

**SAFEGARD**SYSTEMS  
THE DAMPER SPECIALIST COMPANY



# *SAFEGARD V4 USER OPERATING GUIDE*

*Issue 2 - Aug 2016*

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**FIRST FLOOR**      **GROUND FLOOR**

*This is the groups screen on the graphical user interface (GUI). In this example you can see that there are two groups of dampers, one ground floor and one first floor. The first floor icon indicates that all dampers are open and healthy and the ground floor icon has no open or closed indication, but indicates that dampers are healthy. This is because on the ground floor there is a mixture of dampers, some are failsafe closed and some are balanced. In the event of a fault the group's icon will turn red. The computer symbol shown in the ground floor icon indicates that one or more dampers are under the control of a building automation system (BAS).*

Groups | Group | Damper Test


Event Log | Damper Logs | DIO Logs

Time Stamp	Description
------------	-------------

*The 50 most recent events are logged in the Event Log and system logging active is indicated by the disc in bottom right hand corner of the GUI. After 51 or more events they are logged to history on the Desktop*

Engine Running      1      Log On      Desktop

FIRST FLOOR



SFDI 01



*To view a particular group, either double click on the group within the groups pane or select tab "Group" and then select the group that you want to view from the drop down menu at top of pane.*

*Select damper logs to view a fault*

Groups Group Damper Test

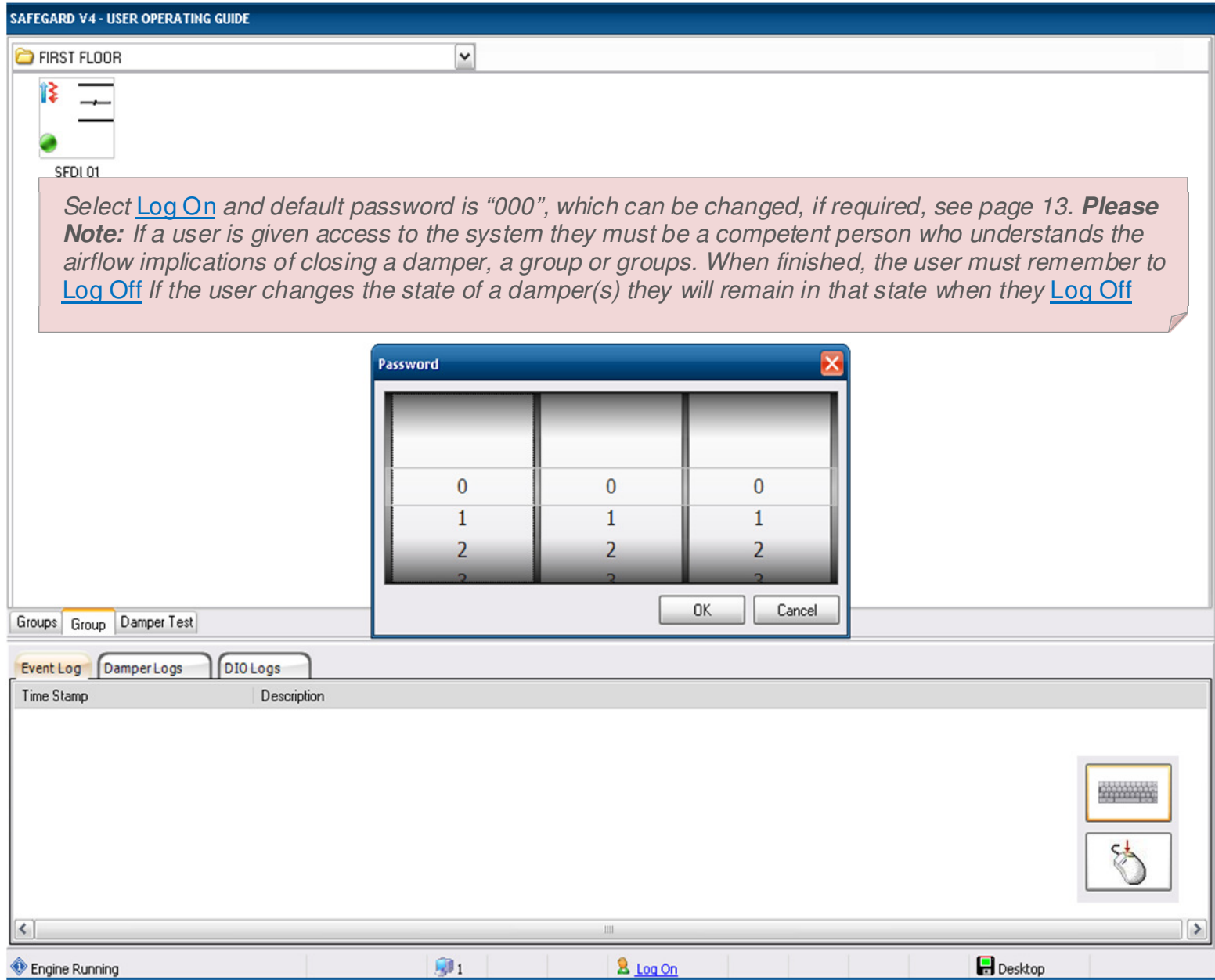
Event Log Damper Logs DIO Logs

Time Stamp	Description
------------	-------------



4

Engine Running 1 Log On Desktop



The screenshot displays the SAFEGARD V4 software interface. At the top, a blue header bar contains the text "SAFEGARD V4 - USER OPERATING GUIDE". Below this, a window titled "FIRST FLOOR" is visible. On the left side of this window, there is a small icon representing a damper, labeled "SFDI 01". A context menu is open over this icon, listing several actions with their corresponding keyboard shortcuts:

- Open (Ctrl+F1)
- Close (Ctrl+F2)
- Normalise (Ctrl+F4)
- Failsafe (Ctrl+F5)
- Toggle Online/Offline
- Open Group (Shift+F1)
- Close Group (Shift+F2)
- Normalise Group (Shift+F3)
- Failsafe Group (Shift+F4)
- Localise Group

To the right of the menu, a pink callout box contains the following text:

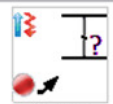
*The user has chosen to close the first floor damper. The damper icon indicates that it is now closed and the yellow warning triangle indicates that it is not in its normal position. The total number of damper(s) that are not normal is indicated in the taskbar. In this case, there is only one damper.*

