

Startup Guide for SPC Intruder Alarm Panel
For Firmware version 3.6.6

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1. **Intro about SPC and this document:**

The SPC panel is a burglar alarm with a built-in webserver, and the possibility to do Access Control features. To get this Intruder Panel quick and easy from startup to Programming of zones, Areas etc. this guide will help you to a good start.

Before you get to the point where you can program the individual zones and Areas, you need to start up your panel, this is easily done by following below procedure.

2. **Starting up the panel:**

Before starting the panel for the first time, you need to connect a Keypad (SPCxxxx).

All below settings can be changed at a later stage in the programming menu.

Connect 230V and thereafter the Battery, push the yellow reset button in the top right corner of the mainboard, for at least 6 seconds, to do a factory default of the panel. The keypad will ask: “Factory Default” Answer Yes to this.

The display shows shortly after this:

- **Panel Type:** SPCxxxx K5400 (or 5300)
- **Current Panel Firmware loaded to the Panel:** y.y.y

Make a note of this information in Section 15 in this guide.

**Display shows:**

Now Press any key on the Keypad.

**Display shows:**

Choose Setup Language with arrows, and “SELECT”

(Depending on version other languages can be chosen, but we continue this guide in English)

**Display shows:**

Set the region of this panel for “EUROPE”
Push “SELECT”

**Display shows:**

Choose “COMMERCIAL”
Push “SELECT”

**Display shows:**

Choose “EN50131 GRADE 2”
Push “SELECT”

**Display shows:**

Now you can choose which languages to use in the panel after Startup. If no Languages is in the Panel it goes straight to next step (DATE)

Languages with *=Is the chosen languages (*Can be removed with #)
Push NEXT 3 times to get to DATE

**Display shows:**

Use the Numeric keys to type in the Date (DDMMYY)
Ex: 9 August 2013 then type 090813
Push “Enter” after this

**Display shows:**

Use the Numeric keys to type in the Time (tmmss)
Ex: 14:48 then type: 144800
Push “Enter” after this

**Display shows:**

Now it is possible to choose if Panel shall register itself to the SPC Connect Portal (ENBL=ENABLED / DSAB=DISABLED)
Change with the Arrow keys up/down
Display shows:
Here you can choose if Panel shall use DHCP (Automatic IP-address from the connected Ethernet Network)
Change with the Arrow keys up/down

Display now shows the assigned IP Address:
Push "Select" to get to next menu.

Display shows:
Now the panel searches for connected Modems inserted to the modem slots
If Any is inserted they will be showed here
Push the button 2 times to get to next menu.
(Use the one named ENTER in the earlier menu)

Display shows:
Now the X-bus is ready to be searched for already connected Hardware.
It is recommended to use manual addressing, so do not change this now.
Push "SELECT"

Display shows:
Depending how the the X-bus is physical connected it will show here.
Panel have automatically detected how it is connected SPUR/LOOP
Push "SELECT" and the scanning will commence.

Those Expanders and Zone that are connected correctly will be found, while the display blinks "PLEASE WAIT"

The Expanders that have been found will now be shown:
If the shown number of devices is correct according to the installed devices, push "NEXT"
If Not, then check your wiring, and Push "RESCAN"
(remember to check wiring AND Address switches)

Push Next after each addressing Segment:
KEYPAD = SPCxxx (Keypad) (Numbering range from 01 to 32)
EXP. = SPCExxx/SPCxxx (Expanders and Power Supply) (Numbering range from 01 to 64)
DC. = SPCxxx (Door Controller) (Numbering range from 01 to 32)
ZONES = Zoner/Indgangen (Numbering range from 01 to 512)

Display shows:
Push "NEXT" to finish the Startup menu.

