

Holtek EverPro M1000 User's Guide

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Holtek EverPro M1000 User's Guide

Introduction

The Holtek EW-M1 Writer was developed to program the range of Holtek Flash MCU devices. The devices can be programmed both in parallel mode or in serial ISP mode by selecting different Writer connection configurations. The Writer can be used in an on-line mode during program development or in an off-line mode for production purposes. The Writer is connected to the computer via the PC RS232 port.

The Holtek EW-M1 Writer Supports the Following Devices

The Writer supports the Holtek range of Flash microcontrollers such as the HT46F and HT48F devices.



Serial Programming Mode - using EIC-101 Connector



Parallel Programming Mode

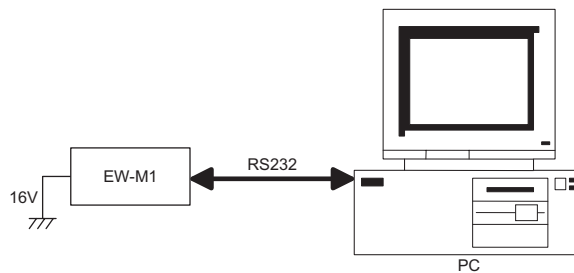
Components

- CD - includes including writer software and User's Guide
- RS232 connecting cable
- EIC-101 Connector
- 16V Power Adapter

Installation

The Holtek-EW-M1 offers simple installation using the following steps.

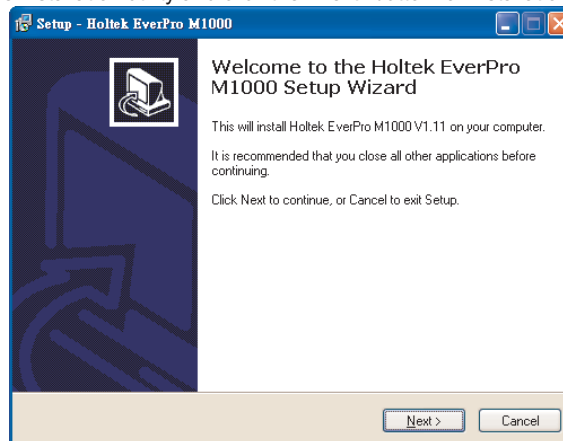
- Connect one side of the 25 pin D-type cable to the Writer and the other side of the cable to the serial RS-232 port of the PC.
- Plug the power adaptor into the power connector of the Writer.
- Install the EverPro M1000 Writer software
- Flash device programming can now be implemented.



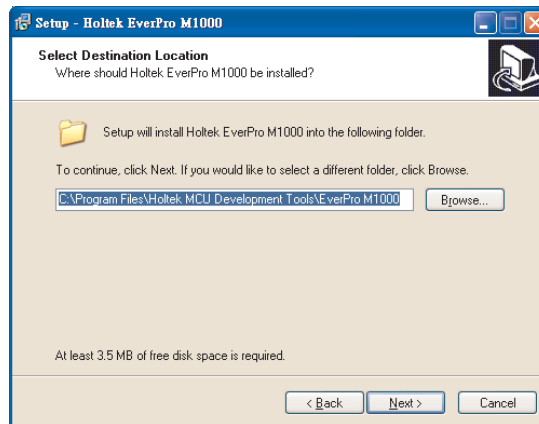
Installation of the EverPro M1000 Software

The software used for the Holtek EW-M1 is known as the EverPro M1000. The steps for installing the software are as follows:

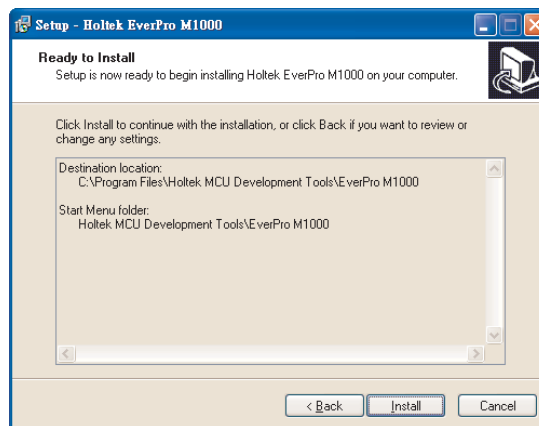
- Step1 – Run the installation utility and click the "Next" button for installation.



