



Intelligent System Management Module (iSMM)

User Manual

v1.01

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1.1 iSMM Introduction

The IEI Intelligent System Management Module (iSMM) application monitors and shows the voltage, fan speed, temperature, and watchdog time, DIO and cash drawer information of the system. The users can control the setting in the following pages:

- Voltage Page
- Fan Page
- Temperature Page
- DIO Page
- WDT Page
- Cashdrawer Page

1.2 iSMM Installation

Follow the steps below to install the iSMM application.

Step 1: Insert the utility CD that came with the iSMM supported IEI product.

Step 2: Click the **setup.exe** in the IEI iSMM folder.

Step 3: The welcome screen in **Figure 1** appears.



Figure 1: iSMM Installation Welcome Screen

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Step 4: Click **NEXT** to continue the installation process.

Step 5: The License Agreement window appears. Accept the license agreement by clicking “I accept the terms in the license agreement” option. Click **NEXT**.

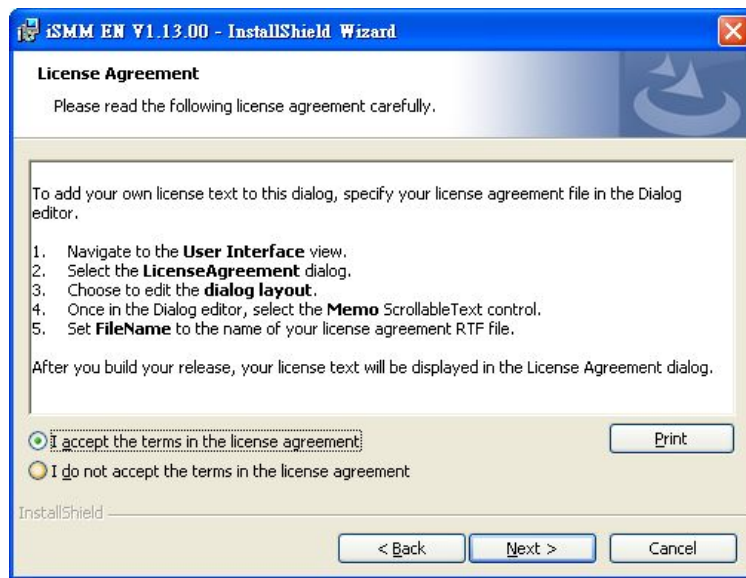


Figure 2: iSMM License Agreement

Step 6: The customer information in **Figure 3** appears.

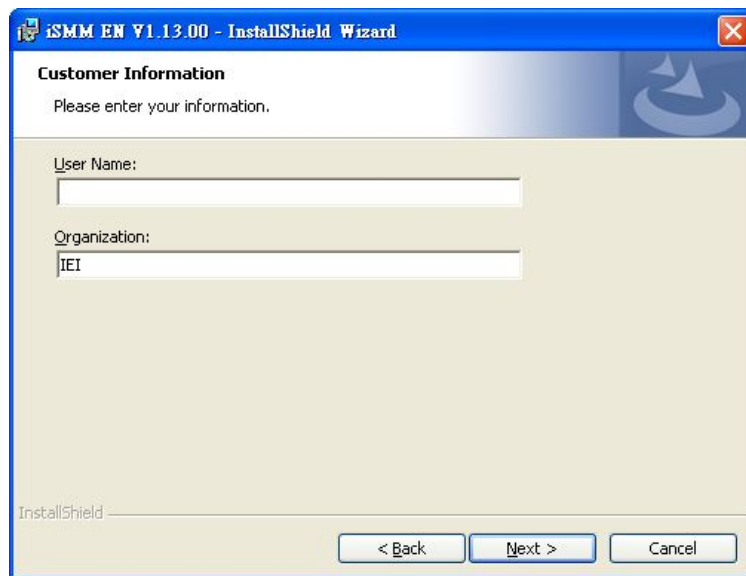


Figure 3: iSMM Installation Customer Information

Step 7: Fill out the information and click **NEXT**.

Step 8: Select a setup type in **Figure 4** and click **NEXT**.