Below the main window, there are several tabs: "Groups", "Group", and "Damper Test". Underneath these, there are three more tabs: "Event Log", "Damper Logs", and "DIO Logs". The "Event Log" tab is active, showing a table with two columns: "Time Stamp" and "Description". A single entry is visible:

Time Stamp	Description
20/06/2013 14:31:16	SFDI 01 Closed

At the bottom of the interface, there is a taskbar. On the left, it shows "Engine Running". In the center, there are two yellow warning triangle icons, each with the number "1" next to it, and a "Log Off" button. On the right, there is a "Desktop" button. In the bottom right corner of the window, there are icons for a keyboard and a mouse.

FIRST FLOOR



SFDI 01

*If wired radially and the network cable is cut or power to the damper(s) is lost then “Missing” will be indicated in the event log and damper log , the damper(s) will attempt to failsafe and their icon LED will change to red at the group screen with a ‘?’ shown on the damper icon.*

*If wired in a loop and the network cable is broken the damper(s) still communicate because the system now sees two radial network cables. In this case there will be no indication on the system until a second break occurs.*

*If there is a loss of power to the damper(s) they will also attempt to failsafe and their icon LED(s) will change to red at the group screen with a ‘?’ shown on the damper icon.*



*If there is a loss of power to the panel and it is reinstated before undergoing a full controlled shutdown then a UPS-CONF screen will appear. The user is required to simply close this screen at their convenience.*

Groups
Group
Damper Test

Event Log
Damper Logs 1
DIO Logs


Fault Log 1
Aux Input Log

Damper	Time Stamp	Group	Location	Description
SFDI 01	20/06/2013 14:32:16	FIRST FLOOR	FIRST FLOOR RECEPTION	Missing

Engine Running
1 
Log Off
Desktop

FIRST FLOOR



SFDI 01

*The damper is now under the influence of an environmental input which can be seen from the green square within the damper icon. This is typically used for occupancy. One IO event is now active, one input, which can be viewed in the DIO logs. In the input log it shows that input 1 is active, its description (alias) and cable tags references.*


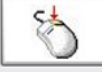
*Similarly, by selecting the output log you can see when an output(s) is active, its description (alias) and cable tag references.*

Groups
Group
Damper Test

Event Log
Damper Logs
DIO Logs !