Now the Panel is in "Full Engineer"-Mode (No Alarm Transmission and possible to do programming of the Panel)
Before you can exit "Full Engineer"-Mode all alerts needs to be cleared.
If the Alerts can’t be corrected physical (ex. Cabinet Tamper)
Then these Alerts need to be "Isolated":
Push "SELECT"
Arrow down to "ALERTS", and Push "SELECT"
Here you will see the Alerts that are active on the Panel (Tamper, Modern Faults etc.)
These can be isolated by using the #-Key
(remember to Deisolate before leaving the installation)
When all Alerts are isolated, the display will show: "No Alerts"

Push BACK 2 Times
And then Arrow until you find the Menu "SPC CONNECT"
Push "SELECT" and step to "Registration ID" Menu.
Push "SELECT" Now you see the 12 digit Registration ID
Write this ID in Section 15 of this manual. Registration ID is used at a later stage to register panel at www.spcconnect.com
Now you can leave the Full Engineer mode, by pushing 3 times “BACK”
You will be prompted to change the Engineer code from the default 1111 (or own desired PIN)
This is needed before you finally can leave the Engineer Mode.

Go to the menu “Change Engineer Code” with Arrow down.
And Change the Engineer PIN-code to 9999 (or own desired PIN)
Now you can Exit with “EXIT”

Login again with the new Engineer code to test 9999
Now we need to make a Manager-User on the Panel:
Now you are in “Soft Engineer” Mode
Push Arrow down 10 times, to the menu “USERS”
Push “SELECT”

Display shows:
Choose “ADD” to add a new User.
Push “SELECT”

Display Shows:
“User 1”
Push “SELECT” to Choose this user.

Display shows:
Now the name of the user can be changed to “Manager”
Push “Enter” when done naming.
Display shows:
Here you can choose what rights this user shall have.
Step down with the arrow keys to “Manager”, and Push “SELECT”
“Manager” is chosen because this user must give access for the technician later on in this guide.
There is need for atleast one User to have Manager Rights in the panel.

Display shows:
Type the PIN this User shall have (ex. 2222)
Push ENTER.

Display shows briefly:

This message is only showed for a few seconds, after that this is showed:
If you want to add even more users, you can do it now.
If no more users will be added now, Push BACK 2 times
Your are now done with the startup of the panel
And the Panel is still in “Soft Engineer Mode”
The Panel can now be programmed through the Menues from the Keypad.
See Section 21, for which menus; (“MenüStruktur Full Engineer”) 
Navigate using the Arrow Keys.

As default the Engineer PIN is: 1111 (Must be changed)
Start up of the Panel can also be found in the Manual, Section 13.3, You find that on the CD that came with the Panel in the folder: CDrom\Documentation

You are now ready to program the rest of the Panel in one of the following ways:

1. Via The Keypad
2. Via the built in WEB-Page (Use your Browser: https://192.168.1.100)
3. Via SPC-Pro (Free Programming software on the CD-Rom delivered with the Panel) (Either via IP or USB)
4. Via www.spcconnect.com, Create an Account and register the Panel with the Reg.ID and a Valid Username/PIN
(Ex. johan.Manager, Password:2222

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SPC_StartupGuide_EN_Ver6(fw.3.6.6)
3. **Install the Free software SPC Pro:**

   Install SPC Pro from the CD delivered with the Panel, or get latest version from your supplier.

   1. Put the CD in to the PC, and await the startup.
      The CD have an autostart feature which starts up this Browser Window:

      Choose in the menu "Tools":-> SPCS310.
      And then SPCS 310

      If autostart is not activated on your Computer, the installation files can be started directly from this Folder:
      X\Software\Tools\SPCS310\SPC_Pro_3.6.6\Installation\Package\setup.exe.

   2. Choose “Next” and Follow the instructions:

   3. Fill in the fields, and then “Next” again:

   4. Choose “Complete”, and then “Next”
      Follow now the instructions until the Software is completely installed.

      **The Program is now installed here:**
      C:\Siemens Switzerland Ltd\SPC Pro\ (former versions where installed here:C:\Program Files\Siemens Switzerland Ltd\SPC Pro)

