

Quick GUIDE

i-on Downloader

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INTRODUCTION

i-on Downloader is a Windows PC program that lets you connect remotely to i-on40 control units. Once connected you can monitor the status of the control unit and change its programming. You can connect to the control unit:

Directly with a USB (Universal Serial Bus) cable from the back of the PC to a socket on the control unit.

Over the telephone network, using either an i-sd02 module for the wired telephone network or a GSM02 module for the mobile telephone network.

Over TCP/IP, using the 8844, 8750 or Emizon modules.

This booklet gives a short introduction to the i-on Downloader program itself. If you want to know more details about programming i-on40 control units then consult the i-on40 Programming Reference Guide.

INSTALLATION

Obtaining i-on Downloader

You can obtain the i-onDownloader software from the Cooper Security web site www.coopersecurity.co.uk. You must be a Touchpoint member to obtain i-on Downloader.

Requirements

To run i-on Downloader you will need the following minimum specification PC:

30MB of free disk space (to allow for accounts data as well as the program itself), Windows XP or Vista, 512Mb RAM, 32 bit processor.

The i-on Downloader program relies on Microsoft's .Net Framework 2.0. If you have Windows Update running on your PC then you will probably have this installed already. You can check to see if .NET Framework is installed by looking in Control Panel - Add or Remove Programs in Windows.

If you do not have .NET Framework installed then you can obtain it directly from Microsoft's website.

If you intend to connect to alarm systems over the telephone network you will need a modem connected to your PC. Not all modems provide reliable connections. Cooper Security Ltd recommend modems with V.21 or V.22 transmission standards, for example the MultiTech MT5600ZDXe (already recommended for the 958 Downloader) or the U.S. Robotics 5631A.

You can connect to an i-on40 using its built-in USB Mini-B socket. You will need a suitable cable for your PC, with a Mini-B plug at one end.

If you are already using a 958 <Downloader> then you must install i-on Downloader in a separate folder. By default the installation software places i-on Downloader in C:\Program Files\Cooper\i-on Downloader.

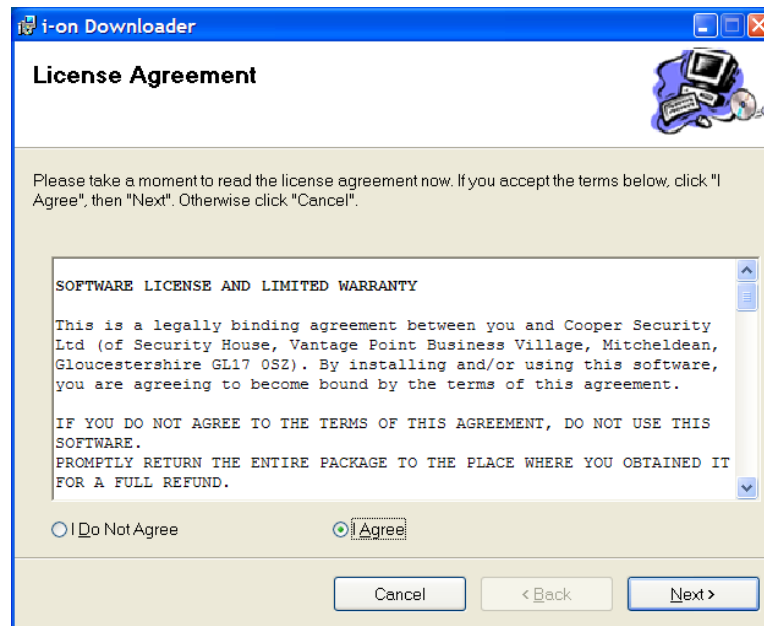
Installing i-on Downloader

The i-on Downloader software is contained within an installation file that has the extension ".msi".

Download the i-on Downloader msi file from the i-on Downloader web page, and save it in a convenient folder (the Desktop will do).

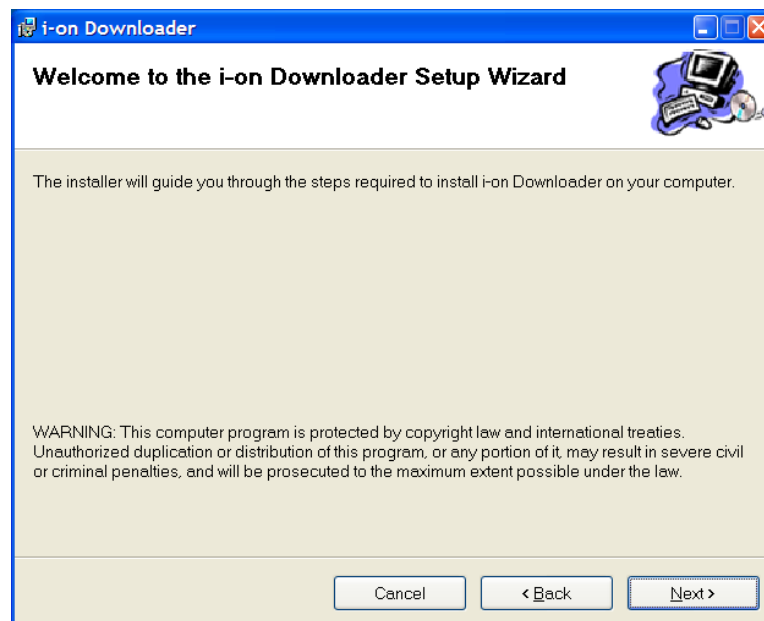
You must have Administrator privileges on your PC in order to install i-on Downloader.

Run the .msi file just as you would any other program on Windows, for example double click on its icon. The display shows:



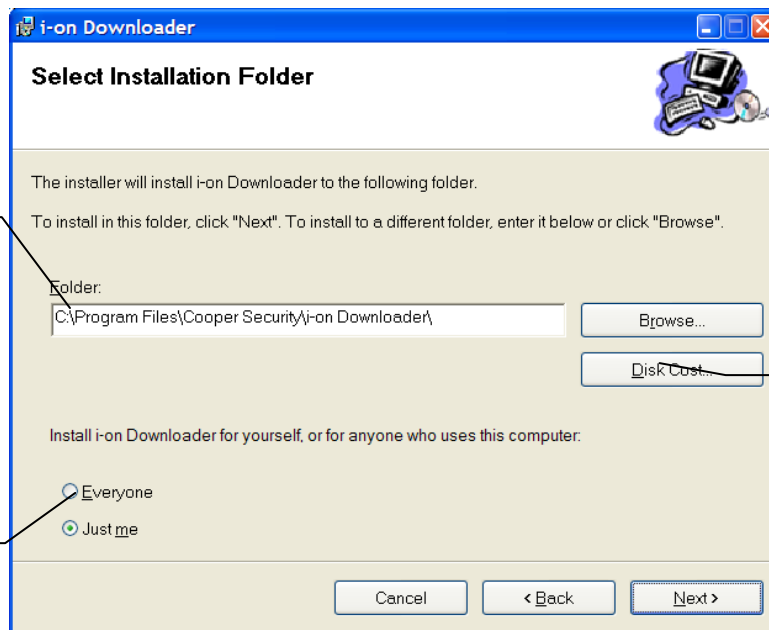
Note the Software License and Limited Warrantee. This text area describes the terms and conditions under which Cooper Security license you to use the software.

If you agree with the terms in the Software License and Limited Warrantee then click "I Agree" followed by "Next". The display shows:



If you wish to abandon the installation at any point click "Cancel". To return to an earlier stage of the process click "Back".

Click "Next". The display shows a dialog box that allows you to choose where the program files will be stored on disk.



Type the path to the folder here OR click "Browse".

Select this if you want to use i-on Downloader in a non-Admin Windows account.

Click to see which drives have free space.

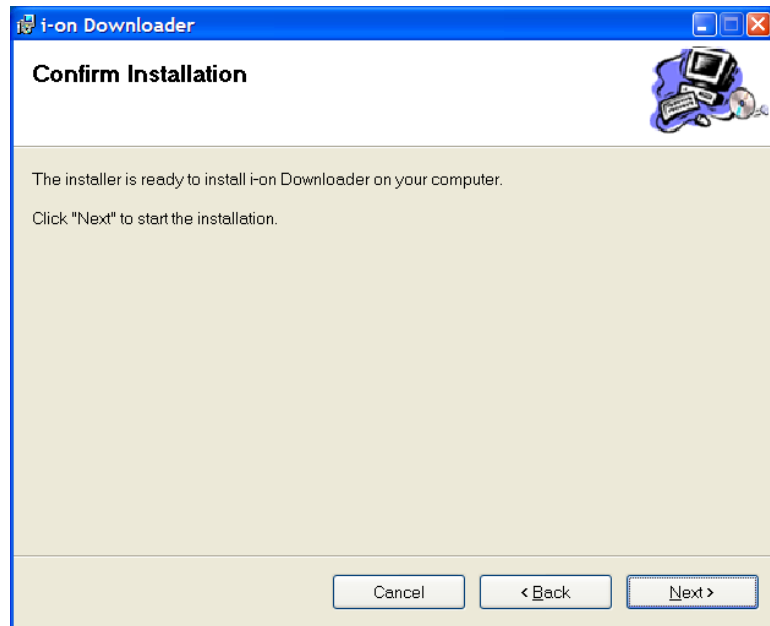
If you wish to change the folders where i-on Downloader stores its program files then either type in the pathname to the folder you want to store the i-on Downloader software, or click the Browse button and select the folder.

