

IHC

Quick Guide



Schneider
Electric

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Security

Schneider Electric cannot be held responsible for the consequences of any hacking or virus attack on the IHC controller. SSL encryption technology is used for data communication between the client and the server, a technology widely used in Internet banking services.

Please contact your network administrator to ensure the appropriate network security level for the IHC controller.

In addition, the technician in charge of the installing and configuring the IHC system should also ensure that all the necessary measures are implemented to secure the electrical installation (e.g. no errors in the user interface, appropriate access control configuration in IHC Administrator).

Welcome to your IHC Control System

This booklet includes the most important information for getting started with your Schneider Electric IHC Control System. This guide will explain you how to:

- Install the complete IHC software package on your PC
- Connect your PC to the IHC controller
- Transfer IHC Visual projects to the controller
- Monitor and control your IHC system locally or remotely, from your customized graphic user interface (only available on the version of the IHC controller with Viewer).

Box content

1. IHC Visual Controller (with or without Viewer)
2. IHC CD-ROM
3. IHC Wiring diagram (Main)
4. IHC Wiring diagram (Alarm)
5. Antenna
6. Antenna cable
7. Mounting bracket for the antenna

Minimum PC requirements

Hardware

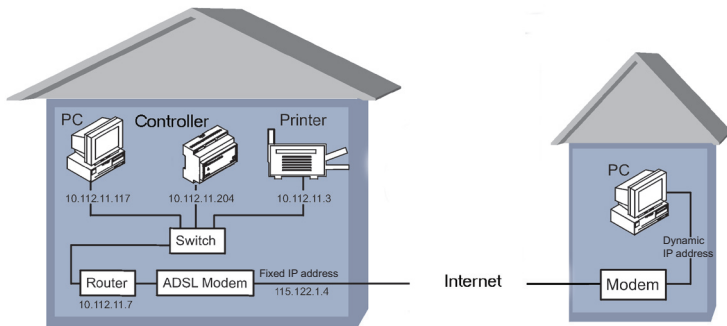
- 500 MHz Pentium (or equivalent)
- 256 MB RAM
- 100 MB free space on your hard disk
- CD-ROM drive
- SVGA (1024 x 768), 65536 colours

Software

- Windows 2000 (SP4+), Windows XP, Windows Vista.
- Microsoft Internet Explorer 6

NB! Only Internet Explorer 6 (or later versions) supports 'Online reports'.
If not needed, you can use other Internet browsers.

Communication between pc and controller



You can connect the IHC controller to a home IP network using a router. This allows you to access your IHC system locally, or remotely from the Internet. The end-user or technician simply enters the IHC controller's IP address in a web browser and will then be asked to enter a username and password.

Remote access to your IHC installation through the Internet requires to use the "with Viewer" version of the IHC controller.

In order to transfer an IHC Visual project, you would normally use the USB connection between your notebook PC and the IHC controller.

Connecting your PC to the IHC controller

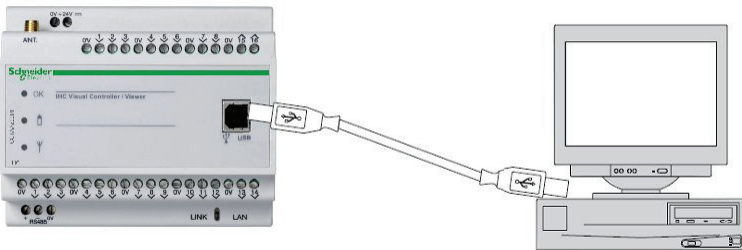
You have three ways to connect your PC to the IHC controller:

- USB connection
- Direct connection using a crossover patch cable
- Connection via a Local Area Network (LAN, 10/100 Mbps).

When connecting the PC and the controller for the first time, you **MUST** use a USB cable

USB connection

NB! Do not connect the USB cable before the IHC software installation is fully completed. Please refer to the IHC Software Installation section.