      *Start the Software with: SPC Pro.exe*

      Or from the Windows Start menu:
4. **How to use the software SPC Pro**

Choose your Language when logging in.
Default Password for SPC Pro is: 1111

First we need to add a new Installation.
Click “Add New”
Now a Dialog box opens that needs basic information about the Panel it will connect to.
Fill in as minimum:
SPC-Pro ID (Choose your own, or follow a Company standard, but must be unique on this PQ)
Installation Name (Your Choice, name of the customer site)
Panel Type (4300/5300/6300)
Firmware version (Must match the version on the panel you will connect to, if in doubt push the yellow reset button at the top right corner of the mainboard, and it will show in the Keypad brief)
*Region (Often EU, But depends which regulations the panel must obey)
*Grade (Often “ENS0131 Grade 2” but again dependent of the regulations)
Panel IP Address (The IP address SPC-Pro will try to connect to for this Panel, either LAN or WAN, can be changed later on) (If WAN address then TCP Port 50000 needs to be forward through the router)
Panel Port (50000 is Standard, try not to change)
Password (Not often Changed, and is default “password” Former Versions used “Siemens” so if this panel is prior to FW version 3.6.6 change to this)
Push now OK, the Installation is now created and in the list in your Software

Now Click on the new installation in the list to open that configuration file
Connect to the panel with the Globe-Button in the Toolbar:

Push “Connect To Panel” (Mouse over the icons to see what they mean)
In the menu choose how you want to connect to the Panel.
Now We need to Get the Config File from the panel to the SPC Pro, so we can start programming the Zones and Areas etc:
Push “Get Config File From Panel” (Green Arrow Down in the toolbar)
Now the configuration is fetched from the Panel to SPC Pro, if any changes are made in the configuration in SPC Pro, those changes needs to be sent to the panel before they take effect:
Put the Panel into Full Engineer mode -> Push “Select Full Engineer Mode” in the toolbar.
And then “Send Config File To Panel” (Blue Arrow Up in the toolbar)
When the transfer is done, exit the Full Engineer mode by pushing the button “Select Soft Engineer”
Please Note as long as the panel is in Full Engineer mode, then all alarm transmission is turned off, and also no special programming will work, so keep the Full Engineer mode at a minimum.

5. **Important to think about when connecting:**

If SPC Pro or Engineer can’t log in from the Keypad, WEB-browser or Software, the reason can be Engineer Access is not allowed/activated due to regulations.
To activate Engineer Access, you need to log in with a Manager User (If this guide is followed the PIN is: 2222)
Log in
Go to “MENUS”, push “Enter”
Step down to “GRANT ACCESS”, push “Enter”
Step down to “ALLOW ENGINEER” You need a star next to it for this is activated
If the Star is missing, it can be activated with the button #
Now the Engineer PIN will have access.
Now the Keypad will show this text: “ENGINEER ENABLE”

To turn off the Engineer Access, the Star needs to be removed again with a Manager User.
6. **Upgrade of the Panels Firmware:**

The Firmware in the Panel can be upgraded if a new version has been released, adding new features and functions. (Remember to upgrade to the nearest version all the way up to the latest 2.1.3 > 3.1.0 > 3.2.5 > 3.4.x > 3.6.6, see the folder upgrade path)

1. Get the latest firmware from your supplier, or from the delivered CD (Typical: Installer CD'Software Firmware)
2. Save it somewhere on your PC.
3. Activate "Manufacturer Access" on the panel from the Keypad.
4. Login with Manager user PIN (2222)
5. Step to "MENUS" and select this
6. Step to "GRANT ACCESS" and select this
7. Step to "ALLOW MANUFACT" Activate it with the #Key
8. Open SPC Pro and go Online with the panel. Activate "Full Engineer" mode
9. In SPC Pro, go to the menu Advanced -> Choose "Firmware Upgrade"
10. Navigate to the where you placed the files in point 2 (Filename ex: SPCx_xfw)
11. In the menu showed, push "Upgrade Now"
12. When the transfer is done, the panel is upgraded to the new version.

Attention: Some features can have changes throughout the versions, the panel have been upgraded to.

Please read the "Releasenote" file following the Firmware files.

When you upgrade from a version prior to 3.2.x to a newer version, you need to make a new empty installation file in SPC Pro, for the Software to be able to communicate with the panels new firmware.

So make a new installation in SPC Pro and then logon to fetch the configuration-file from the panel.

After a Panel upgrade, the Peripherals on the X-Bus often also needs to get a new firmware in them, so they fit to communicate with the Panel, see here below the section 7.

7. **Upgrade of Peripherals (Expanders, Keypads and Modems):**

After upgrade of the panels Firmware, the peripherals also need to be upgraded to retain the new features.

