Note, you will need a custom version of the Arduino IDE with the PanelsG4
board added as a target.

0Program the Arduino Uno to be a AVR programmer. If required -   I included
pre-programmed Arduino.

       * Connect Arduino (Make sure programmer shield is off it will prevent programming)
       * Open Arduino IDE.
       * Go to Tools -> Board and select Arduino UNO.
       * Go to Tools -> Port and select correct Port
       * Go to File -> Examples select "ArduinoISP"
       * Verify (check button) and Upload (right point arrow button).

1.) Programming a comm panel.

       * Connect Arduino w/ programmer shield attached.
       * Open Arduino IDE
       * Go to Tools -> Board and select PanelG4
       * Go to Tools -> Programmer and select "Arduino as ISP" (not ArduinoISP!!!)
       * Connect panels programmer to Arduino shield via ribbon cable
       * Note, you do not need external power supply the Arduino will provide power
       * Connect panel to programmer
       * Go to Tools -> Burn Bootloader
       * Open the comm.ino sketch (latest version is in hardware_v0p2/comm/)
       * Go to Sketch -> "Upload Using Programmer" to upload sketch to panel.

2.) Programming a driver panel

       * Open Arduino IDE
       * Connect Arduino w/ programmer shield attached.
       * Go to Tools -> Board and select PanelG4
       * Go to Tools -> Programmer and select "Arduino as ISP" (not ArduinoISP!!!)
       * Note, you do not need external power supply the Arduino will provide power
       * Connect panel to programmer
       * Connect programmer to shield via ribbon cable (note)
       * Go to Tools -> Burn Bootloader

* Open the driver.ino sketch (latest version is in hardware_v0p2/driver/)
* Select subdevice using dip switch. Up is selected - only one should be up at a time.
* Go to Sketch -> "Upload Using Programmer" to upload sketch to panel.

Note 1. To fully program the driver you chip you need to all four atmega328's
which means programming the bootloader and firmware for all four dip switch "on"
positions.

Note 2. Always remove ribbon cable before removing and attaching new driver
subpanel as sometimes attaching a panel without doing so will corrupt the
ArduinoISP program on the Uno