All relevant timers are PCB programmable using a terminal emulator, programming is as follows.

First connect a PC running a terminal emulator (such as hyperterm) configured for 9600bps 8 Data no Parity 2 Stop. Then make the program mode jumper and apply 12vDC to the controller.

The terminal will now display

Generator autostart control by Richard Drabble Firmware version 1.00 Enter time to wait after mains faliure before beginning start sequence Whole number of seconds from 5 to 255

Often when the mains fails it's only for a few seconds, in such cases we don't want the generator to start up, it's often better to wait a minute or two before starting. In my case I will wait 30 seconds before beginning the generator start sequence.

30

The controller now responds with

Enter time to preheat glowplugs before cranking starter Whole number of seconds from 0 to 30

The value to enter here can only be determined by trial and error, my generator seems OK with 10 seconds. If you are using a generator without preheat, such as a petrol generator, enter zero

10

The controller now responds with

Enter time to crank starter after preheat time is completed Whole number of seconds from 1 to 20

Again you can only find the correct value from trial and error, my generator seems fine with 5 seconds, especially if the glow-plugs have been allowed to get nice and hot.

5

The controller now responds with

Enter time to wait after mains resumes before shutting down Whole number of seconds from 5 to 255

Again often during a power cut mains will cycle on/off several times, sometimes coming on only for a few seconds, in such cases once the generator is running it's best to wait a while to be sure mains is going to stay on, I've used a value of 30 seconds.

The controller now responds with

Programming complete
Please remove programming jumper

Once the jumper is removed the controller should confirm that it is operating by flashing the onboard LED at around 1Hz.