LCN | Software

LCN-PRO

LCN programming software (based on Windows)

LCN-PRO is the Windows-based LCN software for programming LCN modules. Apart from setting parameters the software controls errors and protocoll functions for the LCN system.
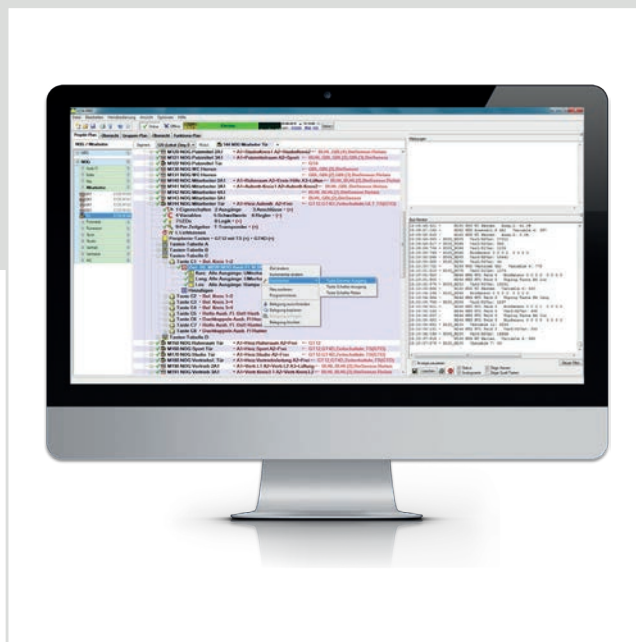
The software has two modes, online and offline. In the offline mode the system is pre-configured and placed in a data base. Later, when a connection is established the parametrization is transferred to the project. The user can set up standard programming and put it into a library and place it at will via "Drag" and "Drop" into LCN systems.

Application

The LCN-PRO is based on a data base (project data) where the programming (setting of parameters) for the LCN modules is placed and stored. The LCN-PRO can programme as many projects as requested. Each project gets its own project data base. With the LCN-PRO it is possible to cut, copy and paste parameters, useful for key table where the same data can be used again or even for entire modules.

When offline, the set parameters are placed in the project data base. After setting up a connection to the LCN system, they are then transfered over to the corresponding modules.

When online, all changes are transferred to the data base and the corresponding LCN module is then programmed.

Technical Data

Hardware:	min. 1 GHz CPU
	min. 1 GB RAM
	free USB interface
	100 MB hard disk space
Operating system:	Windows VISTA, 7, 8, 10
	Windows Home Server
	Windows Home Server 2011
	Windows Server 2008/2008 R2
	Windows Server 2012 R2

Note:
In order to allow communication with your LCN modules, you also need the PC coupling module LCN-PKU or LCN-PKE in addition to the LCN software.

LCN-PCHK

IP coupling software

LCN-PCHK is used for connecting an LCN-system with ethernet/internet. This way programmes like LCN-PRO or the visualisation software LCN-GVS can access the LCN-bus internally or via the internet.

LCN-PCHK integrates two interfaces:

• RS-232 (for connection with the LCN-bus)
• TCP/IP (for connection with an ethernet-network)

Application

With the coupling software LCN-PCHK a TCP/IP coupling between the LCN bus and the LCN software is realized. The software is also used for coupling the LCN bus to third party systems. These can be e. g: third party visualisation systems, management systems, HVAC control or fire alarm systems.

With LCN-PCHK it is possible to access the LCN-bus with various programmes, whereas only one LCN-PKU coupler is needed. One connection is included in the full version, extra connections are available as an upgrade.
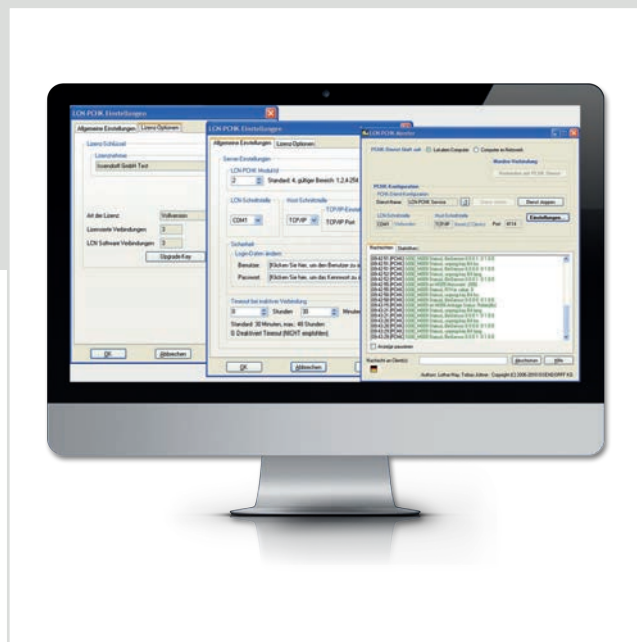
LCN-PCHK supports two protocols:

• the internal mode for LCN-PRO and LCN-GVS
• the PCK-modus, which allows third party software to control the LCN-bus and provides them automatically with all status reports. The PCK-documentation can be obtained free of charge upon request.

Technical Data

Hardware:	min. 233 MHz CPU
	min. 64 MB RAM
	free USB interface
	30 MB hard disk space
Operating system:	Windows VISTA, 7, 8, 10
	Windows Server 2008/2008 R2
	Windows Server 2012 R2
	Linux (various platforms)
	on request

Note:
In order to communicate with the LCN modules, a PC coupling module LCN-PKU or LCN-PKE is needed.

LCN-GVS

Global Visualization System

LCN-GVS is a central server for visualisation which can control and administrate nearly any facilities and buildings equipped with the LCN system world-wide.

Besides the standard functions, the LCN-GVS also covers measurement data acquisition, automatic timers, central access control with individual persons registration, alarm technology and incident reports (incl. associated logical operations, also with time and date) as well as reporting via SMS, e-mail, etc.

The LCN-GVS is a browser based system so the user can have access to the building via any online PC, smart phone etc. Single user access rights to rooms, buildings or groups of these can be allocated via a comprehensive user account control system. Communication between the LCN-GVS visualisation server and the real estate distributed all over the world take place via a coded connection. Due to a new licence system the LCN-GVS comes with the complete range of visualization functions and is very reasonable especially for small buildings. For large buildings the system can be upgraded via licence keys. Configuration of the GVS-tableau/control panels, access, etc as well as backup services are carried out over browser. The GVS enables a wide range of visual design options for the user interfaces. Freely selectable symbols can be individually combined with the text and a large collection of animated graphics can furnish the tableaus with particularly vivid designs.

The LCN-GVS visualisation system is browser independent and can be used with modern mobile devices such as mobile phones and smartphones. The LCN-GVS allows for a great number of visualisations being run simultaneously and has already succeeded in implementing 2500 different icons. For a mobile and comfortable control is the LCN-GVS App is available

Application fields

• Visualization, monitoring and operation of large real estate properties world-wide.

• Visualization of smaller real estates..

• Control and monitoring of energy efficiency in buildings and real estates using data recording devices.

• Entry restriction control and person identification for every building with central/decentral authorisation administration system.

• Automatic monitoring of incidents according to any chosen criteria. The incident report device not only triggers an alarm signal but can also take action independently.

• Numerous other applications.

Technical Data

LCN-GVS PC

Operating server:	– Windows all server variations as from 2008 or later
	– Windows after Windows 7 as Home premium or higher.
Hardware:	– min. 1 GHz Pentium IV
	– min. 1 GB RAM
	– free USB-Port
	– 2 GB hard disk space

*with all current updates!

If you have any questions then
Please contact us! +49 50 66 / 99 88 44!

Client:
All actual web browser versions can be used

Recommended:	– Microsoft Internet Explorer 9.0
	– Mozilla Firefox
	– Apple safari
	– Google Chrome
	– Opera (vers. 8 or later)
LCN-GVS App:	– IOS 5.1.1 or later
	– Android 2.3.3 or later

LCN-module-firmware requirements:
The LCN-GVS reacts to status reports of older LCN-modules as follows:

Firmware modules	queryable information
060101 (Jan. 1996)	Relay- / Binary sensors- / Sums- / Output status
090218 (Feb. 1998)	like 060101, incl.: actual values
100A06 (Oct. 2006)	like 0A0A0B, incl.: set points

Control commands are processed starting with firmware 060101 (Jan. 1996).

