
3 Alignments and Adjustments

This section of the service manual explains how to use the DDC MANAGER JIG.
This function is needed for AD board change and program memory (IC200) change.

3-1 Required Equipment

The following equipment is necessary for adjusting the monitor:

- Computer with Windows 95, Windows 98, Windows NT, Windows 2000 or Windows XP.
- MTI-2059 DDC MANAGER JIG

3-2 Automatic Color Adjustment

To input video, use 16 gray or any pattern using black and white.

During power on, push Power Button with 2 times "LED blinking"

3-3 DDC EDID Data Input

1. Input DDC EDID data when replacing AD PCB.
2. Receive/Download the proper DDC file for the model from HQ quality control department.
Install the below jig (Figure 1) and enter the data.

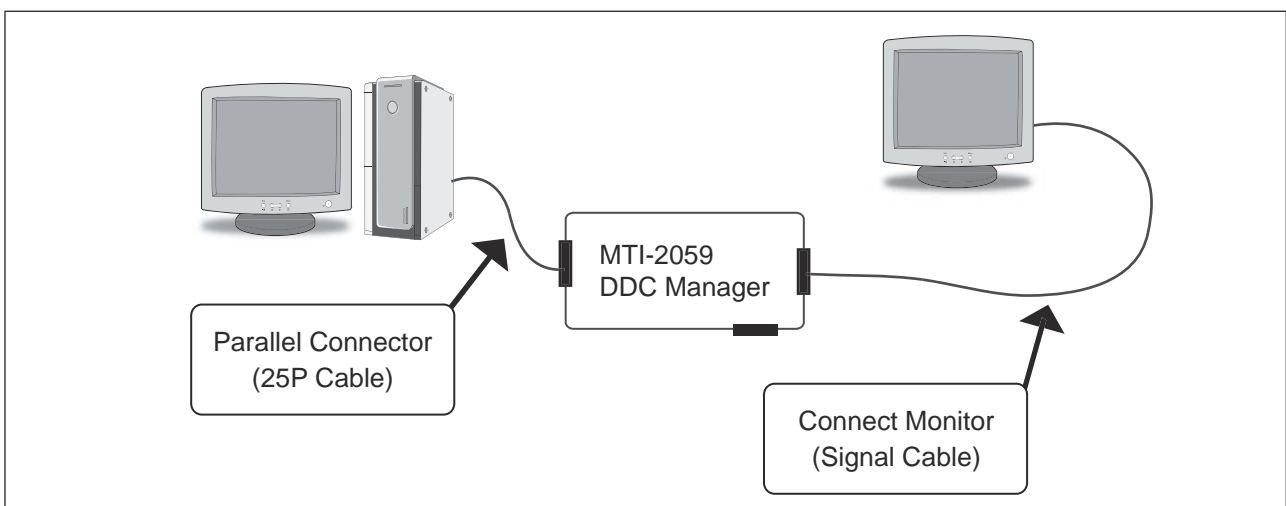


Figure 1.

3-4 Service Function Spec.

3-4-1 How to Display Service Function OSD

During Power off, push Power button with more than 10 times "LED blinking"

Then Power on and push Power button for 15 seconds.

The Service Function OSD is displayed just like in Figure 2.

-During OSD display time, if you keep pushing the Power key, the selected menu (base color is changed to blue) will be moved down.

- If you find the menu you want, please stop pushing the Power key and than push Power key one more time.

Then you can change the menu as you want.

