Setting the Tide

To set your tide instrument, follow the steps below:

- Unscrew the front bezel and remove the dial unit
- Turn the black knob on the back of the movement to adjust the hand to reflect local tide conditions
- Replace the dial unit and screw the bezel back onto the case

The tide hand revolves once every 12 hours and 25 minutes. Strong winds and coastal conditions affect tide cycles. Therefore, periodic resetting of the tide hand may be necessary.

NOTE: Tide readings only work for the East Coast of the United States.

The Barometer

How it Works

A barometer measures changes in atmospheric pressure, or the "weight" of the air. Changes in pressure typically foretell changes in the weather. Weather watchers will note a barometer's reading and how much and how fast it rises or falls. Rising pressure signals improving weather; falling pressure indicates deteriorating conditions. Generally, a barometer works best when mounted indoors (away from the elements) where air pressure is the same as that outside.

Your Chelsea Clock barometer is an aneroid barometer, meaning it measures atmospheric pressure without mercury or other fluids. Instead it uses a vacuum and a hollow metallic diaphragm. Pressure changes on the diaphragm cause the dial's black indicator hand to move.

You can manually position the gold hand over the black hand, and return later to see whether pressure is rising or falling.

Barometers can measure pressure in inches, millibars or centimeters. At sea level, normal atmospheric pressure is approximately 29.92 inches, 1014 millibars or 76 centimeters. At higher elevations the average pressure will be less as there is less air pressure overhead. Normal weather variations cause pressure to rise or fall an inch or less, so you may see little movement of the black hand for several days at a time. A passing storm often brings rapidly falling pressure.

Setting for Local Altitude

When your Chelsea Clock barometer leaves our factory it is adjusted to register pressure at sea level (the standard for measuring barometric pressure regardless of location or altitude). However, because atmospheric pressure decreases as altitude increases, if you live in a higher-altitude location you'll need to adjust your barometer (corrected to sea level) to receive an accurate reading. To do this, call your local weather bureau and ask for the present barometer reading. Then adjust the barometer's long indicator hand to the reading given. Depending on your model, do this by:

- Inserting the screwdriver provided into the hole on the case's back and turning the small screw, *or*
- Unscrewing the bezel, removing the barometer dial from the case and turning the small *brass* screw on the back.

If you live at an altitude of 5,000 feet or greater, your barometer should be adjusted professionally.

Tip: Before taking a reading, lightly tap on the barometer glass to release any built-up frictional resistance on the indicator dial.

Care & Service

Caring for Your Clock and Barometer Case

Chelsea Clock cases are made of high quality brass, superbly polished and lacquered for long-lasting beauty and protection. However, dust, fingerprints and environmental pollutants may, over time, mar the finish. To help maintain its bright finish, we suggest cleaning the case weekly with a clean, soft cloth. Never use polishes, cleaners or other liquids, as these can tarnish and pit the finish.

Servicing Your Clock or Barometer

Under normal operating conditions, your quartz clock or tide instrument is designed to provide years of quality, carefree performance. However, conditions such as extreme heat, cold, dust and prolonged idleness may necessitate servicing.

Your Chelsea Clock timepiece or barometer is a precision instrument and should only be serviced by a certified repair technician. We suggest returning your item to our factory repair center for guaranteed service by an experienced Chelsea technician. Find repair details online at www.ChelseaClock.com.

Limited Warranty

Your new Chelsea Clock product is warranted against defects in material and workmanship for two (2) years from the date of original purchase. In the event of any such defect, please return the instrument postage prepaid, along with an explanation of the defect to the address below and it will be repaired or replaced, at our option and our expense. Any defects or damage caused by misuse, accident, tampering or negligence of the user is not covered by this warranty. Be certain to carefully and securely pack the instrument for return. We will not be responsible for damage in shipment. The repaired or replacement instrument will be returned to you postage prepaid. All implied warranties covering merchantability, fitness for particular purpose, or otherwise are limited in duration to two (2) years from the date of original purchase. The repair or replacement of any defect is the exclusive remedy under this warranty. In addition, the warrantor shall not, under any circumstances, be liable or responsible hereunder for consequential, incidental, indirect or special damages. Please note that some states do not allow limitations on how long an implied warranty lasts, or the exclusion may not apply to you. This warranty gives you specific legal rights; you may have other rights that vary from state to state.

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CHELSEA CLOCK

Since 1897

Quartz Clocks
Tide Instruments
Barometers

Owner's Manual

Congratulations

You are the proud owner of an exquisite work of art, crafted by the elite master clockmakers of Chelsea Clock. For over a century, our craftspeople have been creating instruments whose beauty and workmanship enhance their extraordinary functionality and durability.