Fault Log
Input Log !
Output Log

DIO	Input	Time Stamp	Class	Thread	Alias	Cable Tag
DI804 01	1	20/06/2013 14:32:54	Environmental	0	OCUPANCY CLOSE FIRST FLO...	201 + 202

Engine Running
1
1
Log Off
1
Desktop

FIRST FLOOR



SFDI 01

*The damper is now under the influence of a fire alarm input which can be seen from the red square within the damper icon. Two IO events are now active, two inputs, which can be viewed in the DIO logs. In the input log it shows that inputs 1 & 2 are active, their descriptions (alias) and cable tags references.*



*Similarly, by selecting the output log you can see when an output(s) is active, its description (alias) and cable tag references.*

Groups
Group
Damper Test

Event Log
Damper Logs
DIO Logs 2


Fault Log
Input Log 2
Output Log

DIO	Input	Time Stamp	Class	Thread	Alias	Cable Tag
DI804 01	1	20/06/2013 14:32:54	Environmental	0	+ OCCUPANCY CLOSE FIRST FLO...	201 + 202
DI804 01	2	20/06/2013 14:33:23	Fire Alarm	0	+ FIRE CLOSE FIRST FLOOR	203 + 204

Engine Running
1
1
Log Off
1
1
Desktop

FIRST FLOOR



SFDI 01



*The damper is now under the influence of a firefighter override input which can be seen from the yellow square within the damper icon. Three inputs are now active, which can be viewed in the DIO logs. In the input log it shows that inputs 1, 2 & 3 are active, their descriptions (alias) and cable tags references.*

Groups
Group
Damper Test

Event Log
Damper Logs
DIO Logs 3


Fault Log
Input Log 3
Output Log

DIO	Input	Time Stamp	Class	Thread	Alias	Cable Tag
DI804 01	1	20/06/2013 14:32:54	<span style="color: green;">■</span> Environmental	0	➕ OCCUPANCY CLOSE FIRST FLO...	201 + 202
DI804 01	2	20/06/2013 14:33:23	<span style="color: red;">■</span> Fire Alarm	0	➕ FIRE CLOSE FIRST FLOOR	203 + 204
DI804 01	3	20/06/2013 14:33:45	<span style="color: yellow;">■</span> Firefighter	0	➕ OPEN FIRST FLOOR	205 + 206

Engine Running
1
Log Off
1
1
1
Desktop

FIRST FLOOR



SFDI 01



*Should one of the dampers fail to reach one of its end positions it will attempt to failsafe and indicate a feedback failure in the event log and damper log and its LED will change to red in the damper icon.*

Groups
Group
Damper Test

Event Log
Damper Logs 1
DIO Logs

Fault Log 1
Aux Input Log

Damper	Time Stamp	Group	Location	Description
SFDI 01	20/06/2013 14:35:56	FIRST FLOOR	FIRST FLOOR RECEPTION	Feedback Failure

Engine Running
1
[Log Off](#)
Desktop

FIRST FLOOR

**SFDI 01**

**Channel:** Channel 02  
**Location:** FIRST FLOOR RECEPTION  
**Type:** Smoke-Fire Damper  
**Make:** ACTIONAIR  
**Normal:** Open  
**Failsafe:** Closed  
**Mode:** Auto  
**Drive times:** 90 s; 45 s

*Select a damper to view its details*


Groups Group Damper Test

Event Log Damper Logs DIO Logs


Fault Log Aux Input Log

Damper	Time Stamp	Group	Location	Description
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Engine Running 1 Log Off Desktop



FIRST FLOOR



GROUND FLOOR

Open Groups	Shift+Ctrl+F1
Close Groups	Shift+Ctrl+F2
Normalise Groups	Shift+Ctrl+F3
Failsafe Groups	Shift+Ctrl+F4
 About	
Show Service Information...	
Dump Event Log	
Change Password...	