1. Get the latest firmware from your supplier, or from the delivered CD (Typical: Installer CD'Software Firmware)
2. Save it somewhere on your PC.
3. Activate "Manufacturer Access" on the panel from the Keypad (if activated, go to Step 8)
4. Login with Manager user PIN (2222)
5. Step to "MENUS" and select this
6. Step to "GRANT ACCESS" and select this
7. Step to "ALLOW MANUFACT" Activate it with the #Key
8. Open SPC Pro and go Online with the panel, Activate "Full Engineer" mode
9. In SPC Pro, go to the menu Advanced -> Choose "Peripheral firmware Upgrade"
10. Choose "Send new peripheral firmware file to panel ..."
11. Navigate to the where you placed the files in point 2 (Filename ex: SPCx_xpfw)
12. In the menu showed, push "Send to Panel"
13. When the transfer is done, choose which units that shall receive the upgrade. Upgrade all units with older firmware's in them than the version just uploaded.

Remark: "Manufacturer Access" Disappears after the upgrade.
8. **Upgrade of Language file in the panel (Custom Language):**

Always use the corresponding language file for your Panel firmware (ex. SPC366.cln is for an SPC Panel with FW 3.6.6)

It got copied to the computer when installing SPC Pro, and can be found in the SPC Pro folder:/Translations or delivered with the firmware files.

1. Go to the menu: **SPC-Pro->Options->System Option** check the box “Allow custom language selection on supported panels”
2. Also adjust the “Custom Language Code page” for “1252 (Latin)”
3. Go Online with the Panel, and get the config file from the panel with SPC-Pro(Green arrow)
4. Activate “Full Engineer mode”
5. Go to the menu: **SPC-Pro->Advanced->Choose “Send New Language File To Panel”**
6. Check the box “Other (Import file)”
7. And push the button “Send New Language File to Panel”
8. Now choose the language file from this location(or the location from point2): C:\Siemens Switzerland Ltd\SPC Pro\Translations
9. Choose the language file for this version to be sent to the Panel, and double click it.
   (For Panel Firmware v.3.6.6 the file can be named: SPC_SwDkNoFi_36.cln for the Nordic Languages)
10. Now the Language file is sent to the panel.
11. Now close the window when it is Done.
12. Send now the config file to the panel “Blue arrow Up”
13. When its done, get the config file from the panel again with “Green arrow Down”
14. Now the Panel have received the new languages, and be selected from the menu: **SPC-PRO->Panel Settings->System Settings->Language**

Every user in the Panel can have its own language, also other than the panel itself.

If a user have a different language, then the Keypad and the WEB Page will be in that language when logged in.

Choose the language for a user from the menu: **SPC-PRO->General->Setup Users**

9. **Settings often subject to be changed:**

   **SPC-PRO: Panel Settings->System Settings->Options->Areas = Check this box ON (Activates more than one Area)**
   **SPC-PRO: Panel Settings->System Settings->Timers->Internal bells = 3 Min (Internal Siren Time)**
   **SPC-PRO: Panel Settings->System Settings->Timers->External bells = 3 Min (External Siren Time)**
   **SPC-PRO: Panel Settings->System Settings->Timers->Mains Delay = 30 Min (230VAC Delay)**
   **SPC-PRO: Panel Settings->System Settings->Timers->Dialler Delay = 0 (Then the Panel will transmit events immediately)**
   **SPC-PRO: Panel Settings->System Settings->Clock = Set the time of the Panel**
   **SPC-PRO: Panel Settings->System Settings->Language = Choose Language (If some is missing, please go to Section 8 in this Guide)**
   **SPC-PRO: Panel Settings->Areas->"Select an Area"->Other->Fob Unset Entry = Remove the Checked box (On All Areas)**
   **SPC-PRO: Communications->Network Settings->Ethernet = Check this is according to the network**
   **SPC-PRO: Communications->Network Settings->Ethernet->DNS Server = "The DNS of customer Network" (alt: use the GW address)**

Below lines in this section, is only panels with GSM/GPRS Modems connected:

   **SPC-PRO: Communications->Modems->Choose GSM->Modem Fault Timers = 300**
   **SPC-PRO: Communications->Modems->Choose GSM->"GPRS Settings" = Fill in APN delivered from SIM Provider.**
   **SPC-PRO: Communications->EDP Settings->Settings->Event Timeout = 10**
   **SPC-PRO: Communications->EDP Settings->Settings->Retry Count = 3**
   **SPC-PRO: Communications->EDP Settings->Settings->Dial Attempts = 3**
   **SPC-PRO: Communications->EDP Settings->Settings->Dial Delay = 10**
   **SPC-PRO: Communications->EDP Settings->Settings->Dial Lockout = 30**

10. **FACTORY DEFAULT/CODE RESET/SOFT RESET:**

    If Needed, a factory default of the panel can be done by pushing the yellow reset button on the mainboard(sw3), top right Corner
    Keep it pushed for 6 seconds, Release it, and the Keypad begins to Beep and the text “FACTORY DEFAULT?” is showed.

    Choose “YES” and the panel have been defaulted back to factory settings, and all setup and users are lost!

    Choose “NO” and nothing is deleted just yet, but you have now the possibility to only delete the user PINS.
    If you choose “NO” to “Delete USER PINS”, Nothing is deleted

    Also a “Soft Reset” can be done, with a short push on the reset button (sw3) in the top right corner.
    This can be used if panel misbehaves according to the programming.

**CAUTION:** if the panel has an Engineer Lock PIN enabled, then it is not possible to default the panel or default the users without this lock PIN.

There is no warning that the lock PIN is enabled, it will only prompt for the lock PIN when accepting the option to default the panel or users.

If the PIN is not known, then the panel PCB must be replaced as there is no way to recover from this.
11. Get SPC Panel online on the Internet to be used with Portal and APP:

If needed the panel can be accessed from all over the world for you convenience, either by APP(Android/iOS) or by the SPC Portal Web page, used for logging in and setting parameters, either as a User or an Engineer.

Register the SPC Panel on www.spcconnect.com:
(Registration ID can be found from the Keypad Menus->SPC Connect->Registration ID)

First you need a User Login for the Portal(Portal User).
Go to the web page: www.spcconnect.com
Push the button "Register"

Fill in the Fields and remember your details, like Username, Password and answers to your security questions.
Once registered on the Portal, you must activate the account from the Email sent to you.

Now log into www.spcconnect.com
(Username is Case sensitive)

Now the SPC Panel needs to be registered to the Portal User:

Fill in the fields as shown:
Use the Registration ID for the Panel (Unique for every Panel) And a User locally on the Panel (e.g., Manager[2222]) (User must have "WEB Access" on his "User Profile")

OBS: Registration ID can be found on either 3 ways:
1. From the Keypad in the menu "SPC Connect"
2. Web Page in the Panel (Communications->FlexC)
3. SPC-Pro->Communications->Refresh Registration ID (Must be Online with the Panel)

If you succeed in the registration of the Panel to your Portal User, now the Panel will be in your "Panel List".

The SPC Panel is now Online on the Internet AND the APP, Then Proceed to Section 12.

If SPC do NOT Register itself, then the panel might not have access to the Internet
- Check if SPC Panel have Ethernet link led active on the mainboard (led: D248D30)
- Check the Network setup in the SPC (IP-Address Subnet, Gateway AND DNS Server) (Maybe try DHCP)
- If the Panel have been online earlier at some point, then the encryption key need to be aligned, Reset it in the Panel AND at the www.spcconnect.com

In rare occasions the network can have tcp Ports shut down by the IT administrator, make sure that TCP Port 52000 is opened for outgoing traffic A way of checking this port is open in the network/router, you can by a Computer go to this website www.canon.eu检测和 port 52000

NOTICE! You have a maximum of 10 attempts to register your panel, after the 10 attempt your spcconnect account will be logged out for 1 hour.
12. **Log on to the SPC-WEB page:**

In the "LIST OF PANELS" Push "Connect" on your SPC Panel (Yellow Globe):

Now you end up on a login page, which is your SPC Panels internally Webserver. Type your Panel username in the "User Name"-field. (Username is Case sensitive)

And in the "Password"-field your PIN-Code! (Or Webpassword, if this have been activated for this user)

