



Light-Interface for the PC-Light Control Light@Night LI-LAN-F Part No.: **050702**

>> finished module <<

The **Light-Interface** for the network interface (LAN) of a computer combines together with a minimum of one **Light-Display-Module** or **Light-Power-Module** the hardware for the **PC-Light Control Light@Night**.

It is possible to connect up to **7 Light-Display-** and/or **Light-Power-Modules** onto each **Light-Interface LI-LAN**.

The **lighting effects** (neon lamps, gas street lamps, flashing blue light, light chains, traffic lights and others) can be assigned individual to a **maximum of 280 outputs**.

Suitable for analog and digital model railways.

This product is not a toy! Not suitable for children under 14 years of age! The kit contains small parts, which should be kept away from children under 3! Improper use will imply danger of injuring due to sharp edges and tips! Please store this instruction carefully.



Introduction/Safety instruction:

You have purchased a kit or a finished module of the **Light-Interface LI-LAN** for the PC-Light control **Light@Night** for your analog or digital model railway.

The **Light-Interface LI-LAN** is a high quality product that is supplied within the assortment of **Littfinski DatenTechnik (LDT)**.

We are wishing you having a good time using this product.

The finished module comes with **24 month warranty**.

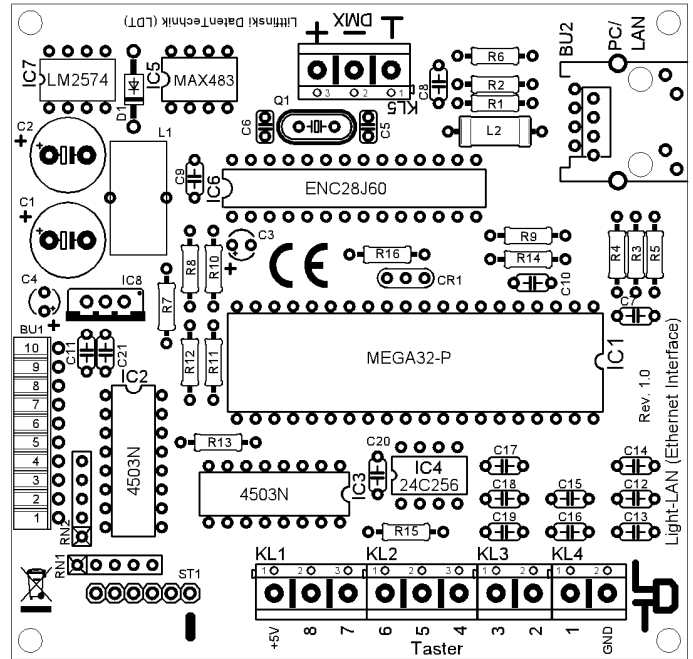
- Please read the following instructions carefully. Warranty will expire due to damages caused by disregarding the operating instructions. **LDT** will also not be liable for any consequential damages caused by improper use or installation.
- Also, note that electronic semiconductors are very sensitive to electrostatic discharges and can be destroyed by them. Therefore, discharge yourself before touching the modules on a grounded metal surface (e.g. heater, water pipe or protective earth connection) or work on a grounded electrostatic protection mat or with a wrist strap for electrostatic protection.
- We designed our devices for indoor use only.

Connect the Light-Interface to the PC and the Light-Display-Module:

- **Attention:** Before starting any installation switch off the drive voltage by pushing the stop button and/or disconnect the main supply and switch-off the computer.
- The **Light-Display-Modules** contain a large capacitor which has to be completely discharged before the **Light-Display-Module** can be connected or disconnected. Please wait a couple of minutes after switching off the supply transformer before you connect or disconnect the **Light-Display-Module**.