Note: i-on Downloader stores its panel and operator data files in C:\Document and Settings\All Users\Application Data\Cooper Security\i-on Downloader. See page 13 if you wish to change this location.

Click "Everyone" if you want any user on the PC to be able to use the i-on Downloader (you should also click this button if you normally operate from a non-Admin Windows account).

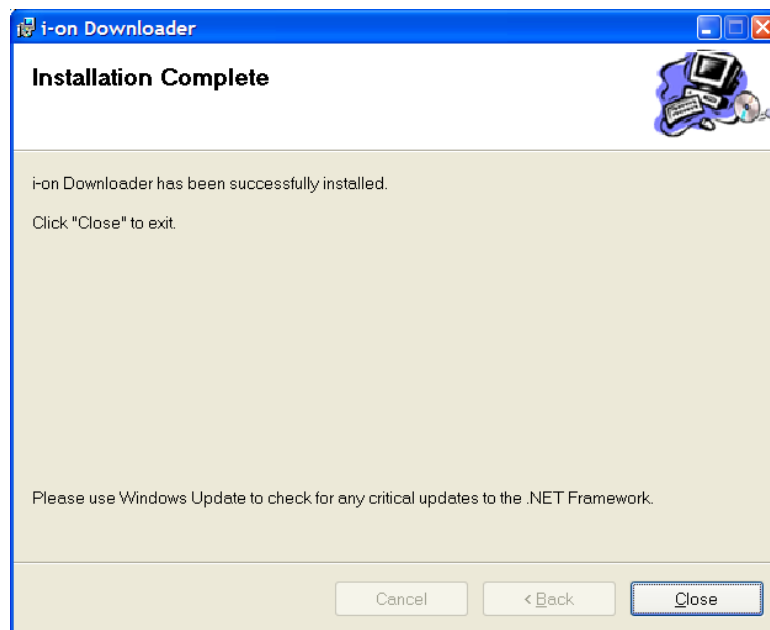
Click "Disk Cost" to see which of your drives have enough space to hold the i-on Downloader. Don't forget to allow some extra space for panel account data.

Click "Next". The display shows the following dialogue box:



This dialogue gives you a final chance to abandon the installation or go back to an earlier stage. If you wish to proceed then click “Next”.

The installation software starts installing i-on Downloader in the selected location and shows a progress bar. When installation is finished the screen shows:



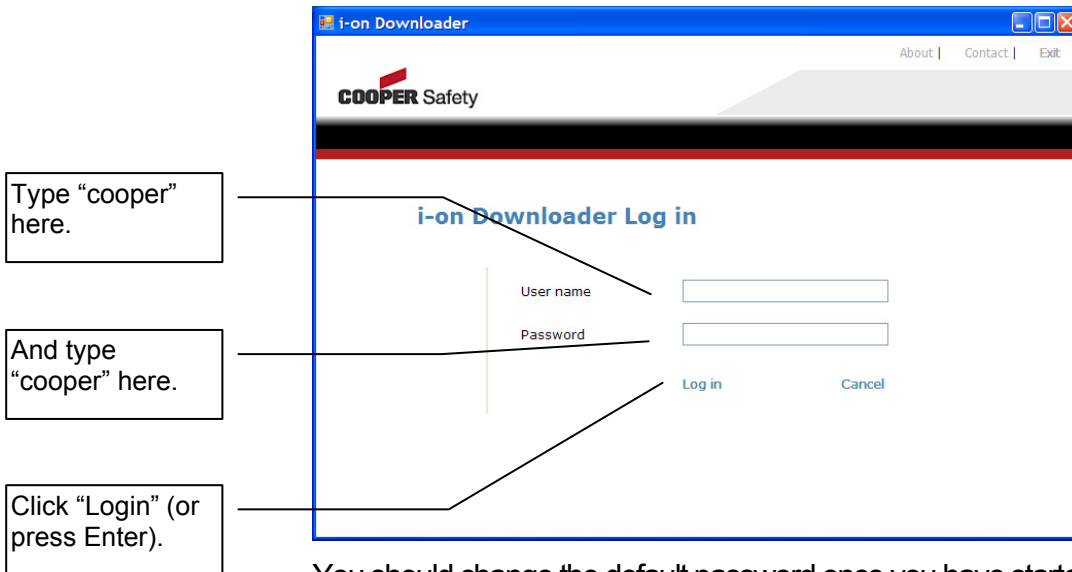
Click “Close”. i-on Downloader is now installed.

STARTING UP FOR THE FIRST TIME

To start i-on Downloader once it is installed, click the Windows Start button and select *All Programs-Cooper Security-i-on Downloader*.

Default Password

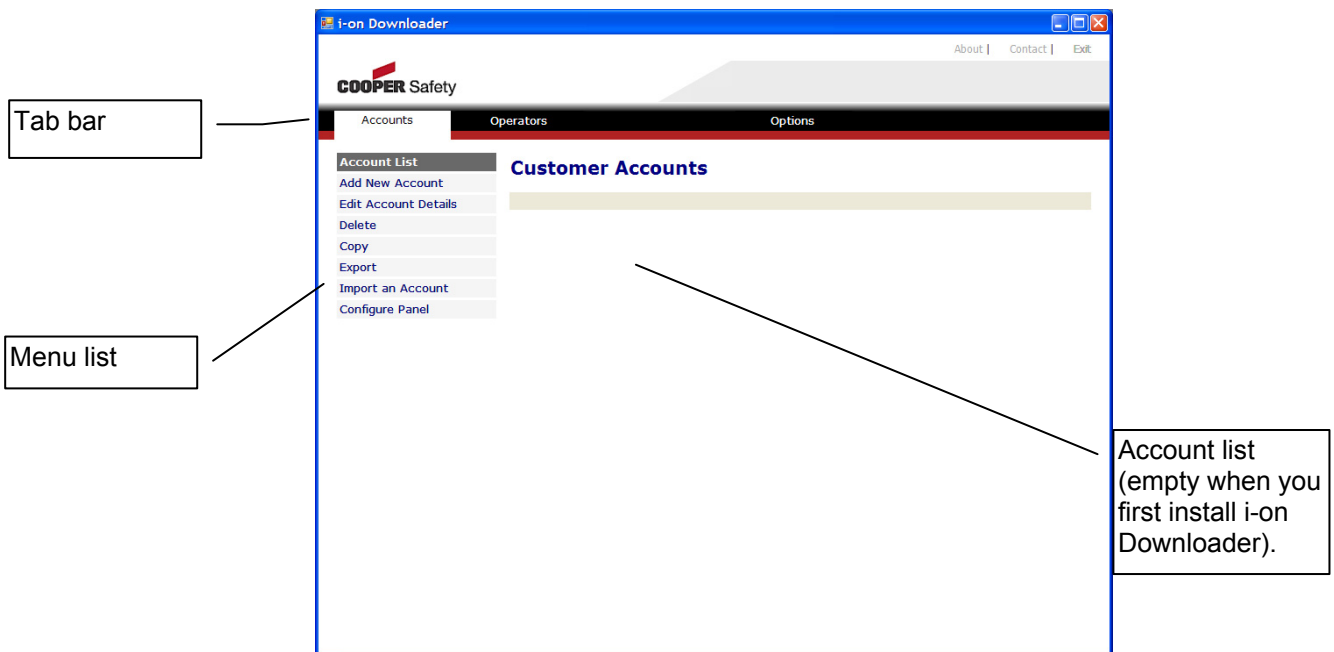
When you start i-on Downloader you must key in a username and password. By default the username is **“cooper”** and the password is **“cooper”** (lowercase for both). Next, click **“Login”** to start the program.



You should change the default password once you have started the program. (see page 9).

Opening Display

The i-on Downloader opening screen shows the following:



The Tab bar shows the main categories of actions you can take at this point:

Accounts is dedicated to creating and programming control units belonging to individual customers. Each customer has their own account, and each account corresponds to one control unit.

Operators is dedicated to setting up and managing operators of the i-on Downloader itself.

Options allows you to set up how i-on Downloader uses the communications ports on the PC and where i-on Downloader stores its files.