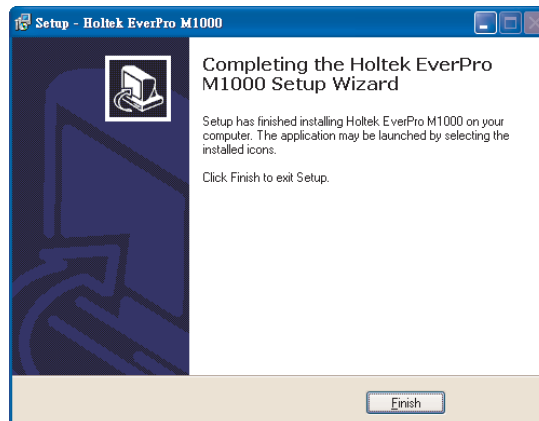
- Step2 – Select the folder where the EverPro M1000 is to be installed and click the "Next" button.



- Step3 – Make sure the installation location is as desired and click the "Install" button



- Step4 – Click the "Finish" button to complete the installation.

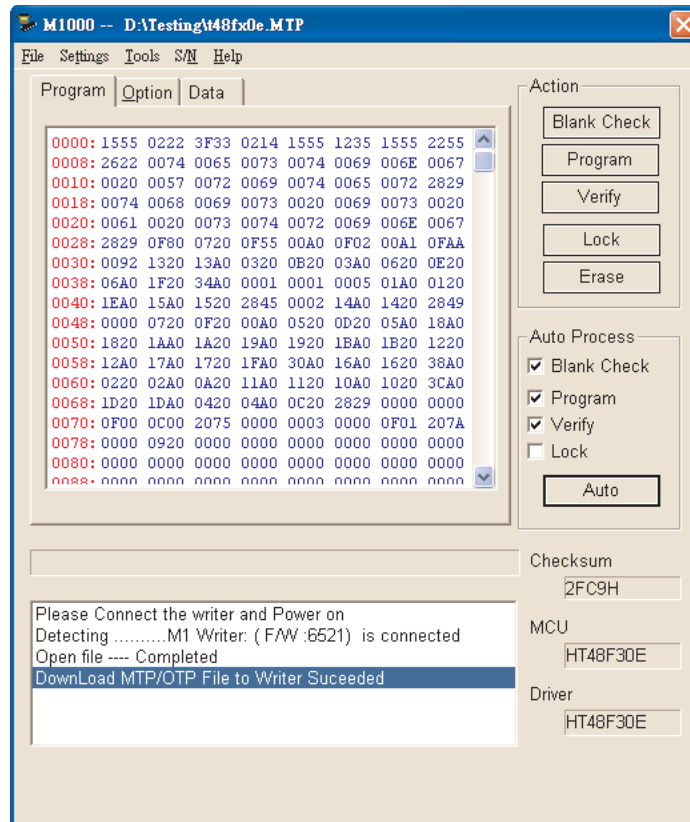


On-line Programming Mode

General Programming Steps

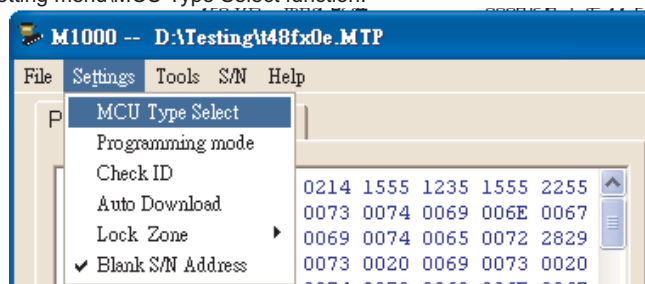
Starting EverPro M1000

The main screen for M1000 is shown in the following figure.

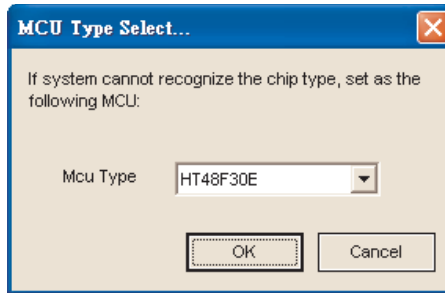


Setting MCU type

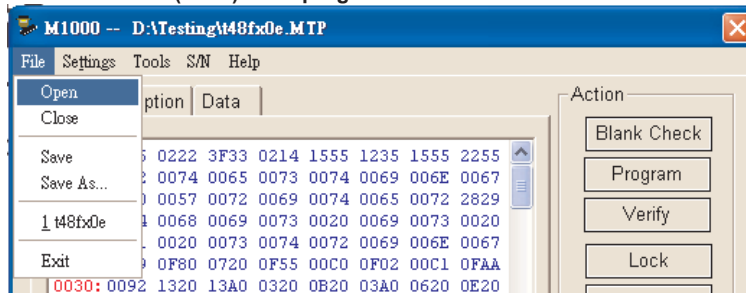
Select the Setting menu\MCU Type Select function.



