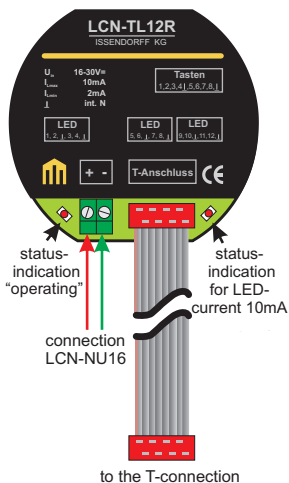


Key converter with eight push-button inputs and 12 LED-outputs for flush mounted boxes

LCN-TL12R triggers eight conventional push-buttons (potential free) on the T-connection (key input) of the LCN modules.



Additionally the LCN-TL12R controls twelve LED's - every colour (even mixed), with or without series resistors. The outputs offer a (lamp brightness) switchable brightness level, one on each command:

2mA = LED "OFF"
10mA = LED "ON"

The LCN-TL12R is supplied for operational use with the LCN-UPP, LCN-UPS or LCN-UP24 module, can also be used with the LCN-HU, LCN-SH and LCN-LD.

Note about the LED-operation: For supplying the LED's with power, an additional LCN-NU16 is needed. With a connected LCN NU16, the status LED is "ON".

Application areas:

The LCN-TL12R can be used for connection to potential free push-buttons like e.g. the Jung push-buttons series 2224 and 2248, the Gira elektronik-push-button series 2001 and 2003 (here without background light) or the Berker TS Glass sensor series 1681 to 1684 in combination with the TS universal-adapter 75900032.

Even heavy push-buttons for industry panels with large LED's, can be directly controlled from the LCN-TL12R.

LCN requirements:

all modules with serial-nr.: 10...(Juni/2006 or after)

software: LCN-PRO vers. 3.1 or later

With older modules (LCN-UPP, LCN-SH+, LCN-HU) manufactured at the end of year 2000, an operation with max. 8 LED's is possible.

Connection:

Push-buttons and LED´s are to be connected with the cable ends included, as shown in the diagram on page 5.

For a simple installation or for swapping push-button groups, the flat cables can be removed from the LCN-TL12R: To do this, the housing casing is grasped left and right on its roundings and lightly pressed inwards.

Unused connecting flat cables can simply be removed. Free connecting wires must be insulated.

Setting up under LCN-PRO:

In the menu `connections> T-connection` choose the setting "LCN-TL12H/-TL12R/ - KT8 tableau".

Function:

The 8 push-buttons on the tableaux work on the key table A. The **HIT-**, **LONG-**, **RELEASE-** commands are fully supported.

All LCN modules have tableau (panel) functions. The sum processing is also available for the 12 LED's.

Over the command LED brightness, the operating current and thus the LED brightness can be toggled between 2mA and 10mA. The set current will be shown over the right status LED on the TL12R. LED off = 2mA, LED is on = 10mA (general set up).

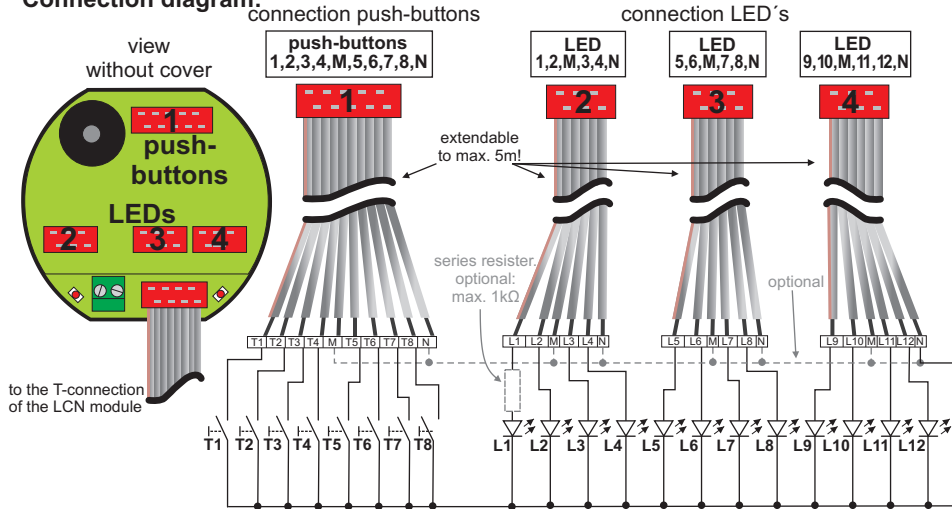
With old modules serial nr.: 0A09... up to and including 0F... , only the first eight LED's can be operated (set up: EIB-Siemens). Internally, all 12 display LED's will be processed.

Extra function: 8 further push-button functions:

With plus-modules from year 1999 or after, there is the possibility, by pressing two push-buttons at the same time, to trigger a key from the table C. Key 1+2 trigger off C1, 3+4=C2, 5+6=C3, 7+8=C4, 1+7=C5, 2+8=C6, 1+8=C7, 2+7=C8.

This art of dual pressing is especially useful for functions that should not be accidentally triggered (zentral off, saved light scenes, activating alarm systems,...).

Connection diagram:



The connecting cables for the push-buttons and LED's carry "N" potential! They are bridged together with all the "N" marked connections and also in the module! At least one "N" connection must be applied!

Technical data**Connection**

power supply:	LCN-NU16 or power supply 16-30V DC (stable)
power consumption:	<0,05W
terminals/wire type:	single wire solid up to 1,5mm ² , fine wire up to 1mm ² , fine wire with wire end sleeves up to 0,75mm ²
LCN-connection:	T-connecting cable length 180mm not extendable
wire type LED outputs:	0,08 mm Ø, length 200mm, cable end tinned extendable up to max. 5m with shielded cable
inputs/push-button function:	8 / Hit, Long, Release for potential free push-buttons no permanent contacts, extendable up to max. 5m with shielded cable
outputs:	12, for connecting LED's directly, as well as for LED's with series resistor <1kΩ, source current 2mA or 10mA, switchable

installation

operating temperature:	-10°C to +40°C
air humidity:	max. 80% rel., non condensing
environmental conditions:	for use as stationary Installation, according to VDE-632, -637
protection art:	IP20 when installed in flush mounted boxes
dimensions (Ø x H):	50 mm x 20 mm

Technical information and images are non binding. Changes are reserved.

Technical hotline: +49 5066 998844 or www.LCN.de