Using The Accounts Tab

The menu items in the Accounts tab have the following actions:

Account List	This option displays all the accounts set up by i-on Downloader.
Add New Account	Click here to start creating a new account.
Edit Account Details	Click to edit the details of a selected account.
Delete	Delete a selected account.
Copy	Copy the details of a selected account to a new account.
Export	Use this command to export the details and control unit profile for a particular account. i-on Downloader saves the information in a single file.
Import an Account	Import an account, either from one that has been exported earlier from i-on Downloader, or from a profile exported by the i-on40 web server.
Configure Panel	Click here to start changing the profile of a control unit belonging to a selected account.

Setting Up Operators

If you click the Operators tab you will see a list of the operators that currently have user names and passwords on the i-on Downloader. When you first install i-on Downloader there are two operators provided by default: "cooper" and "scantronic". Both of these operators have default passwords ("cooper" and "scantronic" respectively). Cooper Security recommend that you change the default passwords as soon as you have installed i-on Downloader.

To change the details for an operator highlight the row you want to edit, and click "Edit Operator". (You can also just double click on a row.) See page 12 for more details.

The menu items in the Operator's tab have the following actions:

Add New Operator	Click here to start creating a new operator.
Edit Operator	Click to edit the details of a selected operator. There are two more commands over the top of the operator's list:
Edit	Click to edit the details of a selected operator.
Delete	Click here to delete a selected operator.

What do I do next?

If you are using i-on Downloader for the first time, then here is a brief outline of the tasks you can perform:

Task	Hint	See page
Configure Downloader to work with your modem.	Select "Options" on the tab bar.	13
Set up i-on Downloader users.	Select "Operators" on the tab bar and then "Add New Operator".	12
Set up an account for each customer's control unit.	Select the Accounts tab and then "Add New Account".	12
Program an existing control unit.	Select the account in the Accounts List and then click "Configure Panel".	19
Connect to an alarm system control unit.	Select the account in the Accounts List, click "Configure Panel" and then click "Connect".	21
Upload a profile from the alarm system control unit into your PC.	Connect to the alarms system control unit and then click "Upload".	28
Change a profile by editing the account.	Click the appropriate option from the programming menu on the left of the window.	19
Download the changed profile from your PC to an alarm system control unit.	Connect to the alarm system control unit and then click "Download".	28
Monitor the activity on an alarm system control unit in real time.	Connect to the alarm system control unit and select "System Activity" from the tab bar.	28
Save and retrieve customer accounts.	Use the appropriate menu options in the Accounts List.	19

Leaving i-on Downloader

To leave i-on Downloader at any time click “Exit” at the top right hand corner of the i-on Downloader window.

If you wish to leave i-on Downloader running but prevent unauthorised use (for example while you leave your desk) then click “Log out” at the top of the i-on Downloader window.

When you want to use Downloader again login with a valid i-on Downloader user account.

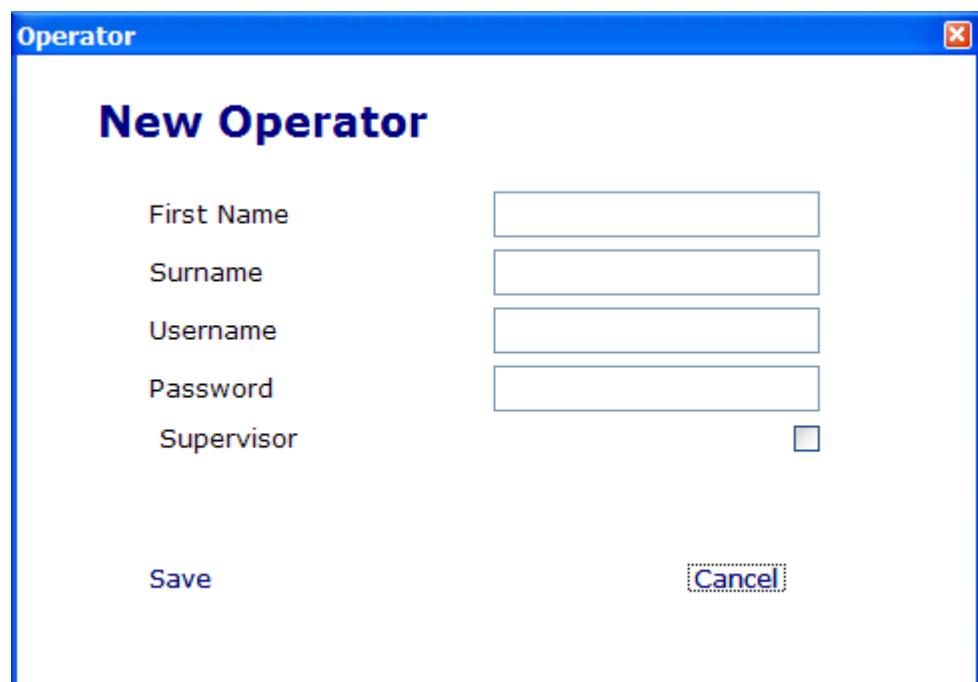
Setting Up Downloader

Setting Up Operators

Downloader recognises two types of operator: supervisors and “ordinary” operators.

A supervisor has full access to all the facilities of the Downloader program, including the ability to create or delete other operators. An ordinary operator cannot create or delete other operators, but can use all the other facilities within the program.

To add details of new operators select the Operators tab and click on “Add New Operator” in the left hand menu. Downloader displays the New Operator window.



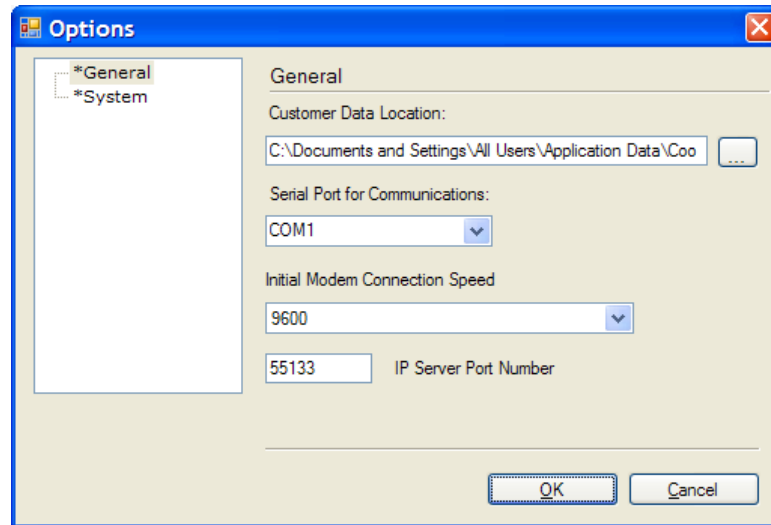
The screenshot shows a window titled "Operator" with a close button in the top right corner. The main heading is "New Operator". There are five input fields: "First Name", "Surname", "Username", "Password", and "Supervisor". The "Supervisor" field is a checkbox. At the bottom left is a "Save" button and at the bottom right is a "Cancel" button.

- | | |
|------------|--|
| First Name | You may enter any text in this box. |
| Surname | You may enter any text in this box. |
| Username | Key in the user name that an operator must enter to log in to i-on Downloader. |
| Password | You must enter a password in this box.
The password can be up to 25 characters long, and is case sensitive (“H” is treated as a different letter to “h”). |
| Supervisor | Tick this box if the operator is a supervisor. |

Click “Save” to save the details you have just keyed in. The username, first name and surname appear in the Operator Accounts list. i-on Downloader never displays the text of the password.

Setting up Comms

To set up the way in which Downloader uses the modem click "Options" on the tab bar. Downloader displays the Options dialog:

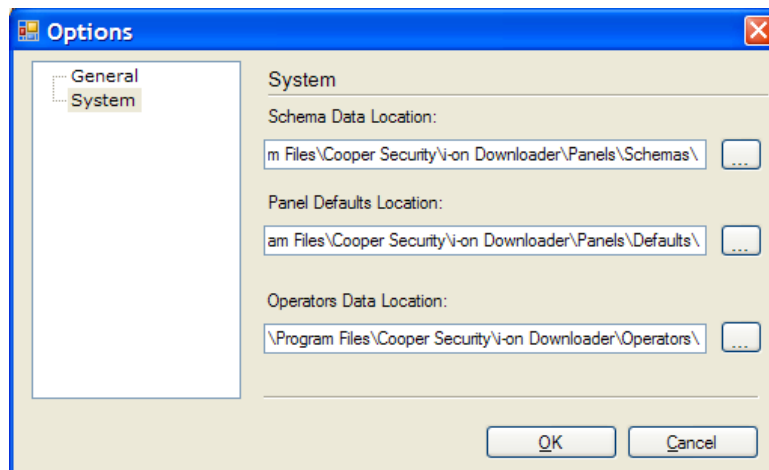


Customer Data Location	Use this field to specify which folder contains all the account records (see Where Downloader Stores Its Files on page 13).
Serial Port	Use this selection box to choose the PC serial port that you have connected to the modem.
Initial Modem Connection Speed	Use this field to select the speed at which the modem communicates with the control unit while attempting to set up a connection. Change this value if you are having problems connecting.
IP Server Port Number	This is the port number that the i-on Downloader is "listening" on for incoming TCP/IP packets from the control unit. See page 23.

