

Cronus Installation and Operation

Installation

1. Feed the AC adapters' cord through the wall to where the clock is going to be located. Connect the wires from the AC adapter to the clock. The polarity of the wires does not matter. (Do NOT adjust the nuts that are already on the clock).
2. Mount the clock directly over the cable feed-thru-hole to avoid crimping the wire under the lip. We recommend mounting the clock on one of our pre-drilled and centered panels.
3. Plug the power supply into a 110 VAC power outlet.

When Cronus starts up, it checks the tide time stored in the battery backed up memory. If it finds that the tide in memory is prior to the current time, it advances the tide time to the next tide in the future. Normally you will be unaware of this action however, if the tide needs to advance a long way, you will see the words "HI" and "LO" appear alternately on the display. It takes about 4 seconds to advance the tide one year. Next, it will perform a brief self-test. All the LED's will light for two seconds and then all the LED's will turn off for two seconds. Finally, Cronus will go to the "Time" display mode.

Operation

Pushing the switch to the right "Select/Auto" and allowing it to return to the middle will toggle Cronus between time and date. This will be indicated by the illuminated function light (AM, PM, 24Hr or, Date).

Pushing the switch to the right "Select/Auto" and holding it for at least three seconds will put Cronus into its auto-sequencing mode. Cronus will alternate between the time and date display automatically. Each function is displayed for approximately five seconds.

To stop Cronus from auto-sequencing simply move the switch to "Select/Auto" and release it.

During power outages, the display will turn off but the clock will continue to run on its internal batteries. The internal batteries will run the clock for up to 10 years in the absence of AC power.

Setting values and options

Cronus uses the same basic setting method for all values. The value being set will be flashing. Pressing the switch to "Select" will select different items to set. Pressing the switch to the left, "Set", will change the flashing value. When no values are flashing, pressing the switch to "Set" will end the setting operation. The next sections describe the setting operations in detail.

Note: When you change the date or time settings, if the new settings make the currently set tide time invalid, Cronus will automatically calculate the new tide time for you.

Time

1. Make sure Cronus is displaying time.
2. Push the switch to "Set" and hold it for about three seconds to start the time setting mode. The hours digits will be blinking to indicate that they can be set.

3. To set the hour, push the switch to “Set” and let it return to the middle. The hour will advance by one, if the hour is 11:00PM (23:00) it will advance to 12:00AM (0:00).
4. Push the switch to “Select” to move to the minutes tens digit.
5. Push the switch to “Set” to change the number.
6. Repeat steps 4 and 5 for the minutes ones digit.
7. Push the switch to “Select” and the final digit will stop flashing.
If you need to change any of the values, simply push the switch to “Select” and move through the digits again.
If you are done setting the time, push the switch to “Set”. Cronus will exit the time setting mode and resume the normal time display.

Date

1. Make sure Cronus is displaying date.
2. Push the switch to “Set” and hold it for about three seconds to start the date setting mode. The tens digit of the month, will be blinking to indicate that it can be set.
3. To set the tens digit, push the switch to “Set” and let it return to the middle. The number will advance by one; if the number is nine then it will advance to zero.
4. Push the switch to “Select” to move to the months ones digit.
5. Push the switch to “Set” to change the number.
6. Repeat steps 4 and 5 for the date tens and ones digits.
7. Push the switch to “Select” and the final digit will stop flashing.
If you need to change any of the values, simply push the switch to “Select” and move through the digits again.
If you are done setting the date, push the switch to “Set”. Cronus will exit the date setting mode and resume the normal date display.

Tide

You need to set Cronus to the next tide that will occur at your location.

1. Push the switch to “Set” and hold it for about six seconds to start the tide setting mode. After about three seconds the date or time setting mode will start, DO NOT release the switch. Once the tide setting mode has been started, the high or low tide LED, will be blinking to indicate that it can be set.
2. First you must tell Cronus whether the next tide is a high or low. To set the tide LED, push the switch to “Set” and let it return to the middle. The other LED will light.
3. Push the switch to “Select” to move to the hours digits.
4. Push the switch to “Set” to change the number.
5. Repeat steps 4 and 5 for the minutes tens and ones digits.
6. Push the switch to “Select” and the final digit will stop flashing.
If you need to change any of the values, simply push the switch to “Select” and move through the digits again.
If you are done setting the time of the next tide, push the switch to “Set”. Cronus will exit the tide setting mode and resume the normal display.

Options and other settings

Cronus contains a number of settings that are changed infrequently. These settings are Year, AM/PM or 24Hour and, Automatic Daylight Saving enable. These can only be set by starting the set everything mode. To start the set everything mode, simply press and release the switch mounted on the back of the instrument. Cronus will start the set everything mode which consists of the following items in the order they are presented.

1. Year setting, Cronus can be set for any year from 2001 through 2099. The setting procedure is like the procedure used for setting time, date or, tide time as described above.
2. Date setting see above.
3. Automatic Daylight Saving Time enable. The display shows “UdS” for Use daylight Saving, followed by a flashing “0” or, “1”. “0” indicates that the feature is turned off, “1” indicates the feature is turned on. Use the “Set” switch to change the setting. When finished, press “Select” followed by “Set”, like the other setting functions, to go to the next function. **Note:** the daylight saving changes follows the North American standard. Time is advanced one hour at 2:00AM on the first Sunday of April and, set back one hour at 2:00AM on the last Sunday of October.
4. AM/PM or 24Hour display mode. Use the “Set” switch to alternate between the two modes. The small function lights will blink and the main display will show “24” or, “AP” to indicate which mode is selected. To finish press “Select” and then “Set” as with the other settings.
5. Time setting see above.
6. Tide setting see above.

Troubleshooting

Latch Up

Power Line disturbances, improper powering up or an error in wiring may cause a blank or improper display reading. If Cronus is "latched up" in this way, proceed as follows:

1. Unplug the AC adapter from the 110 VAC power outlet.
2. Wait 15 seconds.
3. Plug the AC adapter in to the 110 VAC power outlet.

Information for the Cronus user

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Samuel Barnett Boulevard
New Bedford, MA 02745
(508) 995-2200