Choose the MCU type from the "MCU type" selection area.



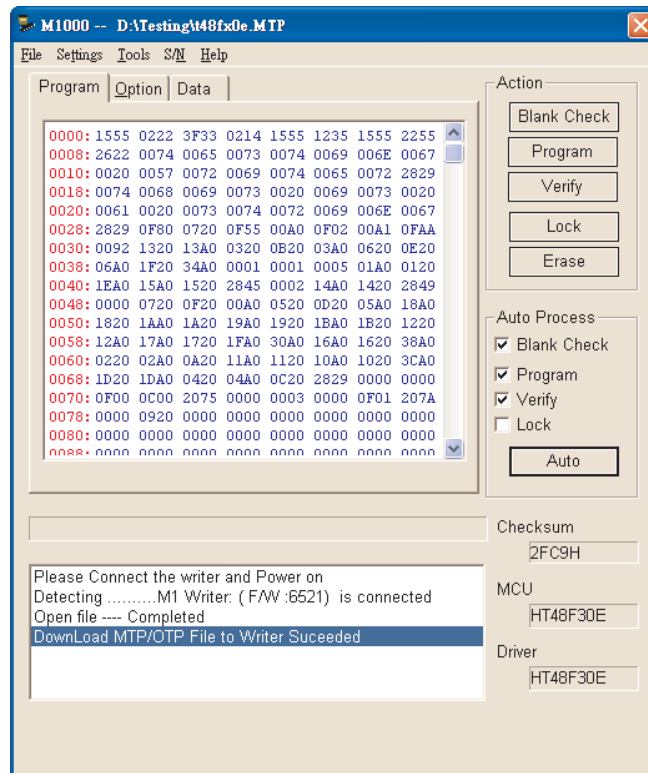
Open the document file (.MTP) to be programmed



The extension file name for Holtek Flash MCU devices is .MTP.

Select the File menu\Open function. An "Open File" Dialog will be shown to enable browsing and selection of the required .MTP file. The contents of the Flash Program Memory will be displayed, however the Option and Data Memory contents can also be displayed by selecting the appropriate Option or Data areas.

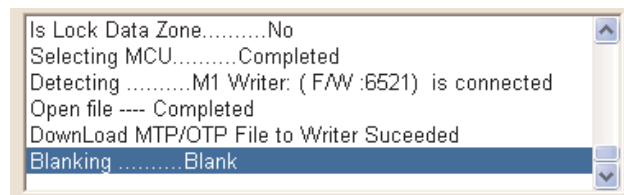
The data will also be downloaded to the Writer simultaneously if the "Auto Download" function is enabled. This is achieved by selecting the Auto Download function switch in the Settings menu. The Checksum, MCU type and Driver information will also be displayed in the lower part of the screen as shown in the following figure.



Programming Functions

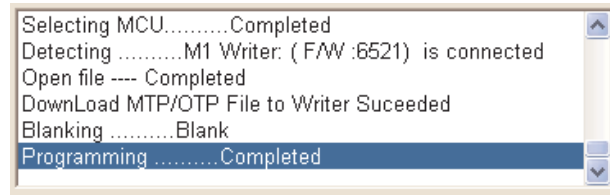
- Blank Check

This will check that the device has been placed correctly into the Textool and does not contain data. The result of this function will be shown in the lower part of the message window.



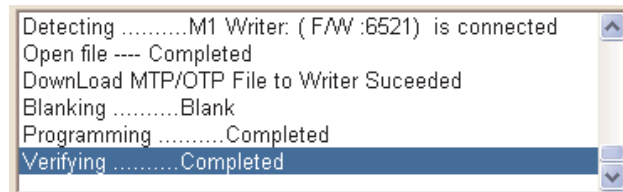
- Program

This will write all Program, Option and EEDData into the Flash device. The result of this function will be shown in the lower part of the message window.



