

*Dear customer,*

*Thank you for purchasing this new product.*

*We still releasing new firmware updates with new ideas we get from our customers. If you have any suggestion do not hesitate to contact us.*

*For the newest releasenotes please check [www.rgb-led.nl](http://www.rgb-led.nl) or [www.lighteasy.nl](http://www.lighteasy.nl)*

*For any question do not hesitate to contact us.*

**The R&D crew**

*Please check [www.lighteasy.nl](http://www.lighteasy.nl) for the latest documentation*



### **NEW IN THIS VERSION:**

- **External remote inputs**
- **- DMX input triggering**
- **- External switches**
- **- External Preset panels**
- **AutoRun / Wakeup**
- **Programmable LOCK**
- **Timer / Scheduling programs**
- **Higher DMX refreshrate**
- **Enhanced Switching**
- **powersupply input (+5...18VDC input, 400mW)**
- **Resolved some bugs**

### **SPECIFICATIONS VERSION 1.0**

- Very compact design (only 110 x 85 x 15 mm), deliverable in **black or white** finish
- Fits in a standard **wall mounting box** or deliverable as **desktop model**
- 256 channel DMX-512/1990 controller
- DMX-input for DMX-recorder functions
- MENU controlled graphical user interface
- Programmable crossfades (1 sec. / 99 min.)
- 4096 memory scenes (16 megabit)
- Realtime clock for time-scheduling programs
- Program and Master-dim function
- Programmable WAKE-UP and AUTO-RUN functions
- On/off button (BLACK-OUT function)
- Programmable LOCK with PIN-code
- USB interface for firmware update
- USB interface for memory-backup and PC-control
- External programmable remote inputs for external scene and program access
- Optional Network connection with own IP-address
- Power Supply: **5 ... 18 Volts DC, 400mW (Enhanced)**
- Available in Black or Grey finish and as desktop enclosure

### **VERSION 0.86**

- Included
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### The Light Easy compact lightcontroller

The architectural light controller is the first wall mounted true DMX-512 controller with many high-end features for controlling intelligent (RGB)-lighting.

Many extended features like:

- Wall mounting or desktopmodels
- 4096 memory scenes
- External remote inputs
- DMX-input (for use as DMX-recorder)
- Wake-Up / Auto-Run / Lock-code
- PC USB-2.0 interface
- Realtime Clock (scheduling)
- Graphical User interface
- Network option

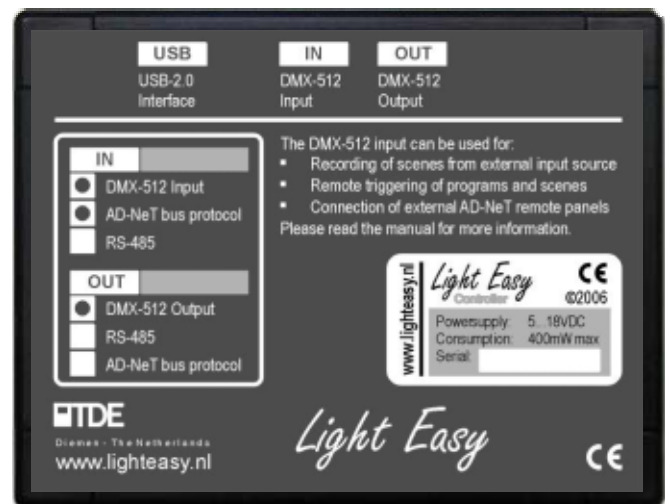
Programming the Light Easy is easily done through the menu controlled graphical user interface

If you have to program more complex programs, you may connect other lightconsoles through the DMX-512 input interface for recording program scenes. You can store up to 64 programs with 64 steps each.

It's able to time-schedule programs using the build-in realtime clock, and you can even select programs using the external remote inputs, RS232 or RS485 interface and DMX-512 remote input.