*Right click on groups pane to open, close, normalize or failsafe all groups. Alternatively use Shift + Ctrl + F keys as shown.*

*“About” indicates current software revision.*

*Show Service Information - This will be greyed out unless a service notification date has been programmed by the engineer who commissioned the system. If it has been programmed, by selecting this option a pop up window will appear in the bottom right hand side of the screen informing the user of the time/date that their next service is due.*

*Dump Event Log - The user can choose to dump the event log to the Desktop at any time rather than waiting for the system to automatically dump after 50 off events.*



*Change Password – select if required*

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Fault Log | Aux Input Log

Damper	Time Stamp	Group	Location	Description

Engine Running
1
Log Off
Desktop

FIRST FLOOR

SFDI 01


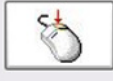
- Open Ctrl+F1
- Close Ctrl+F2
- Balance Ctrl+F3
- Normalise Ctrl+F4
- Failsafe Ctrl+F5
- Localise
- Toggle Online/Offline
- Open Group Shift+F1
- Close Group Shift+F2
- Normalise Group Shift+F3
- Failsafe Group Shift+F4

*Right click on group pane to open, close, normalise or failsafe a group. Alternatively use Shift + Ctrl + F keys as shown.*

Groups Group Damper Test

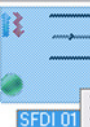
Event Log Damper Logs DIO Logs

Fault Log Aux Input Log

Damper	Time Stamp	Group	Location	Description
 				

Engine Running 1 Log Off Desktop

FIRST FLOOR



SFDI 01

Open	Ctrl+F1
Close	Ctrl+F2
Normalise	Ctrl+F4
Failsafe	Ctrl+F5
<b>Toggle Online/Offline</b>	
Open Group	Shift+F1
Close Group	Shift+F2
Normalise Group	Shift+F3
Failsafe Group	Shift+F4

*Right click on a damper to open, close, normalize or failsafe. Alternatively, use Shift and Ctrl + F keys as shown. If you need to undertake maintenance on a particular damper(s) select the damper(s) and select toggle online/offline. To revert back just select the same command.*



*PLEASE NOTE: If the user chooses to toggle a damper offline it will failsafe and then it will be ignored by the system until it has been toggled back online.*

Groups
Group
Damper Test

Event Log
Damper Logs
DIO Logs


Fault Log
Aux Input Log

Damper	Time Stamp	Group	Location	Description

Engine Running
1
Log Off
Desktop

GROUND FLOOR



3PSFDI BAL 01    3PSFDI BAS 01    FDI 01    SDI 01    SFDI 11

*On the ground floor a mixture of various dampers can be seen:-*

*3 Position Damper Interface (3PSFDI) - Actuator can be set to a balanced position or driven open/closed and failsafes via spring-return, shown as 3PSFDI BAL 01. Alternatively, actuator can be modulated via 0 – 10V signal from the BAS or an air flow sensor and only instructed to failsafe by the system in the event of an environmental input, shown as 3PSFDI BAS 01.*

*Fire Damper Interface (FDI) - Monitors damper position. Damper failsafes closed via spring mechanism and must be manually reset.*

*Smoke Damper Interface (SDI) – Drive open, drive closed.*

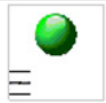
*Smoke Fire Damper Interface (SFDI) - Energizes actuator to drive and failsafe via spring-return.*

Groups    Group    Damper Test

Event Log    Damper Logs    DIO Logs

Time Stamp	Description

Engine Running    1    Log Off    Desktop



FIRST FLOOR



GROUND FLOOR

Groups Group Damper Test

Event Log Damper Logs DIO Logs

Time Stamp Description

*In the bottom left of the screen we can see that the system has been programed to output all damper information to the BAS via a Serial RS-232 link. When the BAS is communicating the icon will turn green. Other protocol options are RS-485, BacNet and Modbus.*



RS-232

Engine Running

1

Log Off

Desktop

**SAFEGARD V4 - USER OPERATING GUIDE**

**Control**

Start Test

Stop Test

Elapsed Time: **00:00:00**

Testing Damper: **0001 / 0006**

**0%**

**Started**

User

Scheduler

Input Action

**Suspended**

User Logged On

Input Priority

Input Action

Time Stamp	Description
20/06/2013 15:38:34	Testing 3PSFDI BAL 01
Type: Smoke-Fire Damper; Drive times: 90 s; 45 s	
20/06/2013 15:38:29	Resumed (User Logged Off)
20/06/2013 15:38:26	Suspended (User Logged On)
20/06/2013 15:38:26	Started (User)