Where Downloader Stores Its Files

To find out where the account files are stored and (if necessary) change the folder, click "Options" in the tab bar and select General. The Customer Data Location field shows the current location of the account files. Click the browse button at the end of the Customer Data Location field to specify a new folder. i-on Downloader generates individual files for each account. The filename contains the Account Name (see page 16).

There are three other types of file that are important to the correct working of the i-on Downloader. If you wish to change their location then click "Options" on the tab bar and then select the "System" entry on the resulting Options dialog box. The System screen allows you to select which folders on your PC should hold these files.



Schema Data Location This folder holds a set of templates for the information presented by i-on Downloader. The Schema Data files ensure that the raw data from the panel is presented in the correct format for the i-on Downloader.

Panel Defaults Location This folder holds a separate file for each set of defaults that a new panel configuration may start with.

Operators Data Location This folder holds a separate file for each operator you have added to i-on Downloader. If there is no file for an operator then they will not be able to log on.

If you wish several PCs to share the same account data over a local network, then on each i-on Downloader installation use the Options - General dialog to locate the shared account data.

In addition, make sure that each installation is also sharing the same Schema Data Location and Panel Defaults Location.

If you wish to control who can log in to Downloader from each PC on a network then make the Operators Data Location local to each PC (or give them separate folders on a central server), and ensure that only the correct operator files are available to each PC.

Backups

To make sure that you do not lose essential data in the event of a disaster, make regular backups of the folders containing your account and operator files. You can recover all the other files in the i-on Downloader installation from the installation file you obtained from the Cooper Security web site.

Setting up Accounts

i-on Downloader can store the details of many individual alarm system installations. The details of a particular installation are called an "account", and the details of how that account's alarm system is programmed are called a "profile". i-on Downloader stores both profile and account data in the same physical file, one per control unit.

Account List

To set up an account for an alarm system control unit open the Accounts tab.

Downloader displays the Customer Accounts screen with existing accounts listed in main area.

Note that you change the headings under which accounts are listed by right clicking on the headings of the list. Downloader presents you with a list of other headings that you display or hide. The information displayed under the headings comes from the details you fill in for each account (see "Adding a New Account" below).



Adding a New Account

Click “Add New Account”. i-on Downloader displays the Panel screen of the new account:

This is the first of four screens, each one designed to hold part of the information you may wish to store about an account. You can get to any of the four screens by selecting its title from the list on the left of the window. Alternatively you can click “Next” or “Back” in the bar underneath “New Account”.

The Panel Screen

This screen holds information that allows you to connect to an individual panel. You must fill in the following fields:

Account Name This field holds a unique identifier for the control unit. You must enter exactly the same string in the control unit through the *Communications - Downloading - Account - Name* option in the Installer Menu.

i-on Downloader displays the name you enter here Account List.

Panel Select the type of control unit here. Make sure that the i-on40 is set to the same type (Partition or Part Set).

Version Select the control unit software version from this drop down field.

Panel Serial Number Type in a string of eight digits. Key in exactly the same string of digits into the control unit through the *Communications - Downloading - Account - Serial Number* option of the Installer Menu.

Every time i-on Downloader connects to the control unit the control unit checks that the serial number it has matches the serial number stored in i-on Downloader. You can use the same serial

Panel Phone Number	number for every control unit if you wish. Type in the telephone number of the line connected to the alarm system control unit. i-on Downloader uses this number when you try and connect over the telephone network.
Network Address	Type in the IP address assigned to the control unit. This IP address will be used by any plug on module that is communicating with i-on Downloader (see page 24). <i>Note: 1) Do not use leading zeroes when keying-in IP addresses. If you do then Windows will interpret the number as an octal number. 2) This is NOT the IP address of the i-on40's built-in web server.</i>
Network Port Number	Type in the Port Number that you wish the control unit to listen on for TCP/IP packets from the i-on Downloader. (This is the port number that any plug on IP module is going to use, see page 24.)
1st dial duration	Enter a time in seconds between 10 and 99. i-on Downloader uses this value when calling a control unit with Answer on One Ring.
Account Serial Number	This field is for your own use, in case you wish to store a separate identifying number for the account.
Comments	Type any extra information you wish to record in this field. (See the other screens of account information, they may already provide a field for the information you wish to store.)

When you have completed this screen click on "Next" for the Installer Screen and subsequent pages.

The Installer Screen

This screen is designed to hold information about the company that installed the alarm system.

To select the installation date click on the downward pointing arrow at the end of the field.

Note that the Service Schedule shows a number representing the service interval. You can use this field to suit your own organisation.

All the other fields hold whatever text you wish to enter.

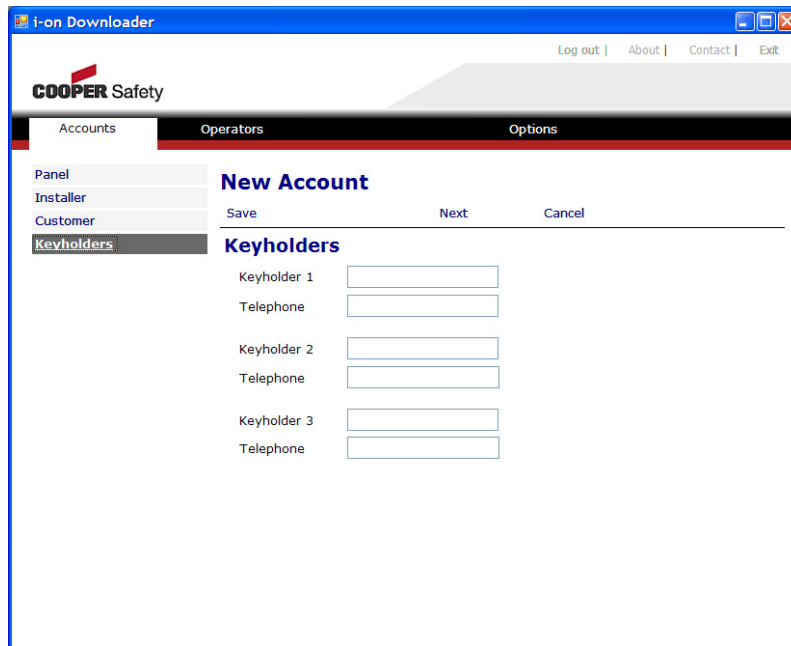
The Customer Screen

This screen is designed to hold information about the customer whose premises the alarm system is installed on.

Each of the fields can hold text and/or numbers.

The Keyholders Screen

This screen is designed to hold contact details for keyholders that will respond for this account. The screen provides space for a maximum of three keyholders.



Each of the fields can hold text and numbers.

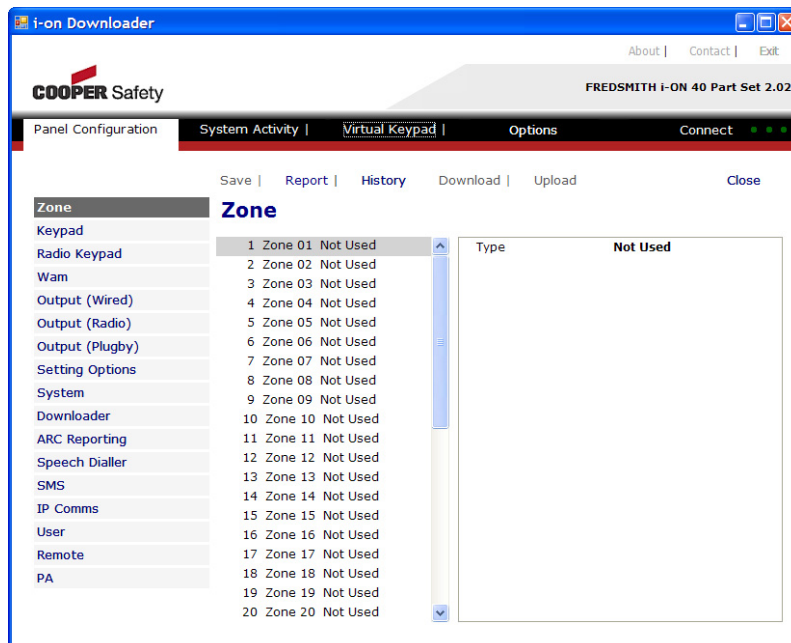
Saving an Account

Once you have entered all the account information you must click “Save” to ensure that it is recorded correctly on the PC.