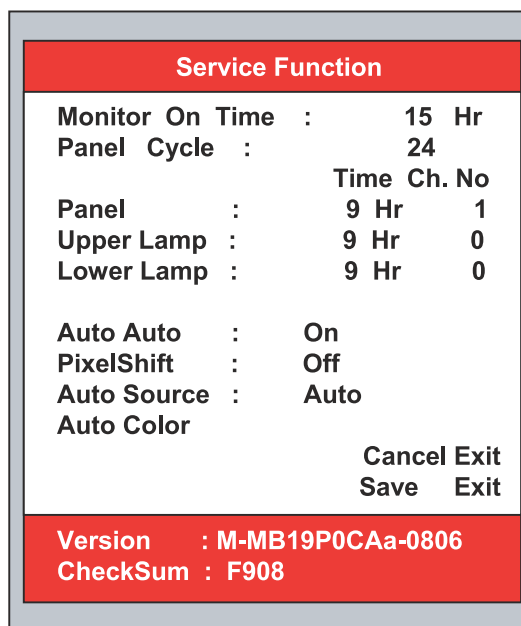
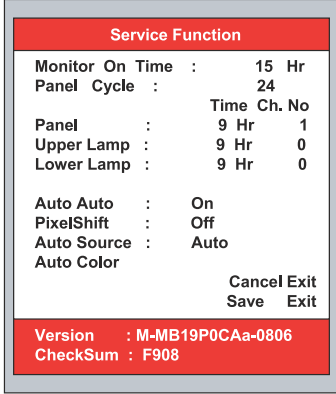
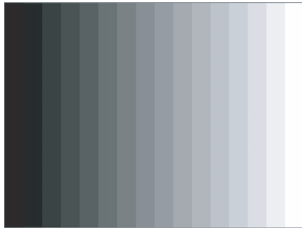
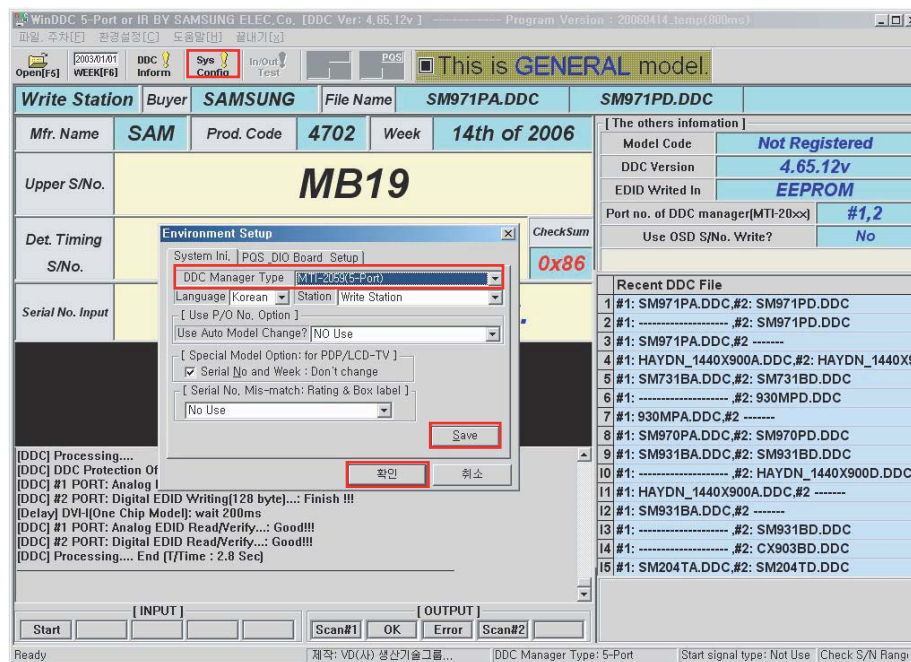


Figure 2. The example of service function OSD

3-5 Hidden Key list

No	Function	Operating method
1	Auto adjustment key	During Power ON, push Power Button with 2 times "LED blinking"
2	Input Source Selection key	During Power ON, push Power Button with 1 time "LED blinking"
3	User delete	During Power OFF, push Power button for 5 seconds with 1 time "LED blinking"
4	Hidden Service Function_1 	1) Monitor On Time: Power On Time 2) Panel Cycle: The number of Panel On/off times (Power on/off, Mode change or DPMS on/off can makes Panel Cycle increase.) 3) Panel: Current Panel's power on time (After changing the panel, increases the Ch. No one step and reset the Time.) 4) Upper Lamp: Upper Lamp's power on time (After changing upper lamp, increases the Ch.No one step and reset the Time.) 5) Lower Lamp: Lower Lamp's power on time (After changing upper lamp, increases the Ch.No one step and reset the Time.)
5	Hidden Service Function_2 	6) Auto Auto 7) Pixel Shift: This menu is for only the panel has image sticking problem. - At regular intervals, to the top, bottom, left and right, the 8 pixels of panel moves by 32 steps. At this time, User can not feel the movement of the pixel. - Factory default setting is OFF 8) Auto Source: Auto or Manual 9) Auto Color: Auto Color calibration. Use the 16gray Pattern. (Please, refer to 16gray pattern on the left) 10) Cancel Exit: Doesn't save all of the changes, and exit the Hidden Service Function. 11) Save Exit: Save all of the changes, and exit the Hidden Service Function. 12) Version: MCU firmware version If you found a compatibility problem, please inform us with this information. 13) CheckSum: MCU firmware checksum If you found a compatibility problem, please inform us with this information.

