

USER MANUAL

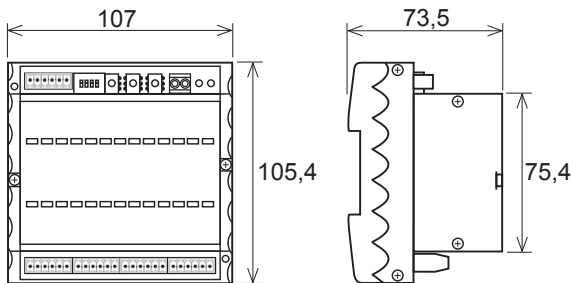
LL ANA8 - Analog module

LL08 400



COMPLIMENTS ON YOUR PURCHASE!

All dimensions are in millimeters



Package includes:

- LL ANA8 1 pc.
- User manual 1 pc.

Additional items needed:

- Data and power cables
- 24V DC power supply

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ENVIRONMENTAL PROTECTION

Do not throw away the appliance with the normal household waste at the end of its life, but hand it in at an official collection point for recycling. By doing this, you help to preserve the environment.



01 SAFETY INFORMATION



WARNING!!!

Carefully read before installing, powering or servicing. Nothing to do if anything misunderstand! Installation can be done only by a qualified professional in accordance with relevant local codes.

01.1 Safety instructions



- Shut down power before installation or maintenance of equipment or voltage /data source.
- Do not modify, alter, or attempt to service the LeaderLight appliance. Doing so will void the warranty.
- Use only the recommended DC voltage source.
- Connect the ground to the bottom of the box!
- Electrical connections, service and maintenance can be performed only by qualified professional.
- AC power supply of DC power supply must comply with local regulations.
- AC power supply must be protected against overvoltage and short circuits.

01.2 Operating restrictions

- This product was designed for indoor use only!
- If the product has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your unit. Leave the unit switched off until it has reached room temperature.
- Do not operate the product in humid, dusty or too hot/cold environments.
- Before connecting, make sure the product is not damaged, wet, or otherwise damaged.
- Unprofessional operation creates the most damages!
- For transport use the original packaging.

Operate only with 24V DC stabilized source!

01.3 Fire protection



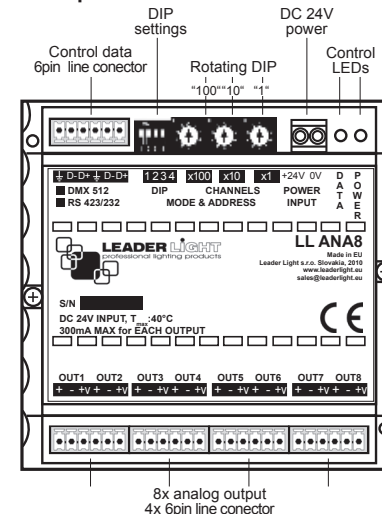
- Follow all safety restrictions.
- Device never cover – the minimum space around the vents must be at least 100mm (4 in.).
- Allowed maximum ambient temperature is 40°C (104°F).

02 PRODUCT SPECIFICATION

02.1 Technical specification

- Power connection:** DC24V max. 10W
- Output:** 8x analog output 1-10V DC, max. 100mA
- Control data:** Protocol USITT DMX-512 or RS 423/232 LL defined protocol
- Ambient temp. (Ta):** 0°C ÷ +40°C
- Net weight:** 0,36 kg
- Dimensions LxWxH:** 107mm x 105,4mm x 73,5mm
- Installation:** standard DIN installation TS35 – 6DIN

02.2 Product description



Indication of control LEDs (LED power- green, LED data - yellow)

LED	Indication	Status
LED Power	blinking - 2Hz	O.K. - device is working correct
LED Data	not lit	No DMX signal
LED Data	blinking - 4Hz	O.K. - Connected the correct DMX signal
LED Data	fast blinking	ERROR - incorrect digital signal
LED Power & LED Data	alternating blinking	function AutoTest

03 INSTALLATION

03.1 Unpacking

- Unpack carefully.
- This is electronic equipment and should be handled carefully.
- Damaged delivered package or if are any mechanical parts broken – it must be claim immediately by the transport company. Photo pictures as evidence are valuable for future claim.