If you wish to leave an account without saving any changes click “Cancel”.

Configuring a Panel

To change the profile of a panel select the account in the Account List and click Configure Panel. i-on Downloader displays the following screen:



The menu list on the left contains the same options that appear in the Installer Menu, organised in the same order as they would appear on the keypad.

For more details on programming the i-on40 control unit consult the i-on40 Programming Reference Guide.

Note: Once you have made changes to a profile click Save to store those changes on your PC.

Reports

If you wish to generate a printed report of the panel profile then click on Report just under the tab bar. i-on Downloader generates a separate file, in .html format, and opens your Web browser to display it. This file contains a detailed listing of the complete profile for the account.

To print the report use the Print command under the File menu in your browser.

If you want to save the report in a file use the File-Save As command in your browser.

History

i-on Downloader keeps a record of the changes you have made to an account. To see this record click History.

i-on Downloader writes a list of the changes to a separate .html file, and displays this file in your Web browser.

Use the browser's Print command (under the File menu) to print the History, or use the File menu's Save As command to save the History in a separate file.

Connecting Downloader to a Control Unit

There are several ways that i-on Downloader can connect to a control unit, but they fall into two main methods: remote and local. A remote connection takes place over a communications network, depending on what type of communications module is fitted to the control unit. A local connection uses a cable directly from the PC to the USB port on the control unit.

For any type of connection the i-on Downloader and the control unit must identify themselves to each other and authenticate themselves. They do this by using two pieces of information that you program into both the control unit and the i-on Downloader: the Account Name and the Panel Serial Number. These are both simple strings of characters and digits.

When i-on Downloader tries to connect to the control unit it sends the Account Name. If this matches the Account Name stored in the control unit then the control unit sends the Panel Serial Number. If the Panel Serial Number from the control unit matches that stored in i-on Downloader's account, then the connection is established. If neither of the two items match then the connection is broken.

To store Account Name and Panel Serial Number in the control unit, enter Installer mode. For the Account name use *Communications-Downloading-Account-Name*. For the Panel Serial Number use: *Communications - Downloading - Account - Serial Number*

To store the Account Name and Serial Number in i-on Downloader use the Panel screen of the control unit's account - see page 16.

Remote Connection

There are two main ways of connecting to an i-on40 control unit remotely: either through the telephone network (PSTN Public Switched Telephone Network, or mobile) or by TCP/IP (the Internet).

Telephone Network Connection

i-on Downloader can connect to the control unit over the telephone network using one of the following methods:

Unattended mode	i-on Downloader can call in at any time when the panel is unset, and not in Installer Mode.
Secure Callback	i-on Downloader makes a short call to the control unit, tells it which of two telephone numbers to use to call back, and then drops the line. The control unit then starts a call to i-on Downloader using the specified telephone number.
User Callout	The master user initiates a call to i-on Downloader from the control unit keypad.

For telephone network connections you may also wish to program the number of rings that the control unit will wait until answering a call. Use control unit Installer programming menu *Communications–Downloading–Rings to Answer*.

If the control unit is sharing a telephone line with other equipment (for example a Fax or an answering machine, you can adjust the number of rings to answer so that the control unit will always wait until the other devices have attempted to answer and then hung up.

Unattended Mode

To use unattended mode program the control unit through the Installer Menu as *Communications–Downloading–Access Mode–Unattended*.

To use Unattended connection:

1. Open the Account List, select the appropriate account and click Configure Panel.

The Panel Configuration screen opens.

2. Click Connect on the tab bar and select “Dial Panel”.

The PC activates the modem, and if the modem speaker is audible you should hear the normal PSTN progress tones followed by the modem negotiation tones when the far end answers.

Using Secure Callback

Secure Callback provides more security, can be used when the panel is set or unset, and does not need the help of someone at the far end. To use secure callback program the control unit through the Installer Menu as *Communications–Downloading–Access Mode–Secure Callback*.

You must also program two callback numbers into the control unit, under Installer Menu *Communications–Downloading–Phone Book*.

Note: Do not use Secure Callback the first time you try to connect to a newly installed alarm system.

To use Secure Callback connection:

1. Open the Account List, select the appropriate account and click Configure Panel.

The Panel Configuration screen opens.

2. Click Connect on the tab bar and select “Callback on Telephone Number 1” or “Callback on Telephone Number 2” as needed.

The PC activates the modem. If the modem speaker is audible you should hear the normal PSTN progress tones followed by the modem negotiation tones when the far end answers.

After a short delay the far end will hang up and the modem will drop the telephone line. Within a few seconds the control unit will then start a call to i-on Downloader on the telephone number you specified in step 2.

User Callout from Control Unit

To use Callout mode program the control unit Installer menu as *Communications–Downloading–Access Mode–Call out only*.

You must also program two callback numbers into the control unit, under Installer Menu *Communications–Downloading–Phone Book*.

To use Callout;

1. Phone the contact given for the alarm system installation and ask to speak to the Master User.
2. Instruct the Master User on how to make a callout as follows:
 - a) Press Menu and key in their access code (or present their tag).
 - b) Press the down arrow button until the bottom line of the display shows “System Config” and then press ✓.
 - c) Press the down arrow button until the bottom line of the display shows “Call Downloader” and then press ✓.
 - d) Press the down arrow button until the bottom line of the display shows the appropriate telephone number. (The display shows the name you have given to the number, not the number itself.) Press ✓.

When the user clicks ✓ in step d) the control unit starts to call the selected number. At first the keypad display will show “Awaiting Connection”. Once the call has connected successfully, the keypad goes back to showing the User menu. At the PC i-on Downloader should show the word “Connected” above the tab bar when the connection is established.

Panel Alarm While Connected

If the alarm system goes into alarm while i-on Downloader is connected to it through the PSTN then the i-on Downloader will display an error message and disconnect from the control unit.

TCP/IP Connection

If you have installed one of the TCP/IP modules on the i-on40 (for example the 8750) then you can connect i-on Downloader to the control unit using TCP/IP. Note that your PC must be connected to a TCP/IP network as well, either by Ethernet cable or wireless access point.

Note - Ethernet Cabling: If you attempt to make a direct connection from your PC to the 8750 using an Ethernet cable, then be aware that the 8750 module is designed to accept either “straight” or “cross-over” Ethernet cables. However, the network card in some older PCs may only be able to operate with “cross-over” cables.

There are two different ways of using an IP connection: either the i-on Downloader starts the connection to the control unit, or the control unit calls out to the i-on Downloader.

For both types of connection you need to set up the following:

At the control unit:

Program:

The 8750 module on the i-on40 with its own IP address. You can give the 8750 module a static IP address, or you can make the 8750 module get its own address automatically using DHCP.

The 8750 module with an IP Port Number. (There is a default port number provide by the control unit when you install the module.)

The IP address being used by the PC running i-on Downloader. (There are slots for two Downloader IP addresses, if necessary you can fill both slots with the same number.)

How? Use Installer Menu:

Communications–IP Network (Own)–Module Ethernet–IP Address.

Leave the field blank to make the 8750 get its own address. You can see the address by using *About–Comms–Module.*

Communications–IP Network (Own)–Module Ethernet–Port Number.

Unless you have a need to change the port number, leave it at the default.

Communications–Downloading–IP Network–IP Address–IP Address 1 or –IP Address 2.

At the PC:

Give your PC or laptop a static IP address.

On i-on Downloader program the control unit's account with:
a) The IP address of the 8750 module.
b) The IP Port Number that the 8750 module is listening on.

Ensure that i-on Downloader IP server is enabled.

How?

See Appendix A.

Accounts tab, Edit Account, Panel:
a) Fill the Network Address field with the IP address of the 8750.
b) Fill the Network Port Number with the IP Port Number programmed in the 8750

Click Options and make sure that the Disable IP Server Connection check box is clear.

Note: Do NOT use leading zeroes when keying-in IP addresses on Downloader. If you do then Windows will interpret the number as an octal number.

If you are going to start an IP call from the i-on Downloader then you will need to carry out the following additional steps:

At the Control Unit set the access type to “Unattended” (use *Communications–Downloading–Access Mode* and select “Unattended”).

There should be nothing else to do at i-on Downloader, provided you have set up IP address and Port Number of the 8750 in the Accounts-Panel page.

If you want a user at the control unit to start an IP Connection then you will need to carry out the following additional steps:

At the Control Unit set the access type to “Call out only” (use *Communications–Downloading–Access Mode* and select “Call out only”). Also program the control unit with the IP Port Number that i-on Downloader is listening on (use *Communications–Downloading–IP Network–Port Number–IP Address 1 or –IP Address 2*).

At the PC check the port that i-on Downloader listens on for incoming connections (click Options, look at the port number to the IP Server Port Number field). Make sure this number is the same as the one you entered in the control unit using *Communications–Downloading–IP Network–Port Number–IP Address 1 or –IP Address 2*.

