



Using A Pickit3 to Update Genesis Program Preprogrammed In The Programmer-To-Go Mode

1. Using the Pickit3 and its USB cable (any USB to USB mini will work) connect the **USB** mini to the Picket3 & the full-size **USB** end to the USB port on the right edge of the PCB.
2. Connect the Pickit3 to the **'PROGRAM'** header on the PCB, with the pin 1 white triangle indicator oriented toward the lower edge of the board.
3. When the **blue 'ACTIVE'** LED signal starts to flash, press the **button on the Pickit3** to program the PCB.
4. After pressing the program button there should be a moment of the STATUS led flashing red on the Pickit3 as it writes to the PCB, and then turns solid **GREEN** to signal success.
5. Unplug the Pickit3 from the PCB. The display should show the TITLE screen with the updated version number. If the screen stays blank, cycle the power to the PCB to get the TITLE screen.

Programming with Download

1. Run the **MPLAB IDE Install**, from <https://drive.google.com/file/d/1RJTvjaetbIM9ZcXnBWvRCxWt1E8wtTLs/view?usp=sharing>. During the installation, there is a step to select just the MPLAB IPE to be installed. (The MPLAB IDE is not needed so

uncheck it when installing the program.) Leave all the remaining choices checked. Uncheck the bottom line asking if you want to help with improving the program. After loading program follow the instructions here.

2. Select appropriate **device: PIC18F97J94**. Then click the APPLY button to the right.
3. Press the **'Browse'** button next to the 'Source' field and navigate to the desired firmware .hex file. This is the file that can be emailed and will be the version that is sent by AutoGate. The new version will AX.XX.
4. Then connect the PICKiT3 to your computer USB port. Wait to make sure the PICKiT3 is recognized and is listed in the 'Tool:' field
5. Press **'Connect'** button next to tool field. This may take a few minutes the first time as the PICKiT3 may need to download the appropriate firmware for the selected device. There will be a statement in **RED** that says it does not see a device, that is OK.
6. In the upper tool bar go to **Settings > Advanced mode**
7. Enter Password: **microchip**
8. Select **Settings** in the left side buttons that appear.
9. Click the **'PICKiT 3 Programmer To Go'** button
10. Name the image if you'd like, but not necessary. I like to name it Ver. AX.X. Press **'Programmer To Go'** button and wait for confirmation.
11. Click the 'Operate' button in the left side of the window and you should see a verification in the Output text that the PICKiT 3 is now in Programmer to go mode.
12. Click the 'DISCONNECT' box next to the tool designation.
13. Remove the Pickit3 and its USB cable (any USB to USB mini will work) and connect the Full-size **USB** end to the USB port on the right edge of the Genesis control board.
14. Connect the Pickit3 to the **'PROGRAM'** header on the PCB, with the pin 1 white triangle indicator oriented toward the lower edge of the board.
15. When the **blue flashing 'ACTIVE'** signal starts, press the **button on the PickiT3** to program the PCB, a power cycle on the PCB may be needed to get the ACTIVE light flashing.
16. After pressing the program button there should be a moment of the STATUS led flashing **red** on the PickiT3 as it writes to the PCB, and then turns solid to signal success.
17. When reconnecting back to the PC and IPE you will get a message that the Pickit3 is in Programmer-to-go mode, click 'no' to wipe the .hex file stored in the Pickit3 if you wish to change to a new .hex or use the Pickit3 for other operations.