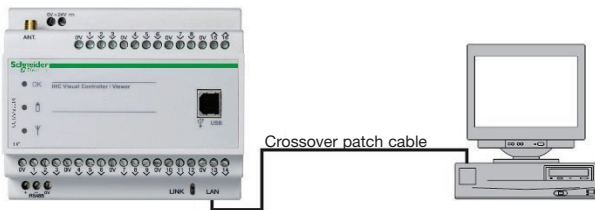


You need

- A USB cable, type A-male to type B-male (max. length 5 m)
- A PC with a spare USB port

Direct connection via crossover patch cable

You can connect your PC directly to the IHC controller using a crossover patch cable:



IP settings

A direct connection via crossover cable between your PC and the IHC controller works the same way as a standard network connection. You must therefore adjust the IP settings accordingly:

- Set an IP address on the controller (e.g., “192.168.1.3”, default IP address for the controller).
- Then set an IP address for your PC so that it only differs from the controller’s IP address in the last field (e.g., “192.168.1.2”).

See IHC Administrator section for more information on how to assign an IP address to the controller.

You need

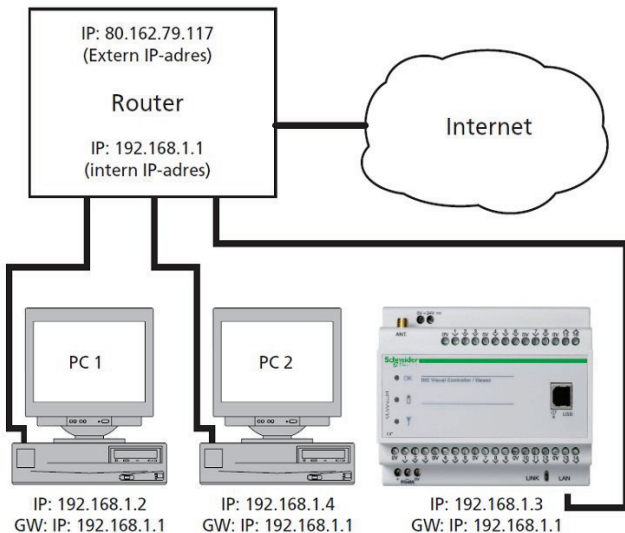
A crossover patch cable (max. cable length: 90 m)

A PC with a Network card

Standard network connection

The IHC controller can be connected to a network the same way as any network device (e.g., PC, printer). It will then work as a server that can be accessed from anywhere on the same local area network.

If the IHC controller is connected to a router with Internet access, you can also monitor and control your IHC controller from the Internet.



IP Settings

The IHC controller must have a fixed IP address (e.g., “192.168.1.3”, default IP address for the controller).

To be able to connect to the IHC controller from the Internet, the router must have a fixed external IP address (e.g., ‘80.162.79.117’) or be compatible with dynamic address servers (e.g., DynDNS).

The gateway address (e.g. GW = “192.168.1.1”) is the internal IP address of the router.

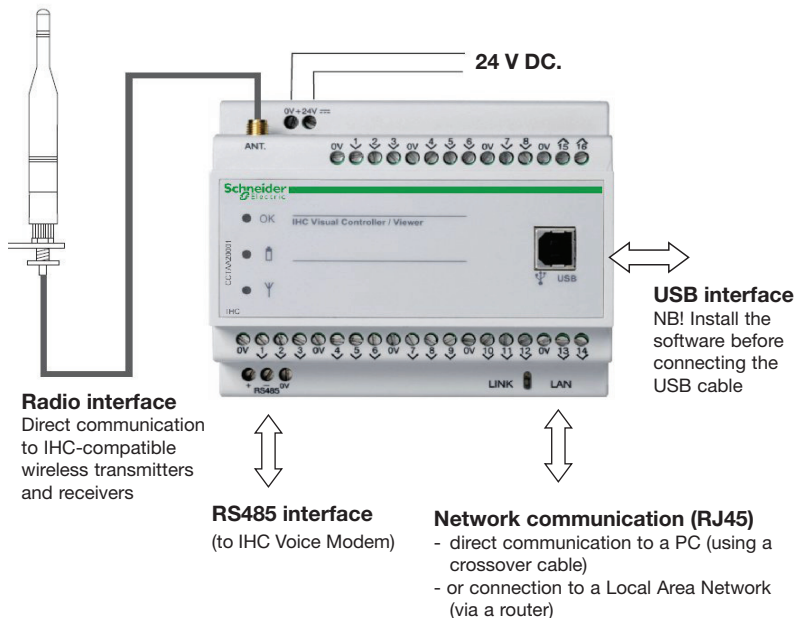
See **‘IHC Administrator’** section for more information on how to assign an IP address to the controller.

You need:

- A network cable (10/100 Mbps)
- A spare connection to your local network (via RJ45 connector).

IHC Controller Overview

IHC Controller interfaces



What do the LED's on the controller signify?