3-6 EDID Installation with Windows Program

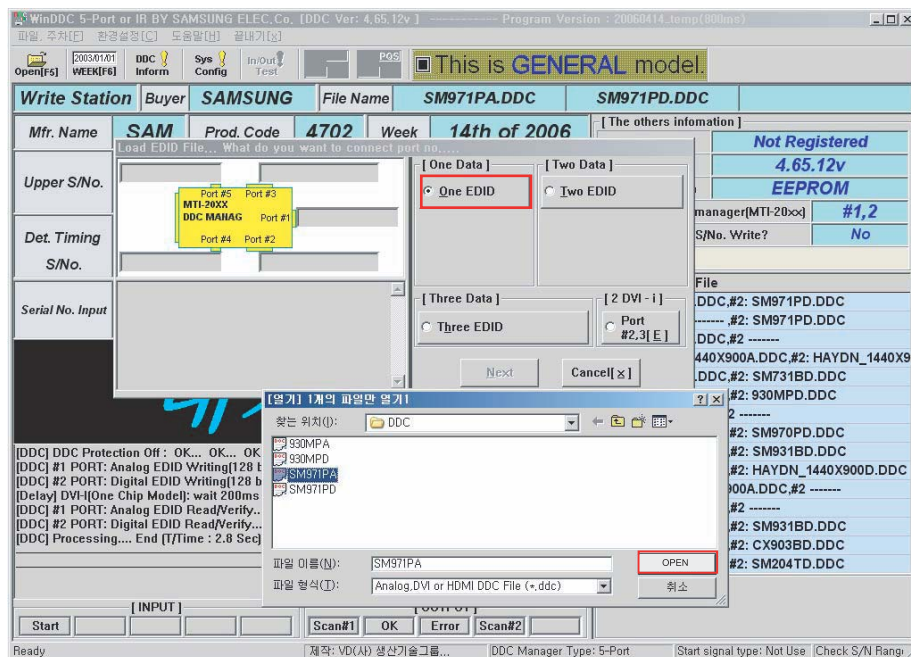


1. Click SysConfig.
2. Select DDC Manager Type to 'MTI-2059 (5-Port)'.
3. Click 'Save' Button.
4. Click 'OK' Button.

* MTI-2059

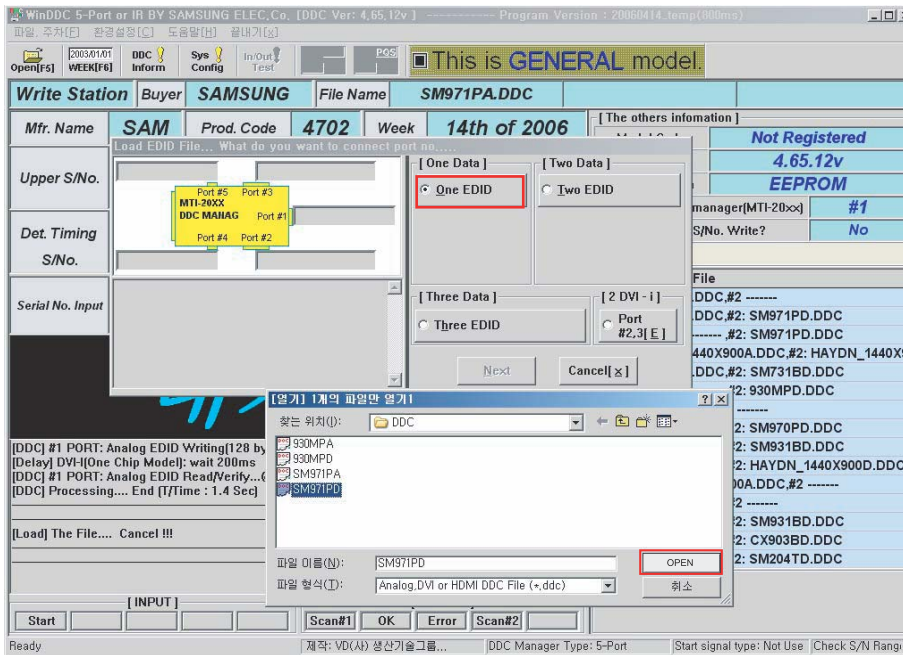
- Analog: Port #1
- Digital: Port #2

- Analog (Port #1)



