

AC10 4.xx Firmware Update Process

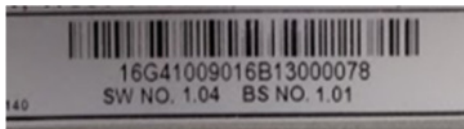
The firmware of an AC10 IP66 0.4kW~15kW (frame 1~3) can be updated using the process described here. These can be identified by the Model Number.



16G-X1-XXXX-XX
16G-X2-XXXX-XX
16G-X3-XXXX-XX

For example, is an IP2 AC10 Frame 6 so can be updated using this method.

Note – if the firmware already installed has version 1.0XX (e.g. 1.04 or 1.044), then it cannot be upgraded. The firmware version can be checked by examining F105 on the keypad. This may also be seen on the label.



The firmware of an AC10 IP66 18.5kW~90kW (frame 4~6) cannot currently be updated using this process. It can be updated using an emulator but should only be done at the factory. This situation will change in the future. The models affected are:

16G-X4-XXXX-XX
16G-X5-XXXX-XX
16G-X6-XXXX-XX

Required Tools:

- 1) Programming software (Windows)
- 2) RS485 4-wire Converter
- 3) Programming Cable
- 4) Jumper for J8 link (bent paper-clip will do)
- 5) 5V power supply (3 x AA battery will do)

The Flash Programmer for TI MPUs can be downloaded from:

<http://www.codeskin.com/c2prog-download>

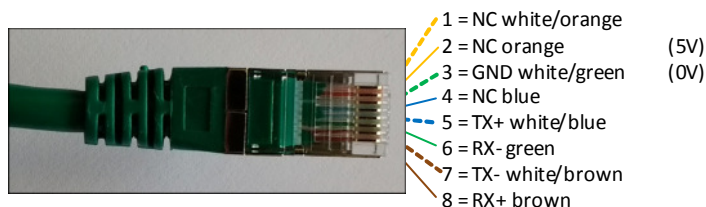
The latest firmware version can be downloaded from:

<http://www.parker.com>

The firmware version will be 3.xx (e.g. 3.27). Do not attempt to program using other versions 2.xx or 4.xx as these are intended for different products.

Any RS485 converter can be used as long as it supports 4-wire mode. A good example is the Moxa Uport1130 RS-422/485 USB-to-Serial Adaptor.

The Programming Cable is an RJ45 (Ethernet standard) connected as follows:



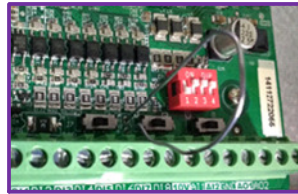
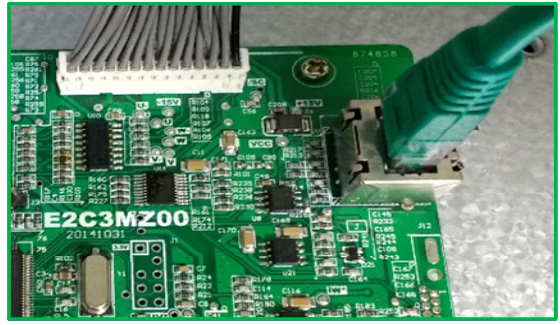
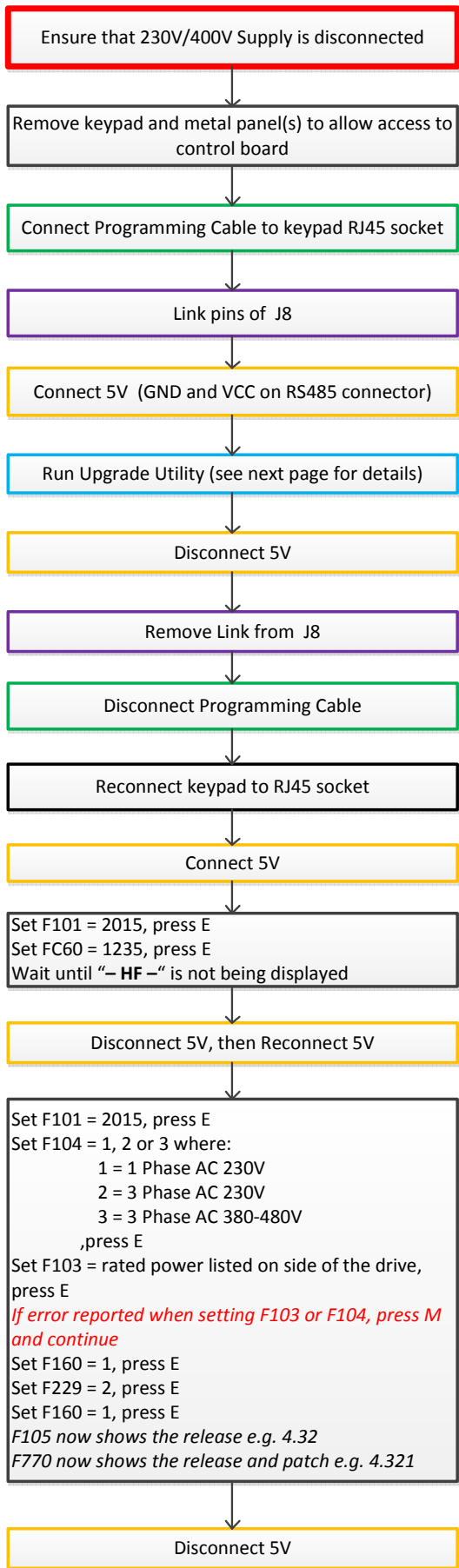
the same cable connected to a Moxa converter:



The Process

Important Notes Before Continuing with Firmware Update

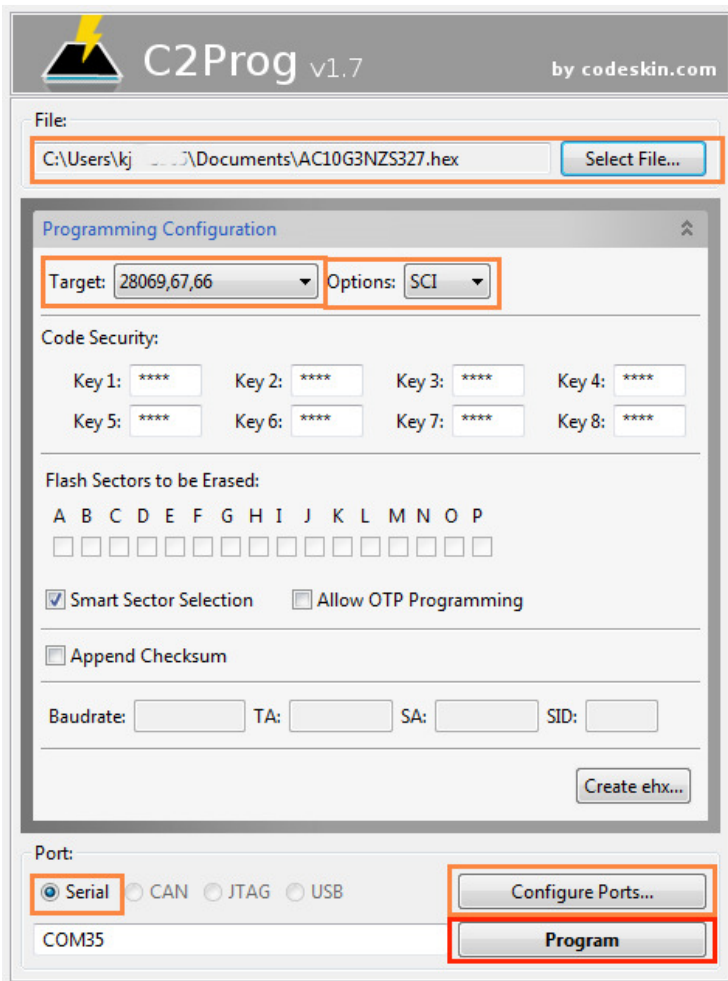
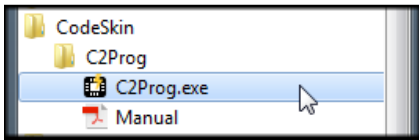
1. Check the values of F103 (kW rating of Drive) and F104 (Phase and Voltage rating of the Drive). These values need to be re-entered after the firmware update. On a system fitted Drive the label with this information is not always visible.
2. Do you need to save the existing Configuration installed in the Drive? The firmware update will set the values in the Drive back to default. The installed configuration can be extracted with DSE Lite before commencing with the update. Once you have started updating you cannot restore the configuration without a saved DSE Lite parameter extraction.



5V can be supplied by USB using the 1002-00-00 CLONE MODULE



Running the CodeSkin C2Prog upgrade utility:



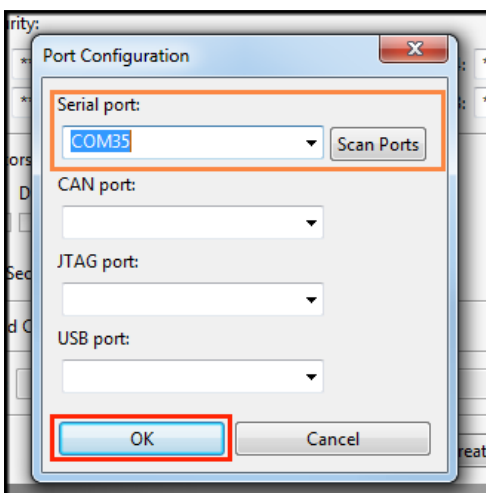
Select File: file containing firmware to program into AC10 IP20 6~12

Target: 208069,67,66

Options: SCI

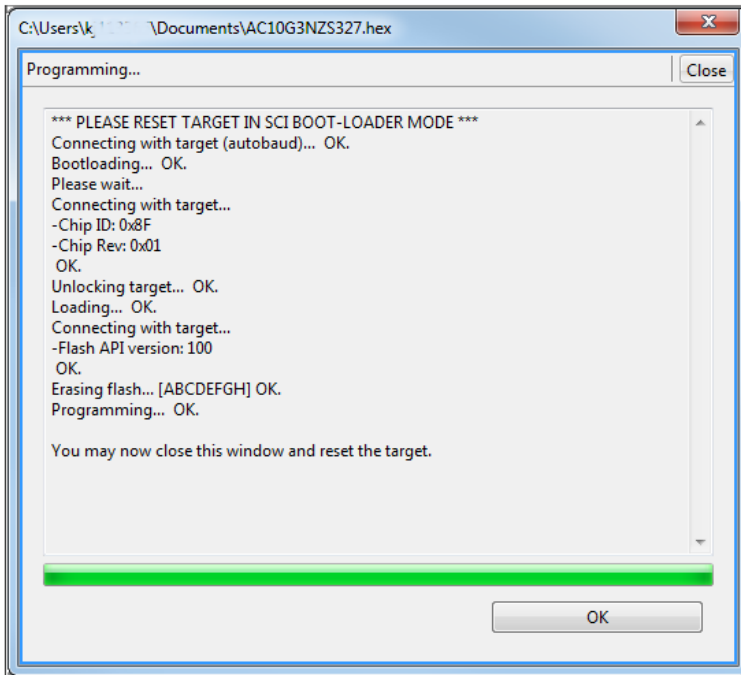
Port: Serial

Configure Ports.. as below

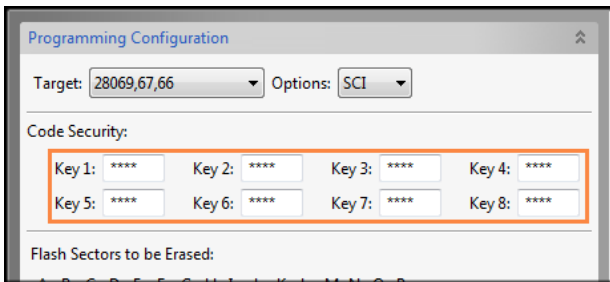


Serial port: Scan Ports and select COM port which is the USB-RS485 converter.

After clicking on Program there may be at least 30 seconds before the *** PLEASE RESET TARGET IN SCI BOOT-LOADER MODE *** message to appear, please wait.



Note – if Unlocking target... FAILS then unlocking keys will need to be entered. These are



Key 1: 1976 Key 2: 1208 Key 3: 1999 Key 4: 0716
Key 5: 0716 Key 6: 1999 Key 7: 1208 Key 8: 1976

After entering the keys, click on Program again.