HY13P-Hex Loader Software User Manual

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1. Hex Loader Overview

1.1Software Introduction

The programming software, Hex Loader, aims to program the .Hex file that generated by all present version of HY13P IDE by means of hardware programmers (Users are required to accurately select IC model number and programmer ID, detailed description is given in *Chapter 2*).

1.2Software Installation

1.2.1 Installation

HY13P-Hex Loader Installation and System Requirement

- PC Hardware Request

  Compatible PC with PENTIUM® CPU

  128 MB Memory（256MB is recommended）

  10 GB Hard Disk Space

- OS

  Windows 98SE /Windows 2000/Windows XP/Windows Vista/Windows 7

- Applicable Interface

  USB Port

- Supporting Software Version

  HY13P Hex Loader V1.0 or above version

- Supporting Products:

  -HY13P56

- Supporting Hardware Model No.:

  - CM01 programmer

- Supporting Hex Files Version

  Hex files that compiled by all present version of HY13P IDE can be downloaded for programming via Hex Loader software.

- Functions:

  - Supporting download the Hex files to Flash Memory of programmers

  - Supporting read out function of the Hex files that downloaded to Flash Memory of programmers

For some Windows OS, it may require to have administrator identity to install the Hex Loader to the computer.

- Find the file in the CD ROM or file to execute Setup.exe
- Following the instruction window dialogs step by step to continue setup procedures. As shown in Figure 1-1.

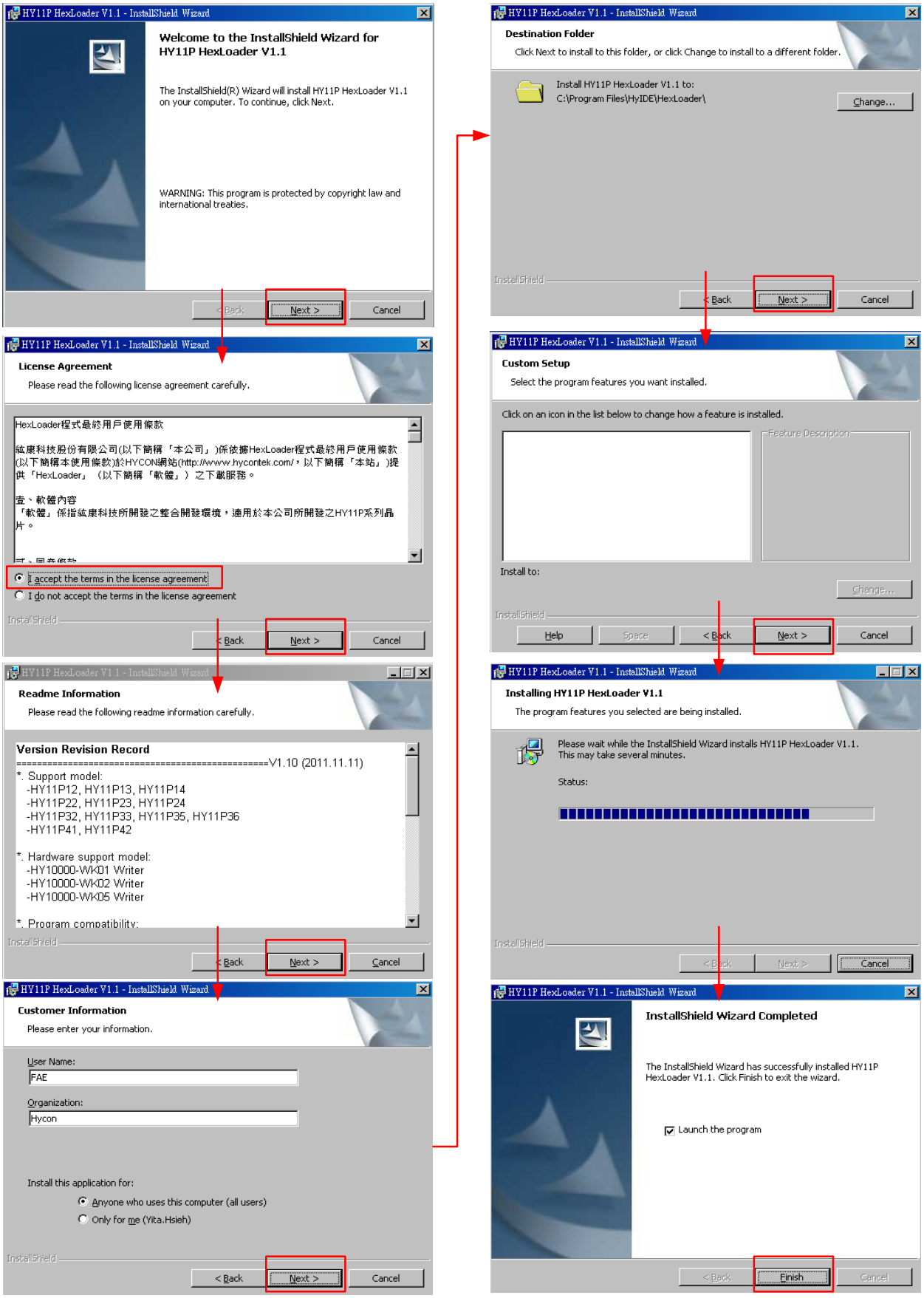

HY11P HexLoader V1.1 - InstallShield Wizard
Welcome to the InstallShield Wizard for HY11P HexLoader V1.1
The InstallShield(R) Wizard will install HY11P HexLoader V1.1 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel
License Agreement
Please read the following license agreement carefully.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Readme Information
Please read the following readme information carefully.
Version Revision Record
V1.10 (2011.11.11)
Customer Information
Please enter your information.
User Name:
FAE
Organization:
Hycon
Install this application for:
Anyone who uses this computer (all users)
Only for me (Yita.Hsieh)
Destination Folder
Click Next to install to this folder, or click Change to install to a different folder.
Install HY11P HexLoader V1.1 to:
C:\Program Files\HyIDE\HexLoader\
Change...
Custom Setup
Select the program features you want installed.
Click on an icon in the list below to change how a feature is installed.
Feature Description
Install to:
Help
Space
Installing HY11P HexLoader V1.1
The program features you selected are being installed.
Please wait while the InstallShield Wizard installs HY11P HexLoader V1.1. This may take several minutes.
Status:
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed HY11P HexLoader V1.1. Click Finish to exit the wizard.
Launch the program
Finish

Figure 1- 1

1.2.2 Uninstall

Please remove the file of “HY13P-Hex Loader” in “Add/Remove Program” under Control Panel.