*Remark: SPC Panel User must have "WEB Access" on his "User Profile"

It is also possible to logon as Engineer (To configure the SPC Panel), with this SPC Panel user:

User Name: Engineer

Password: 1111T (If not already changed from default)

13. **Log on with the APP SPC-CONNECT:**

Download the SPC CONNECT APP from APP-store or Google-Play. [Get the APP here](http://www.vanderbilt.com)

When installed on your mobile device, start the APP with the Icon

First time you start the APP you will see this login screen:

Fill in with your **Portal Username** (created in section 11 in this Guide)
And Password for **Portal Username**
Check the box "Remember Password, if you want the APP to login automatically next time.

Push "Log in" button, now you are online with your SPC Panel.
From here you can now control: Areas/set/UnsetDoors(Unlock/Lock) and Zones(Inhibit or Isolate) Depending on your rights.
More SPC Panels can be added to you Portal User either from [www.spccom](http://www.spccom) or directly from the APP, in the menu: Menu->Account->Administrate->Add Panel

Administration of when to receive Emails from the panel, when certain incidents occur.t.ex. Alarm or Unsetting, can be done from [www.spccom](http://www.spccom)
14. Learning Access control card/tags And Intrusion Paces to the System:
There is a difference in between the card number read by the Keypad and the card number read by the Access-control readers (this is to be as versatile in the choice of Cards and Tags as possible).
So that's why you need to learn the number to both to the Intrusion part of the system and also to the Access-control part of the system.
To learn the card/tag-number do the following on the keypad:
Log in as a Manager user (2222)
Learn the card to the Intrusion part:
Go to Menues > Users > Edit > "Username" > PACE > Edit > Learn Now show the card to the Keypads reader.
Learn the card to Access-control part:
Go to Menues > Users > Edit > "Username" > Access Control > Edit > Learn Now show the card to the chosen Card reader.

15. My Notes:

<table>
<thead>
<tr>
<th>Panel Type</th>
<th>4000, 5000, 6000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>SPC-ID / Panel S/N</td>
<td></td>
</tr>
<tr>
<td>Account number</td>
<td></td>
</tr>
<tr>
<td>Engineer Lock/PIN</td>
<td>1111</td>
</tr>
<tr>
<td>Engineer PIN</td>
<td>1111/9999</td>
</tr>
<tr>
<td>Password for SPC-Pro</td>
<td>&quot;siemens&quot; or &quot;password&quot;</td>
</tr>
<tr>
<td>Registration ID (SPCconnect)</td>
<td></td>
</tr>
<tr>
<td>Portal Username</td>
<td></td>
</tr>
<tr>
<td>SPC Panel Username</td>
<td></td>
</tr>
</tbody>
</table>

16. SMS Commands

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGA.ON</td>
<td>TEKN.TIL</td>
</tr>
<tr>
<td>ENGA.OFF</td>
<td>TEKN.FRA</td>
</tr>
<tr>
<td>MANA.ON</td>
<td>PROD.TIL</td>
</tr>
<tr>
<td>MANA.OFF</td>
<td>PROD.FRA</td>
</tr>
<tr>
<td>O1.ON</td>
<td>U1.TIL</td>
</tr>
<tr>
<td>O1.OFF</td>
<td>U1.FRA</td>
</tr>
<tr>
<td>FSE</td>
<td>TIL</td>
</tr>
<tr>
<td>Q7.ON</td>
<td>U7.TIL</td>
</tr>
</tbody>
</table>

SPC Panel can be controlled with SMS if equipped GSM-module. Command below is sent with PIN code typed first (****) e.g. below: en

**Note:**
- ENGA.ON TEKN.TIL = Allow Engineer Access
- ENGA.OFF TEKN.FRA = Removes Engineer Access
- MANA.ON PROD.TIL = Allow Manufacturer Access
- MANA.OFF PROD.FRA = Removes Manufacturer Access
- O1.ON U1.TIL = Activate Mapping gate X
- O1.OFF U1.FRA = Deactivate Mapping gate X
- FSET TILK = Sets Areas (Examples in English and Danish)
- Q7.ON U7.TIL = Activates Mapping Gate 7
17. **Explanation for abbreviations:**