- Verify

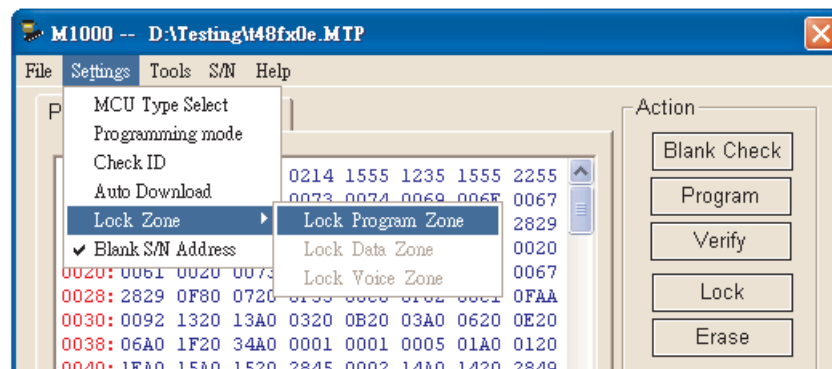
This will check for successful device programming . The result of this function will be shown in the lower part of the message window.



- Lock

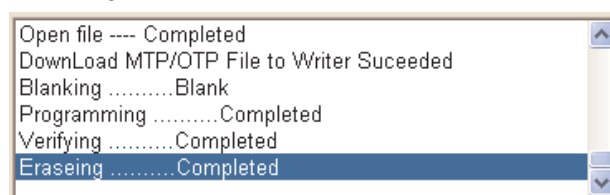
This will lock the flash device so that the programmed data cannot be read out later for the purposes of data protection. By selecting the appropriate settings in the Setting menu/Lock function, the required program or data area can be locked.

The result of this function will be shown in the lower part of the message window.



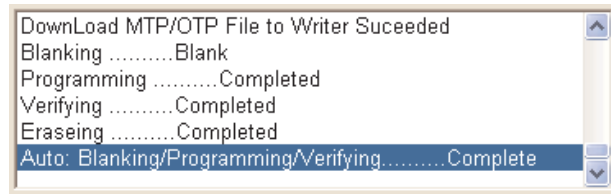
- Erase

This will erase the contents of the flash device. The result of this function will be shown in the lower part of the message window.



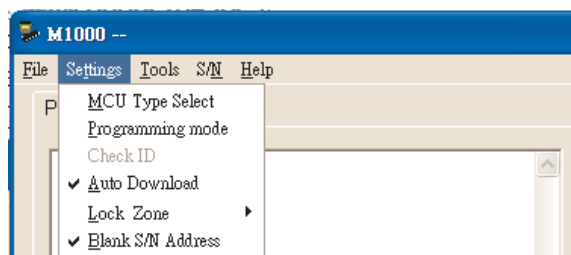
Auto Process

All of the above programming functions can be combined into a single action using the Auto Process function. This is implemented by checking the appropriate box, located beside each function, and then selecting the "Auto" button to start running all the selected functions. The combined function will cease to run if any of the selected functions fails. The result of this function will be shown in the lower part of the message window.

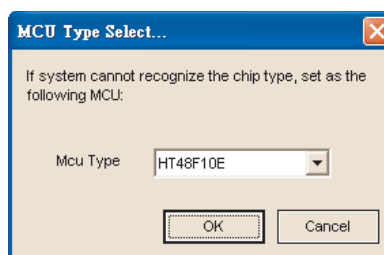
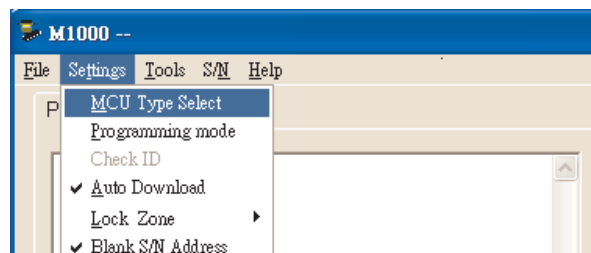