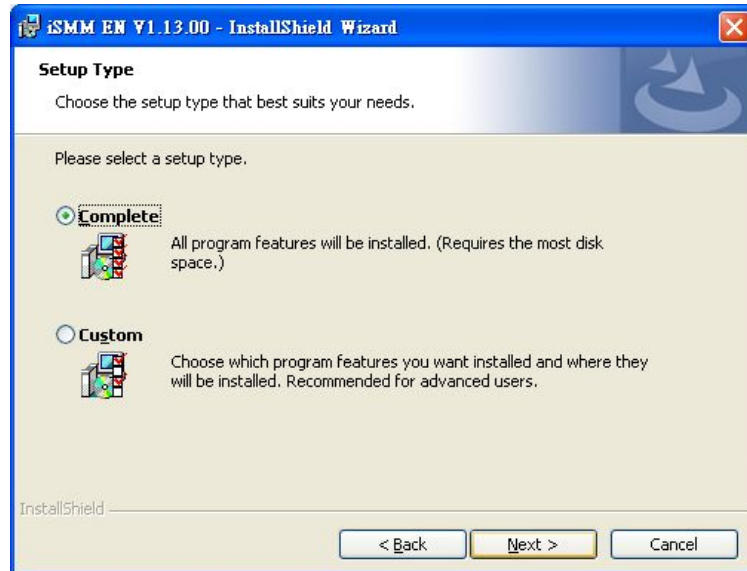


Figure 4: iSMM Setup Type

Step 9: The Ready to Install the Program in **Figure 5** appears.

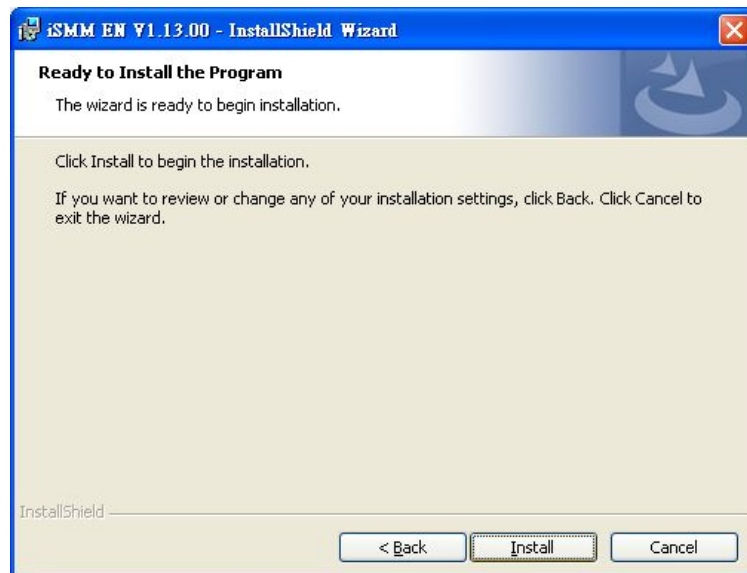


Figure 5: Ready to Install the Program Window

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Step 10: Click **INSTALL** to start the software installation.

Step 11: After the driver installation process is complete, a confirmation screen appears (**Figure 6**).

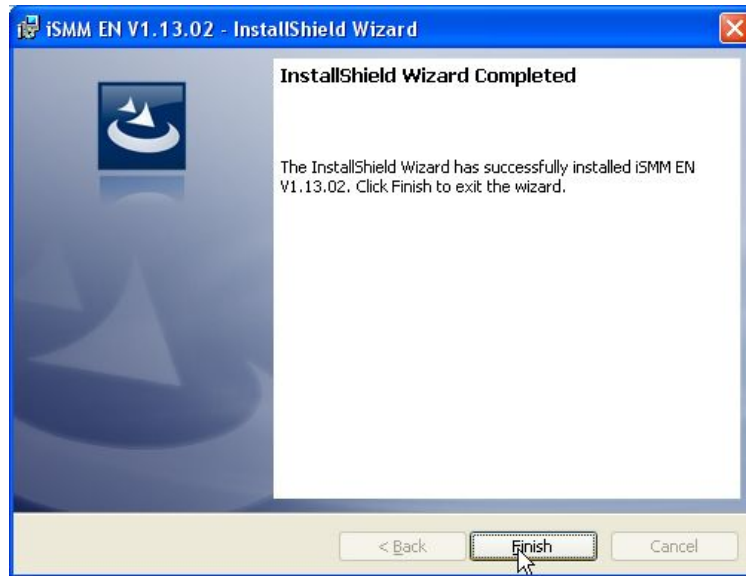


Figure 6: InstallShield Wizard Completed

Step 12: Click **FINISH** to complete the software installation.

