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nCompass Display shows year as 2009

nCompass Real Time Clock (RTC) Function

The nCompass display, like many computers, has a Real Time Clock (RTC) used for multiple functions including display of the local time and date. A battery is soldered into the main board to maintain the RTC settings when the unit is not powered. When the display is powered it begins charging the battery. The battery is fully charged at the time of shipment from the factory and typically maintains its charge for 6+ months.

What happens if the Battery is discharged?

When discharged upon power up the RTC reverts to the year 2009. Other nCompass functions are not affected.

How do I reset the RTC and charge the battery?

Refer to the User's manual for specific directions. Navigation is Settings/Offline/Clock; after setting be sure to depress the "save" button. Note that Security Settings may restrict access to the Settings and Offline modes. Charging the battery is automatic when the display is powered.

How long does it take to fully charge a discharged battery?

Depending upon when the display was assembled, either 2-days or 7-days. The 2-day charging began with serial number 142050001 (May 2, 2014).

How do I determine when the nCompass display shipped fully charged from the factory?

The nCompass display serial number located on the back of the display includes the date and day of final assembly. The display's battery is fully charged when the serial number label is applied to the unit. Below is a description of the serial number / date code.

> *The first two characters of the serial number are the year of manufacturer followed by one character for the month (alpha characters start in October) followed by the date then xxxx for the number of units processed that day. As an example serial number "14-2-09-0001" (hyphens added to show assignment logic) was assigned February 9th, 2014 as the 1st unit of the day.*

How do I source and replace a Battery that no longer accepts a charge?

The battery is soldered in place on the displays main board, battery model MS621-FL11E and is available from multiple commercial sources. Disassemble the display to gain access to the battery as shown below. Utilize appropriate soldering tool and remove and replace the battery using industry standard soldering technique.

Also shown is the location of resistor R32 near the battery. The value of this resistor determines the time it takes to fully charge the battery; 10K = 7-days while 1K = 2-days. If the resistor value is 10K and you chose to change it to allow faster charging time, change the resistor to 1K following industry standard soldering technique.