REQUIREMENTS

A 32 or 64 bit computer loaded with Windows 7 or higher.

If required a FG7-Druid connected to a minimum of 1 and a maximum of 32 energizers and if required up to a maximum of 31 IO cards.

If required a FG7-Tautwire connected to a minimum of 1 and a maximum of 32 sensors

The IP address of the FG7-Druid and/or FG7-Tautwire (defaults 10.0.0.20) must be known and the computer IP address should be set in the same IP range. If both FG 7's are used they must have different IP address and be in the same range as the computer.

A bitmap or png of the site should be filed on the computer (not on a flash drive).

The program file should be downloaded and a short cut of Nemtek (Application) will be made on the desktop.

The program should run under elevated rights (administrator rights)

LOGGING IN TO THE APPLICATION

After downloading the application you can run the program via the shortcut on the desktop. It will ask for a user name and the default is **installer** and the default password is also **installer**. The program should open and a workspace can be set up. The program will run for 4 hours if there is no license in place, to prevent losing the settings it is recommended to save the program (see save workspace and restarting the program) before the 4 hours are completed.

SETTING UP A WORKSPACE

The following steps should be made for setting up a workspace:

- 1) Placing the program in Design Mode
- 2) Set up a workspace
- 3) Set up the workspace and load the site picture
- 4) Connect the workspace to the IP address of the FG7-Druid
- 5) Set up the FG7-Druid
- 6) Draw the energizer fence lines
- 7) Add text
- 8) Assign the fence lines, sounds and text to energizer sections
- 9) Set up the FG7-Taut wire
- 10) Drawing the Taut wire sectors
- 11) Decide on alarm conditions
- 12) Alarm Sensor mode
- 13) Create Action buttons
- 14) Create IO maps

15) Sending Commands
16) Set Timers
17) Users and rights of users
18) Save the workspace and restart the program
19) License
20) Logs

PLACING THE PROGRAM IN DESIGN MODE

To be able to make changes to the workspace you will have to switch to design mode by clicking on the ruler and triangle sign on the toolbar. The program will confirm that you are in design mode.

SET UP A WORKSPACE

To set up the workspace workspace click Workspace and then on Workspace set up, if an additional workspace is required click on new blank workspace and the workspace will go blank and the workspace set up window will open.

Name the workspace by giving it a title under workspace caption.

You can select under "use workspace with" if you want to set up the workspace for energizers and TW sensors, Energizers only or Taut wire only. Please note that you will require an FG7-Druid and a FG7-Taut wire if you want energizers and taut wire sensors on the same workspace.

SET UP THE WORKSPACE AND LOAD THE SITE PICTURE

To install a site image on the workspace a bitmap must be filed on the computer. Browse to the bitmap by clicking on the button with the three dots next to back ground image path window. After finding the bitmap double click the bitmap and the path to the bitmap will appear in the window.

Press OK and the bitmap will be displayed on the workspace. Now adjust the size of the site image by clicking on the Scale by Height or Scale by Width buttons on the toolbar.

CONNECT THE WORKSPACE TO THE FG7-DRUID IP ADDRESS

The workspace has to be connected to the IP address of the FG7-Druid, click on Alarm on the top bar and then on Add FG7 Wizard. Click on the workspace and a window will open and you can type in the IP address of the FG7, the default IP address is 10.0.0.20. Click on next and the FG7 Set Up window will open.

FG7-DRUID SET UP

The energizers and IO cards for the site can be connected to the IP address. Left click on the middle of the FG7 Set Up window and then right click. Select all unchecked and tick all the energizers used in the system to enable those energizers.

Click on the IO card tag and repeat the same process for the IO cards.

Click on finish to complete the process.

A picture of a Wizard and the IP address will be on the workspace. Below the IP address are three coloured squares which will indicate how many sectors are Good (green), In Alarm (red) or in Warning (orange).

You can change the size of the picture by clicking on it and then moving the mouse arrow to one of the black squares on the corners; right size it with the left button on the mouse. You will be able to drag the picture to any place on the workspace.

DRAWING THE ENERGIZER FENCE LINES

To draw the fence lines click on the symbol "\" for add line on the toolbar.

Click on the starting point of the first fence (zone) and drag it to where the end of the first fence is. After releasing the left mouse button click any where on the workspace and the fence line is in place.

If you want to draw around corners you can do this by using the Ctrl button on your key board. Start as before by clicking on the add line button and clicking on the start point of the fence, press the Ctrl button and keep it in, drag the line to the corner and release the left mouse button but keep the Ctrl button in. Left click the mouse again and now drag the line around the corner. You can make nine sections of line this way as long as you keep the Ctrl button in.

If you made a mistake with the fence line and want to delete it you can do this by clicking on the line and press the delete button on the keyboard.

Finish drawing all the fence lines and also draw a fence lines for the gates in the system.