Frontside



Backside Desktop version

In the package you will find the following items:

#### (O) Light Easy Desktop version:

- 1 x Light Easy controller
- (O) Light Easy Black desktop
- (O) Light Easy White desktop
- 1 x Powersupply adapter (USB +5VDC)
- 1 x DMX-512 output connector cable
- 1 x DMX-512 input connector cable
- 1 x USB-2.0 interface cable
- 1 x Light Easy manual

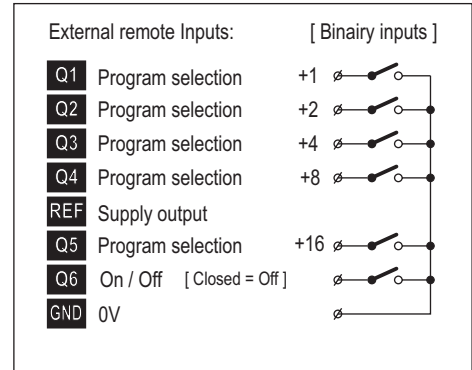
#### (O) Light Easy Wall-mounted version:

- 1 x Light Easy controller
- (O) Light Easy Black wall-mounted
- (O) Light Easy White wall-mounted
- 1 x Powersupply adapter (USB +5VDC)
- 2 x 8-pole connectors
- 1 x USB-2.0 interface cable
- 1 x Light Easy manual

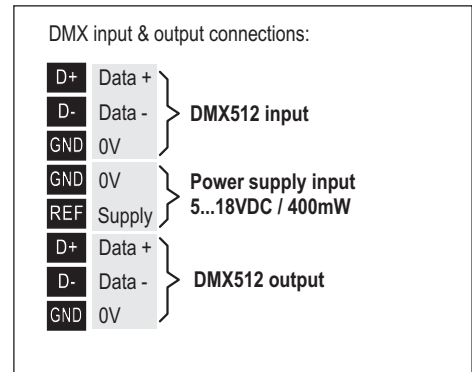
## Connecting the wall-mounted Light Easy:



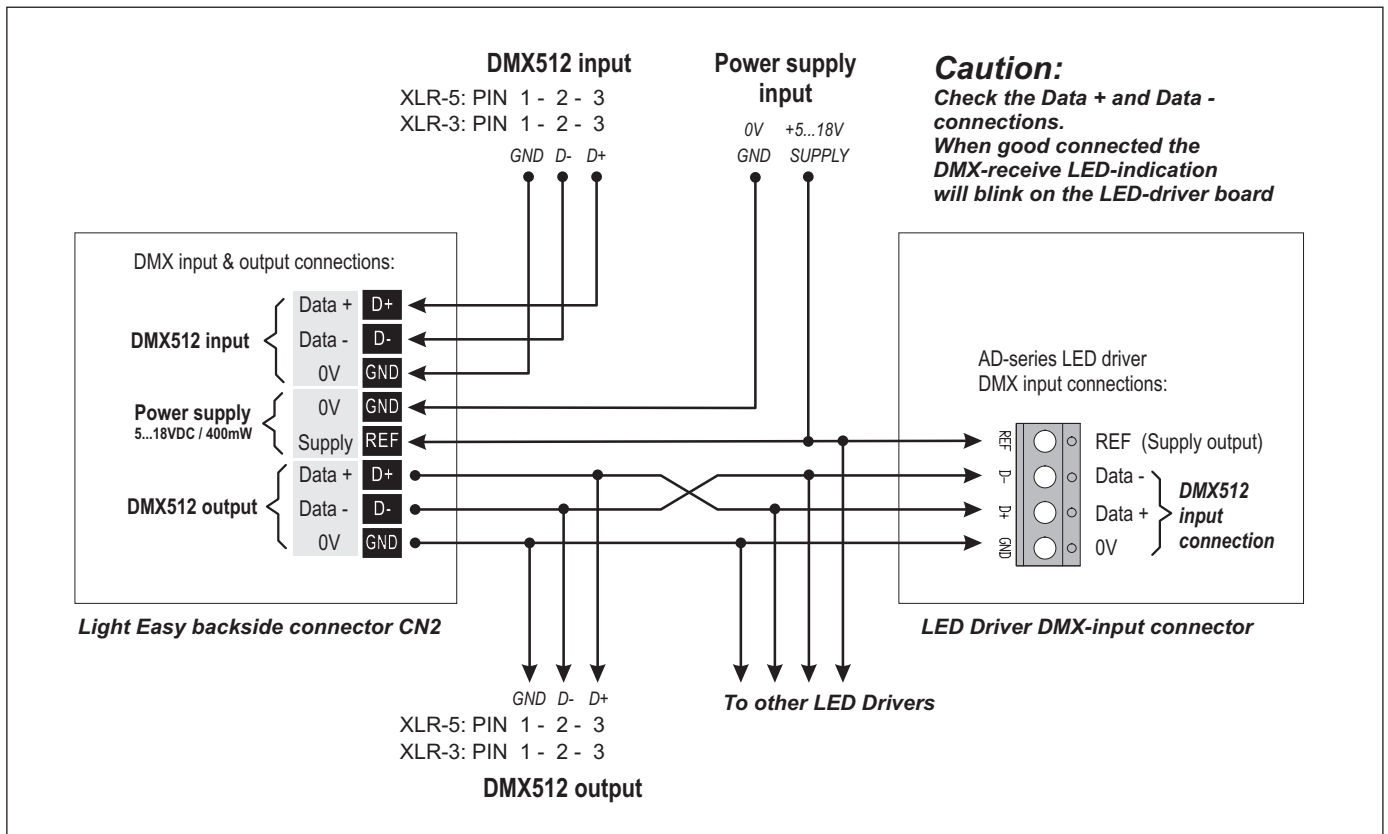
Backside wall-mounted version



Backside connector CN1



Backside connector CN2



Connections of the wall-mounted Light Easy version

The Light Easy is specially designed for easy control of many (RGB-LED) fixtures and other lighting applications. The Light Easy is a **one solution** DMX light controller with inbuilt clock and time schedule functions for automatically creating the right mood on the right time!

When powered up it is starting the selected program or scene and during the day you can schedule other programs. It is even possible to external remote the Light Easy with external remote buttons or use the DMX-trigger input [ see page 8,9 ] to control the Light Easy by an other DMX-console.

**For instance:**

Image a multi functional Bar / Discotheque with a lot of RGB-LED fixtures and other lighting.

- In the morning the cleaning people can switch on the working light via a external remote switch connected to the Light Easy which select a previous store scene.
- At daytime (when the Light Jockey is still sleeping) the hostes can control all the light with the Light Easy controller by selecting different programs and scenes at the Light Easy or at external PRESET-panel(s).
- At nighttime the Light Jockey takes over the total light control by remote control the Light Easy with his DMX-console using all the stored programs and scenes in the Light Easy.

This is a typical application but many other applications are possible!

We think the Light Easy will find his way in...

**Bar / Discotheque / Hotel / Cinema / Restaurant / Shop / Sauna / Home**

... and all other architectural applications.

**The Light Easy control buttons:**



The Light Easy is easy to control through the graphical user interface and easy to access buttons and menus.

It is easy to program and you can easily copy programs and scenes from a DMX-console to the Light Easy.

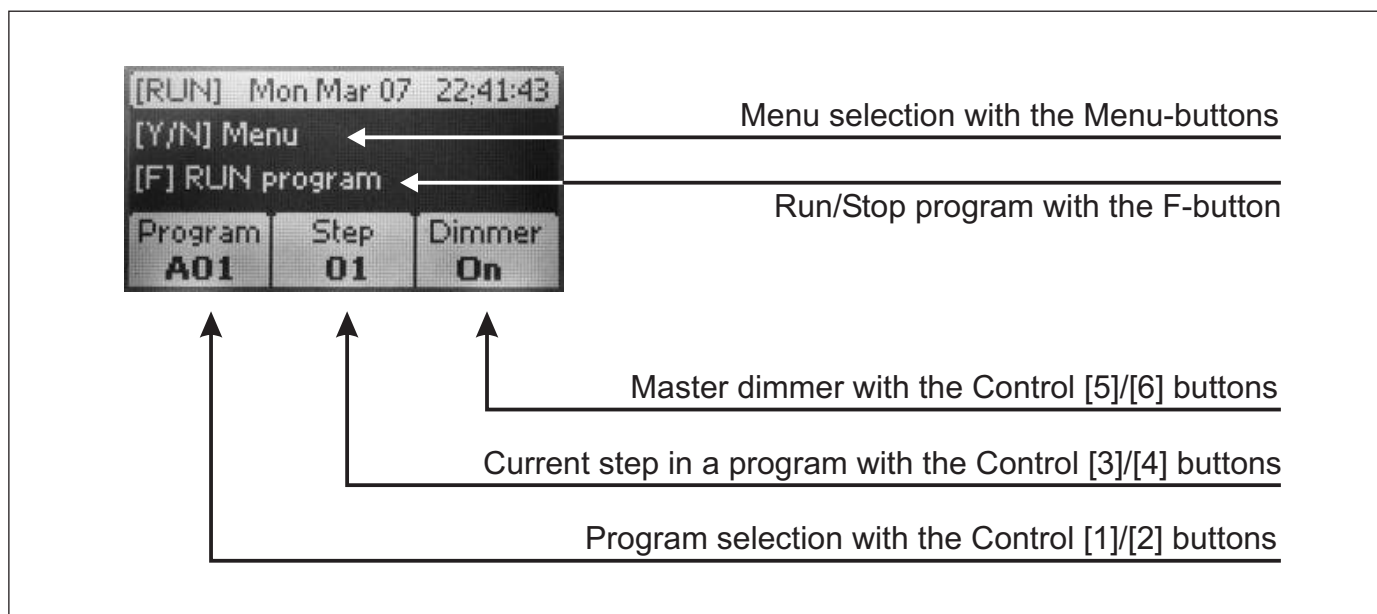
The Light Easy is easy to understand and you can lock the Light Easy with a pin-code for easy use with inexperienced users.