OK

Always ON: The controller is starting up

1 Hz Flash: Operating OK, no data transmission
(normal operation)

2 Hz Flash: Operating OK, data transmission

5 Hz Flash: Firmware upgrade state

1 sec. ON / 0.25 sec. OFF: Error



ON: Low battery on some wireless products

OFF: Battery OK on all wireless products



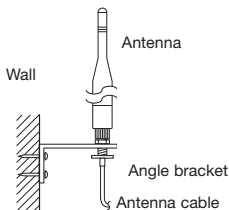
Flashing: Communicating with wireless products

OFF: Not communicating with wireless products

Controller and antenna installation

1. Mount the controller on the DIN rail.
2. If you have any IHC-compatible wireless products:
 - a. Install the angle bracket outside the panel.
 - b. Screw the antenna cable onto the angle bracket.
 - c. Screw the antenna onto the antenna cable.
 - d. Screw the antenna cable onto the controller.
3. Connect the IHC power supply (24 V DC)

NB! Do not connect the USB cable before the IHC software installation is fully completed.



IHC Software Installation

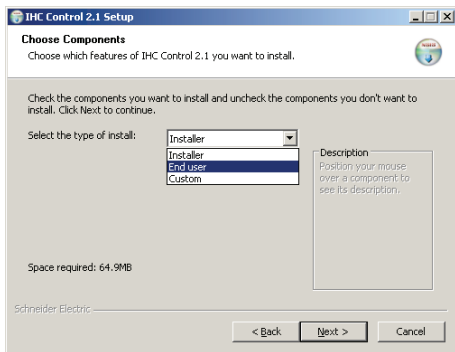
NB! Do not connect the USB cable before the IHC software installation is fully completed.

You need: The controller, the CD-ROM and a USB cable (type A male to type B male, max. length 5.0 m).

1 Insert the CD in your PC CD-ROM drive. The main menu should be displayed automatically. If not, open **'My computer'** or Windows Explorer, locate the CD drive, and directly run the **'Setup.exe'** file located on the CD-ROM. Click on **'Install IHC software'** **1**.



2 Java Runtime is automatically installed. A dialog box is then displayed from which you can select one of three installation options:



If you select '**Installer**', all software will automatically be installed, i.e:

- IHC Visual
- IHC Administrator
- IHC ServiceView
- IHC FirmwareLoader
- IHC help files
- USB driver
- Adobe Reader.

If you select '**End user**', the following software will be automatically installed:

- IHC Administrator
- IHC ServiceView
- IHC help files
- USB driver
- Adobe Reader.

In other words, the following programs are NOT installed:

- IHC FirmwareLoader
- IHC Visual.

If you select '**Custom**', you can manually select which programs are to be installed. However, it is not possible to deselect Sun Java Runtime as this program is mandatory to run any IHC software.

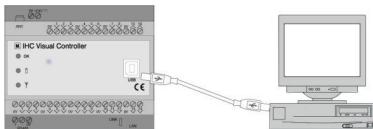
IHC Help files

Once you have installed the software, you can find links to the different help files in the IHC Control section of your PC Start menu.

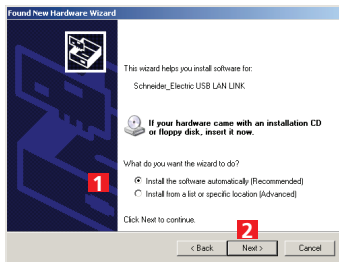
IHC Visual help file: This file provides all the information one might need during the setup of an IHC installation (mainly about IHC Visual software).

IHC Viewer help file: This file provides all the information one might need once the installation is completed.

3 Connect your computer and the controller using a USB cable:



4 If you are using Windows XP, the 'New Hardware Wizard' will start. Select 'Install the software automatically' 1 and click on 'Next' 2.



5 Note (Windows XP only): Although a Microsoft warning message appears, it is completely safe to install the driver. Simply ignore this message by clicking 'Continue Anyway' 3.