*PLEASE NOTE: If programming or initiating a test from the GUI/Input Action be careful about the implications of closing a damper against air flow. If in doubt, speak to Safeguard technical support. All events are logged to the Desktop. The user must [Log On](#) to initiate a user start test. The started – user and suspended – user logged on will flash and suspended will flash in the status bar.*

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp	Description
------------	-------------

Engine Running | 1 | 1 | Log On | Desktop

**SAFEGARD V4 - USER OPERATING GUIDE**

**Control**

Start Test

Stop Test

Elapsed Time: **00:00:00**

Testing Damper: **0001 / 0006**

**0%**

**Started**

User

Scheduler

Input Action

**Suspended**

User Logged On

Input Priority

Input Action

Time Stamp	Description
20/06/2013 15:38:34	Testing 3PSFDI BAL 01
<i>Type: Smoke-Fire Damper; Drive times: 90 s; 45 s</i>	
20/06/2013 15:38:29	Resumed (User Logged Off)
20/06/2013 15:38:26	Suspended (User Logged On)
20/06/2013 15:38:26	Started (User)

*The test will only commence when the user [Log Off](#)*

*Stop Test – stops test*

*Elapsed Time – elapsed time taken for test*

*Testing Damper – 2 of 10 in this example*

*% Indicator - % indication of time to complete test*

**Testing** in the status bar flashes when any one of the three initiators (User, Scheduler or Input Action) triggers a test.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp	Description
------------	-------------

Engine Running | 1 | 1 | Log On | Desktop

SAFEGARD V4 - USER OPERATING GUIDE

GROUND FLOOR

3PSFDI BAL 01    3PSFDI BAS 01    FDI 01    SDI 01    SFDI 11

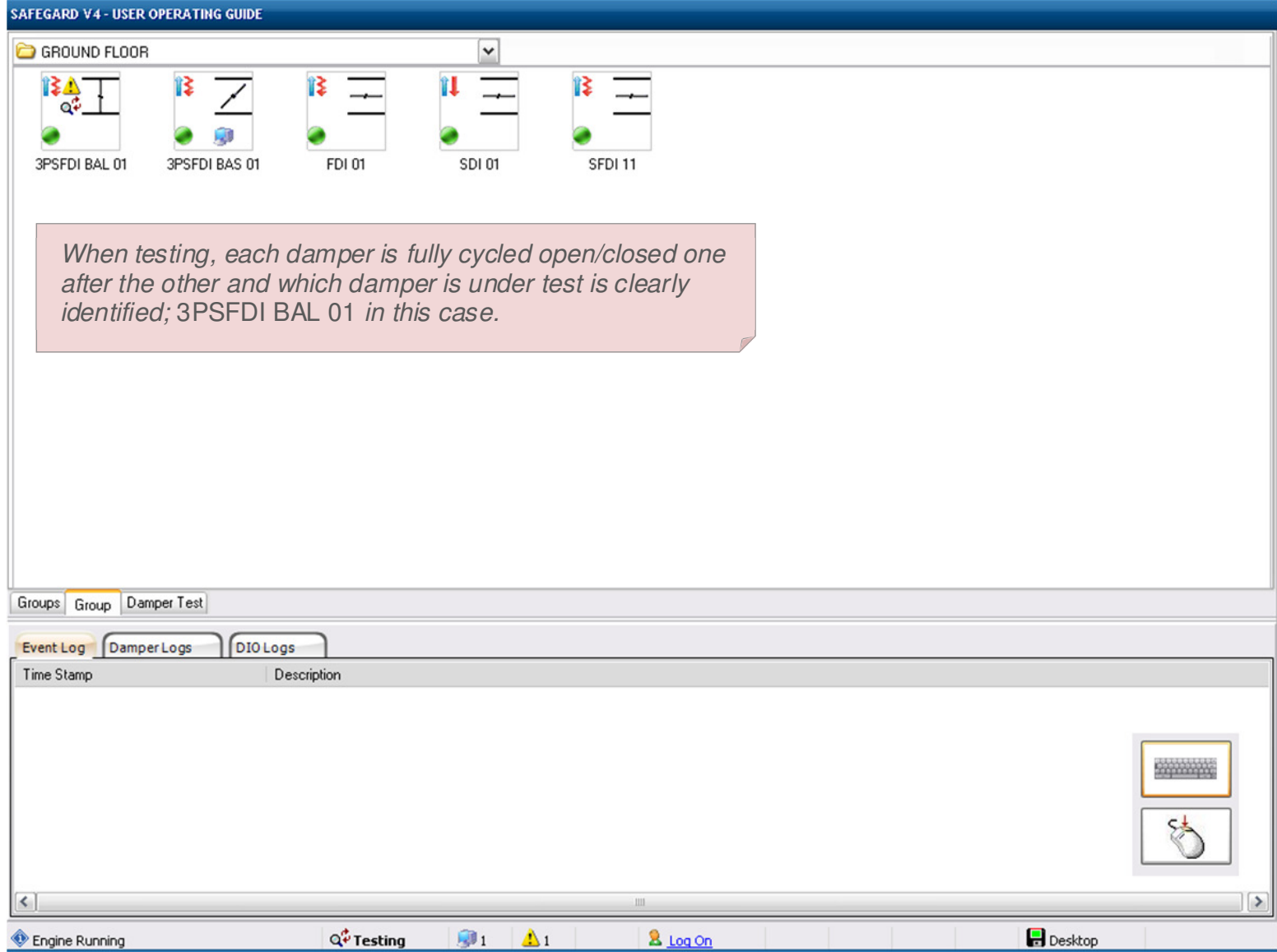
*When testing, each damper is fully cycled open/closed one after the other and which damper is under test is clearly identified; 3PSFDI BAL 01 in this case.*

