

Z90 CD-ROM

Contents:

1. Documents Directory—PDF copies of operating manual, assembly manual, schematic and troubleshooting schematic.
2. Firmware—PIC18F4620 Firmware load version 0.600 (14 July 2006) and boot loader.
3. Windows—Z90-Control program for Windows.

Directions for installing the Z90-Control software can be found in the Z90 Operating Guide.

Firmware folder contains:

MicroCode Loader & Z90 firmware.

The Microcode loader permits revised firmware for the PIC18F4620 PIC to be loaded into its flash memory. New firmware may be released to add features or to correct bugs in the current software.

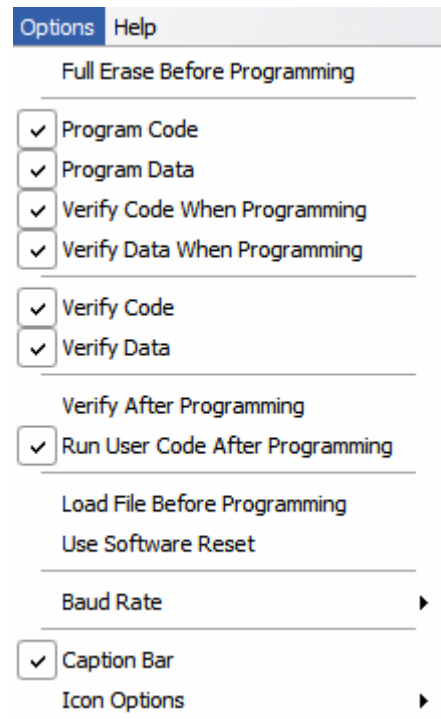
Please copy the files in this folder from the CD-ROM to the folder in which you have installed the Z90-Control software.

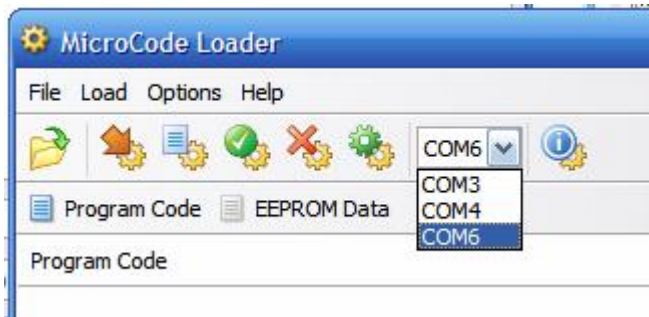
Updating the Z90 Firmware

To use the MicroCode loader to update the Z90's firmware, make sure that your computer is connected to the Z90's serial port and that the Z90's power is turned on.

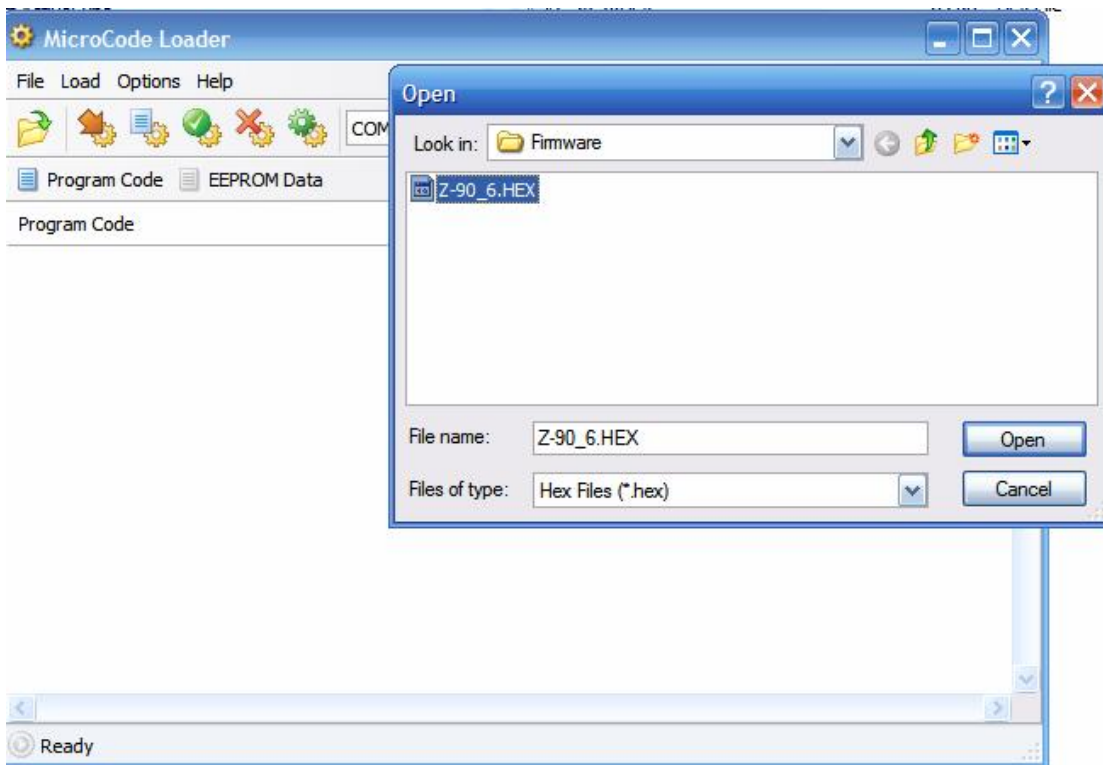
Launch the MicroCode loader and from the OPTIONS menu verify that the following options are selected. These are the default options, and should not normally require revision.

Set the communications port to match the port number to which you have the Z90 connected.



