

1992 **25** LCN  
YEARS 2017  
High-End Building Management

# LCN | Remote Control

# LCN-RR

## Infrared receiver with lens

The LCN-RR is an infrared remote-control receiver for the LCN system and can be connected to all the intelligent LCN bus modules: LCN-UPP, LCN-UP24, LCN-SH, LCN-HU or LCN-LD.

The LCN-RR receives up to 48 commands, 1000 access codes and 16 million key codes.

### Field of application:

The LCN-RR is a remote-control receiver for the LCN system. Due to its size it can be integrated into the switch programme as well as into the lights.

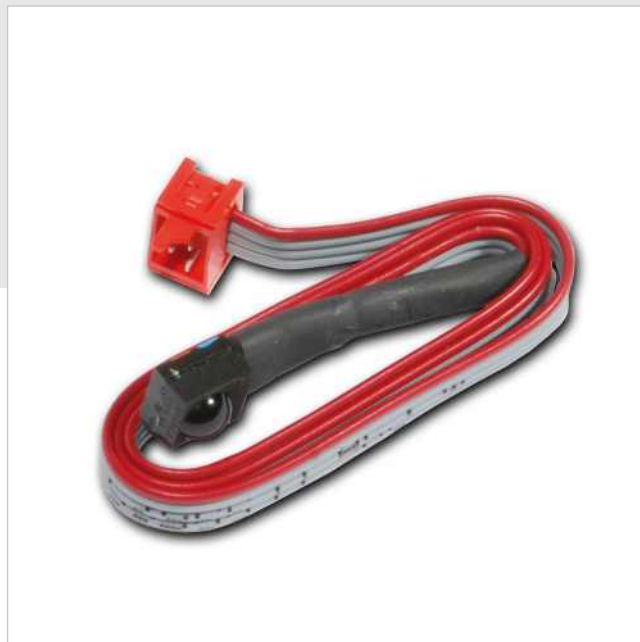
Additionally, it provides comfortable access control with up to 16 million key codes.

### Hardware :

Installation casing

IR-sensor

Flat cable with plug for the I-Port connection to the intelligent bus module



### Note:

The LCN-RR's supply cable can be extended up to 50m via the LCN-IV and can be connected together with the LCN-BMI, LCN-B3I, etc.

The installation location bears crucial influence on the reception range. When used outside, the receiver is to be shielded from daylight as this otherwise affects the range.

For more detailed information please refer to the installation instructions/manual.

# LCN-RR

## Infrared receiver with lens

**Technical Data:**

Operating frequency: 40kHz

**General details:**

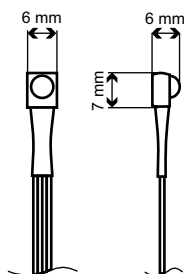
Operating temperature: -20°C to +60°C  
 Humidity: max. 80% rel., no condensation

