



Remote communication set for Xtender systems *Xcom-LAN*

Quickguide

FAQ

Xcom-LAN

I don't have a DHCP server in my network. What should I do?

By default, the Xcom-LAN is in DHCP/BOOTP mode. You can set a static IP address by accessing the gateway.

1. Open your browser
2. Enter the default IP address in the address bar (indicated on the back of the gateway)
3. Enter the password (default password: xcomlan)
4. Click on "Network Settings" in the navigation bar
5. Change IP configuration from "DHCP/BOOTP" to "Static"
6. Set IP address, netmask, gateway and DNS server
7. Click on "Submit"
8. Click on "Save/Restart"

My Xcom-LAN is connected to a company network. What should I do?

The TCP port 83 may be blocked due to security settings. Please change the outbound rule for this port.

My Xcom-LAN is well-configured and connects to the server, but I can't register it with the given GUID. What should I do?

Check the Moxa's TX counter (see Moxa web interface -> monitor -> Async -> TXCnt). If this counter is at zero, the Xcom's TX line is damaged and must be replaced. Please contact the Studer Innotec support in order to replace your set.

Xcom-portal

I can't register my new installation. What should I do?

To register a new installation, the installation needs to be:

1. Configured correctly and in accordance with the user manual.
2. Have been connected to the server at least once.

In order to validate that the installation has been correctly configured, the Xcom system info (available on the RCC connected to the system) should indicate either Xcom-LAN (for an installation with Xcom-LAN) or Xcom-GSM (for an installation with Xcom-GSM).

To validate that the connection with the installation is well established, control that the RCC displays the message "Server connected" when turning on the installation.

There are no datalogger files in the Datalogger tab. What should I do?

If the installation is new and the MicroSD card of the Xcom-LAN/-GSM is empty, it is normal that there are no files on the server.

To activate the automatic recovery of the Datalogger:

1. The Xcom-LAN/-GSM needs to have a software version higher than 1.5.36
2. The datalogger needs to be activated on the Xcom-LAN/-GSM (the green LED should be continuously lit).
3. The Xcom-LAN/-GSM needs to have a micro SD card inserted continuously

- EN 61000-6-4:2007/A1:2011

- EN 61000-6-2:2005

2014/30/EU

- EN 62368-1:2014

Low Voltage Directive (LVD) 2014/35/EU

The communication set Xcom-LAN described in this manual meet the requirements specified in the following EC directives and norms:

EU DECLARATION OF CONFORMITY

The communication set Xcom-LAN described in this manual meet the requirements specified in the following EC directives and norms:

shock absorbing components.

- If used in motor vehicles, this device must also be protected against vibrations by shock absorbing components.

and must under no circumstances be exposed to rain, snow or any other humid or dusty environment.

- This device is meant for indoor use only and genuine components shall be used.

- Modifications and replacements, only aware of the safety precautions and local rules in force.
- All components connected to this device must be conforming to the laws and regulations in force. Persons without a written authorization from Studer Innotec SA are forbidden to do any changes, modifications or repairs whatsoever. Regarding authorized modifications and replacements, only genuine components shall be used.

- The installation and commissioning of the communication sets must be entrusted to skilled and qualified personnel perfectly aware of the safety precautions and local rules in force.

Warnings

For any installation, the local and national norms and regulations in force must be strictly followed.

Therefore this manual should be kept close to the device.

might constitute a lethal physical danger but can also damage the functionalities of the device.

of the device. Failure to follow these instructions

ceeding with the installation and commissioning

Carefully read all safety instructions before proceeding with the installation and commissioning

Generalities

SAFETY PRECAUTIONS

information on compatibility.

Please contact your reseller for any additional date and a hardware upgrade may be required.

updates are no longer guaranteed beyond this one year, starting from the date of purchase. The

of the software updates with the hardware for

Studer Innotec SA guarantees the compatibility

Compatibility

this device.

assume no liability for patent infringement or other third party rights involved in the use of

human beings or for the environment. We shall other critical application with potential risks for

the supply of life support applications or any device is neither designed nor guaranteed for

under the responsibility of the end-user. This to the prescriptions, by a defective operation or

either by an installation that is not conforming any liability for damages, costs or losses generated

any liability for damages, costs or losses generated

Innotec SA. For this reason, we do not accept

of this device cannot be supervised by Studer

Disclaimer of liability

marks.

Disappearance of original identification

packaging.

Damage due to transport or inappropriate

(lightning).

Damage due to atmospheric overvoltage

tightened during installation or maintenance.

Nuts or screws partially or insufficiently

authorization of Studer Innotec SA.

Modifications carried out without the explicit

shock.

Damage resulting from a fall or a mechanical

condensation.

Liquid in the device or oxidation due to

Overvoltage on the device.

by the warranty:

arisen from the following events are not covered

are not described in this manual. Damages

caused by handling, operation or actions that

No warranty claims will be accepted for damages

Exclusion of warranty

WARRANTY AND LIABILITY

Legal notices

LED states

LAN gateway LEDs

LED name	LED colour	State	Indication
Ready	Red	Always On	Power is on and the NPort is booting up.
		Blinking	Indicates an IP conflict, or DHCP or BOOTP server is not responding properly.
Ready	Green	Always On	Power is on and the NPort is functioning normally.
		Blinking	The NPort has been located by the NPort Administrator's Location Function.
Link	Green	Off	Power is off, or a power error.
		Always On	10 Mbps Ethernet connection.
Link	Orange	Always On	100 Mbps Ethernet connection.
		Off	Ethernet cable is disconnected.
Tx/Rx	Green	Always On	Serial port is receiving data.
		Always On	Serial port is transmitting data.
Tx/Rx	Orange	Always On	No data is being transmitted or received through the serial port.
		Off	

Xcom-232i LED

LED colour	State	Indication
Red	Blinks (Ton = 50 % Toff = 50 %)	Updating process. During the Xcom-232i updating process (after insertion of a MicroSD card containing the updates), the signalisation LED blinks in red with a cyclical ratio of 50 %.
	Always on	Error during update or back up of the data logger. If the Xcom-232i detects an error, the signalisation LED is continuously red.
Green	Blinks (Ton = 10 % Toff = 90 %)	MicroSD card full. If the Xcom-232i detects that the MicroSD card is full, the signalisation LED blinks in red with a cyclical ratio of 10 %.
	Always on	Data logging. When the data logging function is activated, the signalisation LED is green.
Orange	Blinks continuously (Ton = 20 % Toff = 80 %)	Communication (via RS-232 connection). When the communication via the RS-232 connection is active, the signalisation LED blinks in green with a cyclical ratio of 20 %.
	Blinks 2x	In operation. The signalisation LED blinks in green twice when the Xcom-232i is in operation and none of the above mentioned states is indicated.
Orange	On 1.5s	Insertion of the SD card. When inserting an SD card, the signalisation LED is both red and green simultaneously for 1.5 second.
	On 1.5s	

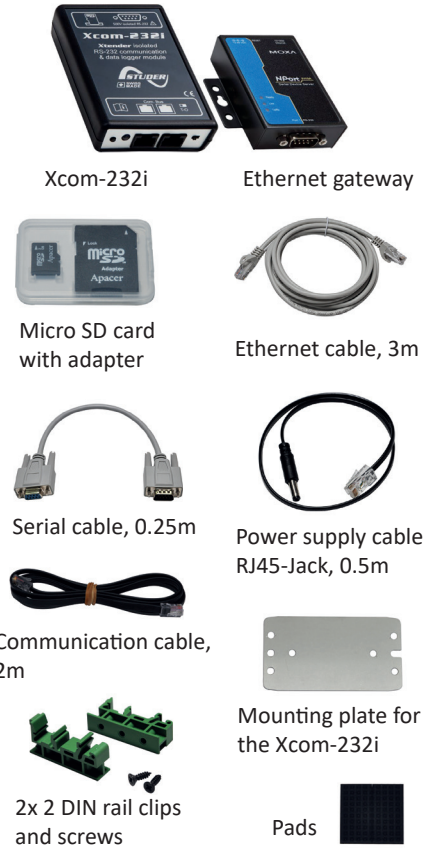
If several of the three states indicated by the red LED light occur simultaneously, they will be displayed in the following priority order:

- Update processing
- Error during updating
- MicroSD card full

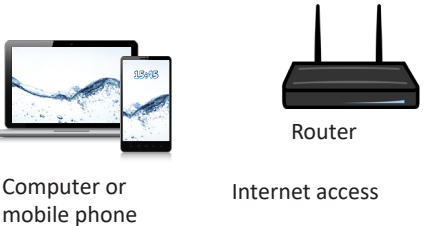
If the two states indicated by the green LED light occur simultaneously, the signal indicating communication via RS-232 connection is reversed (Ton=80% | Toff=20%).

How to configure and to install the Xcom-LAN

1. Contents of the Xcom-LAN remote communication set



2. Additional items needed



3. Mount the different products within the Studer system

The products should be mounted on a smooth surface.

The distance between the Xcom-232i and the Studer system should **not exceed 10 meters**.

The distance between the Xcom-232i and the Ethernet gateway should not exceed 0.25 m.

All cables you need are provided in the set.

ATTENTION!

The metallic casing of the Ethernet gateway is connected to the negative battery pole. Therefore it is necessary to **isolate its casing** from any metallic surface.