1.3 Interface Window

When the software is opened, the window in below will pop up, as like Figure 1- 2.

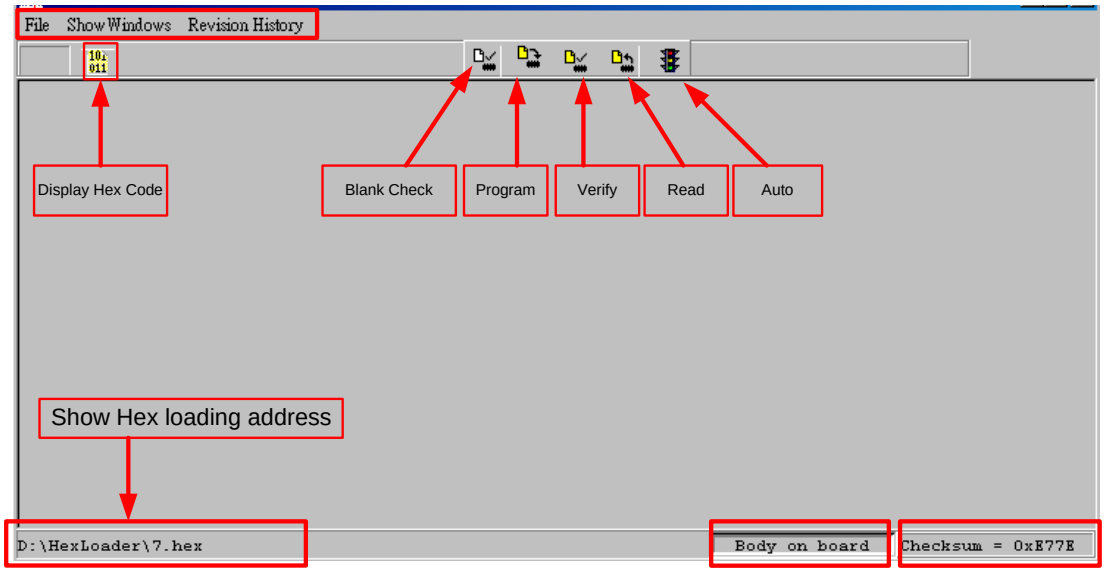


Figure 1- 2

Choose File and the roll will show as Figure1- 3.

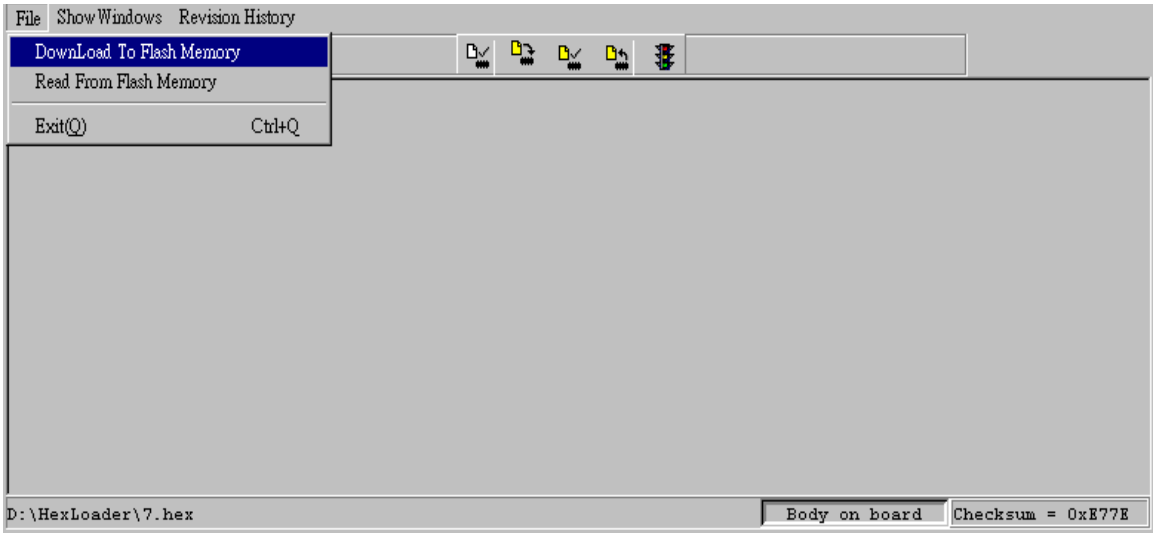


Figure1- 3

Down Load To Flash Memory → Download to Flash memory of programmer

Read From Flash Memory → Read Flash memory from programmer

When Show Windows button is clicked, the window will show as Figure 1- 4.