*The Light Easy*  
an easy job

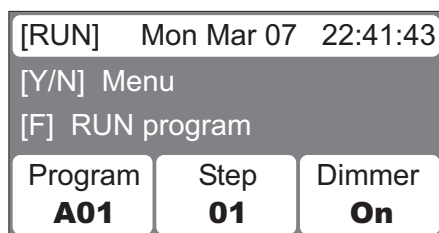
### The Light Easy RUN-menu:

This is the startup screen when powered up. This is the user screen of the Light Easy controller. The following functions can be controlled in this RUN-menu:

- Start/Stop and Hold programs
- Select and display memory scenes (program steps)
- Dim programs and scenes with the Master dimmer function and On/Off switch (blackout)
- Entering the Menu for editing and user setup (this function can be locked).



### Startup screen:



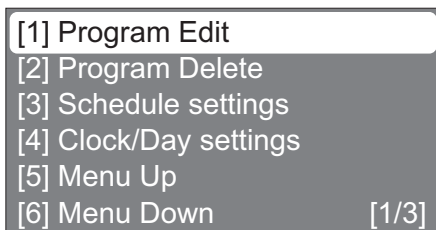
Startup screen

This is the main screen of the user interface.

- You can select programs with the Program-buttons. You also can change programs while running
- You can Start/Stop programs with the F-button
- When stopped you can select programsteps with the Step-buttons
- You can adjust the total lightoutput with the Dimmer-buttons from 0...100%. This is the Master dimmer function
- You can switch the output with the ON/OFF-button (Black-out)

When you select the MENU-buttons you will enter the MENU. To select move the cursor with the MENU UP/DOWN-buttons or press the desired number with the Control-buttons:

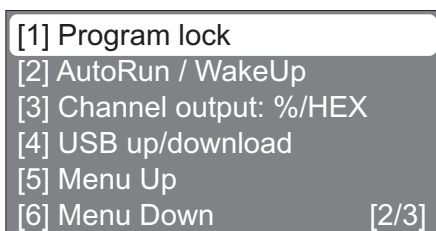
### Menu screen 1/3:



Menu screen 1/3

- [1] Program Edit:  
In this menu you can edit programs. This will be explained in the "Edit Menu" page.
- [2] Program Delete:  
Select first in the Start-menu a program that has to be deleted. Then select [2] Program delete to delete the selected program. When deleted, all data is erased and crossfade time = 0,1 sec.
- [3] Schedule Settings:  
In this menu you can schedule programs. You can make weekly timed programs  
This all will be explained in the "Timeschedule" page.
- [4] Clock/Day settings:  
Here you can set or correct the current date and time. With the Menu-buttons you can switch between time and date. Press the F-button to store the new settings
- [5] Menu Up: Goto next Menu (page 2/3)
- [6] Menu Down: Goto previous Menu (page 3/3)