Installing the Battery

Your Chelsea Clock quartz timepiece requires a "AA" alkaline battery. Some Chelsea clocks require an "N" battery. A fully-charged battery should power the clock for about a year.

WARNING: Old batteries left in the clock may leak and cause damage, which is not covered under warranty.

To Install

Depending on the model of your Chelsea clock, you will need to access the movement on the back of the clock in one of the following ways:

Screw Bezel
- Unscrew the bezel from the front of the clock
- Grasp the rim of the dial unit and gently pull forward to remove it from the case

Hinged Bezel
- Depress the lock button and swing open the bezel on the front of the clock
- Grasp the rim of the dial unit and gently pull forward to remove it from the case

Military-Style Clocks
- Patriot Deck Clock - Open the bezel assembly on the front by turning the black lock knob counter-clockwise.
- Radio Room Clock (6" model only) - Open bezel as above. Remove the three screws holding the dial and movement assembly in the case. Install battery and set time.

NOTE: When closing bezel, squeeze bezel and case tighly to engage rubber gasket before turning knob. This ensures a tight seal against moisture and dust.

Additional Models
- Remove the back cover by gently pulling it off, unscrewing the plate (counter-clockwise) or by unscrewing the center screw and lifting it off

The clock's quartz movement is affixed to the back of the dial. Insert the battery, observing the correct polarity (indicated with "+" and "-" symbols). The movement will begin immediately. Carefully replace the dial, bezel and/or back cover, according to your clock model.

Setting the Clock

Access the back of the movement for your clock model as done in "Installing the Battery" section:
- Turn the small black knob until the hour and minute hands indicate the correct time
- Radio Room Clock Zulu Hand Only (for 8.5" model) - Carefully re-move the three screws that hold the dial and movement assembly into the bezel. Set Zulu hand manually and re-install
- Shipstrike Clock - Turn the black knob *clockwise* to the correct time - never counter-clockwise, as this causes damage

Setting the Second Hand

If your clock has a second hand, you must first stop the clock by removing the battery before adjusting it:

- When the sweep second hand points to "12," promptly remove the battery
- Set hands a few minutes ahead of the actual time
- When the actual time coincides with the hands on the clock, quickly reinsert the battery

Carefully replace the dial, bezel and/or back cover, according to your clock model.

Alarm Clocks

Setting the Clock

Turn the large black knob located on the back of the clock (lower right-hand side) clockwise or counter-clockwise to set the correct time.

Setting the Alarm

Turn the black knob marked "Alarm" in the direction of the arrow to set the hour of the time you wish the alarm to sound. Pull the small black pin *out* to activate the alarm; push it *in* to stop the alarm from sounding and to turn it off.

Shipstrike Quartz Clocks

Silencing the Chime

To turn the chime on or off, simply slide the green switch on the back of the movement to hide the bell symbol (bell symbol indicates chime is on).

Warning: Do not turn off the chime while it is striking; this can damage the mechanism.

NOTE: It is normal for striking to occur up to 30 seconds before or after the precise time.

The Ship's Bell Code

Mariners have used a unique bell code to tell time at sea for hundreds of years. The code is based upon the crew's typical, 24-hour workday routine. The day is divided into six four-hour periods, each called a "watch." Similarly, the crew is segmented into three divisions. Division members perform their duties on two watches per day, with eight hours off between watches. To rotate each division's watch times, the evening watch is typically divided into two watches (called dogwatches). The first dogwatch is the period between 4 and 6 p.m.; the second is the period between 6 and 8 p.m.

First Watch	8:00 p.m. to 12:00 a.m.
Mid-Watch (also Black Watch)	12:00 a.m. to 4:00 a.m.
Morning Watch	4:00 a.m. to 8:00 a.m.
Forenoon Watch	8:00 a.m. to 12:00 p.m.
Afternoon Watch	12:00 p.m. to 4:00 p.m.
Evening Watch	4:00 p.m. to 8:00 p.m.

The watch officer struck the ship's bell every half hour to apprise the crew of the time. A single bell sounded the end of the first half hour, and one bell was added each half-hour thereafter. Eight bells, therefore, signaled the end of each four-hour watch.

The chimes of your Chelsea Clock timepiece reflect this same traditional ship's bell code:

8 bells	12:00	4:00	8:00
1 bell	12:30	4:30	8:30
2 bells	1:00	5:00	9:00
3 bells	1:30	5:30	9:30
4 bells	2:00	6:00	10:00
5 bells	2:30	6:30	10:30
6 bells	3:00	7:00	11:00
7 bells	3:30	7:30	11:30