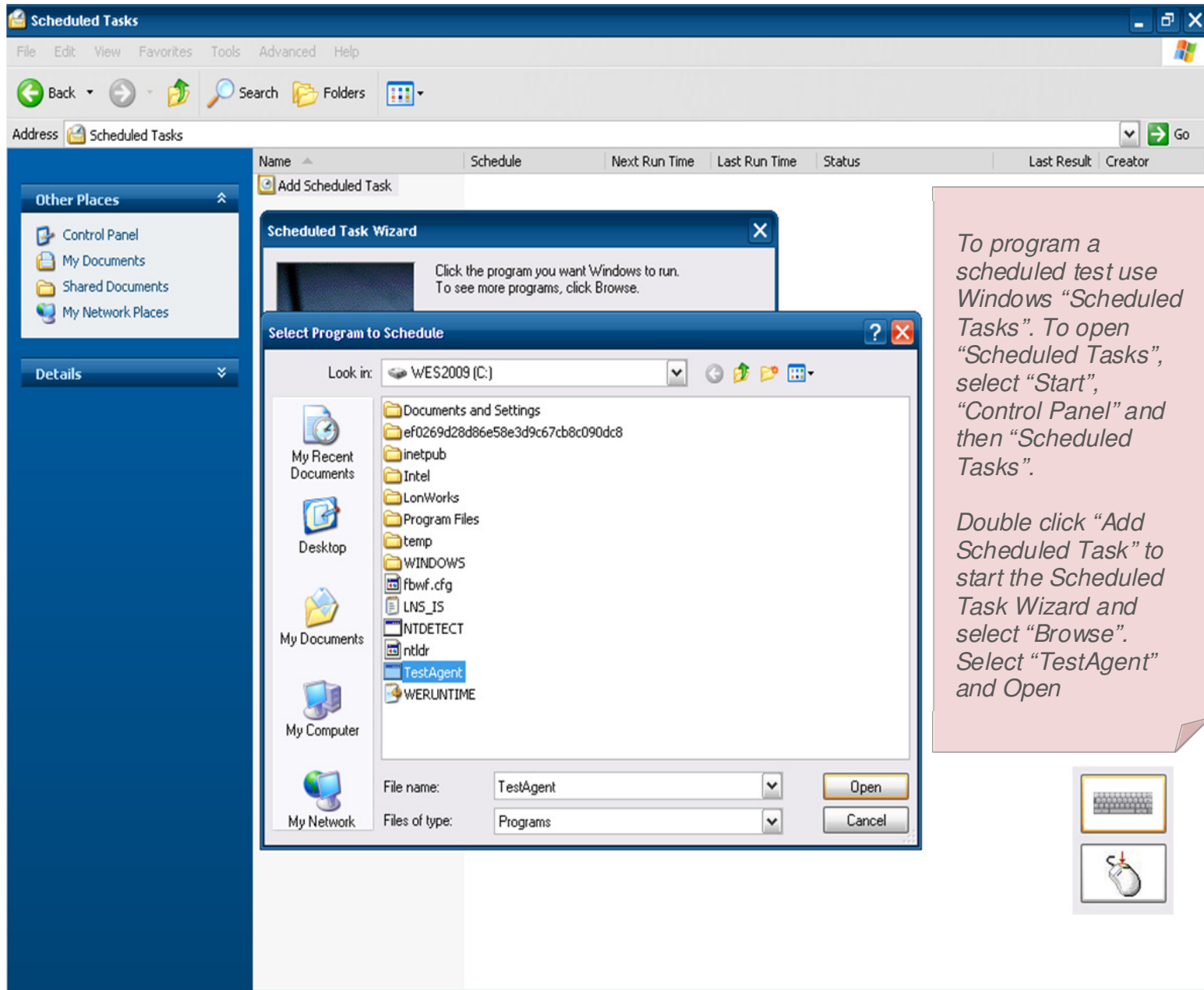
Groups    Group    Damper Test

Event Log    Damper Logs    DIO Logs

Time Stamp	Description