Menu Function Descriptions

Setting Menu



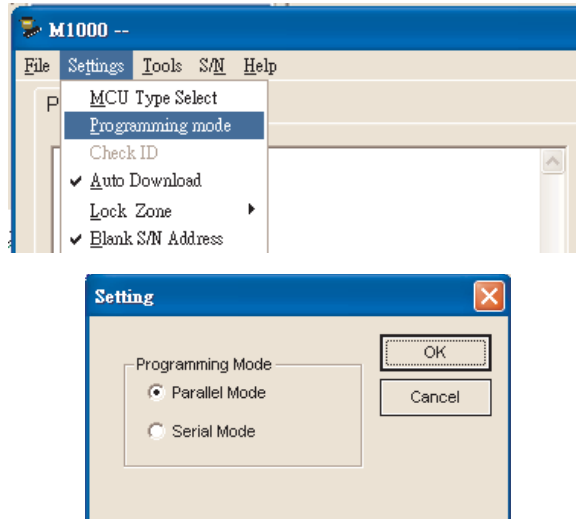
- **MCU Type Select**
This function is used to select the MCU type to ensure that the correct device driver is downloaded to the Writer.



- Programming Mode

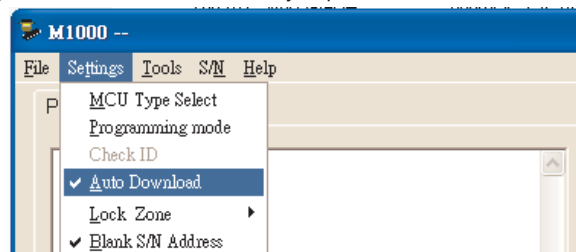
There are 2 programming modes, a serial and a parallel mode, for the Holtek Flash MCU devices. This function is used to select the required programming mode. The EIC-101 needs to be connected to the user target board for the ISP programming mode.

Refer to the "Holtek EIC-100 User's Guide" on the Holtek website for a more detailed description of the ISP mode.



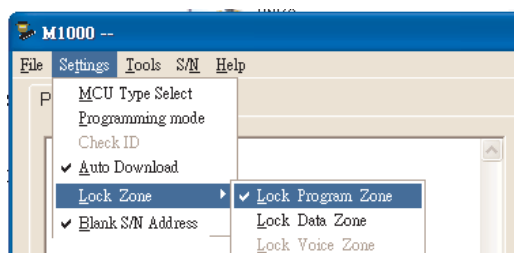
- Auto Download

This function can be enabled to allow the File\Open function to download the data to the Writer simultaneously. Disable this function if it is only required to browse the contents on the screen.



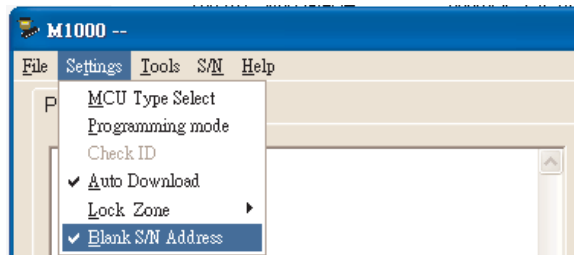
- Lock Zone

Setting the lock area, either code or data, if the MCU data is to be protected.

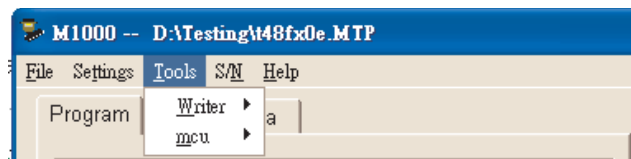


- Blank S/N Address

This function can be enabled to have the Writer check if the S/N location is blank or not. If this function is disabled, the Writer will always write the S/N data whether the specified location is blank or not.

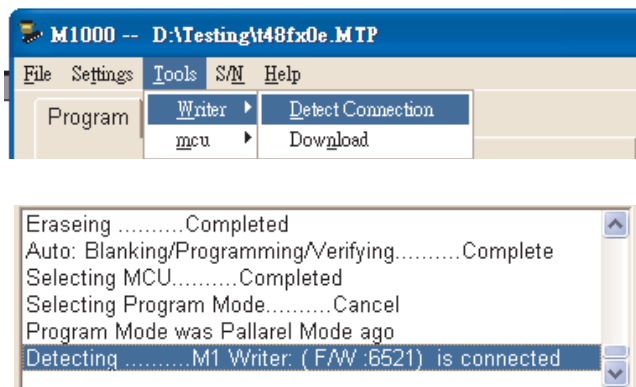


Tool Menu



- Writer/Detect Connection

This function is used to check whether the connection between the PC and the Writer is successful. The result of this function will be shown in the lower part of the message window.



