**Instruction set for Nixie clock**

Note: if your clock has battery backup, in order to start from this point you should:  
1) unplug the cord  
2) unplug the battery  
3) plug cord back in  
4) plug battery back in

When plugged in, the leds should light immediately and the display will read 11:11:11 for five seconds. To enable gps to auto set the time (if equipped), press fast set once and the display will change to 33:33:33. To select a time zone (for gps), press the LED COLOR button and the middle tubes will display “01”. Press fast set to cycle through the time zones. When the correct number corresponding to the time zone needed is selected from the list below, press slow set twice to return to setup.

The display will change after a few seconds to 00:00:00. To enable the calendar to display, press toggle once, and the display will change to 22:22:22 for three seconds. This means the calendar has been enabled.

Next the display will read “11:11” while the firmware detects the frequency automatically (60HZ, 50HZ or 1PPS)

The tubes should then display 1:11 for three seconds for 60HZ, or 0:00 for 50HZ or 4:44 for 1PPS. If the wrong frequency was erroneously detected, unplug, wait until the leds go out, and then plug back in.

Next the tubes should display: 12 (12 hour format, the default setting) for three seconds. To choose 24 hour format, press the fast set button once, and the display should be: 24 for three seconds, then display will show 1:00:00 (or 12:00:00 if 12 hr. format) and normal time keeping begins, set buttons operate as fast set / slow set, (hours / minutes).

\*If the gps auto set is enabled, the time and date will be set automatically at this point.

To set the calendar date: Press and hold fast set, then press and also hold the led color button (button in the back) at the same time, and the date will fast set. Release the led color button, but hold the fast set, and the date will display until fast set is released. Next hold down slow set & led color to slow set the date. Again, release led color while still holding down slow set and the date will display until slow set is released. The date should appear on the second’s count of 50 to 53. It is in mm/dd/yy format. Please refer to the youtube for illustration: [youtube demo](http://www.youtube.com/watch?v=HBwG5y8xDzo)

To manually turn the display on/off , push the button in the back ( toggle )and hold for no longer than one second until the display toggles.

To program the preset on/off times from normal time keeping mode: Press both buttons and the display will blank. Press the fast set button to increment hours to the desired on time (:1 after the hour indicates AM, :0 indicates PM) Press slow set to confirm your choice, and the hour you selected will appear with :00 for PM, :11 for AM. To set the alarm for this time, press fast set again, and “1” will be displayed on the last nixie. (xx:xx:x1 ) Please refer to youtube for illustration: [alarm demo](http://www.youtube.com/watch?v=M0EnK-_eUds)

Press either button once to enter the OFF time set mode. Follow the same procedure, and after the OFF time is confirmed (: XX appears after the hour selected), press slow set button to enter normal timekeeping (fast set, slow set) mode. To program a second set of sleep / wake times, press fast set and repeat the procedure for a second time. Please refer to the youtube link for illustration: [2nd on/off times setup demo](http://www.youtube.com/watch?v=rjGffOYagS0)

Note : The clock will display 12:00 AM to start (1:00 AM if in 24HR mode) so if the present time is after noon, you will need to advance the time past 12:00 in order to reach the PM hours (if in 12 HR mode) else the preset on/off times may be reversed. I.E.: if the present time is 8:00 PM, you need to advance PAST 8:00 once, then stop at 8:00. If gps equipped, time will set automatically.

To change the color of the led underlighting, press the ledcolor button until the color changes. If the button is held, it will cycle through all the color choices until it returns to blue (default color).

Time zone 1; EST

Time zone 2; CST

Time zone 3; MST

Time zone 4; PST

Time zone 5; AKST

Time zone 6; HAST

Time zone 7; BST

Time zone 8; CEST

Time zone 9; MSK

Time zone 10; PHT

Time zone 11; ACST

Thanks again for your purchase !