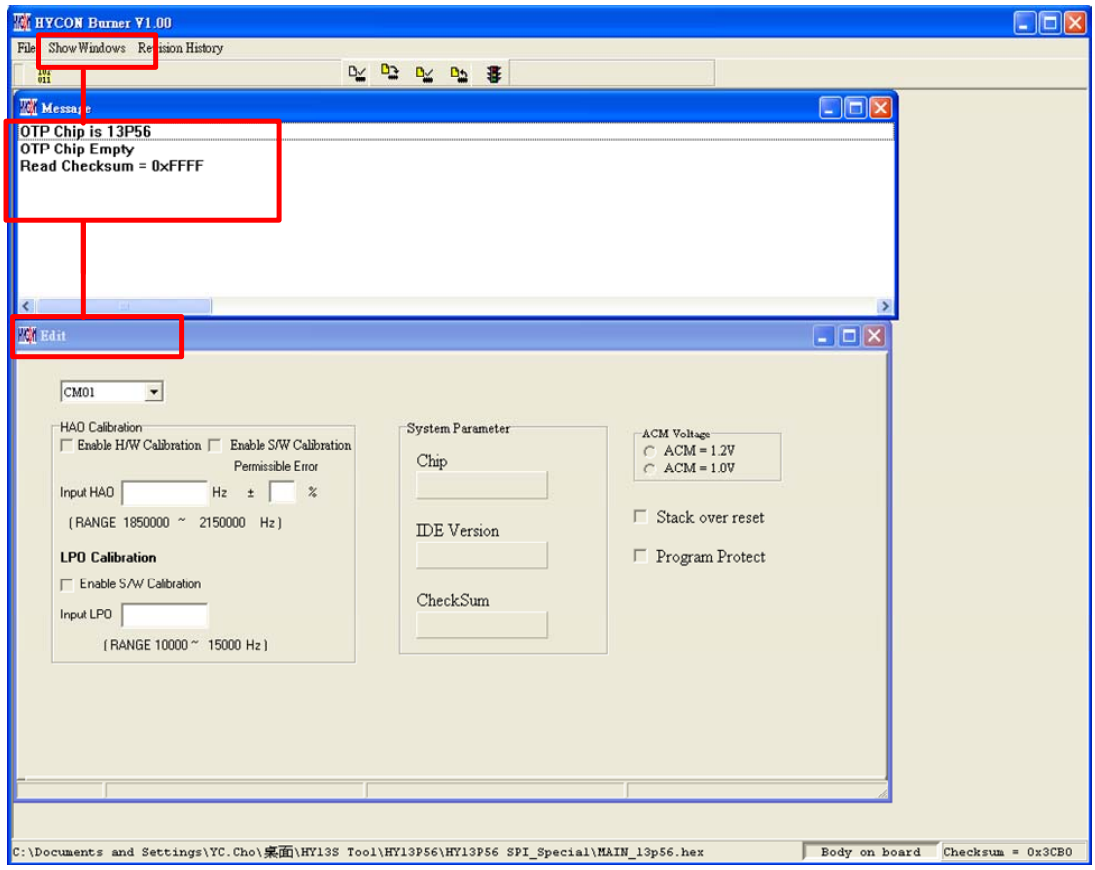


Figure 1- 4

Message → message field

Edit → Display function, no need to tick on this window

1.4 Operation Procedures

Step 01：Choose "Down Load To Flash Memory" from File, as shown in Figure1- 5.

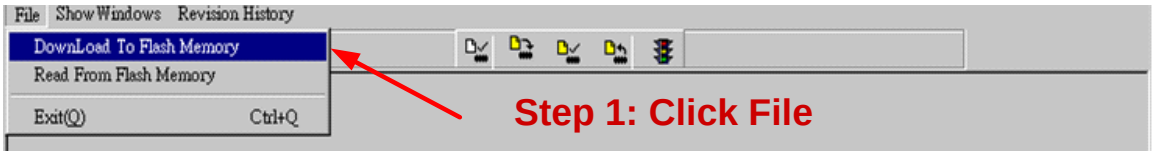


Figure1- 5

Step 02：Select programmer version

Step 03：Select IC model

Step 04：Select IC program limit times; to enable this function, tick “Enable Program Times” and input the limit number. Do not tick if this function is unnecessary.

Step 05：Click OK when setups are finished

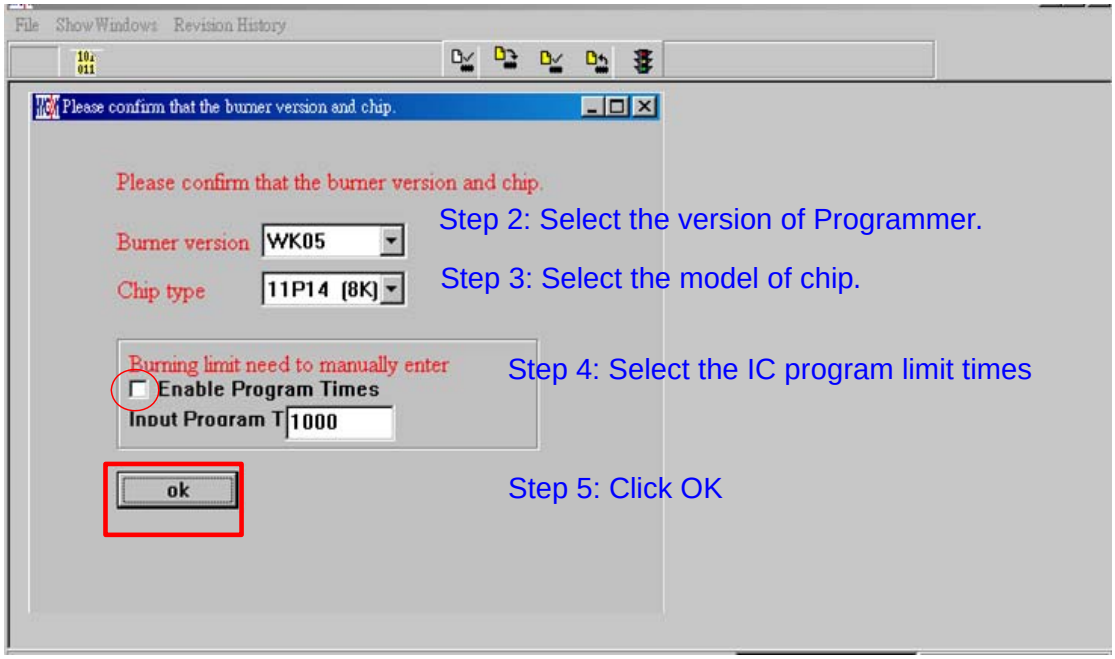


Figure 1- 6

Step 06：Select Hex files and download to Flash Memory of programmer, as Figure 1- 7 indicated.