------------	-------------

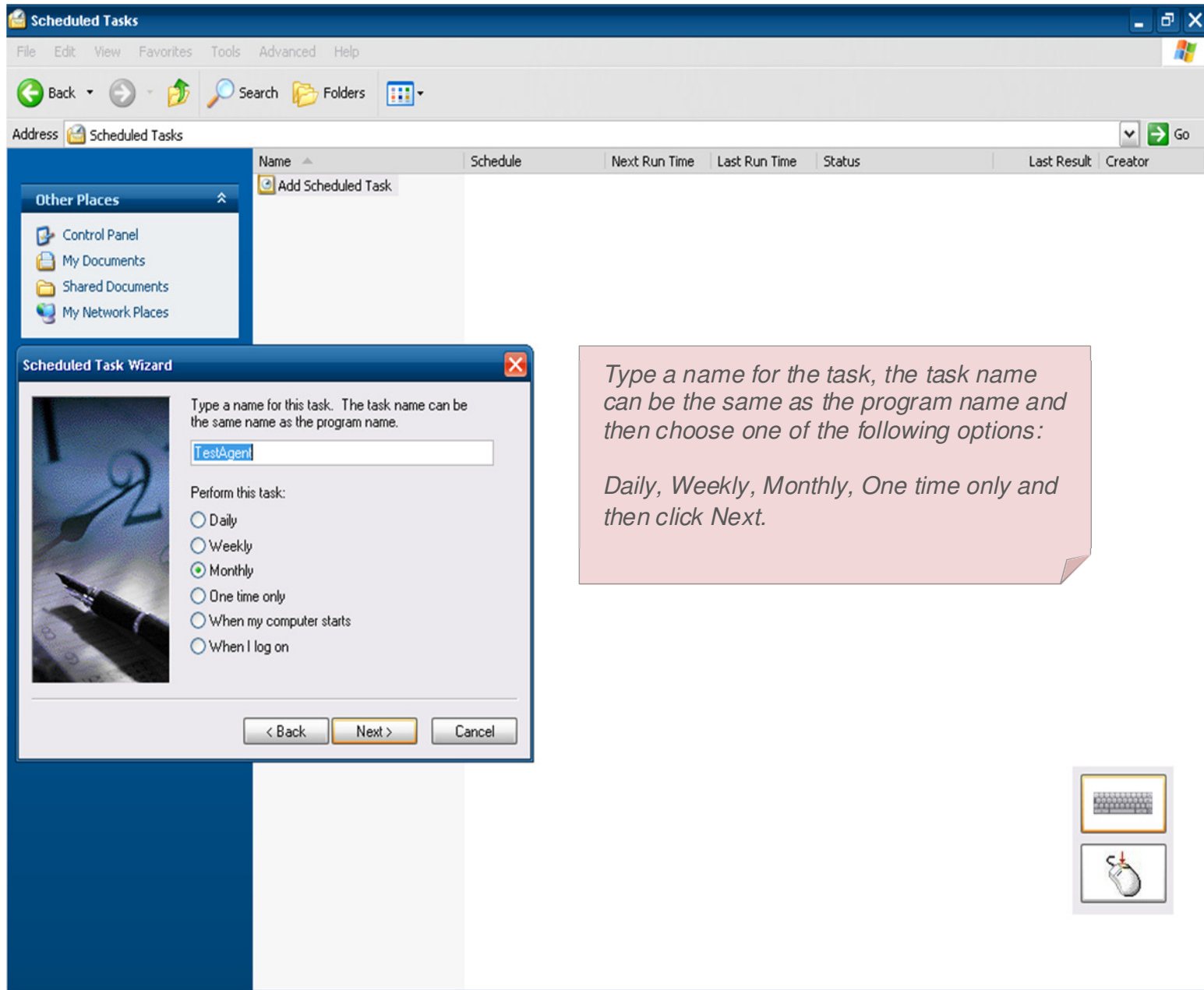
Engine Running    Testing    1    1    Log On    Desktop