1.3 Voltage Page

The IEI iSMM application monitors and shows the current system voltages on the Voltage Page (**Figure 7**). The following sections describe the Voltage Page in details.



Figure 7: Voltage Page

1.3.1 Refresh Time Setting

The iSMM refreshes the voltage values according to the refresh time period set by the user. Follow the steps below to set the refresh time:

Step 1: Click on the Voltage Page tab.

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Step 2: Entering a value beside the **Refresh time (Sec)** (Figure 8).

Step 3: Click **apply** (Figure 8).



Figure 8: Voltage Refresh Time Setting

1.3.2 High Limit Value and Low Limit Value Setting

The high limit value and low limit value of each voltage can be set by the user. When the voltage is greater than the high limit value or smaller than the low limit value, the voltage value shows in red. For example, the VBAT voltage (3.22V) shows in red in **Figure 7** since the current VBAT voltage is greater than the high limit value (3.2V).

To set the high limit value or low limit value, follow the steps below.

Step 1: Check the box and double click a high limit value or a low limit value to enter the new value (Figure 9).

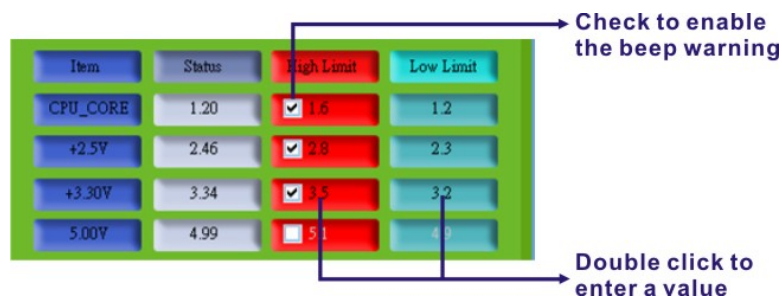


Figure 9: Voltage Page – High Limit and Low Limit

Step 2: Check the high or low limit value to have the system use the beep warning when the specified system voltage is greater or smaller than the high limit or low limit (Figure 9). (Make sure to enable beep/audio alarm on the Load/Save Page.

Refer to **Section 1.6**)

1.4 Fan Page

The IEI iSMM application monitors and shows the fan speeds on the Fan Page (Figure 10). The following sections describe the Fan Page in details.