The diagram on page 26 summarises these steps.

Operation

To make an IP connection from the i-on Downloader, select the account of the control unit and click “Configure Panel”. When the panel profile is open, click “Connect” on the tab bar.

While the connection to the control unit is open i-on Downloader displays the word “Connected” above the right hand end of the tab bar. To close the connection click Disconnect.

If you want a user to start an IP call to the i-on Downloader, contact a Master user for the control unit and instruct them to:

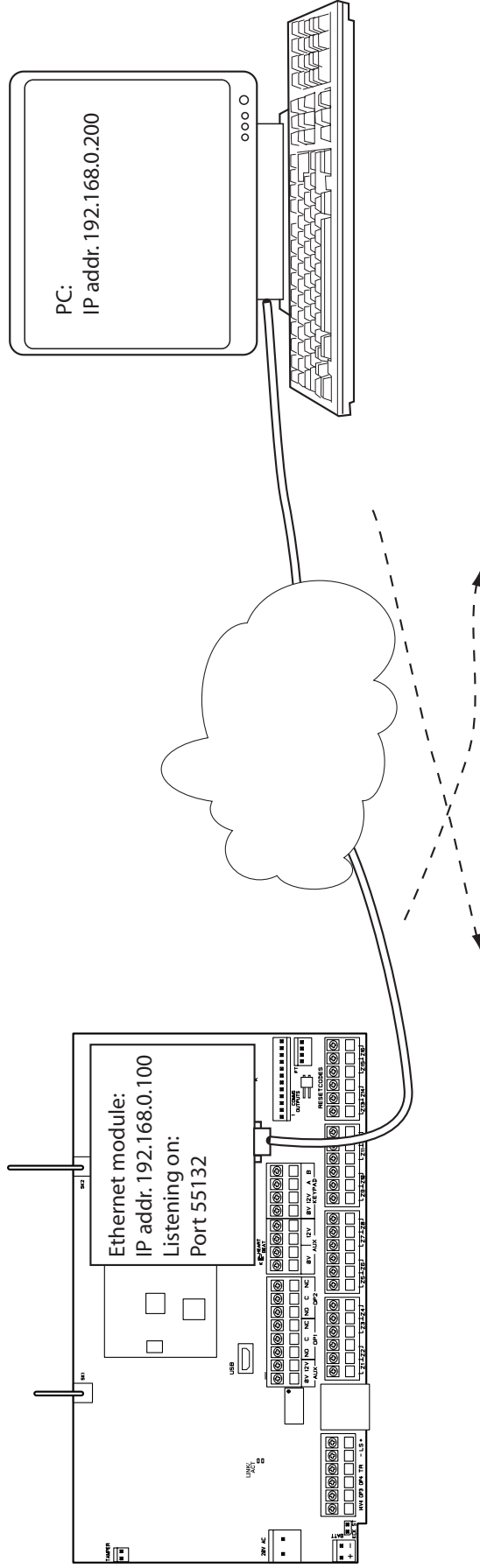
1. Press Menu and key in their access code (or present their tag).
2. Scroll down to System Config and press ✓.
3. Scroll down to Call Downloader and press ✓.
4. Select either IP Address 1 or IP Address 2 and press ✓.

Note: The installer can give each IP Address a text name, so the user may not see them as “IP Address 1 (or 2)” on the keypad.

The keypad will show “Awaiting Connection” followed by a series of messages showing the progress of the connection.

Set up the control unit's own IP address:
Installer Menu
Communications-IP Network (Own)-Module Ethernet-IP Address: 192.168.0.100
Communications-IP Network (Own)-Module Ethernet-Port Number: 55132

Set up the PCs own IP address:
Windows
Local Area Connection-Properties-Internet Protocol-Properties:
92.168.0.200



Tell the control unit what the IP address of the i-on Downloader is:
Installer Menu
Communications-Downloading-IP Network-IP Address 1(2): 192.168.0.200

Tell i-on Downloader what the IP address of the control unit is:
Accounts-Edit Accounts-Panel-Network Address: 192.168.0.100
Accounts-Edit Accounts-Panel-Network Port Number: 55132

For Unattended operation:
Installer Menu
Communications-Downloading-Access Mode: Unattended

Downloader already knows which port to use, from the control unit's account information.

For Call out only operation:
Installer Menu
Communications-Downloading-Access Mode: Call out only
Communications-Downloading-IP Network-Port Number-IP Address 1(2): 55133

Tell Downloader on which port to listen for Call Out from Control unit:
Options - IP Server Port Number: 55133

Local Connection (USB)

The i-on40 provides a USB Mini-B socket. You will need a suitable cable for your PC, with a Mini-B plug at one end.

Note: i-on Downloader will not work correctly when two or more control units are connected to the PC/Laptop by USB.

To start a local connection to an i-on40:

1. Plug the USB cable into your PC and start i-on Downloader.
2. Log in to i-on Downloader and select the account corresponding to the control unit you wish to connect to. Click “Configure Panel”.
3. Make sure the control unit is unset and in Installer Menu (to avoid starting a tamper alarm).
4. Remove the control unit lid.
5. Enter the *Communications–Downloading menu–Connection Type* menu.
6. Scroll down until the bottom line of the displays shows “Local” and then press ✓.

The keypad display shows “Awaiting Connection”.

7. Plug in the USB cable to the control unit USB Mini-B socket.
8. At the PC, click “Connect” on the tab bar and select “USB Connection” from the drop-down dialog.

Once connection is established, the word “Connect” on the tab bar changes to “Disconnect”.

The keypad display shows “Connected to Downloader”.

i-on Downloader is now connected to the control unit.

While i-on Downloader is Connected

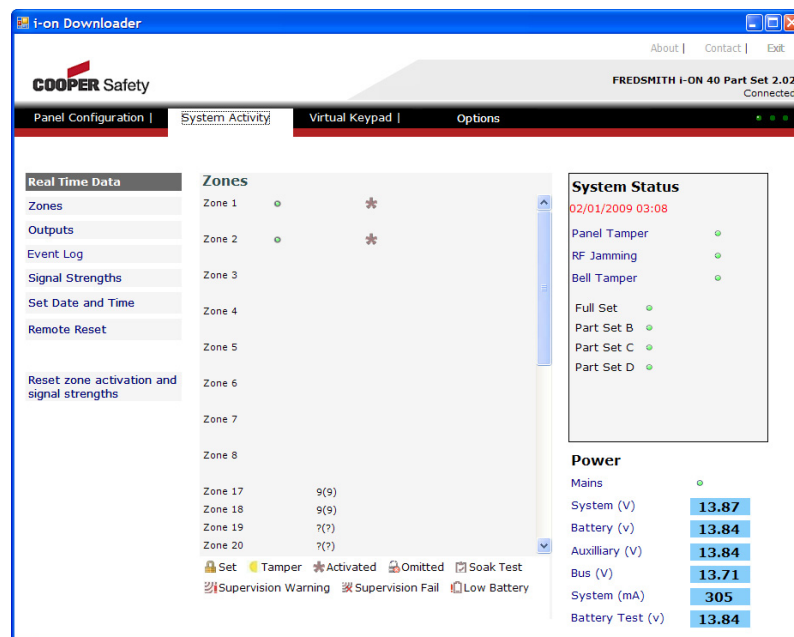
Up and Downloading Profiles

Once i-on Downloader is connected to a control unit click “Upload” to upload the profile from the control unit into i-on Downloader. It may take a few minutes for a complete upload. When i-on Downloader has completed uploading the profile you can proceed to change it (see page 19).

Once you have finished making changes to the profile you must save the profile to your PC before trying to Download the new profile to the control unit. If you do not save the profile first then your changes may not affect the control unit.

Monitoring System Activity

To see the state of the alarm system while i-on Downloader is connected to the control unit select "System Activity" from the tab bar. i-on Downloader displays the Real Time Data screen:



The left hand column provide four menu options that let you view: Zones, Outputs, the Event Log, or Signal Strengths. In addition, you can:

Click “Set Date and Time” to set the control unit clock to the same date and time as your PC.

Click Remote Reset to carry out a remote reset of the connected control unit.

The centre column shows the current state of the part of the system you select from the left hand menu options.

The right hand column shows the overall state of the system, including figures for voltage and current consumptions under the heading “Power”.

System Status

The System Status panel at the right of the screen shows the status of the system tampers: open (yellow) or closed (green). Note the RF Jamming icon: If the icon is red then the control unit has detected a jamming signal that has lasted for more than five minutes, or was present when Downloader connected to the control unit. (When connected through the USB port the keypads must be in standby mode (showing time and date) for the i-on Downloader to respond to jamming reports from the control unit.)