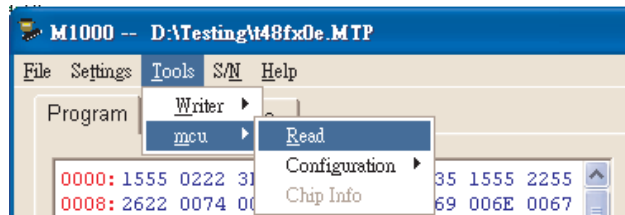
- Write/Download

This function can be used to manually download the data to the Writer.



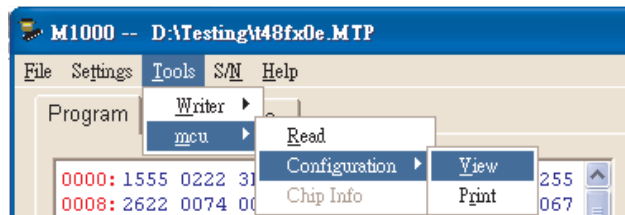
- MCU/Read

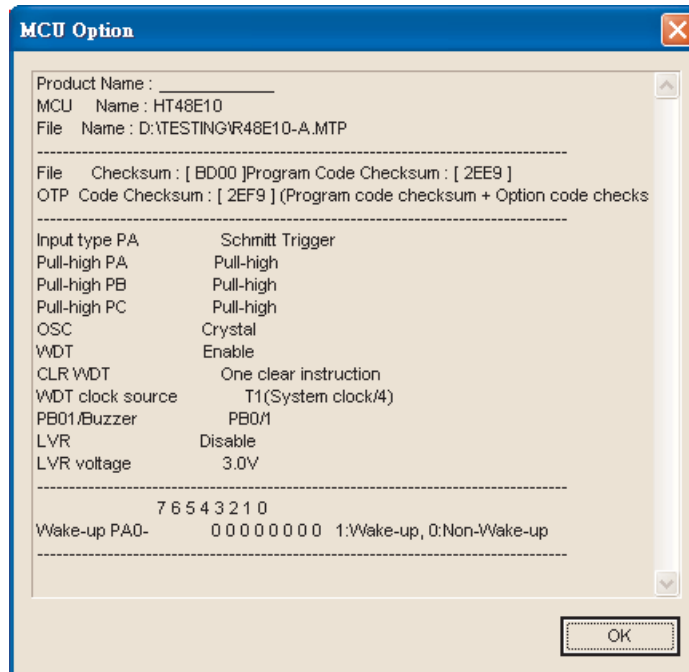
This function is used to read the contents of the device into the Writer buffer. The data can be saved as an .MTP file with a specified file name.



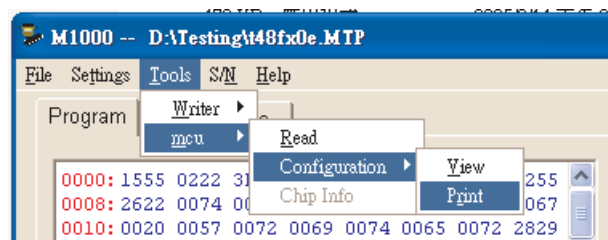
- MCU/Configuration/View

Select this function to show the configuration options on the screen.

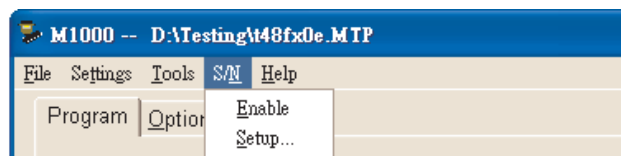




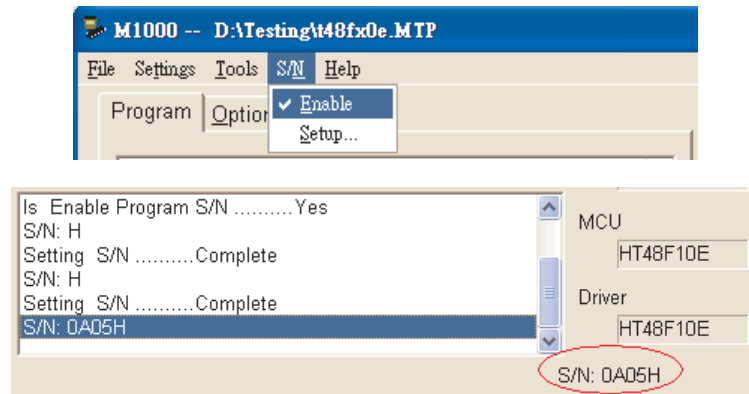
- MCU/Configuration/Print
 Select this function to print out the configuration options.