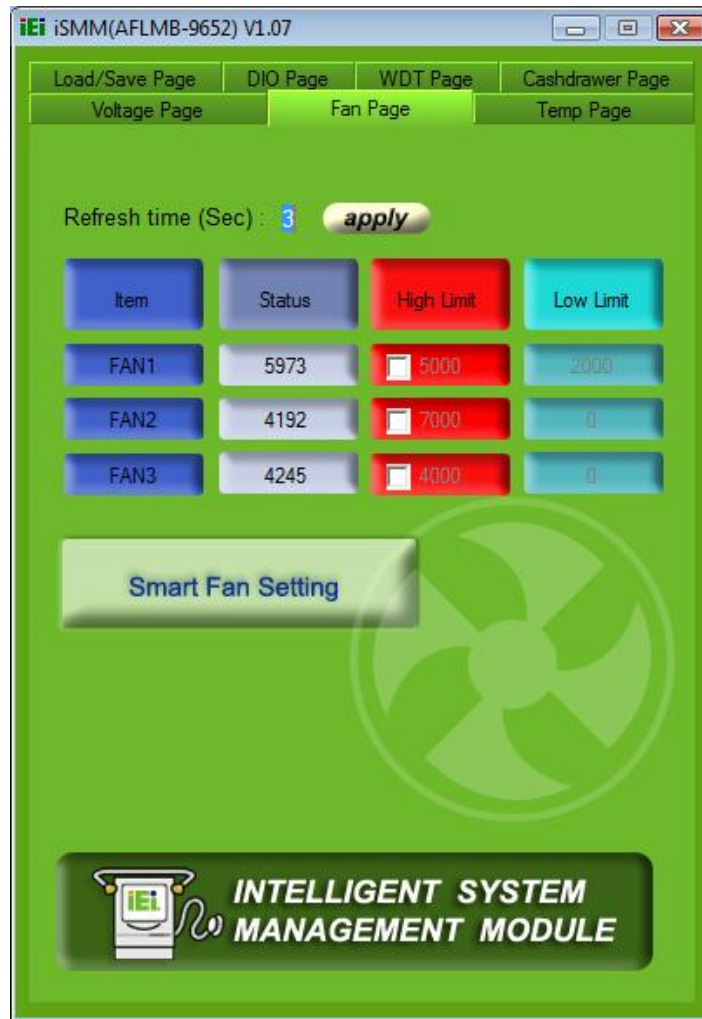


Figure 10: Fan Page

1.4.1 Refresh Time Setting

The iSMM refreshes the fan speed values according to the refresh time period set by the user. Follow the steps below to set the refresh time:

Step 1: Click on the Fan Page tab.

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Step 2: Entering a value beside the **Refresh time (Sec)** (Figure 11).

Step 3: Click **apply** (Figure 11).



Figure 11: Fan Speed Refresh Time Setting

1.4.2 High Limit Value and Low Limit Value Setting

The high limit value and low limit value of each fan speed can be set by the user. When the fan speed is greater than the high limit value or smaller than the low limit value, the fan speed value shows in red. For example, the CPU fan speed (1920) shows in red in

Figure 10 since the current CPU speed is lower than the low limit value (2000).

To set the high limit value or low limit value, follow the steps below.

Step 1: Check the box and double click a high limit value or a low limit value to enter the new value (Figure 12).

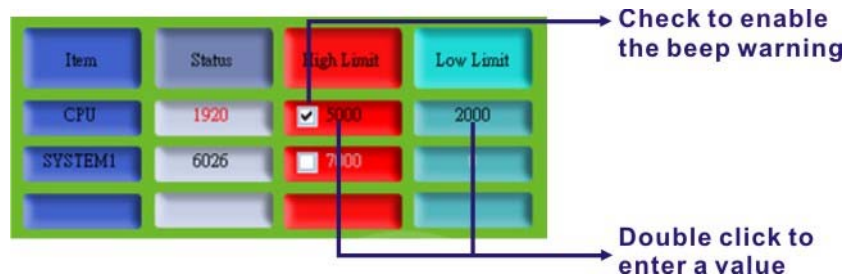


Figure 12: Fan Page – High Limit and Low Limit

Step 2: Check the high or low limit value to have the system use the beep warning when the specified fan speed is greater or smaller than the high limit or low limit

(Figure 12). (Make sure to enable beep/audio alarm on the Load/Save Page.

Refer to **Section 1.6**)

1.4.3 Smart Fan Setting

The Smart Fan Setting page is for advanced fan setting. The user can enable or disable the specific fan. When the fan is enabled, the user can control the fan in three different modes (On/Off Mode, PWM Mode and Automatic Mode).

1.4.3.1 On/Off Mode

In the On/Off Mode, choose **Off** or **On** to turn off or turn on the fan. Click **apply** or **ok** when finish.



Figure 13: Smart Fan Setting – On/Off Mode

1.4.3.2 PWM Mode

In the PWM Mode, the user can set the PWM value from 0 to 127 by entering a value (**Figure 14**). To set the value, double click the number and enter a new value. Click **apply** or **ok** when finish.