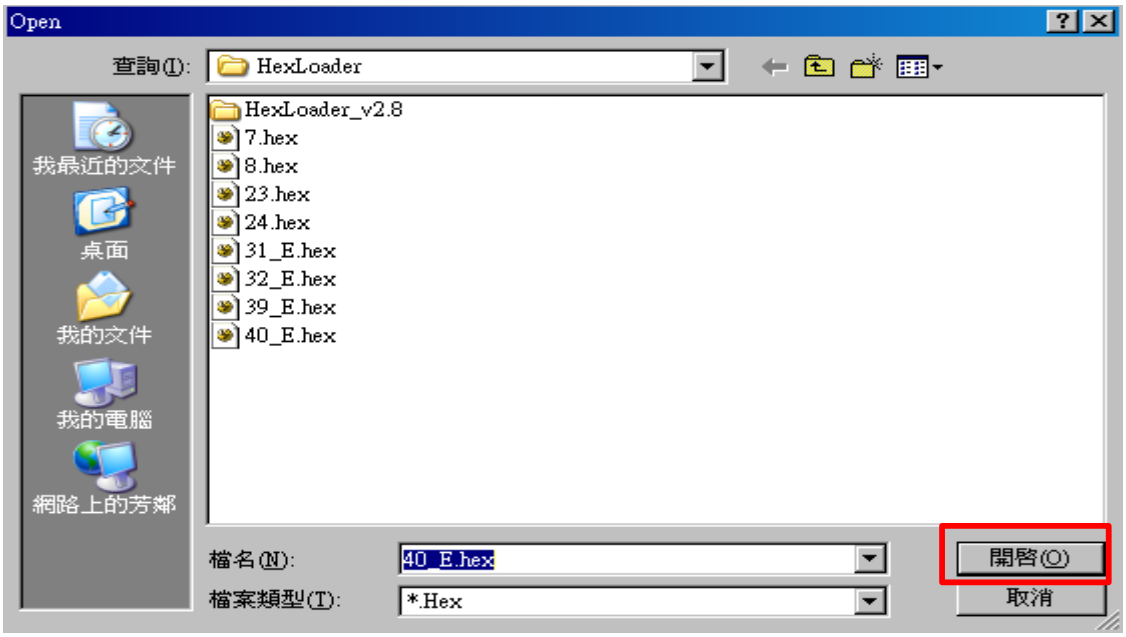


Figure 1- 7

Step 07：Select whether to input Password, as Figure1- 8.

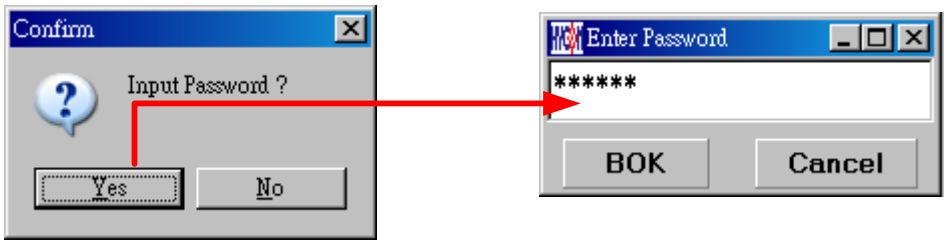


Figure1- 8

Step 08：Select whether to specify programmer ID, as Figure 1- 9.

Figure 1- 9

Step 09：Select Edit as the display data after Hex file loaded. This window is to read data, needless to change the configuration.

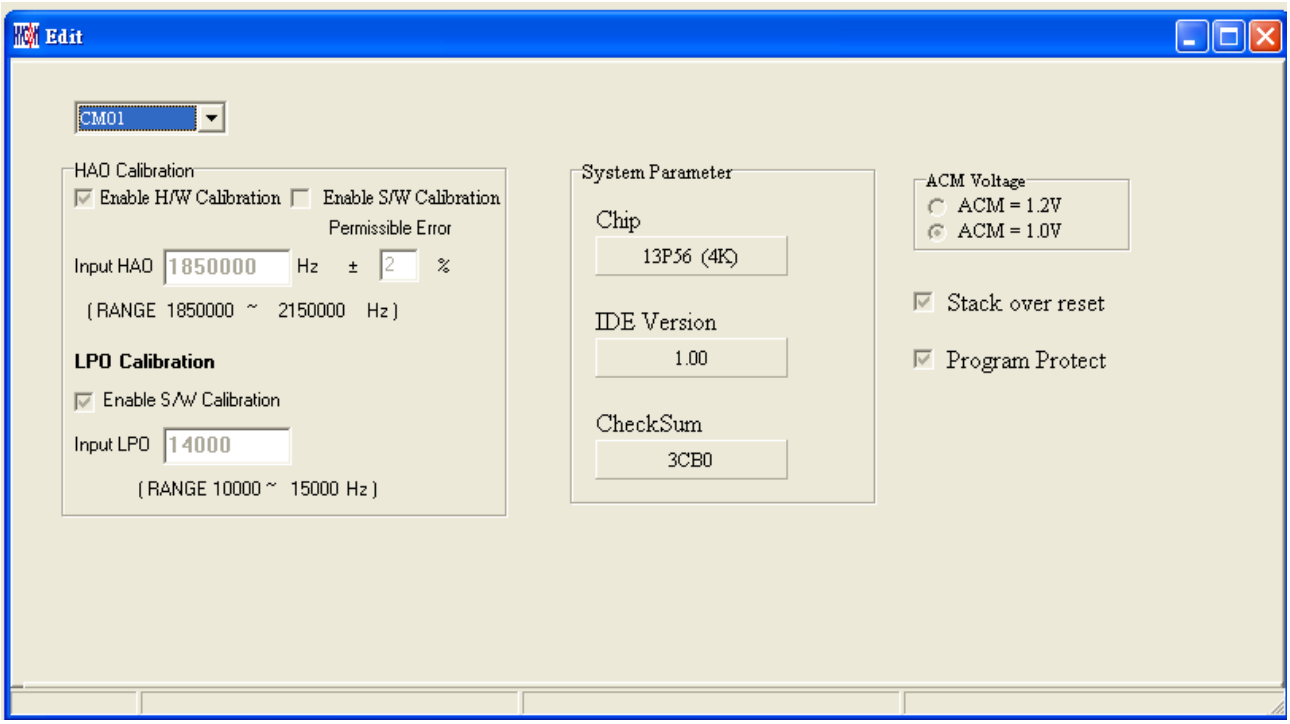


Figure 1- 10

(1) When using USB interface, program code would be loaded to Flash Memory of programmer once the main program was compiled for mass production programming purpose。

(2) Users can choose whether to input password before loading the code to Flash Memory of programmer, as shown in Figure1- 8. This function enables users to see the code that has been loaded from PC to Flash Memory of programmer. Please note that Password can only have 6 digits (ASCII Code). In order to protect the code developed by user, the programmer is defaulted to have a set of Password. If the Password was canceled during operation processes, then it is prohibited to read out the code from the programmer.