### Menu screen 2/3:



Menu screen 2/3

- [1] Program lock:  
You can lock/unlock the programfunctions of the Light easy. The factory PIN-code: [1], [4], [5], [3] (works always!)  
Be sure to unlock the Light easy before start programming!
- [2] AutoRun / WakeUp:  
When powered up you can select which program automatically starts and if a program starts running or not.
- [3] Channel output:  
You can select % or HEX as DMX-data displayed in the Edit-menu (% = 0...100%, HEX = 0...255)
- [4] USB up/download:  
Enter this menu when connected to a Windows PC. With the Light Easy software you can Up & Download programs and update the firmware if available.
- [5] Menu Up: Goto next Menu (page 3/3)
- [6] Menu Down: Goto previous Menu (page 1/3)

### Menu screen 3/3:



Menu screen 3/3

- [1] DMX-trigger setup  
In this menu you can setup the DMX-triggering input. You can use the DMX-input for external triggering by connecting the Light Easy to a DMX-console. With this console you can externally remote program selection and master dimmer function.
- [2] Future developments
- [3] Future developments
- [4] INFO: www.lighteasy.nl:  
Enter this menu for product information and version numbers
- [5] Menu Up: Goto next Menu (page 1/3)
- [6] Menu Down: Goto previous Menu (page 2/3)

### Programming setup:

[RUN] Mon Mar 07 22:41:43		
[Y/N] Menu		
[F] RUN program		
Program	Step	Dimmer
<b>A01</b>	<b>01</b>	<b>On</b>

- Stop running programs by pressing the **F-button**
- Select with the **Control-buttons** a program for editing
- If needed select the desired programstep to be edit
- Press **Menu-buttons**

- If the programming mode of the Light Easy is locked, you will be requested to enter a PIN-code to unlock the device
- Enter the 4-digit PIN-code you used before to lock the device, and press [Enter] to exit to programming mode.
- Move cursor to [Program Edit] or press [1] to enter Program Edit

[1] Program Edit
[2] Program Delete
[3] Schedule settings
[4] Clock/Day settings
[5] Menu Up
[6] Menu Down [1/3]

### You forgot your PIN-code?

- Enter the always working Factory PIN-code.  
Enter: [1], [4], [5], [3], and press enter to exit to programming mode.
- Move cursor to [Program Edit] or press [1] to enter Program Edit

### Creating a program:

[EDIT] Channels	1/2	
<b>Program: A01</b>	[F] Store	
<b>Step: 01</b>	[Y/N] Page	
<b>Red</b>	<b>Green</b>	<b>Blue</b>
001 On	002 Off	003 Off

- Create a scene (program step) by changing the channel levels using the **Control-buttons**.  
*Hint: For output level switching (switching On or OFF) press and hold the Exit-button and press the desired channel level control-buttons*
- Select the desired DMX-channels using the **Menu-buttons** as Page-select buttons

If ready, press the **F-button** to enter the **Fade/Waittime menu**

[EDIT] Fade/Waittime	2/2	
[Y/N] Step Edit Menu		
[F] Store Scene		
Step	Fadetime	Waittime
<b>001</b>	<b>0,1 sec</b>	<b>0,0 sec</b>

- Adjust the **FADE-time** and **WAIT-time** using the **Control-buttons**:
  - FADE-time Crossfade time between to steps (0 sec .. 99 min)
  - WAIT-time Waittime between to steps (0 sec .. 99 min)
- If ready, press the **F-button** to store the scene and to enter the next programming step

**Repeat above steps till all desired steps are programmed**

*Hint: While in [EDIT] Channels press and hold the Exit-button and press the Menu-buttons to browse through the programsteps*

### Last step programming:

[1] Set step as last step
[2] Insert new step
[3] Delete this step
[4] Delete all steps
[5] Return to [EDIT]
[6] Exit Menu (No storage)

- To select the last step of a program press once the **F-button** again to enter the **Fade/Waittime menu**
- Select with the **Control-buttons** the last step of the program
- Press the **Menu-buttons** to enter **Step-Edit menu**
- Press [1] or **F-button** to select the current step as last step

### Exit the programming menu:

- To exit the **Program Edit menu** press and hold the **Exit-button** and press the **F-button** to exit the programming menu

### External remote inputs:

The Light Easy has the possibility to external remote programs and scenes. At the backside of the circuit board are terminals located as drawn on the left.