Environmental conditions: stationary installation

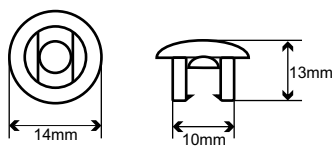
Safety classification: IP 20

**Dimensions:**

Diode (L x W x H): 6 mm x 6 mm x 7 mm  
 Supply Cable: 300 mm

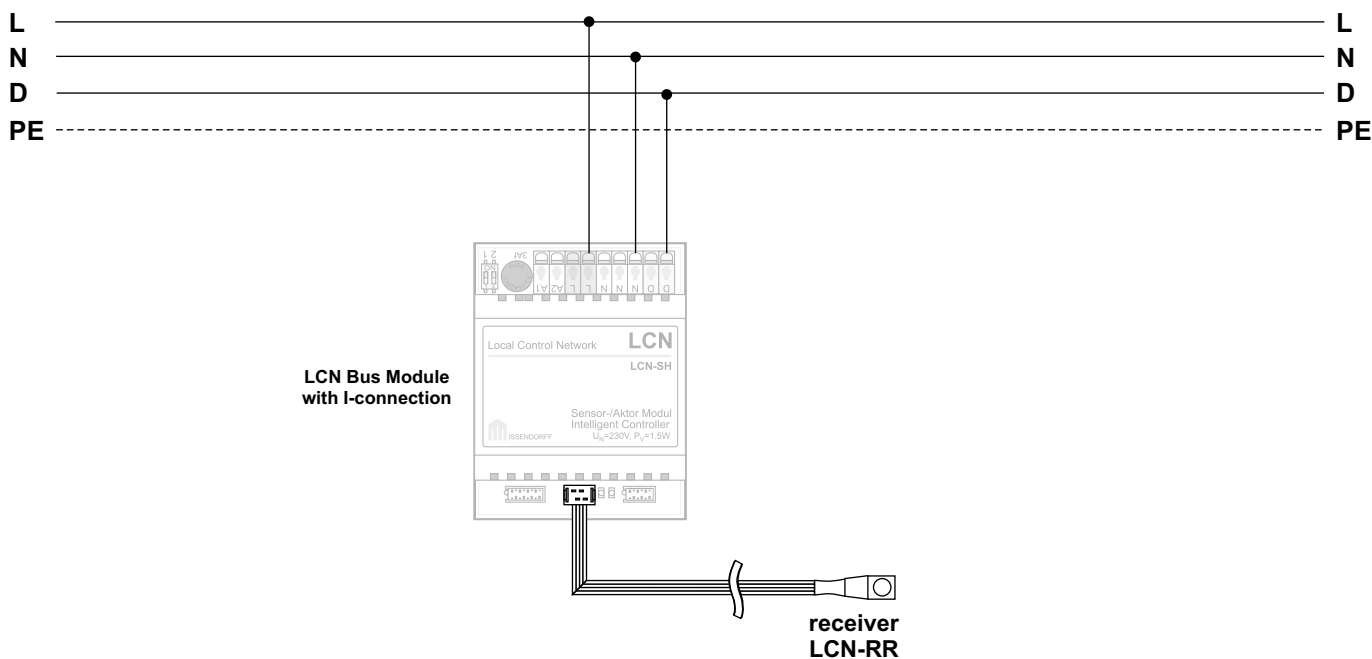


**Dimensions Fitted Lens (H x Ø inside):** 14 mm x 10 mm



**Assembly:** behind a switch cover/panel, behind a 4mm Ø hole or with the installation casing.

**Circuit diagram:**



# LCN-RT

## IR transmitter with 4 keys

The LCN-RT is a miniaturized infrared (IR) hand-held transmitter. It offers four very robust membrane keys with acoustic acknowledgement of activation. Each key recognises the commands 'HIT', 'HOLD' and 'RELEASE', which means that up to 12 commands can be used per key level. At the user's request, up to four key levels can be chosen resulting in 48 commands.

The LCN-RT additionally offers three different set-up options: privileged control, locking systems and access-control systems. In doing so, a code which can be entered by the user is transmitted to the receiver along with their serial number.

### Field of application:

Due to its small size the LCN-RT is suitable for putting on a keyring or belt. In this way it becomes part of the daily routine as a substitute for conventional switch panels.

Using the LCN-RR receiver, all of the LCN modules on the bus system can be controlled with all of their functions- including default values for air-conditioning control etc.

In addition to this, locking systems can be operated with the remote-control transmitter and/or access control with personal identification can also be implemented.

### Hardware:

4 keys

4 key levels

Acoustic signal device

### Note:

Any amount of transmitter/receiver pairs can be independently operated in the same room.

Also available in a left handed version. Please specify when ordering.



### Operating programs:

Transfers 48Bit information (4x as much as conventional hand transmitters).

Each key recognises the commands, 'press', 'press & hold' and 'release'.

It supports four key fields so that up to 16 keys are available to the user.

With each operation it sends a code which can be programmed by the user. All of the bus modules can evaluate the code and permit or refuse the request.

Additionally, it sends a unique and permanently fixed serial number. This number can either be evaluated in the LCN modules for individual allotting of keys and/or can be forwarded to the PC for access control with personal identification.

A checksum is generated and sent with the transmission. It enables the addressee/receiver to recognise transmission interference and prevents false operation - an innovation in IR-remote-control technology.

The operating programme is fully compatible with the larger hand-held transmitter LCN-RT16. The IR-telegram contains a code label with which the addressee/receiver is able to recognise the kind of transmitter it was sent from.

All IR-telegrams in the LCN remote-control system are protected against false transfer by a checksum.

# LCN-RT

IR transmitter with 4 keys

### Technical Data:

Range:	at least 10 metres
Transmitting cone:	20° symmetric rotation
Keys:	4 x 4 key levels
Code:	four digits - user defined additionally serial number
Battery:	lithium cell Cr2032, lasts about 2 years

### General details:

Operating temperature:	-10°C to +40°C
Humidity:	max. 80% rel., no condensation
Safety classification:	IP 20