Notice: Once the Password was set, it is the same password of programmer operation. This password would be required every time the CODE was to be read out. Please memorize the password carefully. The programmer would ask to re-input the password every time a new code is loaded.

(3) After the Password was set, it will ask whether to specify programmer; once a programmers was specified; only it can read the Code of Flash Memory. If not specified, then any programmer can read the code.

(4) If the programming time function was enabled, the message field will display the programming limit number.

(5) After compile finished, the Hex file name and Checksum would be shown in the message line as shown in Figure 1- 11.

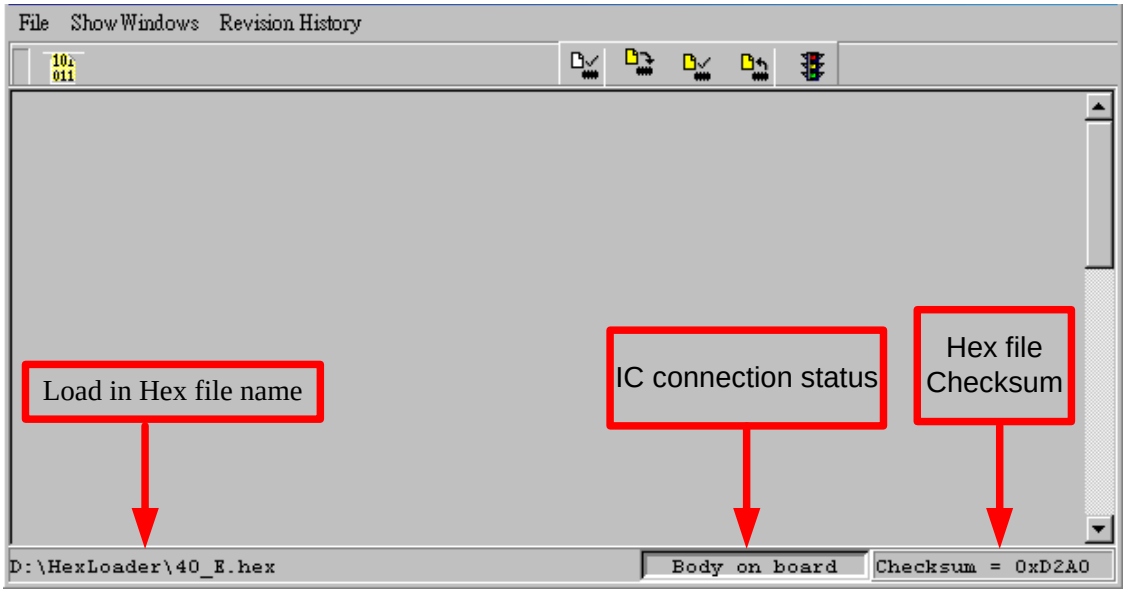


Figure 1- 11

1.4.1 Read out the Code in Flash Memory of Programmer

Users can utilize this function to confirm whether the Code in Flash Memory of programmer conformed to the Download Code. However, the input Password must be the same with that of the Download code to enable the display.