ADDING TEXT

On the toolbar you can click on the adding text button then left click on the workspace and a window will open where you can write in the text. The size of the text can be changed on the toolbar; the window can be resized and dragged to any where on the workspace.

ASSIGNING THE FENCE LINES, TEXT AND SOUND

The fence lines now have to be assigned to the sector (zones) or gates of the energizers.

The assignment is done in the All list on the right side of your screen. Open all the items in the list by clicking on the + sign next to the IP address, this will show the energizers and IO cards in the system. Click on the + next to the energizers and it will show the sectors and gate of the energizers. Right click the sector and an Add button will pop up, left click the button and an Action Manager window will open. Select the fence you want to add to that sector (zone) of the energizer and press select. Repeat the process for all sectors and gates.

You can add the text in the same way, the text will flash and show alarm when the sector goes in alarm.

Sound is added also in the same way. If the sector goes into alarm or into warning a computer sound will be generated.

FG7-TAUT WIRE SET UP

To connect the workspace to the IP address of the FG7-Taut wire, click on Alarms on the top bar and then on TW sensor set up. A window will open and you can type in the IP address of the FG7-Taut wire. The default is 10.0.0.20 (if you also have an FG7-Druid connected to the workspace ensure that they do not have the same IP address). Click on the tick box "TW sensors enable" and tick for each sensor in the system its enable tick box.

Finally click on the green tick mark next to the IP address you previously entered, this will copy the IP address into "select TW system".

Click close to close the set up window.

DRAWING THE TAUT WIRE SECTORS

Several taut wire sensors can be assigned to a Sector. The Sector is graphically displayed on the workspace by a solid circle.

Click on the green circle (add TW sector) on the top tool bar and then click on the workspace where the sector should be positioned. Draw all the sectors in the system. You can add text to each sector in the same way as descripted for the energizers.

ASSIGNING THE TAUT WIRE SENSORS, TEXT AND SOUND

The sensors now have to be assigned to the Taut wire sectors, the assignment is done in the All list on the right hand side of the screen. If not already shown double click on the IP address of the FG7-Taut wire and all sectors and sensor will be shown.

Right click the respective sector and add the sensors for that sector one by one. You can also add an action like text or sound to the sector by clicking on add action after having right clicked on the respective sector.

Repeat for all the sectors in the system.

ALARM CONDITIONS

On the top bar under Service and then Settings you will find Alarm conditions you can prioritize your alarms, if you for example want Mains failure on an energizer to be a warning and not a critical alarm you can change the setting by double clicking on the alarm priority of the specific condition and selecting from the drop down menu. The color of the fence lines can be changed here by double clicking on the color of the alarm condition and selecting the required colour. When the energizer goes in the alarm condition the colour of the fence line indicates which alarm condition is present. It is also possible to enable or disable alarm conditions with the tick box provided here.

ALARM SENSOR MODE

If the system is connected to an alarm system and is not continuous monitored then the system can be under Service/Settings/Miscellaneous placed into Alarm Sensor Mode. In this mode the alarm pop ups do not appear and alarm indications on the screen like fence line colours will change back to normal when the alarm condition has cleared.

ACTION BUTTONS

Action buttons can be placed on the workspace by clicking the Add Action button on the toolbar and then clicking on the workspace. The button will appear on the workspace and the properties for the button will appear on the docking window on the right side of the screen. Click in properties next to Command under Value and a browsing button will appear, click the button and select the energizer you want the action button to be assigned to. Click then on the action you require.

If you require a global action for all the energizers then instead of clicking on the energizers click on the IP address to enable you to select the global commands. The name of the button can be changed in properties under the Btn Caption and the size of the text under Font.

By right clicking the button you can move the button to the correct place on the workspace.

The only action button available for the taut wire is "Clear Alarm". With this command you will be able to clear the buzzer inside the FG7-taut wire unit if the alarm has disappeared or is disabled.

This is a global command and can be set as above by clicking on the IP address of the FG7-Taut wire.

CREATING IO MAPS

To create an IO map you have to click on FG7 setup on the toolbar. If you want to map the relays of an IO card you have to be under the Energizers tab and if you want to map the inputs of the IO card you have to be under the IO Cards tab. Ensure that the IO cards and Energizers on the system are enabled.

Before starting the mapping of either energizer to IO card relays or IO card inputs to energizers a selection has to be made if the FG7 and the software application require the same mapping. The software application has a wider mapping range than the FG7, for example it can facilitate communication from one energizer to more than one IO card which the FG7 cannot do.

In principal you would like the same mapping on the FG7 as on the application in case the communication between the FG7 and the computer running the application fails. Please note that the mapping in the application takes preference over the mapping on the FG7. If communication fails between them then the FG7 falls back onto its own mapping.

If you want the mapping to be identical select the "with text file" tick box. If you do not require them to be the same do not tick the box.

After completing the mapping "with text file" a text file has to be loaded into the FG7 so that the mapping will be identical in the application and the FG7.