5. Select 'One EDID'.
6. Select DDC file.
File Name:
"SM971PA.ddc"
7. Click 'Open' Button.

- Digital (Port #2)



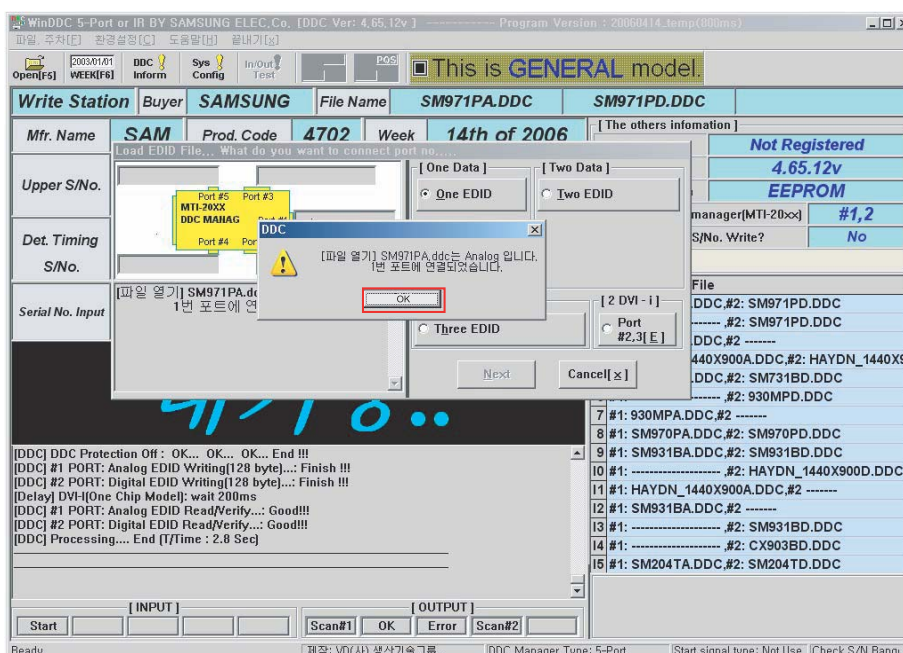
5. Select 'One EDID'.

6. Select DDC file.

File Name:

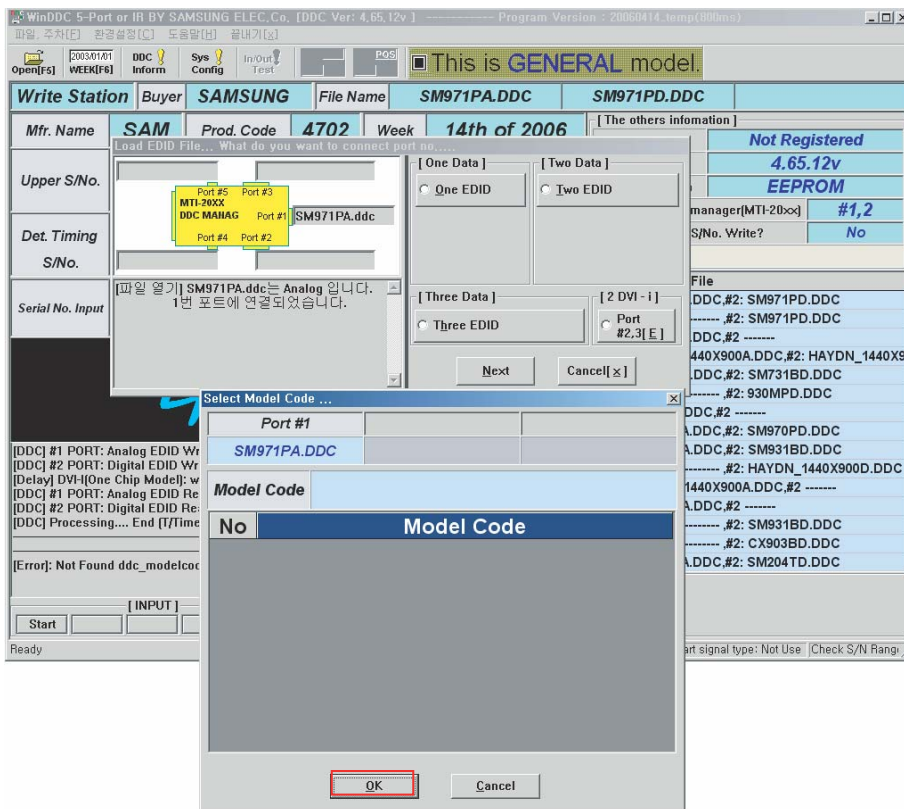
"SM971PD.ddc"