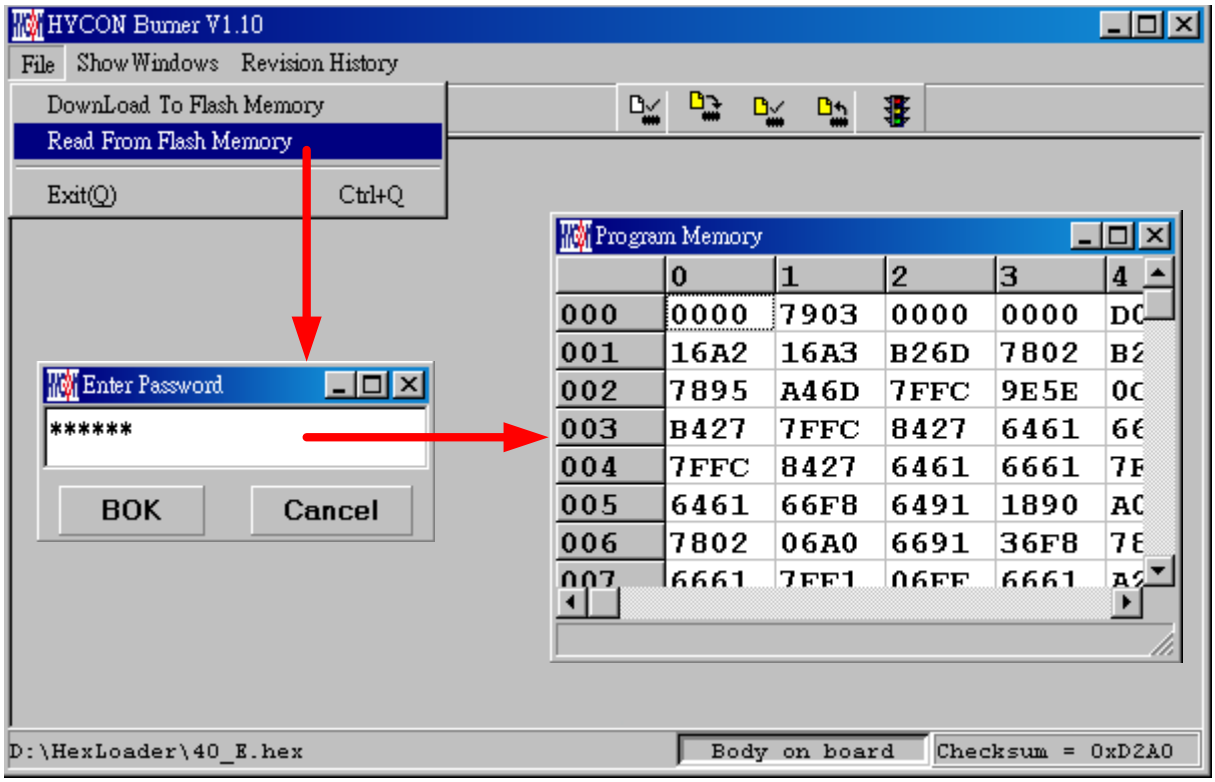


Figure 1- 12

1.5 PC Offline OTP Programming

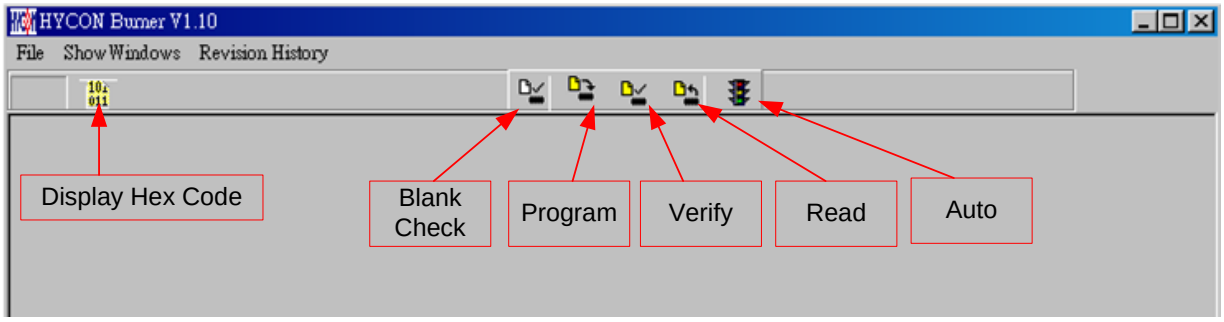


Figure 1- 13

Blank Check, Programming, Verify and Read Commands can be implemented when the programmed file was successfully loaded into programmer or IDE Flash Memory, as Figure 1- 14. On the contrary, those commands will not be activated if the download failed, as shown inFigure 1- 15.

Figure 1- 14

Figure 1- 15

1.5.1 Blank Check

The internal code of Blank ICs that have yet been programmed is 0xFFFF. The purpose of checking the IC is to make sure the OTP address content is 0xFFFF.

Check whether IC is blank, the OTP address to be programmed must be 0xFFFF.
If the IC selection is correct and the content is empty, a message will appear as follows.

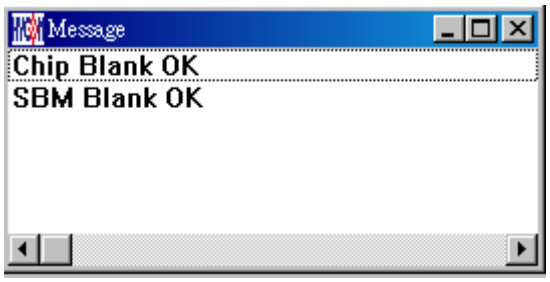


Figure 1- 16

If the IC selection is incorrect or the content is not empty, a message will show up as follows.

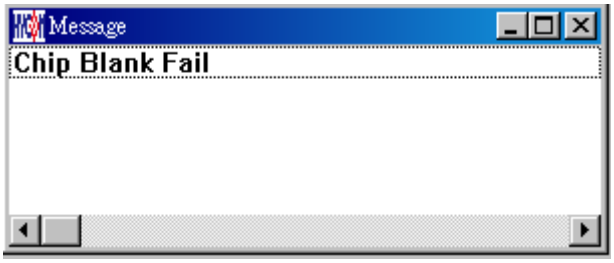


Figure 1- 17

1.5.2 Program

The purpose of programming is to write Compiler accomplished program into IC OTP.
When programming is completed and the IC is assembled as finished goods, programmer

can operate the program as users commanded.

Program the downloaded or assembly finished Hex file (displayed at the bottom of the column) in the selected IC and verify the correctness of the programming content.

If the selected IC is correct and the programming succeeds, message will appear at the information column as Figure 1-28 illustrated. If “Enable Program Times” is ticked up, the enable program times will minus 1 and the program times left will be revealed in the message column.

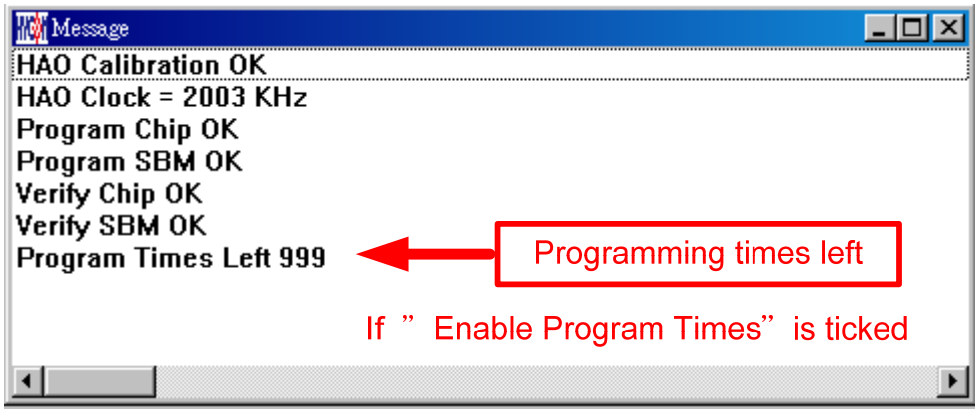


Figure 1- 18

1.5.3 Verify

The purpose to verify programming IC is to compare whether the code written into the IC OTP conforms to the program downloaded to programmer or IDE Flash Memory.