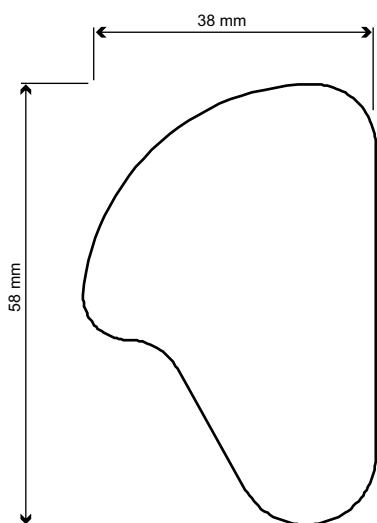


Batteries are not to dispose in household waste



### Dimensions:

(L x W x H): 58 mm x 38 mm x 9 mm



### Assembly:

on your keyring

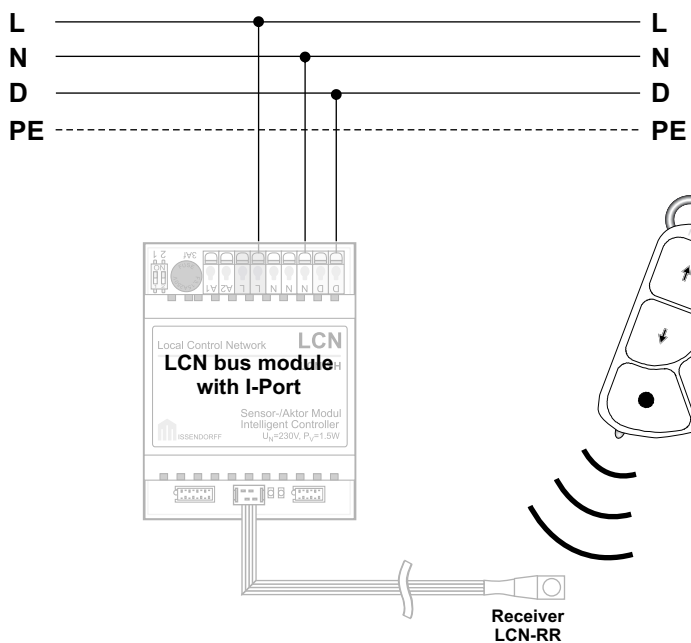
### Changing the key levels:

The 4 keys on the LCN-RT can be used in four different levels, so a total 16 keys are available.

- Level 1 (keys 1-4): Standard level
- Level 2 (keys 5-8): Press keys 2 & 4 simultaneously
- Level 3 (keys 9-12): Press keys 3 & 4 simultaneously
- Level 4 (keys 13-16): Press keys 1 & 3 simultaneously

A long beep confirms the successful level change. The transmitter signals are different (louder) when used key level 2, 3 or 4. Four seconds after pressing the last key it will return automatically to the standard level. This is being alerted by a short beep.

### Circuit diagram:



### The keys



### Key level 1



Standard

### Key level 2



Keys 2&4

### Key level 3



Keys 3&4

### Key level 4



Keys 1&3

# LCN-RT16

## High power IR transmitter with 16 keys

The LCN-RT16 is the most powerful commercially available IR hand transmitter in the world. It offers 16 keys, each of which can be individually labelled; 6 of these are equipped as rocker switches. Each key recognises the commands 'HIT', 'HOLD' and 'RELEASE', giving the addressee up to 48 possible commands. (The commands themselves are deposited in the receiver-modules so that customised functionality can be offered for each room.)

The LCN-RT16 additionally offers three different set-up options: privileged control, locking systems and access-control systems. In doing so, a code which can be entered by the user is transferred to the receiver along with their serial number.

### Field of application:

With the power remote-control transmitter LCN-RT16 you can control your LCN bus system from a distance, in large rooms, conference rooms, churches and use it as a long-distance remote control and garage door opener with a range of more than 100m.

Using the LCN-RR receiver, all of the devices connected to the LCN system can be controlled with all of their functions via a remote-control transmitter.

In addition to this, locking systems can be operated with the remote-control transmitter and/or access control with personal identification can also be implemented.

### Hardware:

Two power levels

16 keys

Acoustic signal device

Display for power level and battery

Charger with automatic charging for built-in 9V battery

Key field for individual labelling

Case for storage

### Note:

Any number of transmitter/receiver pairs can be independently operated in the same room.



### Operating programs:

Transmits 48Bit information (4x as much as conventional hand transmitters)

Each key recognises the commands, 'HIT', 'HOLD' and 'RELEASE'.

Supports a second key level for later modifications.

With each operation it sends a code which can be programmed by the user. All of the bus modules can evaluate the code and permit or refuse the request.

Additionally, it sends a unique and permanently fixed serial number. This number can either be evaluated in the LCN modules for individual allotting of keys and/or can be forwarded to the PC for access control with personal identification.

A checksum is generated and sent with each transmission. It enables the addressee/receiver to recognise transmission errors and prevents false operation - an innovation in IR-remote-control technology.

The operating programme is fully compatible with the smaller key ring transmitter type LCN-RT. The IR-telegram contains a code label with which the addressee/receiver is able to recognise the kind of transmitter it was sent from.

# LCN-RT16

High power IR transmitter with 16 keys

### Technical Data:

Range:	more than 100m / more than 30m
Power levels:	100% / 11%
Transmitter cone:	20° symmetric rotation
Keys:	16, individually letterable
Code:	four digits - user defined additionally, serial number
Supply:	9V clock battery
Charger:	230V AC ±10%, 50Hz plug PSU included in delivery

### General details:

Operating temperature:	-10°C to +40°C
Humidity:	max. 80% rel., no condensation
Safety classification:	IP 20
Case:	metal

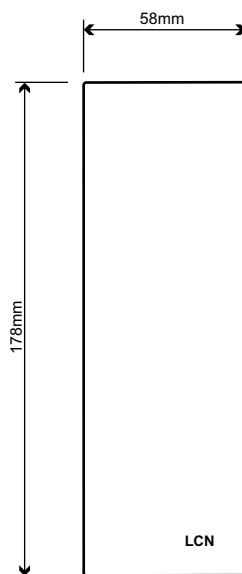


Batteries are not to dispose in household waste



### Dimensions:

(L x W x H): 58mm x 178mm x 34mm



### Circuit diagram:

