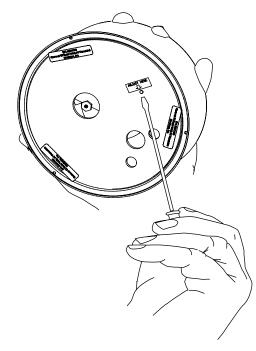
## **PROTEUS** SETTING AND OPERATION

### INTRODUCTION

Inside the brass barometer case is a sealed, flexible metallic drum. As the atmospheric pressures changes, the drum is compressed or expanded. This change is transmitted through linkage to a pointer - thus, change in atmospheric pressure is evidenced by movement of the pointer around the dial. The linkage has a bimetallic element which automatically compensates for changes in temperature which would otherwise introduce an error in barometer readings.

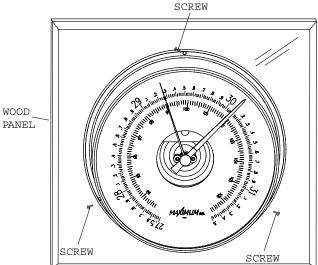


## SETTING YOUR BAROMETER

Your barometer has been carefully calibrated and tested at the factory and needs but one simple adjustment before installation at your location. This adjustment is made by inserting a screw driver in the recessed slotted screw at the back of the barometer and turning this screw to the proper setting.

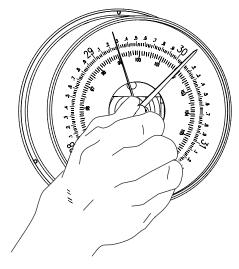
The simplest method of obtaining the correct barometric pressure for your location is to consult the local weather bureau, airport or perhaps a nearby individual with a correctly set barometer.

Due to the nature of aneroid (mechanical) barometers it may be necessary to fine tune the initial setting to accomodate the natural mechanical break-in of the device by simply repeating the setting procedure.



We recommend mounting the read-out on one of our pre-drilled and centered panels.

# **PROTEUS** HELPFUL COMMENTS



Your barometer is a useful instrument for weather prediction. The settable pointer, controlled by the knob in the center of the glass lens, is used to show changes in atmospheric pressure. When reading your barometer, lightly tap the case to take up normal slack in the linkage. Next, move the settable pointer until it rests exactly over the movement pointer. The next time you observe your barometer lightly tap the case again and you will now have a clear indication of rising, falling or steady barometric pressure. Observation of changes in barometric pressure, wind and temperature conditions give the weather watcher a strong basis for forcasting the weather.

#### WITH A RISING BAROMETER THE FOLLOWING READINGS INDICATE:

28.8 TO 29.2 INCH <del>ES</del>	CLEARING, HIGH WINDS AND COOL WAVE
29.2 TO 29.6 INCHES	HIGH WINDS, COOL WAVE, PRECEDED BY SQUALLS
29.6 TO 29.9 INCHE <del>S</del>	FAIR WEATHER, FRESH WINDS DURING NEXT 24 HOURS
29.9 TO 30.2 INCH <del>ES</del>	FAIR WEATHER AND BRISK WINDS, DIMINISHING
30.2 TO 30.5 INCHES	FAIR WEATHER, COOLER VARIABLE WINDS
30.5 TO 30.8 INCHES	CONTINUED COOL, CLEAR WEATHER, LIGHT WINDS
30.8 TO 31.0 INCH <del>ES</del>	HIGH WINDS, SOUTHEAST WITH RAIN

#### WITH A FALLING BAROMETER THE FOLLOWING READINGS INDICATE:

30.8 I	0 30.5	INCHES	FAIR, WEATHER, FOLLOWED BY RAIN
30.5 I	0 30.2	INCHES	APPROACHING STORM.
30.2 I	0 29.9	INCHES	CLOUDY, WARMER, UNSETTLED WEATHER.
29.9 I	0 29.6	INCHES	UNSETTLED WEATHER, WARMER WITH INCREASING WIND.
29.6 I	0 29.3	INCHES	SQUALLY, CLEARING, FAIR AND COOLER WEATHER.
29.3 I	0 29.0	INCHES	CLEARING, HIGH WINDS WITH SQUALLS AND COOLER WEATHER.
29.0 I	0 28.7	INCHES	STORMY WEATHER

Excerpt from "Eldridge Tide & Pilot Book"

NOTE: IF THE BAROMETER IS TO BE USED ABOVE 3000 FOOT ELEVATIONS, THEN THE UNIT MUST BE COURSE ADJUSTED AT THE FACTORY TO THE PROPER ALTITUDE.

### **IMPORTANT ADDITIONAL INFORMATION**

**Components:** Along with the indicator, the following components are included with this instrument:



**Brass Case:** Your brass case is solid brass A70-30 Holloware quality, with a durable lacquer finish. It is in fact a piece of jewelry and should be treated as such. It should be cleaned at least once a week to keep airborne pollutants (dust, etc...) and any moisture from collecting on the case thereby attacking the lacquer. At no time should you use an abrasive cleaner or cloth on the brass case. Simply use a soft cloth or soft paper towel with a mild glass cleaner to wipe the case clean. If your instruments are in a summer home, and you are not able to clean them regularly, simply lay a small cloth or towel across the top two-thirds so that dust cannot settle on the finish.

**Specifications:** All instrumentation or measuring devices have accuracy tolerances and specifications. Making comparisons between different pieces of equipment is appropriate provided the specified accuracies of both are known.

Barometric Pressure

**Measurement Range** 27.5 – 31.5 Inches of Hg Guaranteed Accuracy ±0.08 Inches of Hg



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