Downloader also shows the current time and date on the control unit clock within the System Status panel. If this differs significantly from the time and date on the PC clock then Downloader highlights the figures in red. To synchronise the control unit time and date with the PC time and date click "Set Date and Time" over on the left hand side of the screen.

Partitions (or Full Set/Part Set)

The the middle of the System Status box shows you the current set/unset status of the control unit. allows you to set, unset or reset the alarm system when you are connected by Callback On or Callback Any.

Note that Downloader may take a few seconds (typically 10) to show that the status has changed.

Power

The Power area shows you the health of the alarm system's power supply. The area shows:

Mains	The icon shows green when mains power is present, and red when mains is absent.
System Voltage	This figure shows the voltage of the control unit's power supply output. (See <i>Note 1.</i>)
Battery Voltage	The figure shows the voltage at the battery terminals while it is connected to the control unit and supply current to, or being recharged by the control unit. (See <i>Note 2.</i>)
Auxilliary Voltage	This figure shows the voltage at the control unit of 12V Aux pins (resolution +/- 100mV).
Bus Voltage	This figure shows the voltage at the control unit between the 12V and 0V of the keypad bus.
System mA	This figure shows the total current being supplied by the control unit's power supply. (See <i>Note 1.</i>)

Battery Test Voltage This figure shows the voltage present at the battery terminals when they are (electrically) disconnected from the control unit and supplying no current. The control unit carries out a battery test every five minutes.

Note:








1. There are no test points available on the control unit pcb for you to measure this quantity with a separate meter.
2. If you disconnect the battery (but not the mains) while i-on Downloader is connected to the control unit then it may a few seconds before the Battery Voltage drops. This is because the control unit does takes up to 10 seconds to report a missing battery.

Zones




When you select the “Zones” menu option the central column lists the status of individual zones.

Note that for a control unit using 4-wire CC wiring, zones one to eight are shown with separate entries for their tampers. The radio zones start at zone 17, and there are no zones numbered 9 to 16.

The state of each zone is shown by an icon:

-  Closed. The zone is in use, but not activated (alarm contacts closed).
-  Open. The zone contacts are open, the detector is active.
-  The zone is armed. This icon will also appear next to 24 hour type zones, for example fire alarm zones.
-  Activated. The zone has been activated within the last seven days.
-  Omitted. Shows those zones that have been omitted. Note that you can still activate an omitted zone and i-on Downloader will display its status.
-  In soak test. Appears when a zone has the "Soak Test" attribute set.
-  Tampered. The tamper contacts have been opened.

For any radio zones the display shows:

-  Battery low
-  Supervision Warning. RF zone has NOT reported for more than 20 minutes.
-  Supervision Fail. RF zone has NOT reported for more than two hours.
- n Displays a number between 1 and 9 giving the received signal strength of each radio detector. Higher numbers indicate a stronger signal.
- (n) Shows the lowest signal strength detected so far for each radio detector.

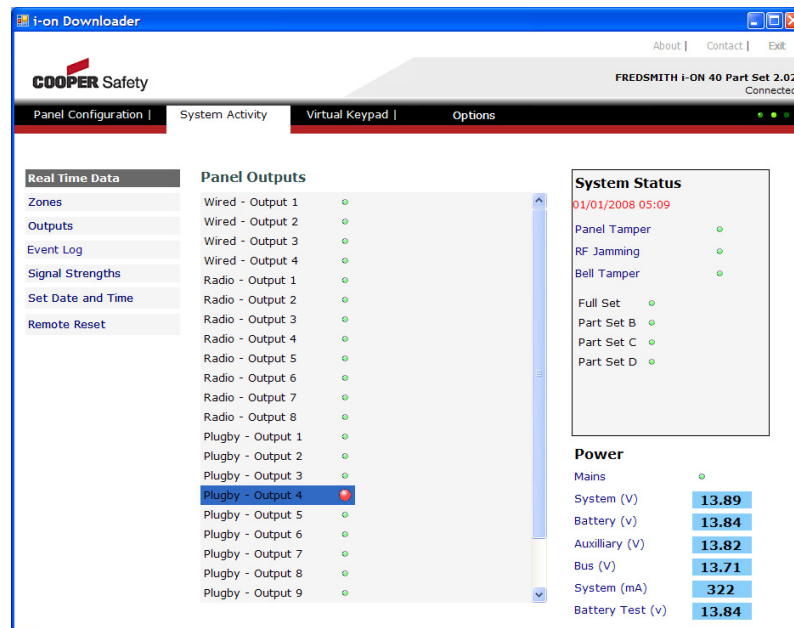
Zone Resistances

When a wired zone FSL is open the Zones column shows the resistance of the circuit loop measured by the control unit.



The readings shown are +/- 100 Ohms.

Outputs

The Outputs screen of the System Activity tab allows you to see the current state of the outputs of the alarm control unit, and to change them.



Icons next to each output show that output's current status:

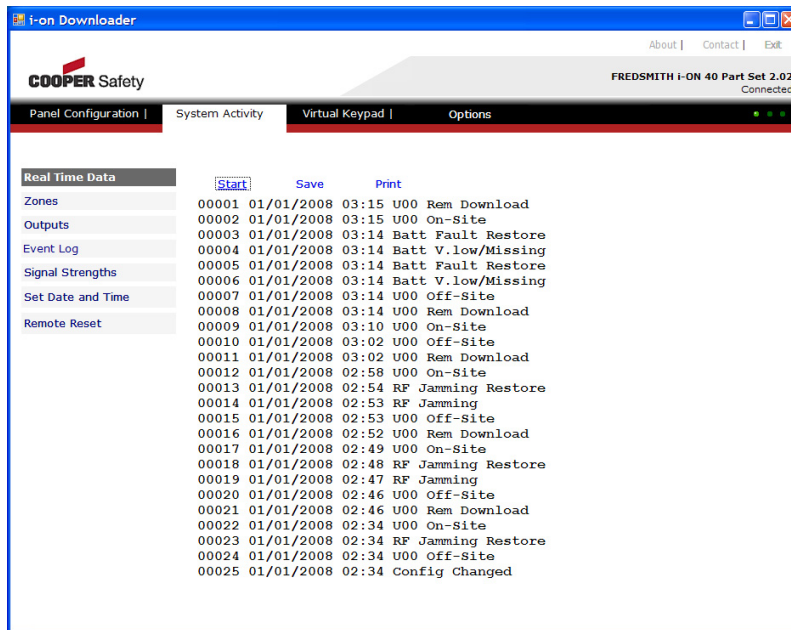
-  The output is inactive.
-  The output is active.

To change the status of an output, select the output with your mouse, and then double click on it. After a short delay i-on Downloader should report the changed status of the output.

Note: The outputs will remain in the state you have put them in when you leave the System Activity tab, or if you disconnect from the control unit.

Event Log

The Event Log screen of the System Activity tab allows you to review the log stored within the control unit.

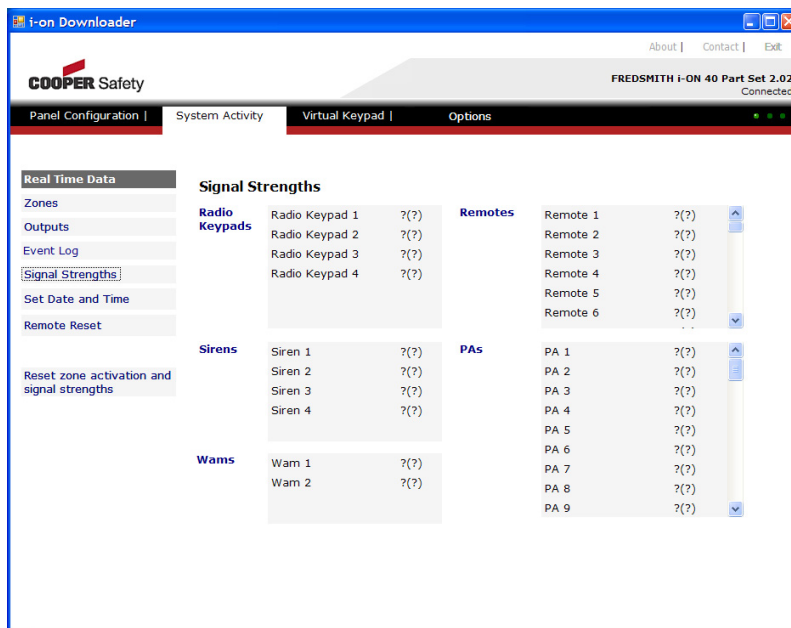


Note that i-on Downloader retrieves the log as a separate operation from uploading the control unit profile. To retrieve the log, make sure you are connected to the control unit and then click Start. i-on Downloader starts retrieving log records, most recent first. Since the control unit log may contain several hundred records extending over a considerable period you may wish to stop retrieving records before the control has presented the whole log. To do this click Stop.