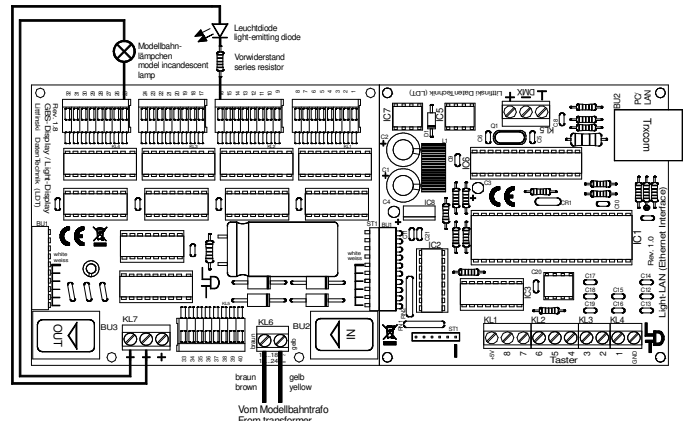
The **Light-Interface LI-LAN** for the Network-Interface (LAN) of a computer will be **supplied together** with a **Standard-Patch cable** of 2 meter length. With this cable can be the **Light-Interface LI-LAN** directly connected to a **Hub, Switch** or **Router**.

For a **direct connection** between **PC** and **LI-LAN** you will need a **Cross-Over-Network-Cable**. This cable will be available at any computer shop. If you use a PC with **Gigabit-Connection** you can as well use the supplied **Standard-Patch cable** for a **direct connection**.



Connect now the **Light-Interface** via the **10-poles socket bar BU1** either to a **Light-Display-** or a **Light-Power-Module**. Take **special care** that the **pin bars** of the **Light-Display-** or the **Light-Power-Module** are **not offset** connected into the socket bar of the **Light-Interface**.

Attend as well to the **Operation Manual** of the **Light-Display-** and the **Light-Power-Module**.



It is possible to connect up to **7 Light-Display-** and/or **Light-Power-Modules** to one **Light-Interface**. For this assembly shall be the **second Display-Module** connected to the **first Display-Module** via the **10-poles pin bar** either directly or with the extension cable "Kabel Light@Night xm".

The **Light Interface** receives always the operating voltage from the first **Light-Display-** respectively **Light-Power-Module**. The **Light-Interface** contains a **galvanic separation** to the interface of the PC. Therefore is no direct electrical connection between model railway and computer existent.

One **Light-Display-Module** offers 40 light control outputs with 0.5 Ampere each. One **Light-Power-Module** offers 24 outputs of 2.5 Ampere each. Each output can be individual configured via the **Light@Night PC-Software**.

Further **details referring** to the **wiring** of lamps and light emitting diodes are available within the **Operating Instruction** of the **Light-Display-** respectively **Light-Power-Module**.

Colored sample connections for the wiring can be additionally found on our web site www.ldt-infocenter.com at the section "**Sample Connections**".

Installation of Light@Night demonstration software:

The **Light@Night PC-Software** runs on almost any PC with a **Windows operating system** of **Windows 95** or higher. We **recommend** particularly **modern operating systems**.

Operating system	Windows 95, 98, Me, NT, 2000, XP, Vista, Win 7, 8 or 10
CPU	Intel or AMD from 300MHz clock frequency
Working memory	64Mbyte RAM
Interface to the Light-Interface	Network connection (LAN)

If you want to run the **Light@Night PC-Software together with a model railway control software** (e.g. **Railware, Win-Digipet, TrainController** or **iTrain**) on your PC you have to attend to some **strict specific requirements**, because the control software as well as **Light@Night PC-software** need some system resources.

In this case please find out the system requirements of your model railway control software and attend to the specific instruction.

In a doubtful case it could be considerable to use a second PC exclusive for **Light@Night**.

In case of a common operation of **Light@Night PC-software** and a **model railway control software** the following PC-system requirements are necessary:

Operating system	Windows 2000, XP, Vista, Win 7, 8 or 10
CPU	Intel or AMD from 800MHz clock frequency
Working memory	256Mbyte RAM
Interface to the Light-Interface	Network connection (LAN)

Together with the **Light-Interface LI-LAN** you received a **CD-ROM** containing the **Light@Night PC-demonstration software**.

This demo-software enables you to test the **Light@Night hardware** for the **Layout Light Control** without the complete version. There is a substantial difference to the complete software version. The light outputs of the demo-version offers only **light effects** for **incandescent lamps** and **flashing lights**.

The **DMX-Interface** for the **Surrounding Light Control** and the inputs of up to eight **push buttons** for the **external control of light effects** are **not supported**.