You are able to external remote 31 programs with the Q1...Q5 inputs. With the input Q6 you can externally switch the Light Easy blackout function to On/Off.

If all input switches are open, then the Light Easy is function normally. To externally select programs you have to switch one or more of the External remote inputs to ground, using the binary decoded inputs on Q1...Q5.

*These External remote inputs overrules all internal functions.*

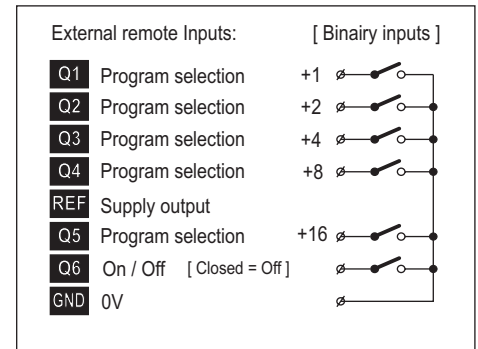
With the input Q6 you can switch the Light Easy blackout function On and Off.

If you close the input Q6 switch the output will be switched off (blackout is selected)

The inputs are voltage protected (with diodes) and are only active when connecting to ground.

It has no use to supply any voltage to the external inputs.

Only connecting to ground will have any effect.



### External program selection

0	INTERNAL	5	PRG-16
1	PRG-1	1+5	PRG-17
2	PRG-2	2+5	PRG-18
1+2	PRG-3	1+2+5	PRG-19
3	PRG-4	3+5	PRG-20
1+3	PRG-5	1+3+5	PRG-21
2+3	PRG-6	2+3+5	PRG-22
1+2+3	PRG-7	1+2+3+5	PRG-23
4	PRG-8	4+5	PRG-24
1+4	PRG-9	1+4+5	PRG-25
2+4	PRG-10	2+4+5	PRG-26
1+2+4	PRG-11	1+2+4+5	PRG-27
3+4	PRG-12	3+4+5	PRG-28
1+3+4	PRG-13	1+3+4+5	PRG-29
2+3+4	PRG-14	2+3+4+5	PRG-30
1+2+3+4	PRG-15	1+2+3+4+5	PRG-31

### DMX-TRIGGER input:

The Light Easy can use the DMX-input for DMX-triggering purpose. Before using the DMX-input for DMX-triggering you have to select the DMX-startaddress of the DMX-trigger input.

Press the following keys to enter this MENU: **[No], [5], [5], [1]**

Then select with the **[5] / [6] buttons (+/-)** the DMX-IN startaddress from 1...511.

The channel assignment is as follows:

Ch-1	Startaddress	Program selection (1...32)
Ch-2	Startaddress + 1	Dimmer (0...100%)
Ch-3	Startaddress + 2	0 = Light Easy active (local control) 255 = DMX trigger input active

**BE NOTICED:** THE DMX-TRIGGER INPUT IS **ONLY ACTIVE** WHENEVER CH-3 (STARTADDRESS+3) HAS THE DMX-VALUE OF 129...255

### CH-1 Program selection:

1-8	PRG-1
9-16	PRG-2
17-24	PRG-3
25-32	PRG-4
33-40	PRG-5
41-48	PRG-6
49-56	PRG-7
57-64	PRG-8
65-72	PRG-9
73-80	PRG-10
81-88	PRG-11
89-96	PRG-12
97-104	PRG-13
105-112	PRG-14
113-120	PRG-15
121-128	PRG-16
129-136	PRG-17
137-144	PRG-18
145-152	PRG-19
153-160	PRG-20
161-168	PRG-21
169-176	PRG-22
177-184	PRG-23
185-192	PRG-24
193-200	PRG-25
201-208	PRG-26
209-216	PRG-27
217-224	PRG-28
225-232	PRG-29
233-240	PRG-30
241-248	PRG-31
249-255	PRG-32

