Solar Charger interface pseudo-code 4/26/13

// Buttons used for this are to be layed out in a cross, with U representing the up button, D representing down, L representing left, R representing right and S representing the center button. Since we haven’t done the LCD yet, I’m assuming we’ll be able to configure the code such that the LCD is constantly updating

Initialize SPI;

Output welcome screen;

Wait 5 seconds;

While 1{

Output clock screen;

Clkmode = 1;

While Clkmode = 1{

If R{

 Hourset = 1;

 LCD hours start blinking;

 While hourset = 1{

 If U

 Increment hour up

 Elseif D

 Increment hour down

 Elseif R

 Hourset = 0

 LCD hours stop blinking

 }

 Minset = 1;

 LCD minutes start blinking;

 While Minset = 1{

 If U

 Increment minute up

 Elseif D

 Increment minute down

 Elseif R

 minset = 0

 LCD minutes stop blinking

 }

Elseif S{

 clkmode = 0;

 }

 }

Initialize FM radio;

Display radio station;

FMrad = 1;

While FMrad = 1{

 If L

 Increment volume down

 Elseif R

 Increment volume up

 Elseif U

 Seek station up

 Display new station

 Elseif D

 Seek station down

 Display new station

 Elseif S

 FMrad = 0

 }

Initialize AM radio;

Display radio station;

AMrad = 1;

While AMrad = 1{

 If L

 Increment volume down

 Elseif R

 Increment volume up

 Elseif U

 Seek station up

 Display new station

 Elseif D

 Seek station down

 Display new station

 Elseif S

 AMrad = 0

}

}

//hopefully since this ends the while 1 loop, this will cause the system to loop between the three existing modes (clock, FM, AM). In addition, if there are additional operating modes we must add, we can add them to the sequence and create a new value indicating whether they are active (like clkmode, FMrad, and AMrad).