Verify programming IC content consistency with the downloaded or assembled Hex file (displayed at the bottom of the column). If the IC is protected by programmed, this verification is ineffective or the comparison failed.

If IC selection and program verification is success, a message will appear as below.

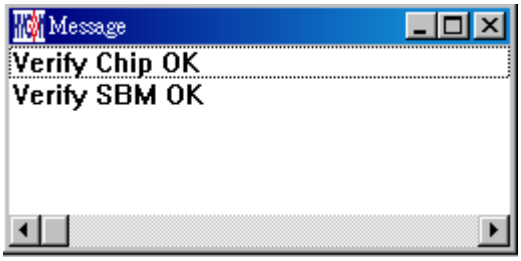


Figure 1- 19

If IC selection is incorrect or the program verification miscarries, a message will pop up as Figure1- 20.

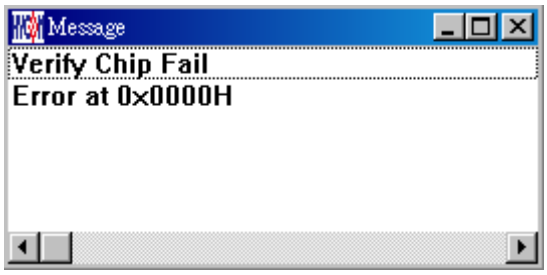


Figure1- 20

1.5.4 Read

The purpose to read the IC is to verify the consistency of OTP Checksum and programmed Hex file. To read IC content, the procedures are illustrated as Figure 1- 21. The content will reveal at ”Display Code” window.

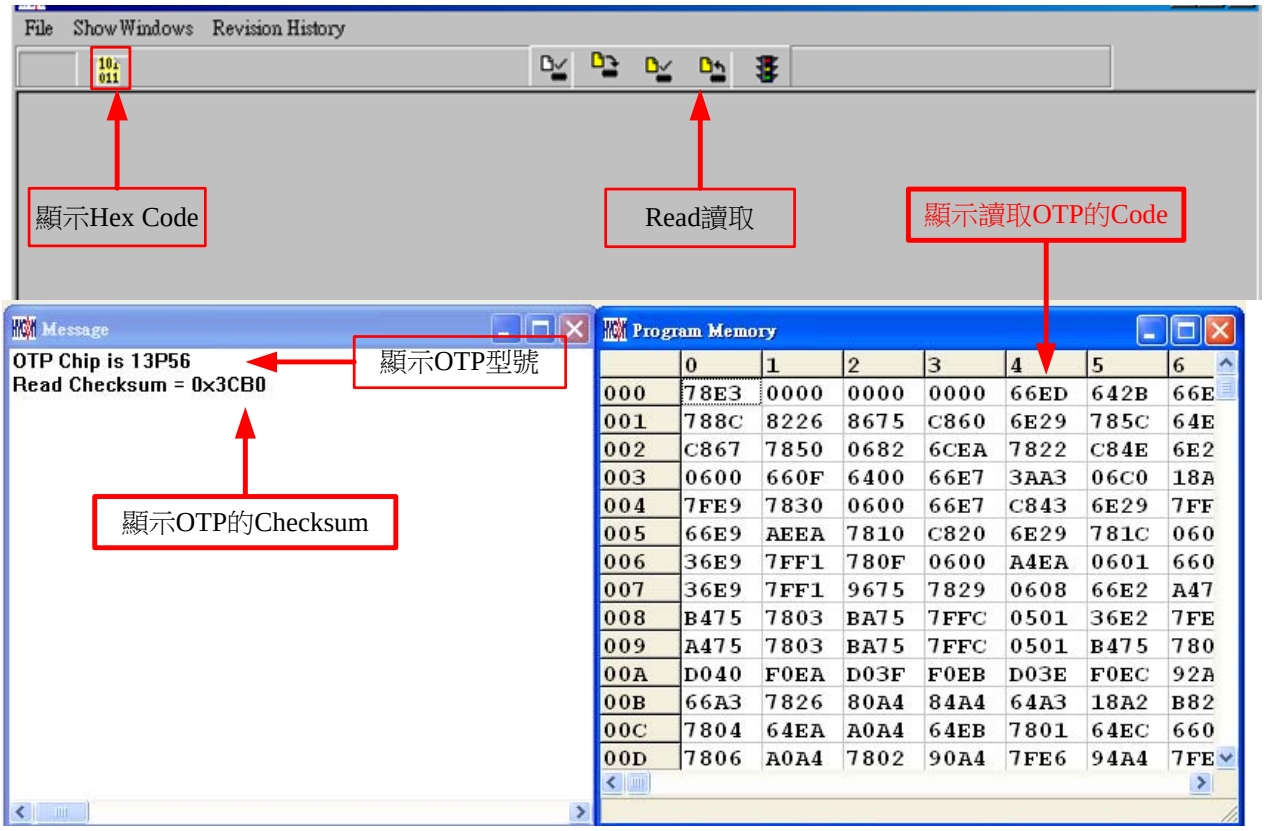


Figure 1- 21

1.5.5 AUTO

Auto integrates Blank Check, Program and Verify function. If user selects Auto, it will first check whether the IC is blank, then to program and verify.

After the execution succeeded, a message will be displayed as Figure 1- 22. If the option, ”Enable Program Times” is ticked up, the program permitted times will reduce 1 and the program times left will be shown in the message column.

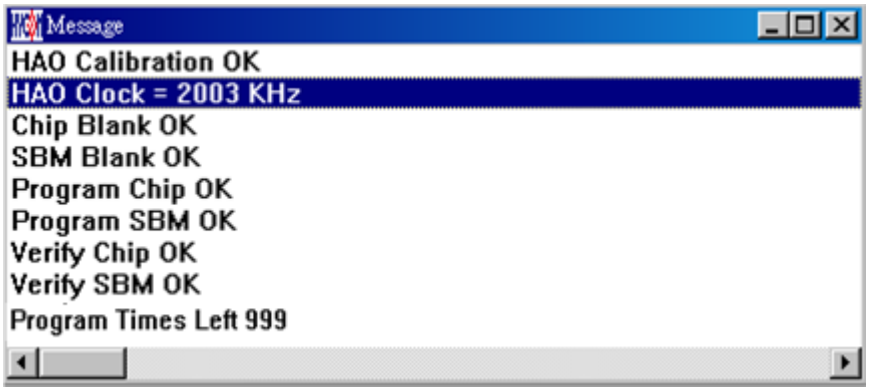


Figure 1- 22

If any function fails, the whole process will stop and display an error message in the message column.

