TO WIRING OR ELECTRICAL CONNECTIONS.

Power to the AA550 and all windlass controls eg. toggle switch, remote switches, deck switches must be supplied from one point or the AutoAnchor will be damaged. Multiple battery bank negative terminals must be permanently connected together to become the common negative return (ground). Refer to the installation instructions.

Polarity: The AA550 is polarity sensitive. Battery polarity must be checked before connecting the power otherwise the unit may be damaged.

Resettable Breaker Switch: A 5 Amp switch to shut off power to the AA550 must be installed in a position easily accessed by the operator.

Cables: Battery and motor cables must be installed to maintain a distance of at least 300 mm away from the sensor head. Cable specifications are set out in the installation instructions and on page 18 of this manual.

Voltage: Neither the windlass nor the AA550 will operate with insufficient power. (See below). Batteries must be properly maintained and charged and all connections and wires must be of good quality and the correct gauge to prevent voltage drop. To check the voltage to the console unit: Turn the AA550 off and then press and hold the DOWN button - the voltage will display on the LCD. During operation, if the voltage drops below the minimum the AA550 will show **Lo Pr** and the voltage.

Minimum voltage required to start windlass operation	12V system	10 Volts
	24V system	20 Volts
If the windlass is already operating this is the minimum voltage required to continue operating. A drop below this voltage will stop the windlass.	12V system	7 Volts
	24V system	14 Volts

ELECTRONIC DIAGNOSTICS

Definitions SoL = Solenoid, SEN = Sensor, Lo Pr = Low Power

The AA550 is not faulty if these messages are displayed. The diagnostics help identify problems with installation, the battery, the solenoid and the sensor and windlass rotation. Some of the messages appear when you try to operate the AA550 but others only appear briefly when the AA550 is turned on. Always check for the diagnostic messages by switching the AA550 off and then on again. Use the table below to help identify a problem and provide a possible solution. If you cannot resolve the problem, contact your supplier for further information.

SEN message: When this message is displayed the AA550 will operate the windlass up and down manually but the Auto function will not work and the count will not be accurate.

Message/Problem	Possible Solution
1. LoC Displayed when a button is pressed. The AA550 will not operate.	The safety lock is on. Hold down the Mode button to release the safety lock and then operate as normal.
2. Lo Pr + a number Displayed when the Up or Down button is pressed. The AA550 will not operate the windlass.	Low power to the AA550. To check the voltage received by the AA550, turn the AA550 off, and press and hold the Down button. The voltage will display on the LCD. Check the battery voltage output. Check wiring for loose connections. Check the cable size. If the cable is the wrong size there may be voltage drop between the battery and the AA550. See the cable specifications on page 18 and the minimum voltages on page 13.
3. OFF Displayed when attempting to use the Auto function.	No setting has been entered for the rode to be released so the Auto function cannot operate. Enter a length of rode for release and the system will operate normally. (Refer page 10 Operation Manual).

4. SEN

Displayed when attempting to use the Auto function.

Use the AA550 up and down manually and check for the specific sensor error. Refer to the note below.

5. SEN 3

Displayed when the AA550 is operated manually. Auto does not work. No sensor pulse.

No signal from the sensor to the AA550. Either there is no magnet, the gap between the magnet and sensor is too big or the sensor signal is out of tune because of testing during installation. AA550 will operate the windlass up and down but there will be no count displayed on the LCD. Try resetting the AA550 by running the windlass up and down for 10-15 seconds. If the message still appears check the magnet and the gap and alignment between the magnet and sensor. Check sensor wiring and installation and check for damage to the sensor and magnet. When fixed reset the AA550 as above. To reset manually the anchor must be docked and the AA550 reset to zero twice. To reset to zero - press and hold the ON/OFF button. Release when the display shows 0.0.

6. SoL oL

Displayed when the Up or Down button is pressed. The windlass may operate for a short period and then stop.

The solenoids could be exceeding the maximum 4 Amps or a solenoid wire is shorted to ground. The AA550 is designed to turn the solenoids off if these events occur. Check the solenoids and the wiring and fix as necessary.

7. SoL uP or SoL dn

Displayed briefly when the AA550 is turned on. The AA550 will not operate the windlass.

SoL uP - The Up (orange) wire is not connected to the solenoid. **SoL dn** - The Down (yellow) wire is not connected to the solenoid. These messages also appear if the up or down button is pressed on the AA550 when the windlass is already in operation using a deck switch. Diodes or interlock devices between the AA550 and the solenoid will also cause these messages. The AA550 has internal diode protection. External diodes will cause the system to fail.

8. AA550 will not turn on or turns off.

Check battery connections, polarity and voltage. The voltage to the AA550 can be checked by turning it off and holding the Down button. The voltage is displayed on the LCD. See page 13 for minimum voltages. Check fuses and wiring and for the **Lo Pr** diagnostic message. Refer note 2 above.

9. AA550 will not operate the windlass.

Check if the safety lock is on - the LCD will display **LoC**. Refer note 1 above. Check voltages at the battery and the AA550. The LCD will display **Lo Pr**. Refer note 2 above.

Check wiring for loose connections to the solenoids. The LCD will display **SoL Up** or **SoL dn** if the wires are disconnected. Refer note 7 above.