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Figure 14: Smart Fan Setting – PWM Mode

1.4.3.3 Automatic Mode

In the Automatic Mode, the user can set the temperature that decides the fan activity. The following value can be set (**Figure 15**):

- Fan Start (°C): the fan starts when the temperature reaches the set value
- Fan Off (°C): the fan turns off when the temperature reaches the set value
- Full Speed (°C): the fan runs at full speed when the temperature reaches the set value
- Start PWM Value (0~127): the initial PWM value when the fan starts
- Slope (PWM Value (add/°C): the PWM value added per degree Celsius (°C) of temperature increase when the fan start running

To set the value, double click the number and enter a new value. Click **apply** or **ok** when finish.

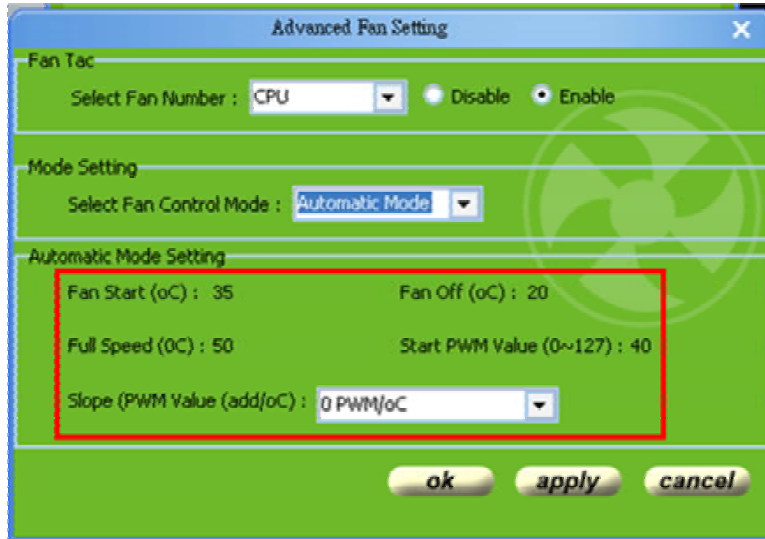


Figure 15: Smart Fan Setting – Automatic Mode

1.5 Temperature Page

The IEI iSMM application monitors the current CPU temperature and system temperature and shows the temperature on the Temperature Page (Figure 16). The following sections describe the Temperature Page in details.

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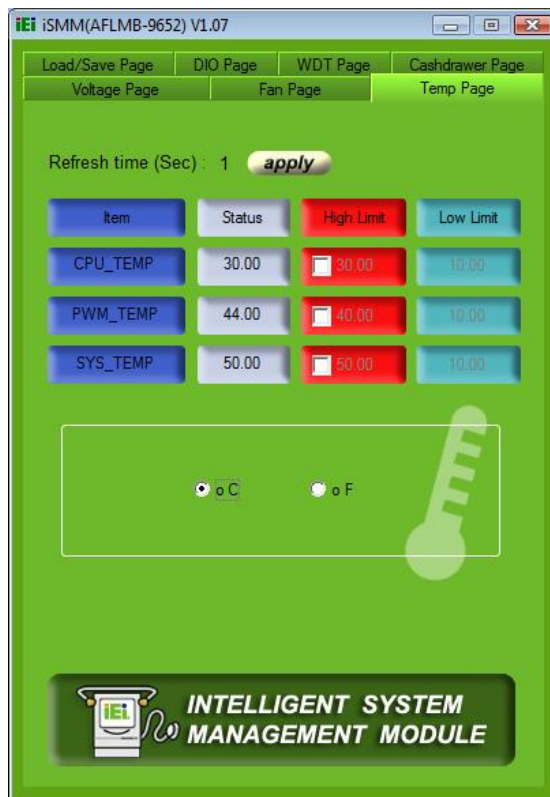


Figure 16: Temperature Page

1.5.1 Refresh Time Setting

The iSMM refreshes the CPU and system temperature according to the refresh time period set by the user. Follow the steps below to set the refresh time:

- Step 1:** Click on the Temperature Page tab.
- Step 2:** Entering a value beside the **Refresh time (Sec)** (Figure 17).
- Step 3:** Click apply (Figure 17).



