Remote communication set for Xtender systems ***Xcom-LAN***

Quickguide



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409E7

How to configure and

1. Contents of the Xcom-LAN remote communication set



Xcom-232i

Ethernet gateway



Micro SD card with adapter



Ethernet cable, 3m



Serial cable, 0.25m



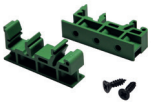
Power supply cable RJ45-Jack, 0.5m



Communication cable, 2m



Mounting plate for the Xcom-232i



2x 2 DIN rail clips and screws



Pads

2. Additional items needed



Computer or mobile phone



Router

Internet access

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



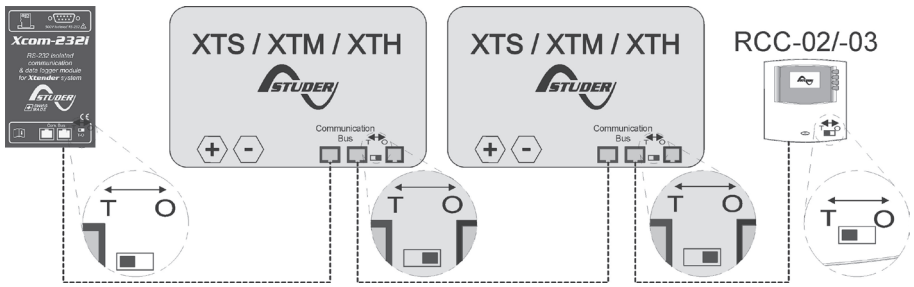


5. Set the terminations

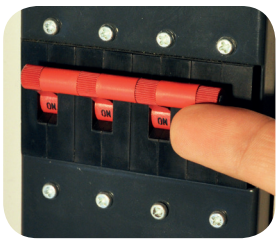
It is very important to set the terminations correctly for the functionning of the system.

With one device in the system the termination on the Studer device should be put to T as in "Termi
nated". 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
as in "Terminated".

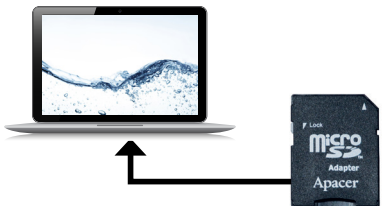
The termination switch next to the two RJ45 connectors on the Xcom-232i must be set in position T



6. Turn on the power

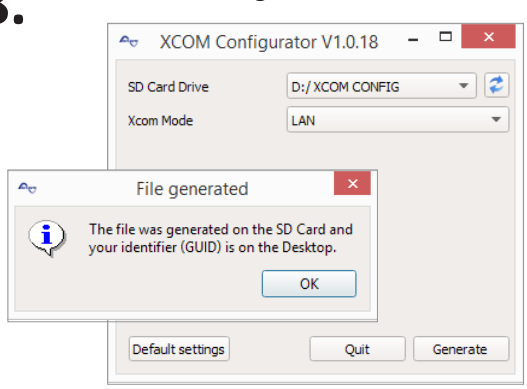


7. Insert the Micro SD card into the computer



to install the Xcom-LAN

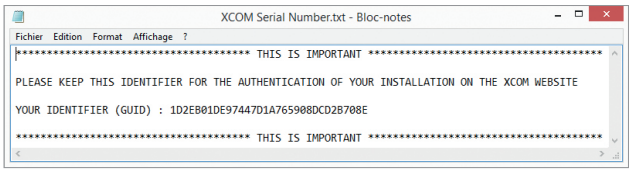
8. Run the Xcom-configurator



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.

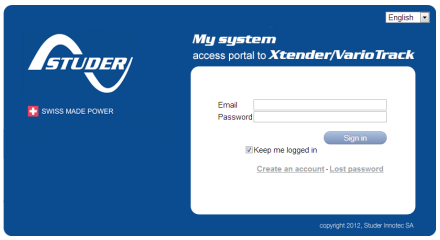
11. Xcom connects to the server

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.



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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 Micro SD 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

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.
	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.
	-	Off	Power is off, or a power error.
Link	Orange	Always On	10 Mbps Ethernet connection.
	Green	Always On	100 Mbps Ethernet connection.
	-	Off	Ethernet cable is disconnected.
Tx/Rx	Orange	Always On	Serial port is receiving data.
	Green	Always On	Serial port is transmitting data.
	-	Off	No data is being transmitted or received through the serial port.

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.
	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 % .
Green	Always on	***Data logging.*** When the data logging function is activated, the signalisation LED is green.
	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.

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%).

Legal notices

WARRANTY AND LIABILITY

Exclusion of warranty

No warranty claims will be accepted for damages caused by handling, operation or actions that are not described in this manual. Damages arisen from the following events are not covered by the warranty:

- Overvoltage on the device.
- Liquid in the device or oxidation due to condensation.
- Damage resulting from a fall or a mechanical shock.
- Modifications carried out without the explicit authorization of Studer Innotec SA.
- Nuts or screws partially or insufficiently tightened during installation or maintenance.
- Damage due to atmospheric overvoltage (lightning).
- Damage due to transport or inappropriate packaging.
- Disappearance of original identification marks.

Disclaimer of liability

Installation, commissioning, use and maintenance of this device cannot be supervised by Studer Innotec SA. For this reason, we do not accept any liability for damages, costs or losses generated either by an installation that is not conforming to the prescriptions, by a defective operation or by poor maintenance. The use of this device is under the responsibility of the end-user. This device is neither designed nor guaranteed for the supply of life support applications or any other critical application with potential risks for human beings or for the environment. We shall assume no liability for patent infringement or other third party rights involved in the use of this device.

Compatibility

Studer Innotec SA guarantees the compatibility of the software updates with the hardware for one year, starting from the date of purchase. The updates are no longer guaranteed beyond this date and a hardware upgrade may be required. Please contact your reseller for any additional information on compatibility.

SAFETY PRECAUTIONS

Generalities

Carefully read all safety instructions before proceeding with the installation and commissioning of the device. Failure to follow these instructions might constitute a lethal physical danger but can also damage the functionalities of the device. Therefore this manual should be kept close to the device.

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

Warnings

- 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.
- 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.
- This device is meant for indoor use only and must under no circumstances be exposed to rain, snow or any other humid or dusty environment.
- If used in motor vehicles, this device must also be protected against vibrations by shock absorbing components.

EU DECLARATION OF CONFORMITY

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

Low Voltage Directive (LVD) 2014/35/EU
- EN 62368-1:2014

Electromagnetic Compliance (EMC) Directive 2014/30/EU
- EN 61000-6-2:2005
- EN 61000-6-4:2007/A1:2011