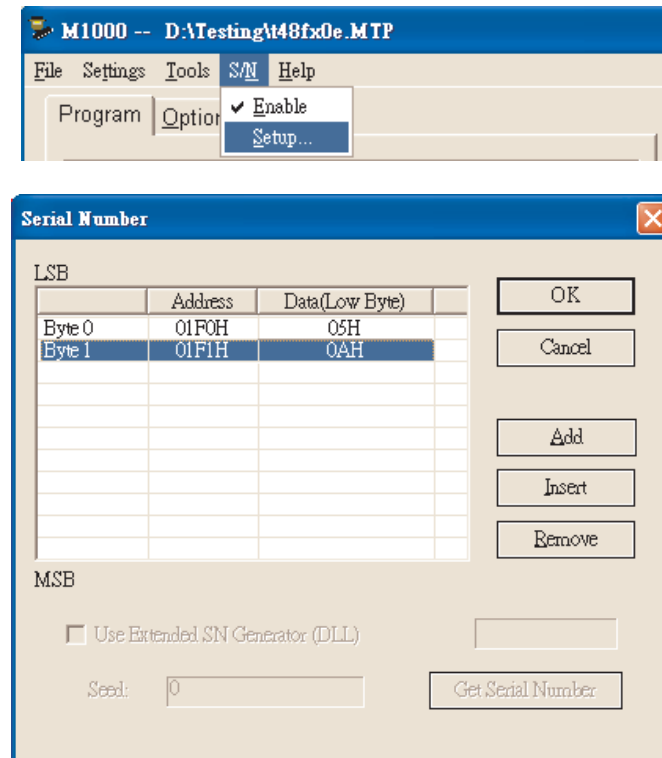
S/N Menu



- **Enable**
This item can be checked to Enable/Disable the serial number writing function. The previous serial number will be shown at the bottom of the screen.



- **Setup**
This function can be selected to display the "Serial Number" dialog as shown in the figure. Set up the address and the initial serial number. The serial number will be automatically incremented by 1 after each device has been programmed.



Off-Line Programming Mode

Stand-Alone Programming Description

The data to be programmed must be downloaded to the Writer in advance. The DIP switches can be configured to select the required programming functions as shown in the table.



DIP Switch Position	Function	Description
DIP1	Erase	Set DIP #1 to ON to erase the data before programming.
DIP2	Program Mode Select	Set DIP # 2 to ON for the serial programming mode and OFF for the parallel programming mode.
DIP3	Lock	Set DIP switch #3 to ON to lock the device after a successful programming operations.
DIP4	Buzzer	Set DIP switch #4 to ON to generate an audible reminder signal to indicate the success or failure of the programming operation.

Programming Procedure

- Step 1
Connect the supplied 16 V power adaptor. The Writer will check whether the data in the Flash buffer is correct or not. The yellow/red LED will illuminate to indicate whether the data is correct or incorrect.
- Step 2
Place a device into the Textool socket of the Writer.
- Step 3
Press the button to start programming
- Step 4
Check the indicator LED to verify whether the operation was successful or not.
- Step 5
If the operation was successful, the device can be retrieved from the Textool and the Writer will return to its standby state automatically. Otherwise, the button must be pressed once more so that the Writer can return to its standby state.
- Step 6
Repeat step 2 to step 5.

Three LEDs exist on the Writer to indicate the programming results. Below lists the meaning of each LED:

LED Status	Status	Description
Red LED – Failure status	Flash once	The loaded device has been locked.
	Flash twice	The loaded device does not match the contents of the device information in the writer.
	Flash 3 times	The loaded device is not blank.
	Flash 4 times	Programming has failed.
	Flash 5 times	Verification has failed.
	Flash 6 times	Unable to lock the loaded device.
	Rapid Flashing	The Writer contents are incorrect.
Green LED – OK status	Illuminated	Programming has succeeded.
Yellow LED – Ready status	Slow Flashing	Standby: The status is normal and is ready for programming
	Rapid Flashing	Programming

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