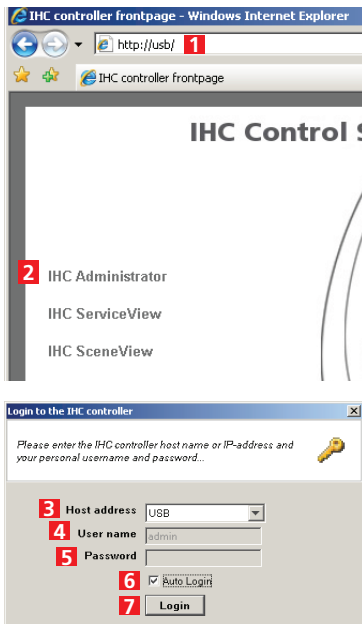


IHC Administrator Software

1 Connect your computer to the controller using a USB cable (as described in the previous section). Open your Internet browser and enter '**USB**' **1** in the address line. This will give you access to the controller's home page, just as if you were connected to any Internet website.

2 Click on '**IHC Administrator**' **2** and log into the IHC Administrator software selecting '**USB**' as the '**Host address**' **3**.

When you log in via USB, you do not need to supply a '**Username**' **4** or '**Password**' **5**. If you log in via LAN/Internet, use the default username ('**admin**') and password ('**admin**'). Select '**Auto login**' **6**, if you want the system to remember your username and password. Click on '**Login**' **7**.



IHC Administrator Configuration

1 The main menu of the administrator program includes all communication and access control configuration options. Start by clicking on **'Network'** **1**.

2 The network menu allows you to adjust the following settings:

'IP address' **2**: Enter the address you have chosen for your controller.

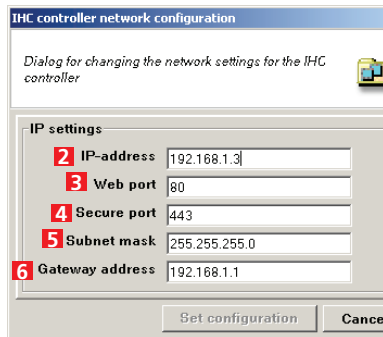
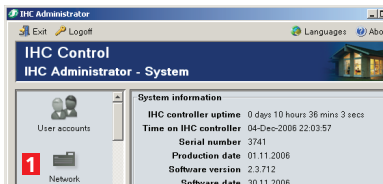
'Web port' **3** (http traffic): You should only change the default setting (port 80) if you have other servers using this number.

'Secure port' **4** (https traffic): You should not have to change the default setting (port 443).

'Subnet mask' **5**: You should not have to change the default setting.

'Gateway address' **6**: Enter your router's internal address.

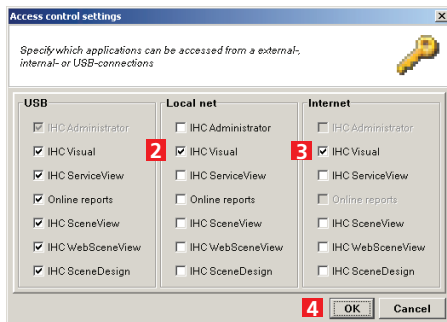
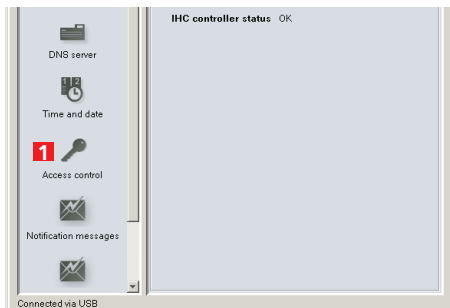
NB! This point is not relevant for USB connections.



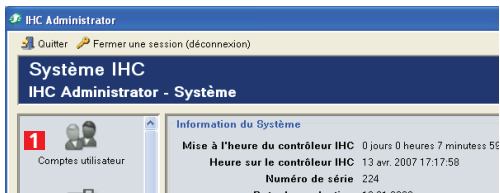
3 From the main menu of the IHC Administrator, scroll down the left window and click on **'Access control'** **1**.

4 This menu allows you to select which programs can access the controller from a USB connection, from a local network (including cross-over patch cable), and from the Internet. Select the programs that you wish to grant access to. For example, if you want to use IHC Visual via LAN/Internet, check fields **2** and **3**.

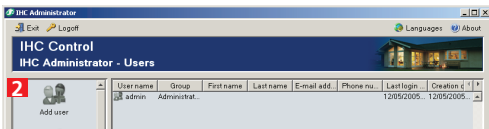
Click on **'OK'** **4** when you are done.



5 Click on **'User accounts'** **1** in the IHC Administrator main menu.



6 You must create a user account for yourself.
Click on **'Add user'** **2**.



7 Enter the username and password in the **'Login profile'** section **3** (NB! Case sensitive).

This information is used when you communicate with the controller via the Internet. Under **'Group'** **4**: Select **'Administrators'** **5**.