The screenshot shows the SAFEGARD V4 software interface. At the top, there's a blue header with the text 'SAFEGARD V4 - USER OPERATING GUIDE'. Below that, a section titled 'GROUND FLOOR' contains five damper icons: 3PSFDI BAL 01, 3PSFDI BAS 01, FDI 01, SDI 01, and SFDI 11. Each icon has a green circle at the bottom. A pink callout box with a drop shadow is positioned below the icons, containing the text: 'When testing, each damper is fully cycled open/closed one after the other and which damper is under test is clearly identified; 3PSFDI BAL 01 in this case.' Below the callout, there are tabs for 'Groups', 'Group', and 'Damper Test'. Underneath, there are three log tabs: 'Event Log', 'Damper Logs', and 'DIO Logs'. The 'Event Log' tab is active, showing a table with two columns: 'Time Stamp' and 'Description'. The table is currently empty. On the right side of the log area, there are two icons: a keyboard and a mouse. At the bottom, there's a taskbar with several icons: 'Engine Running', 'Testing' (with a red 'X' icon), '1' (with a blue cube icon), '1' (with a yellow warning triangle icon), 'Log On' (with a person icon), and 'Desktop' (with a monitor icon).



*To program a scheduled test use Windows "Scheduled Tasks". To open "Scheduled Tasks", select "Start", "Control Panel" and then "Scheduled Tasks".*

*Double click "Add Scheduled Task" to start the Scheduled Task Wizard and select "Browse". Select "TestAgent" and Open*



Type a name for the task, the task name can be the same as the program name and then choose one of the following options: Daily, Weekly, Monthly, One time only and then click Next.

The screenshot shows the Windows Scheduled Tasks console. The main window has a menu bar (File, Edit, View, Favorites, Tools, Advanced, Help) and a toolbar with navigation icons. The address bar shows 'Scheduled Tasks'. A table lists tasks, with 'Add Scheduled Task' selected. A 'Scheduled Task Wizard' dialog is open, titled 'Select the time and day you want this task to start'. It includes a 'Start time' dropdown set to '22:00', a 'Day' dropdown set to '1', and a 'The' dropdown set to 'first' with a 'Monday' dropdown. Below, a grid of months is checked: Jan, Apr, Jul, Oct, Feb, May, Aug, Nov, Mar, Jun, Sep, Dec. Buttons for '< Back', 'Next >', and 'Cancel' are at the bottom. A callout box on the right contains the text: 'Select the settings you require and then click Next'. In the bottom right corner, there are icons for a keyboard and a mouse.

Select the settings you require and then click Next

**Scheduled Tasks**

File Edit View Favorites Tools Advanced Help

Address Scheduled Tasks

Name	Schedule	Next Run Time	Last Run Time	Status	Last Result	Creator
Add Scheduled Task						

**Scheduled Task Wizard**

Enter the name and password of a user. The task will run as if it were started by that user.

Enter the user name: 1ZPPMI3U2T\Administrator

Enter the password: .....

Confirm password: .....

If a password is not entered, scheduled tasks might not run.

< Back Next > Cancel

*Leave the "Enter the user name" as is and select the "Enter the password" box. Input the PC's administrator password: 'safeguard' and confirm it, then click Next. Verify the choices you have made and click Finish.*

*To change a "Scheduled Task" that you have already programmed, go to "Start", "Control Panel" and then "Scheduled Tasks". Select "TestAgent" and right click on it and select "Properties". Select "Schedule" tab, change as required and click OK.*

**PLEASE NOTE:** *If a User or a Scheduled Task has initiated a Test and an environmental input that has been programmed to suspend or stop a test is activated it will override the test.*