7. Click 'Open' Button.

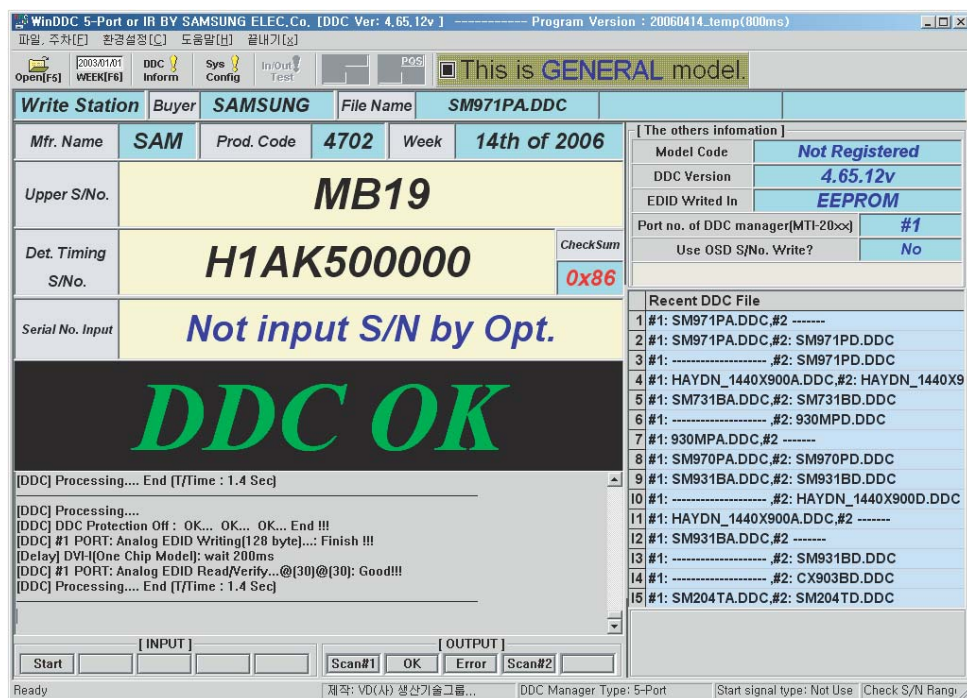


9. Click 'OK' Button.

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10. Click 'OK' Button.

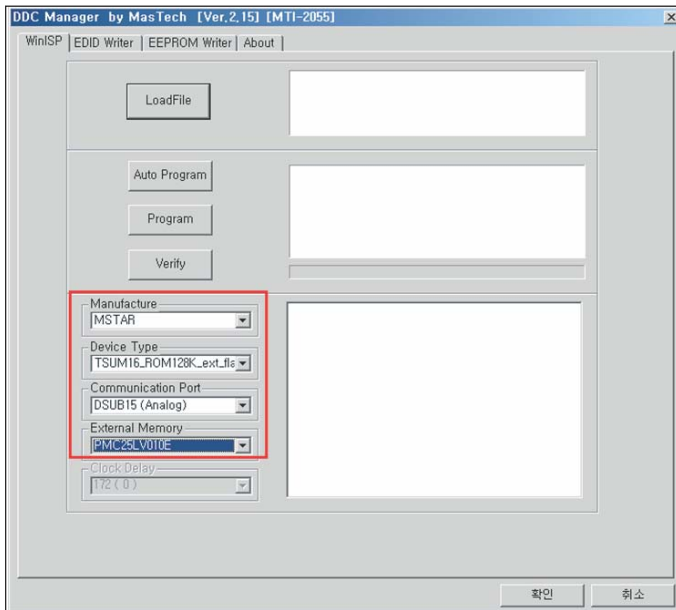


11. Type monitor serial number and press Enter.

Repeat this step 2 to 5 times in digital inputs after the analog input.

