

The Irrisys Irrigation controller involves a number of timers

Each timer has two fields [00:00]

These fields could be for HH:MM (Hours : minutes)

Or MM:SS (Minutes : Seconds) - I will express these as XX:YY

We need a procedure that will handle both - based on a flag. If the flag is set then we are editing HH:MM if it is clear then we are editing MM:SS

We use the same procedure in both cases but save the data differently according to the flag.

The underlying values are always expressed in seconds so if the flag is set)HH:MM) then final value will be $(XX * 60 * 60) + (YY * 60)$

If the flag is clear the result will be $(XX * 60) + YY$ (MM:SS)

The display will be based on the current value (in eeprom_ this value is in seconds so will have to be converted as per the flag.

Initial display (in List Mode) will be [XX:YY] - substitute correct values as above

Red text indicates flashing

In all cases both the XX and YY fields are padded to 2 places

If we select edit mode (short button press > beep) We change the display to (XX:YY) - we edit the XX field first with the RE incrementing / decrementing from 00 to 99 and rolling over and under depending on + or - delta

We will reuse this procedure for multiple variables - including setting the clock (this may need an extra flag to force HH rollover / under to 00 to 24 - so please make provision for that.

(short button press > beep) to lock that value in and move to the XX field (XX:YY) - same procedure but the boundary here is 00 to 59 - rolling over or under depending on + or - delta.

(short button press > beep) > lock in this value, calculate the total seconds and set a flag to update eeprom when we exit to the main screen.

Long press in edit mode > long beep then exit edit mode without saving, returns to the list mode.

Menu time out > beep pattern, exit without saving changes - return to the main screen (exit all menus)