Figure 17: Temperature Refresh Time Setting

1.5.2 High Limit Value and Low Limit Value Setting

The high limit value and low limit value of each temperature can be set by the user. When the temperature is greater than the high limit value or lower than the low limit value, the temperature value shows in red. For example, the SYSTEM1 temperature (48) shows in red in **Figure 16** since the current system temperature is greater than the high limit value (40). The temperature scale can be changed from Celsius scale (°C) to Fahrenheit scale (°F).

To set the high limit value or low limit value, follow the steps below.

Step 1: Check the box and double click a high limit value or a low limit value to enter the new value

(**Figure 18**).

Item	Status	High Limit	Low Limit
CPU	29.00	<input checked="" type="checkbox"/> 30	10
SYSTEM1	48.00	<input type="checkbox"/> 40	1
SYSTEM2	35.00	<input type="checkbox"/> 50	1

Check to enable the beep warning

Double click to enter a value

Figure 18: Temperature Page – High Limit and Low Limit

Step 2: Check the high or low limit value to have the system use the beep warning when the specified temperature is greater or lower than the high limit or low limit (Figure 18). (Make sure to enable beep/audio alarm on the Load/Save Page. Refer to **Section 1.6**). (Make sure to enable beep/audio alarm on the Load/Save Page.)

1.5.3 Watchdog Timer Page

The IEI iSMM application allows users to set watchdog timer on the WDT Page (**Figure 19**).



Figure 19: WDT Page

Set Timeout	Set the watchdog timer value. The value is a period of time that the system will shut down if the timer is not reset in that period of time.
Start	Click to start the watchdog timer
stop	Click to stop the watchdog timer
Auto refresh	The watchdog timer auto resets before timeout.

1.6 DIO Page

The IEI iSMM application monitors the current voltage of the digital input and digital output and shows the information on the DIO Page (**Figure 20**). The digital output information can be set and written to an internal register to control the state driven on the output pin.



Figure 20: DIO Page

1.6.1 GPO Information Setting

Follow the steps below to set the GPO.

Step 1: Click the DIO Page.

Step 2: Click the icon in the GPO Information section to change the output pin state.

( : voltage pull high)

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( : voltage pull low)

Step 3: Click **Write** to write to an internal register to control the state after finish setting the output pin.

1.7 Load/Save Page

The IEI iSMM application allows the user to save the settings of all the high limit/low limit values and smart fan setting as an *.ini file. Thus, the user can load the setting easily to the iSMM if necessary. The saving and loading action is done from the Load/Save Page of the iSMM (**Figure 21**). This page can also enable the beep/audio alarm.



Figure 21: Load/Save Page

1.8 Cash Drawer Page (Optional)

The Cashdrawer Page of the IEI iSMM application allows users to view and control the cash drawers connected to the system. **Figure 22** shows an example of the status of the cash drawers:

- No. 1 cash drawer: open
- No. 2 cash drawer: closed

The user can change the status of the cash drawer by clicking the image.