03.2 Physical installation

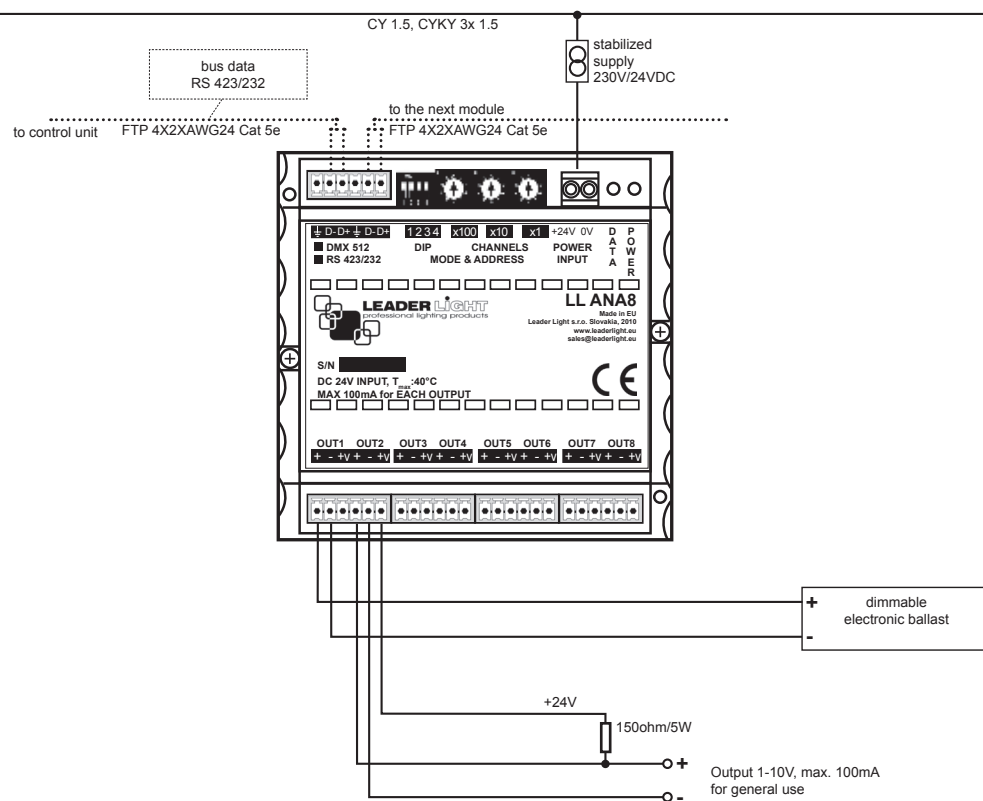
- Loading capacity of bearing area has to be at least 10 times the weight of all device clusters.

03.3 Connection

- Respect all SAFETY INFORMATION 01!
- Connect the ground (earth) to the bottom of the module!
- LL ANA8 device may be operated only with 24V DC stabilized source.
- In the case of connecting the power supply with more than a prescribed voltage you can suffer a dangerous electric shock, inflict damage equipment or fire.
- Shut down power supply from all devices before installation of LL ANA8 to end devices.



Wiring diagram LL ANA8 module



Cable:
 — CY 1.5, CYKY 3x 1.5
 FTP 4X2XAWG24 Cat 5e

Feature LL ANA8:

LL ANA8 is addressable analog output module. The device is designed primary to control the electronic ballasts with Input 1-10V

03.4 Installation Factors

- For any indoor and outdoor installation inside the installation box must be add +100mm to each side and must be add ventilation modul.
- For outdoor installation must be add heating modul, if the outdoor temperature is less then 0°C any time!



03.5 DMX channels

These informations are subject to change. latest data are on: www.leaderlight.eu

Mode1:

- Channel 1 = Analog output 1
- Channel 2 = Analog output 2
- Channel 3 = Analog output 3
- Channel 4 = Analog output 4
- Channel 5 = Analog output 5
- Channel 6 = Analog output 6
- Channel 7 = Analog output 7
- Channel 8 = Analog output 8

Analog output = 1-10V DC

Feature DipBCD (rotary switch RS1 - "100", RS2 - "10", RS3 - "1"):

- DipBCD = 000 = DMX address 001
- DipBCD = 001 – 512 = DMX address 001 – 512
- DipBCD = 9xx = AutoTest: Fade-Over
- DipBCD = 8xx = AutoTest: all channels on 50%
- DipBCD = 7xx = AutoTest: all channels on 100%
- DipBCD = 6xx = Service Test: all channels at 0,10,20 ,..., 90% by DipBCD RS3 - "1"

Feature Dip (switch Dip1, Dip2, Dip3, Dip4):

- Dip1 = Zap = if the command RSX is not present more than 7s, all channels are set on 100%
- Dip2 = Zap = without function
- Dip3 = Zap = without function
- Dip4 = On = activation protocol RSX3b (only if power is switched on)

Description of RSX3b protocol is in a separate annex.

04 MAINTENANCE AND SERVICE



- Before any maintenance is necessary to carefully read all **SAFETY INFORMATION 01!**
- Damages caused by inadequate cleaning or maintenance are not covered by warranty.
- Requires periodic cleaning (dust, dirt ,...)

Procedure for maintenance:

- Unplug mains before maintenance and at least 10 minutes cool off.
- Appliance do not illegal open or demount.
- Clean-up dust only from outer surface. Use vacuum or dumpy duster (warm water)
- Before reinstalling make sure everything is intact and dry- no wet parts!

Service:

- Customer service provided by the manufacturer.