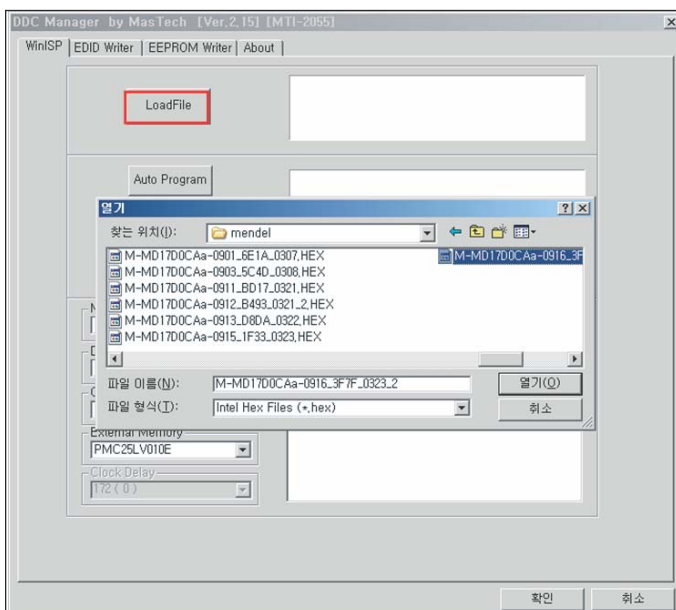
3-7 How to execute MCU Code

3-7-1 Program Setting - Config Setting



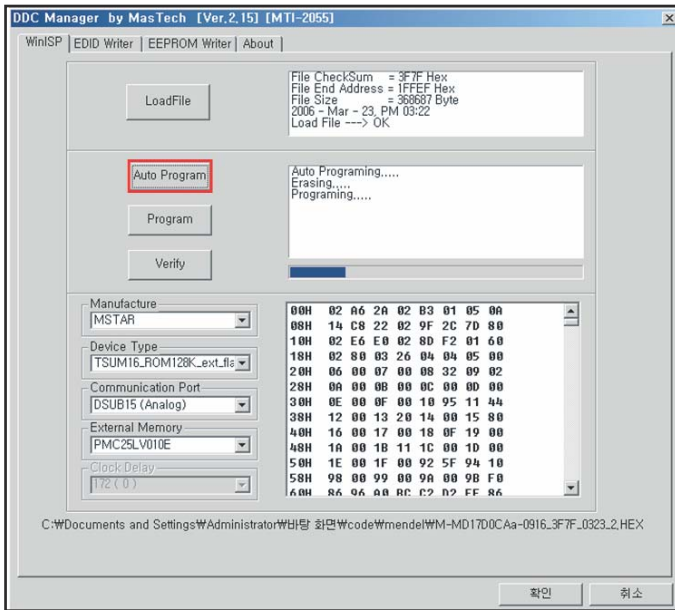
1. Set the options.

- Manufacture: MSTAR
- Device Type:
TSUM16_ROM128K_ext_flash
- Communication Port: DSUB15 (Analog)
- External Memory: PMC25LV010E

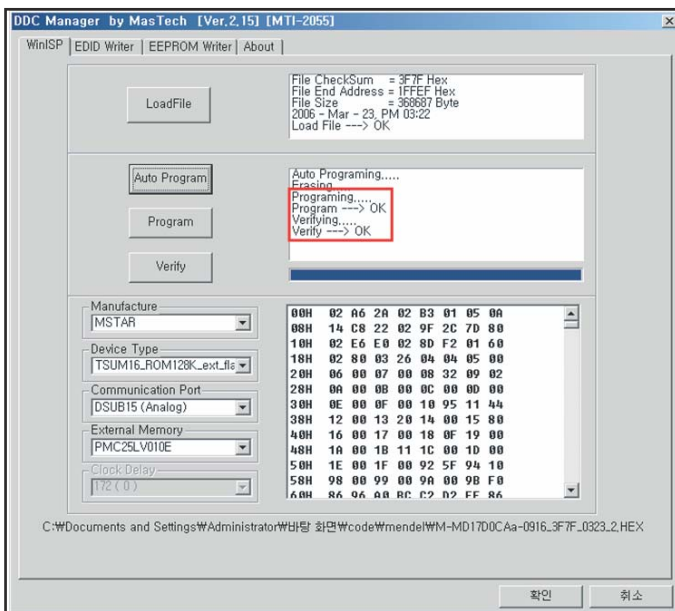


2. Click 'LoadFile' button, and select the MCU code.

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3. Click 'Auto Program' button.



4. If Program and Verify is OK, turn off the hard power and than turn on again.