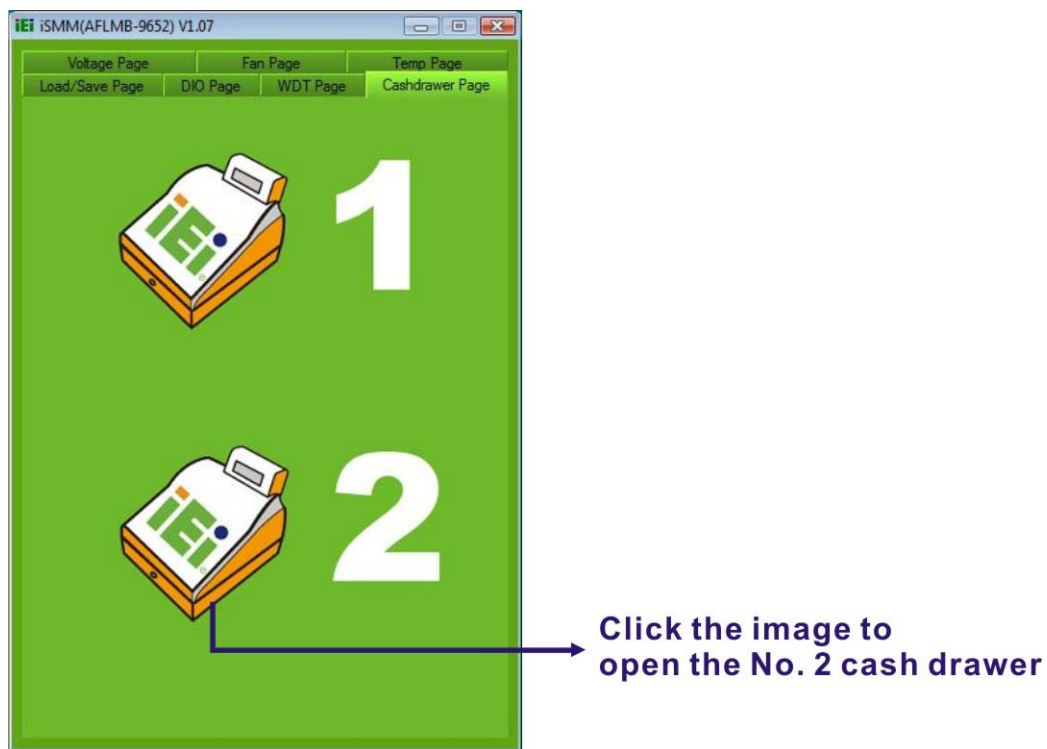


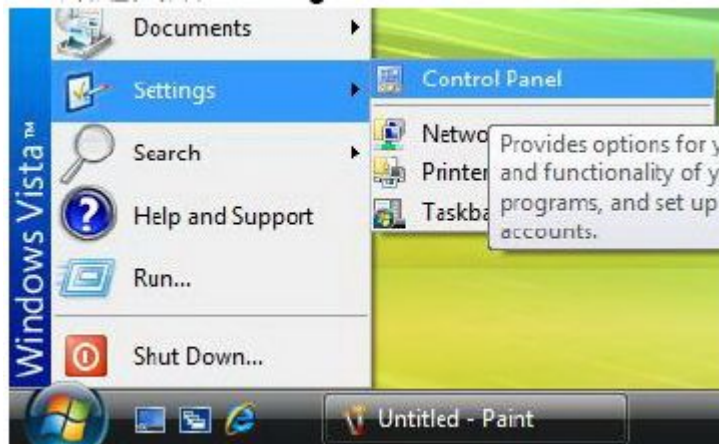
Figure 22: Cash Drawer Page

Appendix

A.1 Disable User Account Control (UAC) in Windows Vista

It is recommended to disable UAC in Windows Vista when using iSMM. Please follow the instruction below to disable UAC.

Step 1: Click **Startup** → **Settings** → **Control Panel**.



Step 2: In Control Panel window, click **User Accounts**.



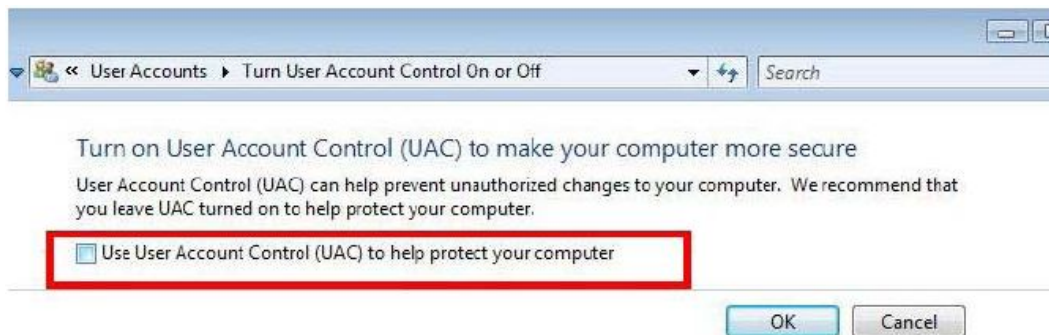
Step 3: Click **User Accounts** again in the User Accounts window.



Step 4: Click **Turn User Account Control on or off**



Step 5: Uncheck the "Use User Account Control (UAC) to help protect your computer" option.



Step 6: Click OK button and restart the computer.