2. Hex Loader Notice

2.1 Configuration Items

Three points that must be selected correctly when using Hex Loader programming software, or it would lead to error programming

Notice 01: Please correctly choose programmers (CM01)
Notice 02: Please pick the right IC model number (Chip Type) that matches to the Hex Code.
Notice 03: Mind the Programming limit. Tick “Enable Program Times” to enable the function and input the programming times. If this function is not necessary, please do not tick.

When Hex Code was loaded to the programmer and the above three points were accurately set, the software will set up the programming environment that matched to your selected IC model number. Chip Type supports: HY13P56

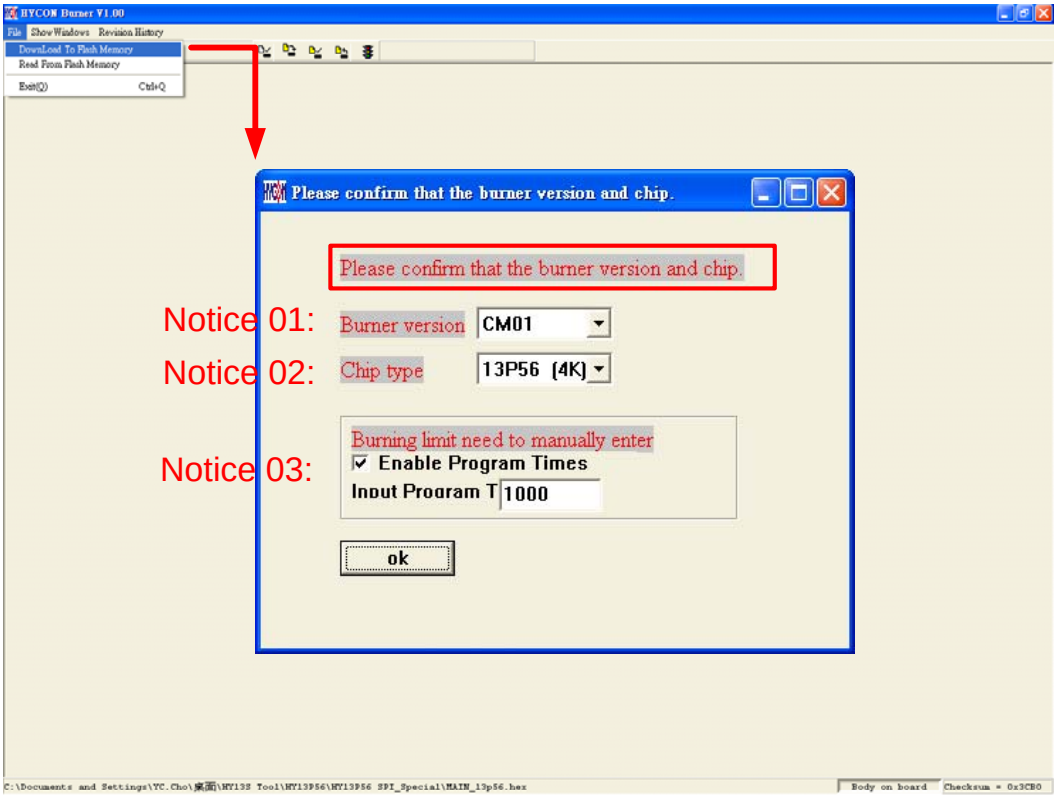


Figure 2- 1

The way to connect hardware programmer, please link http://hycontek.com/e-page2.html for corresponding programmer manuals.

※When using online programming function, make sure 9V adapter is connected before connecting USB LINE. Do not unplug 9V adapter while PC connected or the PC may crash.

3. Offline Programming

3.1 Program Key Executes Blank Function

AsFigure 3- 1 shows, users can select whether to execute blank function of Program key.

1. Select on/of in settings.
2. Select: press PBKUBPUT to write settings to programmer.
   If blank on is chosen, the step is: Blank Check → Program → Verify.
   If blank off is chosen, the step is: Program → Verify.
3. If program protect is ticked before downloading Flash Memory, the program protect will be executed after Verify.
   If not, it will stop after Verify.

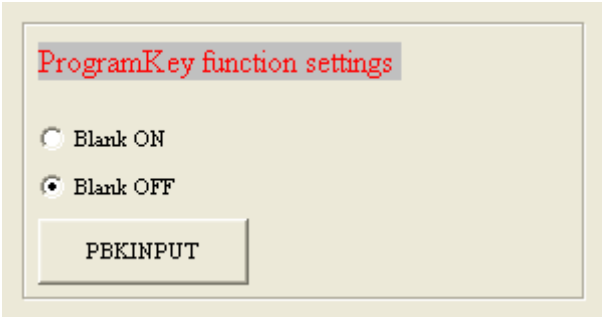
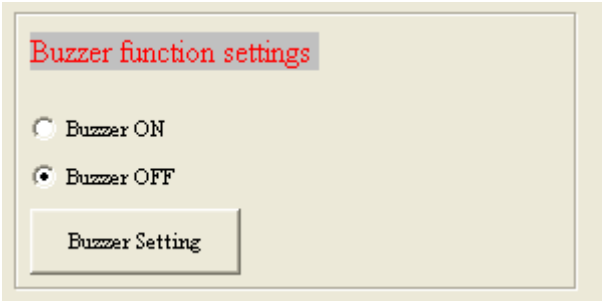


Figure 3- 1

3.2 Buzzer Function

Users can select whether to enable Fail alarm when programming.



6. Revision History

Version	Page	Revision Summary
V01	ALL	First edition