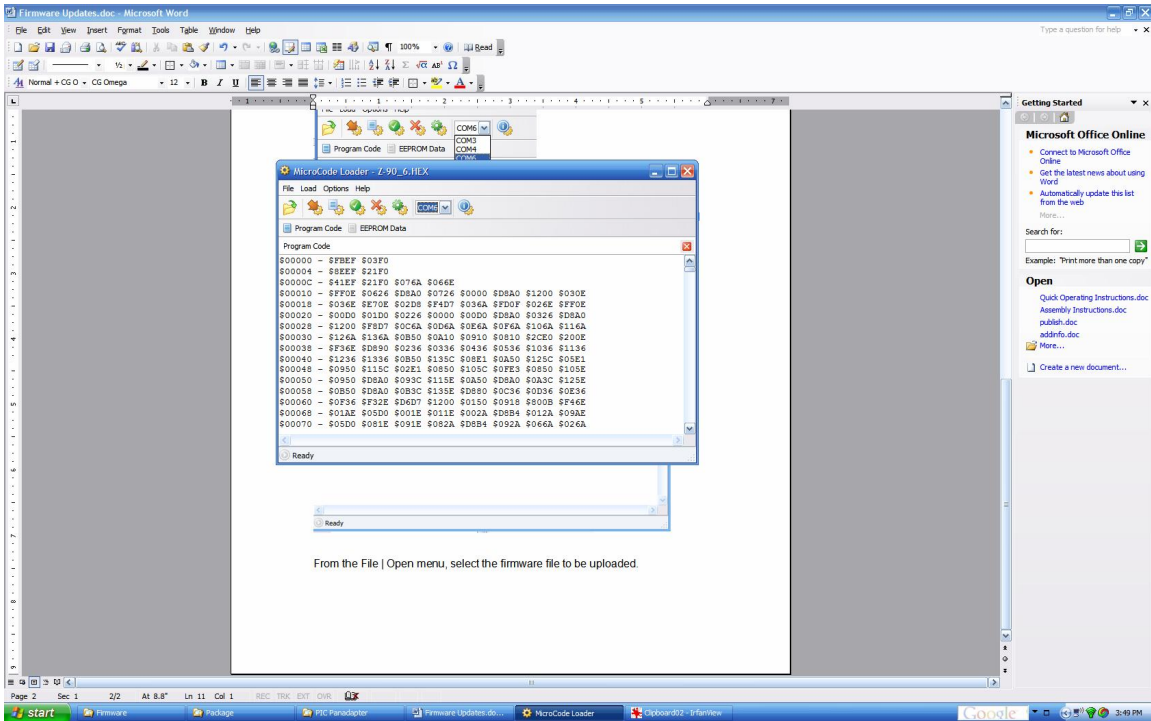


To program the Z90 with new firmware, copy the new firmware load (this file will normally be named Z90_xxx.hex where the xxx is the release version) to the directory in which you have installed the MicroLoader.

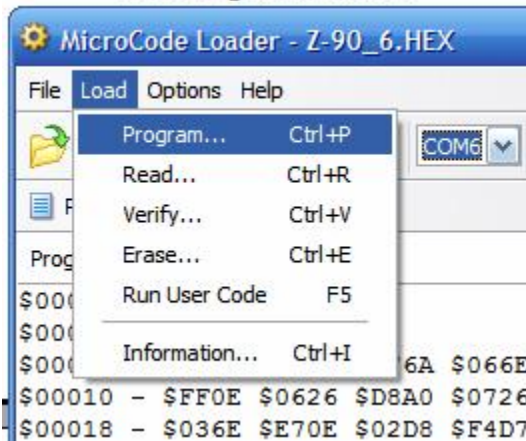


From the File | Open menu, select the firmware file to be uploaded.

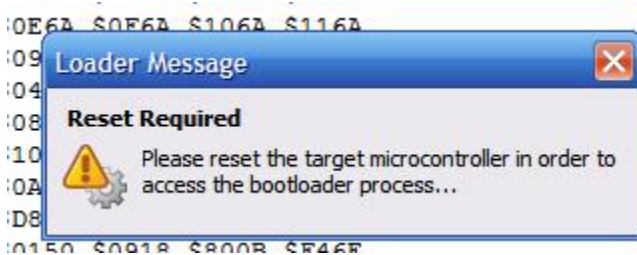
The MicroLoader will read the hex file into memory and display it, similar to the following illustration.



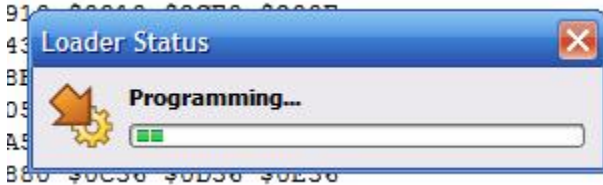
Select Load | Program



You will see a Reset Required dialog message appear.



When this message appears, turn the Z90's power switch OFF and after a two or three second wait, turn it back to the ON position.



The MicroLoader should then indicate the code is being programmed into the Z90 and show the programming load status. It will take two or three minutes to load the complete code into the Z90.

When the code has been loaded, the status dialog will disappear.

You may then exit the MicroLoader.

Loading the new firmware has overwritten the EEPROM and it will be necessary for you to do the following tasks:

1. Recalibrate the master time base
2. Run the filter auto-calibration routine
3. Re-enter any custom IF and custom span and callsign information.

Note: Some software releases may instruct you to alter the MicroLoader setup to not program or verify DATA, as shown below.

These software releases will preserve the EEPROM data and will not require you to perform the data re-entry described above.