Once you have retrieved a long you can save it to a file (click Save) or print it (click Print).

Signal Strengths

This menu option displays the signal strength of Arming Stations, radio Sirens and WAMs, and compares them with previously recorded signal strengths.

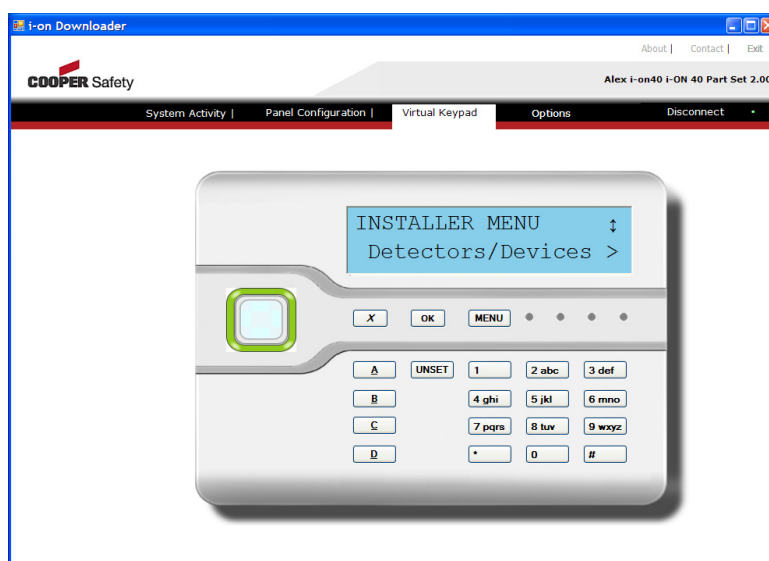


If you have reason to believe that the minimum signal strength shown is too low or too high then you can clear the fields by clicking on Reset Zone Activation and Signal Strength at the bottom left of the screen. i-on Downloader then starts recording more up to date values for minimum signal strength.

If you wish to see the signal strength reported by radio zones, look at System Activity-Zones page.

Virtual Keypad

When you select Virtual Keypad from the tab bar then i-on Downloader presents you with a picture of keypad that you can click on with the mouse.



With this option the keypad on the i-on Downloader mimics a physical keypad. The physical keypads themselves all show “Busy (remotely accessed)”.

(When connected through the USB port the physical keypads must be in standby mode (showing time and date) for the i-on Downloader to respond to the virtual keypad.)

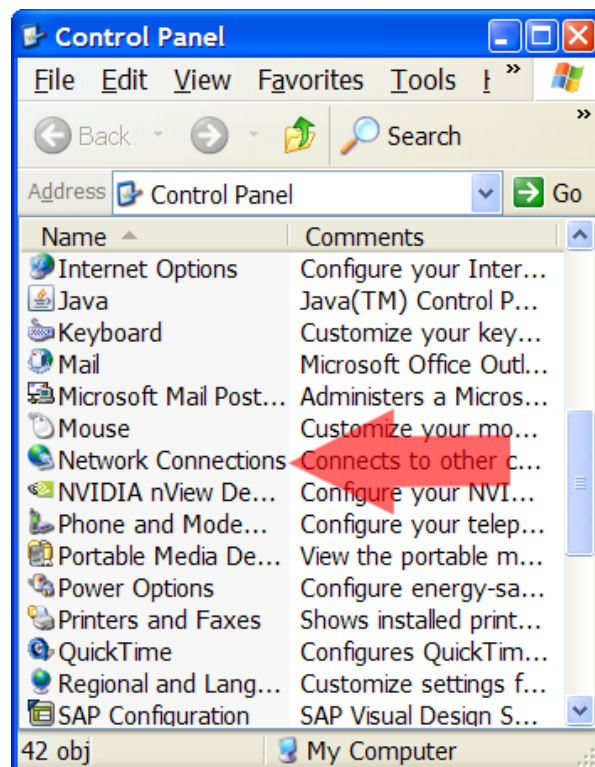
Note: if you use Virtual Keypad there will be a short delay between "pressing" keys on the PC display and receiving the corresponding display from the keypad LCD.

Appendix A: Setting your PC's IP Address

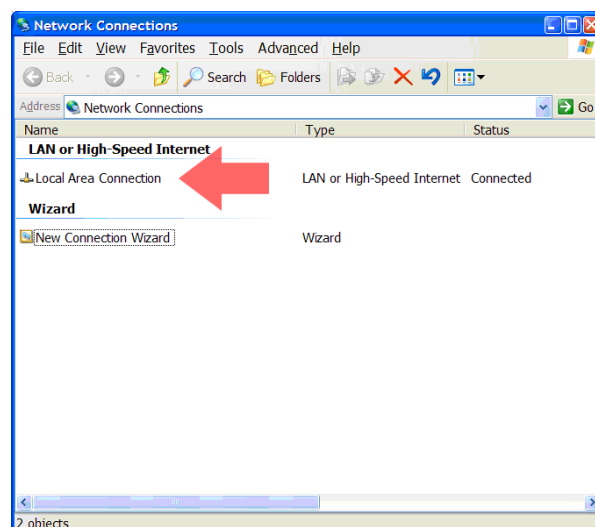
To change the network connection settings on your PC or laptop you must be logged in with an account that has administrator privileges.

Many TCP/IP networks use DHCP (Dynamic Host Control Protocol) to assign an IP address to each PC every time the PCs start up. If you are going to use i-on Downloader then you should give your PC or laptop a fixed IP address that it can use while connected to the i-on40.

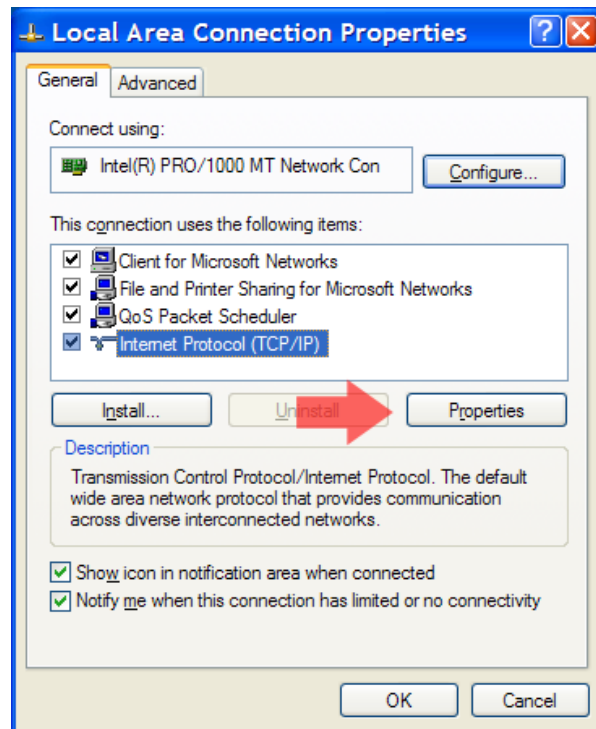
1. Go to the Windows Start button, find Control Panel and then open the Network Connections window.



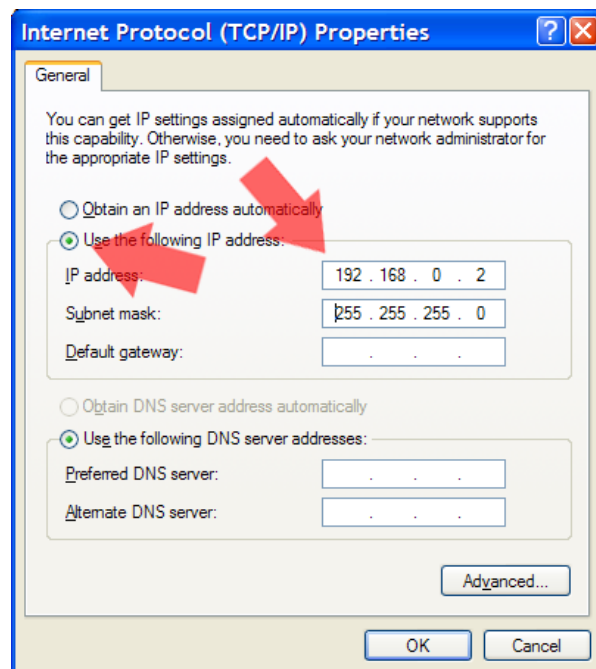
2. Right click on the Local Area Connection icon and select Properties.



3. Highlight the Internet Protocol (TCP/IP) entry and click on Properties.



4. Make sure the radio button "Use the following IP address" is checked.



5. a) Key an IP address (different from the e one you gave the control unit).
c) Key in a subnet mask (for example 255.255.255.0).

Note: Do not use leading zeroes when keying-in IP addresses. If you do then Windows will interpret the number as an octal number.

6. Click OK, twice
7. Close the Network Connections window.

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