LCN-GVS

Global Visualization System

- **Building controls worldwide**
- **Measured data coverage, data recorder**
- **Central access control with person registration**
- **Alarm technic and an incident report**
- **Also available as App**

License structure LCN-GVS

LCN-GVS is a global visualisation software package for the administration and operation of any number of LCN installations world-wide.

With the right licence code the following LCN-GVS functions can be extended:

- automatic timers/time switches with unlimited number of channels
- incident and disturbance reporting for print, e-mail, SMS etc.
- building users for access control
- MBS hardware

The basic version LCN-GVS includes:
- 1 x Licence module = 10 modules
- 1 x Licence building users = 5 users
- 1 x Licence time switching channels = 10 channels
- 1 x Licence incident reporting = 10 incident reports devices
- 1 x Licence tableaus = 10 tableaus

License package for GVS:

LCN-GVSM
Modules in steps of 10 (max. 2500 per code)

LCN–GVSU
Building users in steps of 5 (max. 1250)

LCN–GVSZ
Switching channels in steps of 10 (max. 2500)

LCN–GVSE
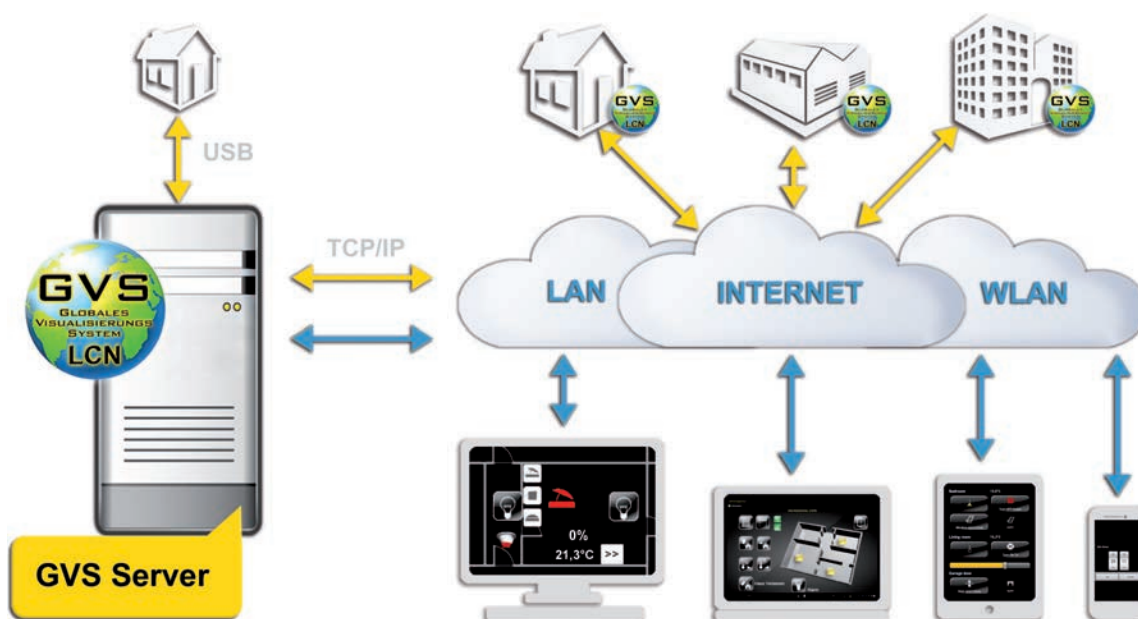Incident reports in steps of 10 (max. 2500)

LCN–GVST
Tableaus in steps of 10 (max. 2550)

Note:
License codes can be purchased additionally at any time; for example: to increase the amount of incident reports. Every new licence is added to the existing one. For more detailed information please refer to the installation guide.

LCN-GVShome

Visualisation server with LCN-GVS

The LCN-GVShome system is a central control unit for private homes. On this maintenance-free LCN-GVShome PC the LCN-GVS visualization software is already preinstalled. Using a web browser or a smartphone App a complete building can be controlled and visualized. The required Microsoft® Windows® software license is also included.