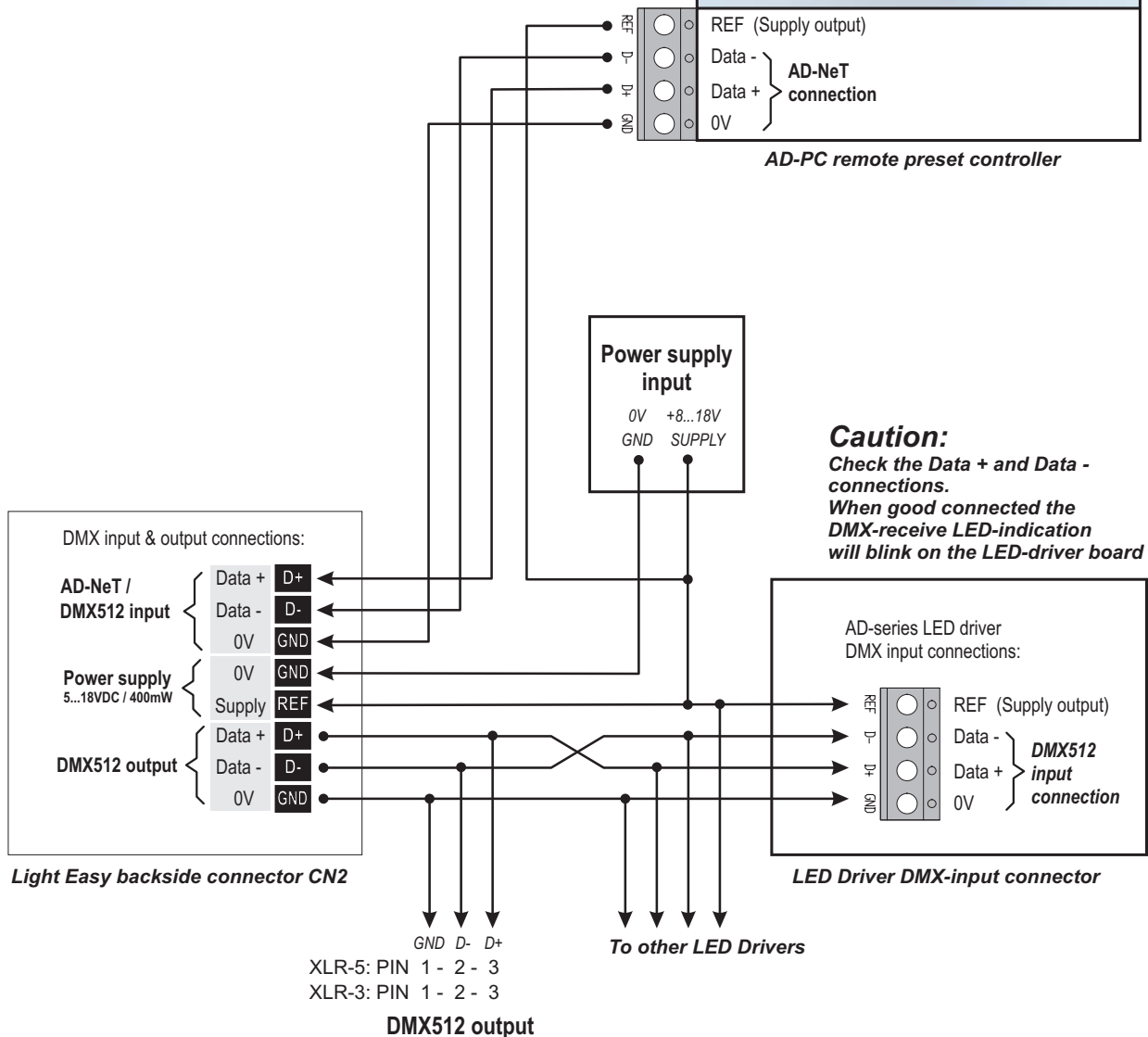
### Connecting the AD-PC remote preset controller to the wall-mounted Light Easy:

With the AD-PC remote preset controller you can externally select programs on the Light Easy.

The AD-PC has 8 buttons with LED's indication. With the 8 buttons you can select program 1...8 on the Light Easy controller.

When you connect the AD-PC controller to the Light Easy the DMX-input of the Light-Easy switches over to the AD-NeT protocol. The Ad-NeT is a domotica protocol and has nothing to do with the DMX-512 protocol.

On the AD-NeT you may connect more than one AD-PC controller on the same data-lines if you want to externally control the Light Easy on several places..



**Caution:**

Check the Data + and Data - connections. When good connected the DMX-receive LED-indication will blink on the LED-driver board

Connections of the wall-mounted Light Easy version