The **complete version** of the **Light@Night PC-software** for all light effects (neon lights, gas street lamps, flashing blue lights, light chains, traffic lights and many others) the support of the **DMX-Interface** and the external push-buttons including a manual (in German language only) is available by company **Railware** (<https://railware.de>).

For the **installation** of the demo-software please insert the supplied CD-ROM into the CD-ROM drive of your computer:

- The installation program will start automatically. In case the function **“auto start”** has been set to **“off”** on your PC please start the program with **“Execute...”** at the Windows start menu and enter the following line (without **`** sign): **‘d:\lightatnightdemo.exe’**. Please replace the letter **‘d’** with the letter-code of your CD-ROM drive.
- Follow now the instructions of the installation program.
- Enter the directory where **Light@Night** shall be installed. Recommendation: **‘C:\Program\LightATNight’**.
- The following installation will run automatically.
- Finally please restart your PC.

Before the LAN configuration please connect an **incandescent lamp** or a **light emitting diode with serial resistor** to the **output 1** of the **Light-Display** respectively to the **Light-Power-Module** which is the first module connected directly to the **Light-Interface LI-LAN**.

Further information for the wiring of incandescent lamps and light emitting diodes can be found within the operating instruction of the Light-Display- respectively Light-Power-Module.

Now **switch-on** the **power supply** (transformer or of the switched mode mains power supply) for the first **Light-Display- respectively Light-Power-Module**.

Control at first the network connection. The **green LED** of the **LI-LAN** network socket has to **lighten constantly**, the **yellow LED** will **flicker** during **general network operation**.

LAN-Configuration:

To **integrate** the **Light-Interface LI-LAN** into your **PC-Network** you have to **start** the program **“IP Programmer”**. You will find this program at the **Windows start directory** under **“Programs”** and **“Light@Night”**.

Click now onto **“Search and Read”** at the **IP Programmer**. If the **IP Address of 192.168.1.76** (**pre-setting** of the **Light-Interface LI-LAN**) is suitable for your network you will receive immediately an information about the settings.

If you need a **correction** of the **IP-Address** you can do this at the lower part of the window. For your orientation you can read the **IP-Address of your computer left top side**.

As long as the input of the **IP-Address** is incomplete the background of the input area will be **yellow**. If the selected **IP-Address** will be **used already by another member** the background will be **red**. If the **IP-Address** will be **suitable for your network** the background will be **green**.

Now activate the button **“Programming”**. The **Light-Interface LI-LAN** confirms the **receipt** of the new IP Address by indicating with **short flashing** at the output of the **first Light-Displays**.

Close now the **IP Programmer** and start the **Light@Night Demo software** which can be found as well inside the **Windows Start Directory** under **“Program”** and **Light@Night**.

Within the **Demo software** and the menu **“Option”** open the dialog **“Interface”**. Select the **Hardware type “Light-LAN Interface”** and register under interface the previous **configured IP Address**. Or use the predefined **IP Address 192.168.1.76**, in case you have **not programmed a new IP-Address** at the **IP-Programmer**.

Close now the dialog with **“OK”**. The **selected IP-Address** will now be indicated at **left side bottom** on the **status line**. If the **Light@Night Demo software** has now a connection to the **Light-Interface LI-LAN** the **LED** on the **status line left next** to the **IP-Address** will **lighten in green color**.

For introduction to the **various features** of the **Light@Night PC-Software** the software contains within the help function detailed help-descriptions. Just press the key **“F1”** and read the section **“Operating the Software”** and **“Configuration”**.

The **Complete Version** of the PC-Software will be supplied together with a **manual** which described all light effects of the PC-Light Control **Light@Night** in detail. At the section **“Downloads”** on our **Web-Site** you can as well **download** this **manual**.

Accessories:

For the **assembly** of the **Light@Night hardware** we offer suitable **assembly material** under the order coder **“MON-SET”**. A set consist of **4 plastic distance washer** and **4 matching wood screws**.

Under the order code **“Kabel Light@Night xm”** you can order an **extension cable** for the **Light-Display-** and **Light-Power-Module** for a possible assembly of the modules at a **0.5m, 1m or 2 meter distance**.

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