The visualization system for control and management of a building includes, in addition to standard functions in building automation, time switching functions, a central access control registering persons and an event reporting feature. This includes logical combinations plus date and time functions. Messages can be sent via email, SMS or other methods. The connection to the LCN bus is achieved with the LCN-PKU coupler. When using a router, the PC may be connected via RJ45 cable to a local area network.

Application areas

• Visualization, monitoring and control of worldwide distributed large properties

• Visualization of smaller properties

• Control and monitoring of energy efficiency in buildings and properties with data recorders

• Access control with person identification for all buildings with central and decentral management of access rights

• Automatic event monitoring on any desired criteria; the data recorder not only generates alarms, but also reacts on events

• And many more functions and features

Software licence

The included licence allows control and visualization of up to 40 LCN modules. If more modules are installed in a building, the number of modules can be increased with an extension licence. This is also valid for other licenced options, for example time control functions.

The connection to the LCN bus is carried out using an LCN-PKU directly or with an LCN-PCHK connection. The most important benefit is then that the LCN-PRO and the LCN-GVS have parallel access to the bus. The connection to the LCN bus must be established before any tableau can be created. To create a tableau in LCN-GVS you will need the LCN-PRO project file.

LCN-GVShome includes licences for:

• 20 modules/4 tableaus

• 4 time switching functions

• 4 event reporting functions

• 4 access control functions

• 2 connections LCN-PCHK (1 x LCN-GVS, 1 x -PRO)

Hints

The system is recommended for private homes with a maximum of 100 LCN modules, 20 persons/users, a maximum of 10 parallel connections to the LCN-GVS are possible (via web browser or App). The LCN-GHShome system may only be used for building automation with the LCN-GVS.

Technical data

Main power

Power supply:	230 VAC ±15%, 50/60 Hz
Power consumption:	4,5 W in idle mode
	max. 10 W under full load

System

Operating system:	Windows 10 Enterprise 2016 LTSB 64Bit
Hardware:	Intel Celeron N4100, 4GB DDR4-RAM, 64GB SSD LAN,WLAN DualBand, Bluetooth 4.2, 3x USB3.1, HDMI 2.0, microSD-CardReader
LCN-GVS licences:	20 modules, 4 tableaus 4 time switching functions 4 event reporting functions 4 access control functions 2 connections LCN-PCHK

User interface:

All recent web browsers and versions can be used

recommended:	Microsoft Internet Explorer 9.0 Mozilla Firefox Apple Safari Google Chrome/Iron Opera (from version 8)

LCN-GVS App:
iOS 5.1.1 or later, Android 2.3.3 or later

Installation

Operating temperature:	-10 to 40 °C
Humidity:	max. 80% non condensing
Environment:	stationary installation, according to VDE632, VDE637
Protecton class:	IP 20
Dimensions:	121 × 121 × 28,5 mm
(W x D x H)	4.7 x 4.7 x 1.1 inch.
Mounting:	Wall mounting bracket in scope of delivery (VESA bracket)

LCN-GVShome

Visualisation server with LCN-GVS

- **GVShome PC for building automation**
- **Includes LCN-GVS and LCN-PCHK licences**
- **Includes operating system Microsoft Windows 10**
- **Completely preinstalled and maintenance-free**
- **Ports (80, 443, 4220, 4114) unlocked**
- **Safe connections with SSL certificate**
- **Low energy consumption**

Licence structure LCN-GVS

LCN-GVS is the global visualization software for worldwide administration and operation of an unlimited number of LCN installations. Per licence key the following functions sets can be extended:

- Time switching functions
- Event reporting for printing, email, SMS etc.
- Users for access control
- BACnet server
- ModBus slave
- OPC server

Licence packages for LCN-GVS:

LCN–GVSM
Number of modules in steps of 10 (max. 2500 per key)

LCN–GVSU
Users in steps of 5 (max. 1250)

LCN–GVSZ
Time switching functions in steps of 10 (max. 2500)

LCN–GVSE
Event reporting functions in steps of 10 (max. 2500)

LCN–GVST
Tableaus in steps of 10 (max. 2550)

Hints:
Licence keys can be purchased at any time, e. g. to increase the number of event reporting functions. Every licence is added to the existing one.

Circuit diagram

LCN-PKU   **LCN-GVShome**

USB

L L
N N
D D
PE PE