AC10 2.xx Firmware Update Process

The firmware of an AC10 IP20 0.2kW~22kW (excluding 3Ph 230V 4kW~15kW) can be updated using the process described here. These can be identified by the Model Number.


```
10G-X1-XXXX-XX
10G-X2-XXXX-XX
10G-43-XXXX-XX
10G-44-XXXX-XX
10G-45-XXXX-XX
```

For example, is an IP20 AC10 Frame 2 so can be updated.

Required Tools:

1) Programming software (Windows)
2) RS485 4-wire Converter
3) Programming Cable
4) Jumper for J9 link (bent paper-clip will do.)
5) 5V power supply (3 x AA battery will do) or USB via 1002-00-00 CLONE MODULE.

The programming software and the latest firmware can be downloaded from
http://divapps.parker.com/divapps/ssde/ssde/Downloads/AC10FwInstaller/publish.htm
Note: The firmware installer is not updated since 2.322. The firmware 2.331 can be chosen by a "User Firmware File".
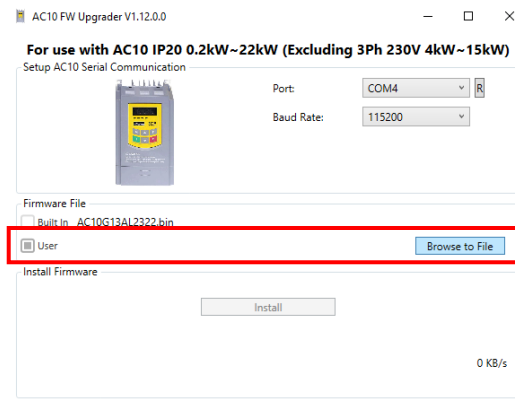
Any RS485 converter can be used as long as it supports 4-wire mode. A good example is the Moxa Uport1130 Rs-422/485 USB-to-Serial Adaptor.

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

1 = NC white/orange
2 = NC orange   (5V)
3 = GND white/green   (0V)
4 = NC blue
5 = TX+ white/blue
6 = RX- green
7 = TX- white/brown
8 = RX+ brown
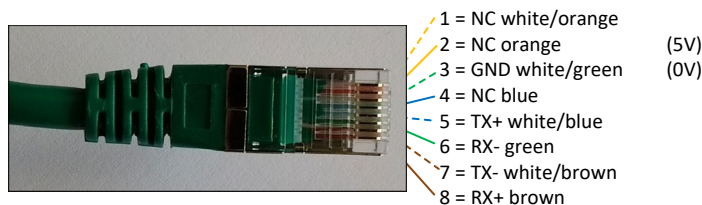
the same cable connected to a Moxa converter:

Jumper for J9 link:
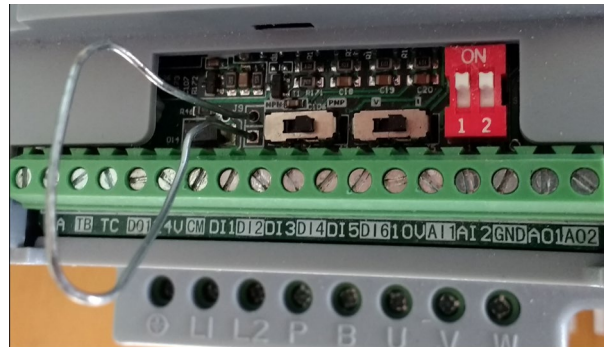
The Process

Important Notes Before Continuing with Firmware Update

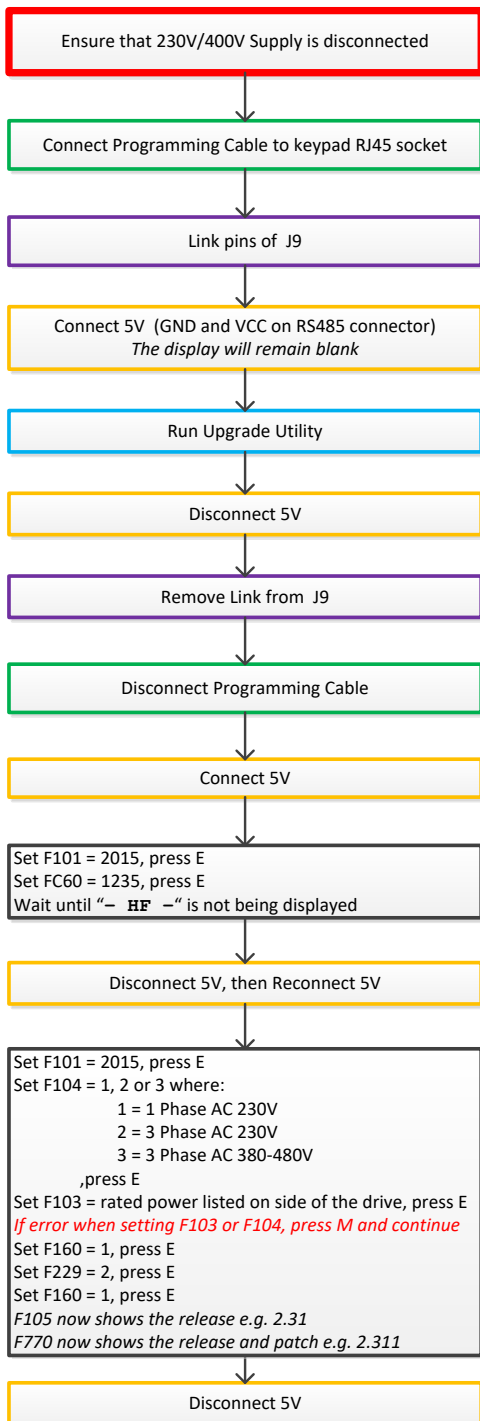1. Check the values of F103 (kW rating of Drive) and F104 (Phase and Voltage rating of the Drive). These values need to be re-entered after the firmware update. On a system fitted Drive the label with this information is not always visible.

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.

Ensure that 230V/400V Supply is disconnected

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Connect Programming Cable to keypad RJ45 socket

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Link pins of J9

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Connect 5V (GND and VCC on RS485 connector)
The display will remain blank

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Run Upgrade Utility

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Disconnect 5V

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Remove Link from J9

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Disconnect Programming Cable

↓

Connect 5V

↓

Set F101 = 2015, press E
Set FC60 = 1235, press E
Wait until "– HF –" is not being displayed

↓

Disconnect 5V, then Reconnect 5V

↓

Set F101 = 2015, press E
Set F104 = 1, 2 or 3 where:
            1 = 1 Phase AC 230V
            2 = 3 Phase AC 230V
            3 = 3 Phase AC 380-480V
    ,press E
Set F103 = rated power listed on side of the drive, press E
If error when setting F103 or F104, press M and continue
Set F160 = 1, press E
Set F229 = 2, press E
Set F160 = 1, press E
F105 now shows the release e.g. 2.31
F770 now shows the release and patch e.g. 2.311

↓

Disconnect 5V

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

For AC10s that do not have the RS485 connector, pin 2 (5V) and pin 3 (0V) of the programming cable may be used instead.