

Customizing the 950 Via the Source Code

The basic code that the 950 generates from the Builder code file can be modified. By modifying the code you add capabilities that are not normally accessible from OIBuild. The examples included here are: turning off the automatic backlight, an automatic retry when the PLC communication is lost, making the 950 wait a specified time upon powerup, and switching 950 screens by using a PLC register.

A note before continuing: **Back up the original oibcom.src file before changing anything!** Every program that OIBuild generates is based on this code. If something was changed that generates an error, no OIBuild program will work on the 950 until the problem is found.

Setting up the backlight to be on continuously:

Step One: modify the text file **oibcom.src** with any text editor by adding the text in bold italic to the line shown. . .

```
*****  
* INCLUDE ***** INCLUDE ***** INCLUDE *** INCLUDE ***** INCLUDE ***** INCLUDE *  
*****  
. . .  
TRAILER: LIBRARY  
CODE: ZLABEL ZSIGNON  
CODE: ZON ZERROR ZGOTO ZERRMSG  
CODE: ZCALL BACKLIGHT(2):ZGOTO %%3  
CODE: ZLABEL ZSIGNON1  
CODE: ZKEY OFF:ZREMOTE OFF  
CODE: ZCALL ZC(1)  
CODE: ZCALL ZA(5,1,1,"INITIALIZING PLC")  
CODE: ZCALL ZA(5,2,2,"PLEASE STAND BY")
```

That's it. The ZCALL will be added to the beginning of the program and executed when the program runs.

Automatically reestablish communications after a plc communications failure:

Inset the following code should be added to oibcom.src:

```
CODE: ZON ZTIMER 1 ZGOSUB ZALARMT1  
CODE: ZGOTO BEGIN  
CODE: 'ERROR HANDLING SUBPROGRAM:  
CODE: ZLABEL ZERRMSG  
CODE: ZIF ERR<>53 THEN ZGOTO ZERRMSG1
```

CODE: ZCALL ZA(0,4,0,"CHECK PLC CONNECTIONS. ATTEMPTING TO")
CODE: ZCALL ZA(0,5,0,"REESTABLISH COMMUNICATIONS. . . ")
CODE: ZGOTO ZRESUMI
CODE: ZLABEL ZERRMSG1
CODE: ZCALL ZA(0,3,0,"THIS ERROR SHOULD NOT OCCUR.")

Making the 950 wait a specified period:

To make the Eason950 wait a specified time period upon powerup insert the following code towards the beginning of the oibcom.src file. This is useful if you want to the Eason to delay startup for your PLC to initiate.

CODE: ZDELAY n

The **n** specifies the time period in milliseconds you wish the 950 to wait. This **n** cannot be longer than 65535, and a value of 0 equals no delay.

Switching screens via PLC register:

The last trick is changing the source code to allow switching of the 950 screens via a plc register. This works by letting the 950 interrupt alarms with other alarms. Note that because of this, the only screens that you can switch to will be alarm screens.

Step One: modify the text file ***oibcom.src*** with any text editor by adding the text in bold italic to the line shown. . .

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...

PSEUDO: ALARM: SCREEN screen,parma,parmb
PARM: screen:8 (~) "Enter a screen name: "
PARM: parma:20 (-32768-32767) "Enter alarm masks 1-16: "
PARM: parmb:20 (-32768-32767) "Enter alarm masks 1-16: "
CODE: ZLABEL screen
CODE: ZCALL ZC(3,parma,parmb):***ZTIMER 1,ZALRMTIM%***

Step Two: In the Register... setup screen, define an integer register that will be used to control the screen switching. This is done in the Message and Alarm Conditions in the lower section of the screen. Define a level alarm for each screen that you want to switch to. All of the screens that you are switching will need to be alarm screens.

Now to switch screens on the 950, just change the value of the plc register and that alarm screen will come up.