Check that the windlass is not already in operation using the deck switch or remote control.

Check the total rode on board (Calibration 3 - Operation Manual Pg 4) is not set to OFF.

10. AA550 will operate the windlass manually but Auto function does not work

Check the rode to be released is not set to zero. The LCD will display **OFF**. See note 3 above. Use the AA550 manually and check for diagnostic messages.

11. Windlass rotates down when the Up button is pressed and up when the Down button is pressed.

The motor or solenoid wiring is reversed. Change the wiring and check the direction of the windlass rotation.

12. The windlass does not stop exactly at the preset point.

This is not a fault. Stopping is accurate to +1 chainwheel revolution. The chainwheel may run on slightly with momentum.

13. AA550 counts when the windlass is not turning or counts erratically displaying a large number eg 8888.

The sensor could be damaged, incorrect cable may be fitted, or the AA550 may have been subject to external interference - RF or electrical. Check that the sensor cable is not damaged and that the cable fitted is Beldon 9501 or equivalent, 2 core, tinned, copper, screened, as specified in the instructions. Check for external interference on the boat eg damaged or loose RF cables or aerials or other instruments that may not be working correctly or have been damaged by electrical interference including lightning.

14. AA550 beeps when it is turned off or locked.

Anchor rode is running through the windlass. Check if the windlass is being operated using the deck switches or a remote control. If not, check the windlass and anchor is secured.

CABLE SPECIFICATIONS

Cable from AA550 Console to the Sensor: Belden 9501 (AWG24) or equivalent, tinned, 2 core, screened.

Cable from AA550 Console to batteries and solenoids:

All battery and motor cables must be ring type.

This specification is based on the total cable length measured from the battery to the console plus from the console to the solenoids.

Where the total length is less than 33 ft (10m) - AWG16 (1.5mm²)

Where the total length is between 33 ft (10m) and 66 ft (20m) - AWG14 (2.0mm²)

Where the total length is between 66 ft (20m) and 132 ft (40m) - AWG12 (3.0mm²)

For lengths greater than this refer to your supplier.

MAINTENANCE

The AA550 does not contain any user servicable parts. User maintenance is limited to :

- Checking all cables and connections for signs of wear or damage and replacing them as necessary
- Checking the sensor head is not worn and has not moved out of alignment with the magnet and replacing the sensor if necessary
- Checking the magnet is not worn or corroded and replacing the magnet if necessary

Note: Do not use chemical or abrasive materials to clean the console unit. If it is dirty wipe it with a clean damp cloth. Avoid wiping the display screen with a dry cloth as this could scratch the screen.

CHAINWHEEL CIRCUMFERENCES

Calibration Items 5 and 6.

Find the chainwheel reference and enter the chainwheel circumference. Follow the instructions on page 5 to calculate the circumferences for chainwheels not listed below.

Gypsy	Chain Size	Chainwheel Circumference
001	5/16" 8mm	330mm (12.99 inches)
002	5/16" 8mm	310mm (12.20 inches)
002	3/8" 9.5mm 10 mm	330mm (12.99 inches)
003	3/8" 9.5mm 10 mm	295mm (11.61 inches)
603	1/4" 7 mm	205mm (8.07 inches)
604	5/16" 8 mm	290mm (11.42 inches)
670	6/7mm	255mm (10.04 inches)
762	7mm	255mm (10.04 inches)
765	6/7mm	255mm (10.04 inches)

MAGNET & SENSOR GAPS

Magnet 6mm x 4mm

Min 3mm Max 30mm

Magnet 8mm x 6mm

Min 3mm Max 44mm

Magnet 10mm x 8mm

Min 3mm Max 50mm

If using a reed switch sensor, the gap must be between a minimum of 3mm and a maximum of 5mm.

Note: If the installation uses a black all-chain sensor (Part No: 9008) the gap must be between minimum of 3mm and a maximum of 8mm and the south pole of the magnet must face the sensor.

INDEX

Anchor Retrieval Stopping Point	4	Manual Operation	8
AA 550 Diagram	1	Measurement	2
Automatic Operation	9	Operation	7
Backlighting	12	Other Settings	12
Battery Voltages	13	Power Supply	13
Cable Specifications	18	Release the Anchor in Auto	10
Calibration	3	Retrieve the Anchor in Auto	11
Change Backlighting Level	12	Reset Factory Default Settings	12
Diagnostics/Troubleshooting		Reset Counter to Zero	11
Guide	14	Rode on Board	4
Disable Automatic Operation	10	Rode to be Released	10
Disable Safety Lock	4	Safety Features	2
Electronic Diagnostics	14	Safety Lock	8
Electromagnetic Compatability	12	Select Feet or Metres	3
Enable Automatic Operation	10	Set Rode to be Released	10
Factory Default Settings Reset	12	Technical Specifications	2
Features	2	Testing	6
Feet/Metre Selection	3	Total Length of Rode on Board	4
Maintenance	18	Troubleshooting	14

To the best of our knowledge the information in this manual was correct at the time of printing. However, the AA550 is continuously being reviewed and improved and product specifications may be changed without notice. The latest product specifications may not be reflected in this version of the manual.

Documentation relating to the AA550 is created in the English language and can be translated from English to another language. In the event of any conflict between translated documents, the English language version will be the official version.