The etoimapplus.txt and/or the itoemap.txt file can be generated and exported by clicking on the light blue spreadsheet symbol situated between the "with text file" tick box and the IP address of the FG7.

The procedure to load the .txt file into the FG7 is documented in the FG7 installer manual.

MAPPING

If you want to map a relay on an IO card to a fault condition on an energizer then double click on the mapping picture for the energizer, click on the green + sign and select the IO card. Press OK and a window will open where you can select the fault condition and the relay which should operate when the fault condition occurs. If required the same relay can be triggered by different faults by ticking different faults in the same row. If you want different relays to come in for the same fault you can tick different relays in the same column.

If you want to map a fault condition on any of the energizers to a relay on an IO card then double click on the mapping picture for Global Energizers and this will then allow you to map in a similar way for all energizers.

For mapping an input on an IO card to switch a zone into low voltage mode or to switch a zone off on a specific energizer. Double click on the mapping picture for the IO card and then click on the green + sign, select the required energizer and press OK and when the window opens you can map an input to control a zone. It is again possible to tick more than one input to the same zone control or the same input to different zones or zone controls if no text file is required. If a text file is required for the FG7 the application will limit your selections to match the FG7 mapping.

The inputs 5 and 6 are reserved for Global Input commands On/OFF and HV/LV, if ticked the input signal will trigger all energizers.

There is also a tick box for reversing the input signal from closed to open but it can only be ticked under Services/Settings/Miscellaneous and this will only work if with no text file was selected.

Please note that if an input switches an energizer off it can be switched on again by opening the input but also with a command button in properties or with keypad or tag. The inputs on the IO card cannot be used as a lock out.

SENDING COMMANDS

Global, energizer or IO card commands can be given in properties under the All list in the dockable window on the right side of the screen.

Click on the IP address for a global command or click on the + sign next to the IP address to expand the tree view to see the energizers and IO cards. Click on an energizer, IO card or a sector to open the properties of the selected item. In properties a command is given by ticking or un-ticking an action.

SETTING TIMERS

In the program there are two timers which can activate any one of the relays on an IO card. Please ensure that relays are selected which are not mapped by energizer conditions. To set a timer go to Service on the top toolbar and click on timers. Double click on the required timer and the window for time setting will open.

Set the start time, the finish time and the days on which the timer has to operate. Do not forget to click Active before clicking on Select, this will open a window which will show the IO cards in the system. Select the required IO card by clicking on it and then press OK to return to the Timer settings. Now select which relay on the IO card you want to activate with the timer before pressing OK.

Check under Timers that the selected timer is now enabled.

USERS AND RIGHTS OF USERS

Under Service/User Administration you can add, edit or delete users by clicking on the +, pen or – symbol. Each user has a name and a password as well as a role.

There are only three roles possible: installer, administrator or operator. The rights of these roles are specified under the tab for rights of users.

If you are logged in as an Administrator and want to hand over to an operator you will have to close the program and then the operator can log in with his name and password.

SAVE THE WORKSPACE AND RESTART THE PROGRAM

To save the workspace for the first time go to file and then save as, you can save it anywhere on the computer but saving it in the file which contains the other files for the program might be the easiest. If you make changes after you saved it for the first time you can just click on save on the toolbar or save under file. The program will shut down after 4 hours if there is not a valid license. You can restart the program with the short cut (if made) on the Desktop or with the Nemtek (application) file in the original file.

LICENSE

If you want the program to operate longer than 4 hours then a license is required. The license is only valid for the computer on which the program is running and cannot be transferred to another computer.

Go to file on the top toolbar and click on license, your computer identifier will appear. You will be able to purchase the license by supplying the identifier to the person you bought the equipment from.

Nemtek will supply a file which must be placed in the original Nemtek Fence file (default in Program Files (x86)) which was downloaded for the program. In the Nemtek Fence file is a file NemtekLicense.cr and you replace the old NemtekLicense.cr with the new one supplied by Nemtek.

When you now open the program it should show at the bottom bar "License is valid".

LOGS

There are two logs which can be printed if so required. The User Action Log you will find on the top toolbar under Service/Show User Action Log. The log shows all the action different users take.

The Alarm log can be found on the bottom toolbar and will show alarms and changes in the system.

Logs older than 30 days will be cleared by default. This period can be changed on the top toolbar under Service/settings/Miscellaneous.

ENERGIZER PROPERTIES

There are two ways to see the properties of an energizer, the first is by opening the tree view under the All list on the right hand side of the screen and clicking on the required energizer. The information will be displayed under properties situated below the All list. The second method is to click on the lightning symbol at the start of a fence line on the screen. The property window for the energizer connected to that zone will pop up. In energizer properties you can see the output voltage of each zone as well as the different conditions of the energizer. It is also possible to switch zones off or place them in low voltage mode by using the tick boxes.

An alarm can be cleared by clicking under value next to Clear Alarm, a button will appear and by double clicking the button the alarm will be cleared.