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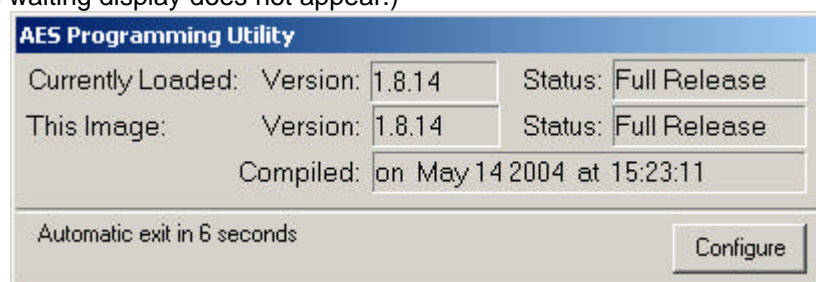
## Milan Interface Firmware programming

All Milan firmware releases are distributed as self-extracting Windows executables. As well as those stored on the distribution CD, they are also accessible on the Internet at:

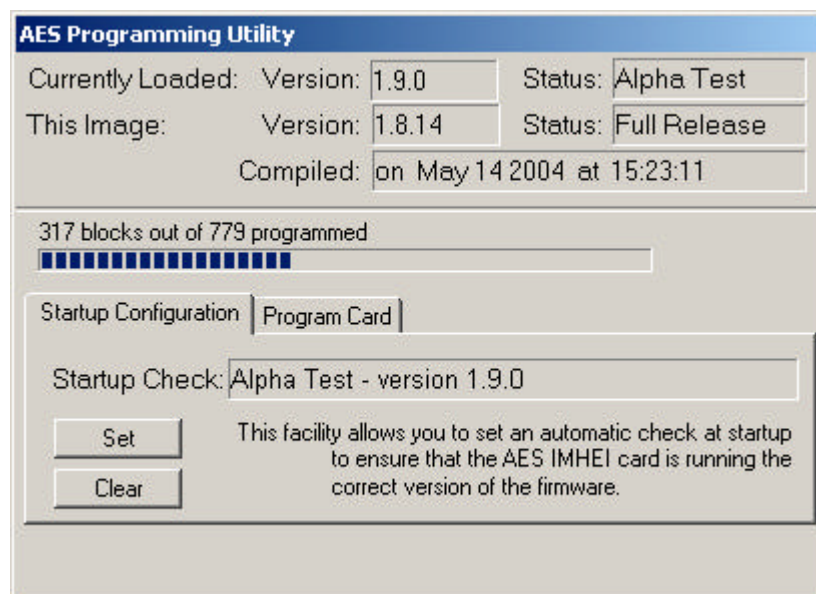
<http://www.aardvark.eu.com/products/milan/downloads.htm>. Each executable is named MilanVx-x-x.exe where the sequence after the V identifies the version. (In case of anti-virus difficulties, the files MilanVx-x-x.zip are available, which contain the MilanVx-x-x.exe files)

The same Windows programming utility is contained in all the firmware release files. When run normally it will check that a Milan Interface is installed and accessible, and will then compare the version of the firmware that it contains with version installed on the Milan Interface. If they differ it will then load the new firmware:

if they are the same it will display the (matching) details for 10 seconds and then automatically exit. (If a parameter is provided on the command, then the check is silent if it passes; the waiting display does not appear.)

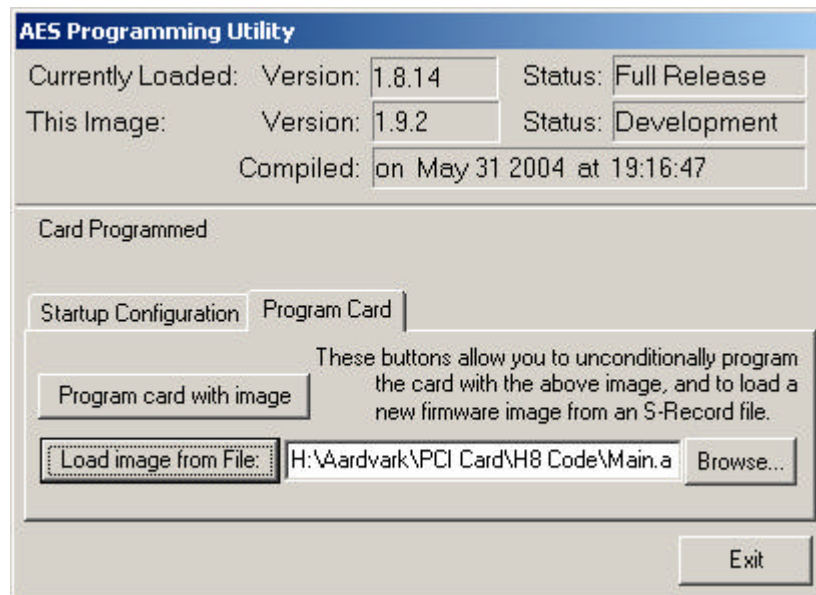


While running a "Configure" button is accessible. This can be used to access two advanced features, "Startup Checking" and "Programming".



**"Startup Configuration"** provides the ability to "Set" and "Clear" an entry in the Windows registry that will silently run this copy of the programming utility at system Startup. If this entry is Set, it ensures that, if a Milan Interface is installed with a different version, the firmware packaged with this copy of the programming utility is loaded onto it.

*Note: As the Set entry is for the programming utility itself, in order to use this facility the programming utility must have been saved to a folder on the hard disc and then run from that location.*



The “**Program Card**” option will normally only be used by expert users, or under instruction from a support technician. The following two facilities are available:

1. The image packaged with the executable can be overwritten (*for this execution only*) by that contained in a S-Record file.
2. The current image (either packaged or loaded) can be written to the Milan Interface (regardless of whether the version matches).

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## Command Line Options

Three options are accepted on the command line, for use primarily from a remote PC.

**/Force** - will automatically re-program the Milan unit even if the images match.

**/Check** - will cause the loader to exit without showing an window if the Milan firmware matches, and has no errors.

**/Nogui** - will never display anything on the screen and will report progress to stdout or a console window, if either is available.

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## Limitations

A limitation of this programming utility is that a functional release must be executing on the Milan Interface. In the event that an earlier or non-functional version is loaded, the Milan Interface requires the use of a special serial cable, the Hitachi programming utility FlashSimple and an S-Record (.a37) file.

For full details on using these, please contact Money Controls.