Panel = The SPC Alarm Controller  
Engineer = Technician/Installer username  
Soft Engineer = Engineer is logged in but all alarms and functions is normal.  
Full Engineer = No Alarms is sent as default when in full engineer mode, is used for configuring the panel, shows hidden menues.  
SPCCXXX = Keypad to control the System  
SPEXXX = Expander for connecting Sensors and Sirens (Inputs and Outputs)  
SPCPXXX = Power supply  
SPCAXXX = Door Controller for Access Control Readers  
Zones = Inputs/Sensors etc.  
Area = Containing Zones, making it easier to Set/Unset the system  
ARC = "Alarm Receiver Center" Transmission to Alarm Receiver via PSTN or GSM with SIA (Analog)  
EDP = "Enhanced Data Protocol" Transmission to Alarm Receiver via IP or GPRS  
FlexC = Alarm protocol, Transmission to Alarm Receiver via IP, GPRS, GSM or GPRS, easy and fast setup  
ATS = "Alarm Transmission System" The receiver of FlexC (Contains up to 10 ATPs)  
ATP = "Alarm Terminal Path" Transmission path to the Alarm receiver(ATS).  
Spur = Xbus structure, 2 busses, one on 1a1b and one on 2a2b, and no return to the panel.  
Loop = Xbus structure, 1 bus that goes out from the panel on 1a1b, and returns on bus 2a2b (only available in SPC 5xxc og 6xxx)  
KeyFOB = Wireless remote control  
PACE = Personal keyfob to be used on the Keypads (not on Access Control Doors)  
Access Control card number = Tag or Card that is being used on Access Control Doors (not on Keypads)  
OBS: Both PACE and Access Control Card Number can be same Tag, Fob or Card, but is often not the same way on a Card reader and Keypads, this is due to being versatile in the choosing of Access Control Card readers.

**Filenames:**  
SPCfw = Firmware file for the SPC panel Mainboard/Controller  
SPCpfw = Firmware for the peripherals on the X-Bus and Moderns (Expanders, Keypads and Moderns)  
spc.cln = Language file to be used via WEB (Contains all language, and follows always the fw and pfw, when a new version is released)  
SPC_SwDKNoFi_36.cln = Language file to be used via SPC-PRO Software (Contains only the Nordic Languages and is delivered with SPC PRO)

18. **Standard PINs, Ports, Links etc.:**

Engineer/Technician via Keypad: 1111 (if 5-8 digits PIN, leading zeros to be applied = 001111)  
Engineer/Technician login via WEB: User ID= Engineer  
Password= 1111 (or Engineer PIN above)  
Engineer lock PIN = 1111  
Password to be used for panels when connecting with SPC-PRO and SPC Safe for panels booted as firmware before 3.6= "siemens", and Panels booted as 3.6 or newer= "password" (avoid changing this unless security demands this)  
SPC-PRO login password = 1111  
Access to panel via WEB: HTTPS://192.168.1.100 Locally via LAN (This is the default IP and can be changed, login via keypad as engineer and go to communication->Ethernet->IP-Address)  
Registration ID: Used for registering the Panel to the SPCConnect portal user, can be found in the SPC-CONNECT menu on the Keypad  
SPC Connect User ID: Username on www.spcconnect.com  
SPC Connect Password: Password on www.spcconnect.com

**Name of APP: SPC CONNECT**  
Web page about SPC: http://www.spc-intruder-detection.com/ssp-spc/  
Username via WEB = "Username" (Panel Username)  
Password via WEB= "UserPIN" (Keypad PIN or WEBPassword)  
Username via APP = "SPC Connect User ID"  
Password via APP= "SPC Connect User Password"  
REMARK *Panel user must have the Right "Web Access" in his User profile.