This grants access to all programs. Fill out the rest of the personal information fields. Click on **'Add user'** **6**.



8 You should now be able to see your new user profile in the list of users **1**.

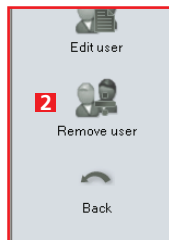
IHC Administrator - Users				
 Add user	1	User name	Group	First name
		Admin admin	Users Administrat..	John Sorensen

9 If you wish to remove a user, select the user from the list and click on **'Remove user'** **2**.

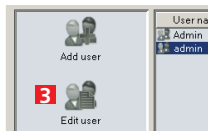
You will be asked to confirm your request.

NB! You should ensure that the standard login profile (admin) is removed, especially if the controller can be accessed via the Internet. If you have logged in using the default login profile, you should:

- Create a new administration profile (points 6-7) with your own username and password.
- Log off from IHC Administrator.
- Log in using your newly created administrator profile.
- You can now delete the default login profile.

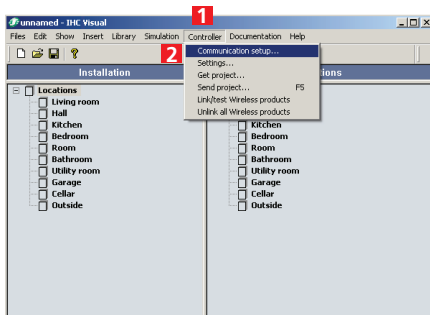


10 You can also create further users from the user menu, and you can edit the various user profiles by clicking on **'Edit user'** **3**.

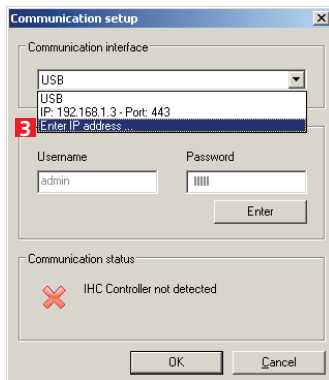


Communication settings in IHC Visual

1 If you have installed IHC Visual: Start the program and click on **'Controller'** **1** in the menu bar. Select **'Communication setup'** **2**.



2 Default settings: USB is used when communicating via USB cable, the IP address is used when communicating via a network cable (standard or crossover cable). The default address is 192.168.1.3, and the port number is 443. You should adjust these values so that they match the ones you have entered in IHC Administrator. If you wish to change them, select **'Enter IP address'** **3**.



3 Enter the IP address and port number **1** you have assigned to the controller in IHC Administrator. Click on 'OK' **2** to return to the previous menu.

Enter IHC controller IP address

IHC controller IP address

IP address 1 Port

192 . 168 . 0 . 100 443

2 OK Cancel

4 Select the IP setting with the new address and port **3**. Check that the '**Communication status**' is OK **4** and click on 'OK' to finish **5**.

Communication setup

Communication interface

IP: 192.168.0.100 Port: 443 3

IHC Controller administrator account

Username Password

admin

Enter

4 Communication status

5 IHC Controller connected

OK Cancel

Accessing the IHC controller from a web browser

Via USB cable: Enter USB

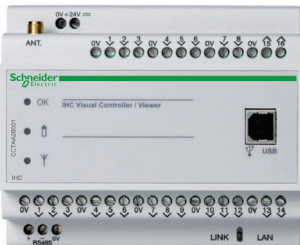
Via a crossover patch cable: Enter the controller's IP address, e.g. 192.168.1.3

Via your Intranet: Enter the controller's IP address, e.g. 192.168.1.3

Via the Internet: You must configure your router so that the controller's 'Web port' and 'Secure port' (port 80 and port 443 by default) are relayed to the controller's IP address (default 192.168.1.3). To setup your router accordingly, please contact your network administrator.

Once the router has been configured: enter your router's external IP address, e.g. 80.162.79.117.

NB! The following usually applies: If you do not use the default port number (80), you must type 'http://' in front of the IP address, and the port number after the IP address, e.g. 'http://192.168.1.1:8080' (where 8080 is the new port number).





More information

For more information about the IHC Control System, please contact the Schneider Electric front office in your country (visit the 'Local Operations' section of our website: www.schneider-electric.com).