4. Wiring

a. Connect the Ethernet cable between the Ethernet gateway and the router



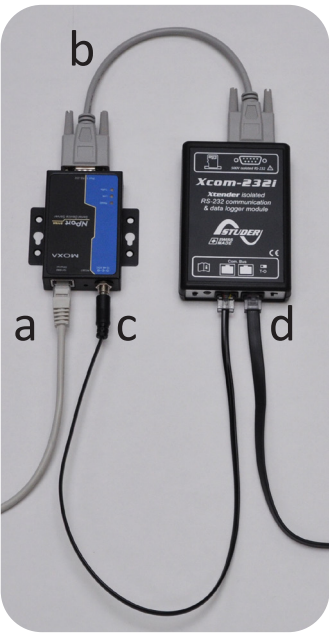
b. Connect the serial cable between the Ethernet gateway and the Xcom-232i



c. Connect the power supply cable between the Ethernet gateway and the Xcom-232i



d. Connect the communication cable between the Xcom-232i and the Xtender system

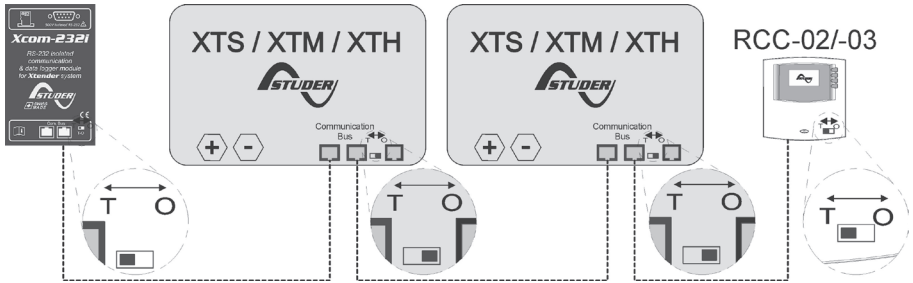


5. Set the terminations

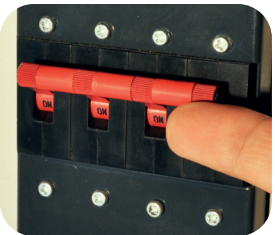
It is very important to set the terminations correctly for the functioning of the system.

With one device in the system the termination on the Studer device should be put to T as in "Terminated". With more than one device in the system all Studer devices should be put to O as in "Open" apart from the devices at the end of the communication chain. These devices should be put to T as in "Terminated".

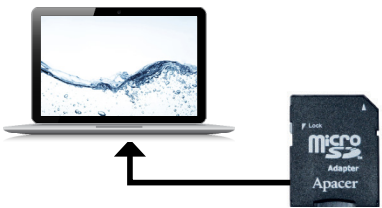
The termination switch next to the two RJ45 connectors on the Xcom-232i must be set in position T.



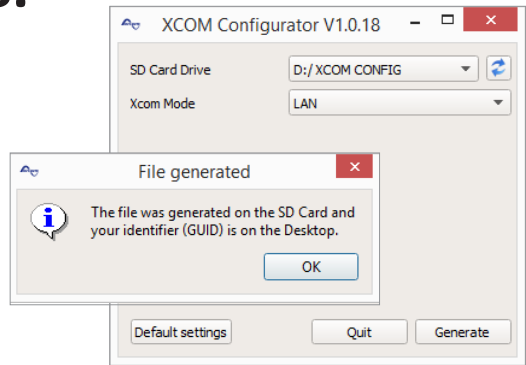
6. Turn on the power



7. Insert the Micro SD card into the computer



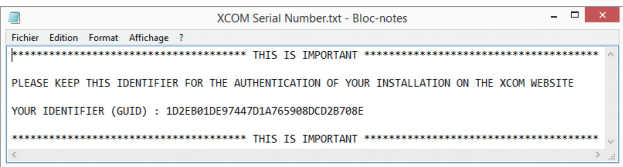
8. Run the Xcom-configurator



Choose "LAN" as Xcom mode. No other parameters are required. The gateway is already configured. Press "Generate" to save the parameter settings. A window will automatically confirm the successful file generation.

9. Take note of your GUID file

Close the message box and a text file with your identifier (GUID) will appear. This file is saved on your "Desktop" or in "My documents". The unique identifier (GUID) is required to link your installation with your account on the Xcom portal. Keep it safe.



10. Insert the Micro SD card into the Xcom-232i

Remove the SD card from the PC and insert it into the Xcom-232i. The setup process will start automatically and normally takes 1 second.



When the LED stops blinking red, the setup is finished.

ATTENTION!

The Xcom-232i needs to be powered during the setup process. Otherwise, the configuration will not be taken into account.

11. Xcom connects to the server

After the parameters are set and applied, the Xcom-LAN will automatically connect to the server and send a confirmation message to the RCC. If there is no message, the Xcom is not connected to the server. Use the FAQ of this Quick guide to see what could have gone wrong.



The Xcom-LAN is successfully installed!

Register the installation at: <https://xcom.studer-innotec.com> in order to control it remotely with the Xcom-LAN.