**Default network ports used by the Panel:**  
FlexC to SPC Connect portal, and to Alarm Receiver Station = 52000 (Outgoing)  
WEB = 443 (SSL)  
EDP to Alarm Receiver Station = 50000 TCP (Outgoing)  
SPC PRO = 50000 TCP (Outgoing and Ingoing)
19. Layout of the Panel Mainboard:

<table>
<thead>
<tr>
<th>LED</th>
<th>On</th>
<th>Off</th>
<th>Blinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Wireless Status</td>
<td>No Function</td>
<td>No Wireless being Received</td>
<td>Wireless Data being received</td>
</tr>
<tr>
<td>2 - Battery Status</td>
<td>Battery is below deep discharge (&lt;10.9V)</td>
<td>Battery OK</td>
<td>No Function</td>
</tr>
<tr>
<td>3 - Mains Supply</td>
<td>Mains Failure</td>
<td>Mains OK</td>
<td>No Function</td>
</tr>
<tr>
<td>4 - X-Bus Status</td>
<td>In Loop Configuration</td>
<td>In Spur Configuration</td>
<td>Detects End offline Expander or Break in wiring</td>
</tr>
<tr>
<td>5 - System Fault</td>
<td>Mainboard Failure</td>
<td>No Failure on Mainboard</td>
<td>No Function</td>
</tr>
<tr>
<td>6 - Writing to Flash</td>
<td>Writing to Flash Memory</td>
<td>Not Writing to Flash</td>
<td>No Function</td>
</tr>
<tr>
<td>7 - System Heartbeat</td>
<td>No Function</td>
<td>No Function</td>
<td>System is Normal</td>
</tr>
</tbody>
</table>

20. Menutree User Menu:
## 22. Technical Overview:

<table>
<thead>
<tr>
<th>From Version 3.6 eq op:</th>
<th>4xxx</th>
<th>5xxx</th>
<th>6xxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Users on site</td>
<td>100</td>
<td>500</td>
<td>2,500</td>
</tr>
<tr>
<td>User Profiles</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Profiles prUser</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>PACE for Keypad</td>
<td>32</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Access Control Cards for Doors</td>
<td>100</td>
<td>500</td>
<td>2,500</td>
</tr>
<tr>
<td>SMS IDs</td>
<td>32</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>WEB Passwords</td>
<td>32</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Wireless Remote Control FOBs</td>
<td>32</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Personal Duress devices MDT</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>WPA (Not personal)</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Language</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Log events</td>
<td>1000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmission</th>
<th>4xxx</th>
<th>5xxx</th>
<th>6xxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP Receivers</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>ATS (FlexC Receivers)</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>ATP (FlexC ATS transmissionpaths)</td>
<td>4</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Command Profiles (FlexC)</td>
<td>5</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Event profiles (FlexC)</td>
<td>5</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Event Exceptions (FlexC)</td>
<td>10</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Areas</th>
<th>4xxx</th>
<th>5xxx</th>
<th>6xxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zones</td>
<td>32</td>
<td>128</td>
<td>512</td>
</tr>
<tr>
<td>Wireless Zones (Take away Wired Zones)</td>
<td>32</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Outputs</td>
<td>32</td>
<td>128</td>
<td>512</td>
</tr>
<tr>
<td>Doors/In&amp;Out</td>
<td>4/2</td>
<td>16/8</td>
<td>64/32</td>
</tr>
<tr>
<td>Verifikationzones</td>
<td>4</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>MappingGates</td>
<td>4</td>
<td>512</td>
<td>512</td>
</tr>
<tr>
<td>Triggers</td>
<td>8</td>
<td>1024</td>
<td>1024</td>
</tr>
<tr>
<td>Calendars</td>
<td>4</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Exception dates/Holidays/Vacation</td>
<td>64</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>X-Bus</td>
<td>4xxx</td>
<td>5xxx</td>
<td>6xxx</td>
</tr>
<tr>
<td>Xbus structure, Spur/Ring</td>
<td>1/0</td>
<td>2/1</td>
<td>2/1</td>
</tr>
<tr>
<td>Keypads</td>
<td>4</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Doorexpanders</td>
<td>2</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>I/O Expanders</td>
<td>5</td>
<td>16</td>
<td>64</td>
</tr>
<tr>
<td>Total number of units on X-Bus</td>
<td>11</td>
<td>48</td>
<td>128</td>
</tr>
<tr>
<td>Door/DoubleDoor/Nr.of expanders:</td>
<td>4/2/2</td>
<td>16/8/8</td>
<td>64/32/32</td>
</tr>
</tbody>
</table>