CONTROLLER



Installation and users guide

Strobe, 1Ch, 24A, PAD1 1132/24 RS232 operated

This package consists of:

- PAD1 1132/24, Strobe control unit
- LKA1 1032 Power/Trigger/com cable, 5m

For program, see www.latab.se

Specifications	
Voltage supply	24V DC(±10%)
Current requirement	max. 1.5A
Protection class	IP30
Operation temperature	0°C+65 °C
Storage temperature	-40°C+80 °C
Storage humidity	max. 80%

Power output	Max 24A	
Light intensity	0 to 100%.	
Strobe pulselength	50 to 1500 μsec	
Trigger frequence	max. 200Hz at 24A	
Communication	RS232	

Warning!

Do not connect to other than 24 V DC

Power/trigger cable		
Yellow	24 VDC	Pin 1, 2
Brown	0 V	Pin 3, 4
Green	Trigger +	Pin 8
White	Trigger -	Pin 9

Trigger input: Optical isolated Trigger range: 5-24VDC, 20mA

Communication.

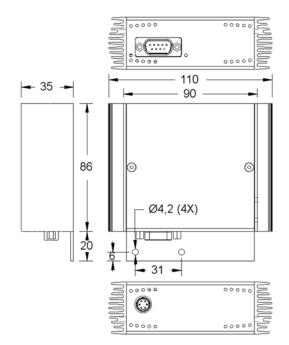
Connect the 9-pin D-SUB, marked "COM" to a com.port on host system

Light head connector:

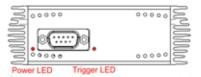
Pull back the spring-loaded housing before connecting and disconnecting.

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LED indication



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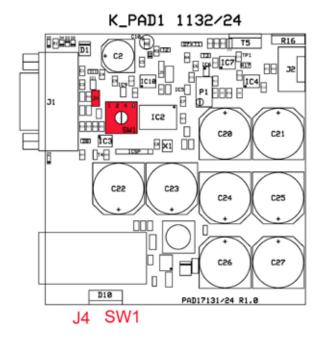


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Adjustment:

Open the units by unscrewing top cover



Adjustable parameters:

Pulse Current	PC	0-100%	
Stobe Pulse Width	SPW	50µsec-1,5msec	
Trigger Delay	STD 0-38msec		

Trigger delay consists of STD (0-255) multiplied with a delay factor (DF) (2-150µsec) giving a STD range of 0-38 msec.

EMC compatibility:

This product, PAD1 1131/24 follow the EG-directive for EMC-compatibility, 897336, additional 9321/EEG and 93/86//EEG

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Communication, SW1:

The communication cable PC com. port connector contains an RS232 to RS485 interface converter for safer transmission but mainly to enable so called multi drop systems with up to 8 units, in any combination of steady state and/or strobe RS232 operated controllers, connected to the same com port. Each controller is given its own ID (0-15), set by switch, SW1.

The PC control software handles max. eight units, (available on www.latab.se).

Termination jumper, J4:

Termination jumper J4 shall be installed on the last unit of the multidrop system.

In case of only one unit this jumper J4 shall be installed in the unit. (Preset at factory)

RS232 interface.

Connect the 9 pin D-SUB marked "COM" to the host system PC.

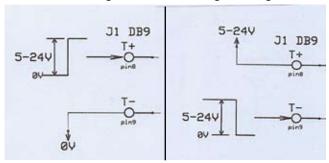
Com port setting:

19.200 baud, no parity, 8 data bits, 1 start/stop bit Set DTR and RTS pins to pos. voltage level

Trigger configuration

Positive edge

Negativ edge



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PAD1 1132/24 control protocol

The control string (hex) are 5 bytes and to be sent in the following order:

Start byte: FE.

ID-byte: 00-0F. Corresponding to SW1

inside the controller.

SPW/DF-byte: 00-FF. Higher nibb = SPW.

Lower nibb = DF

TD-byte: 00-FF. Trigg delay

PC-byte: 00-FF. 0-100% light intensity

Example 1:

FE, 00, C6, 08, FF (five byte command)

FE = Start byte. 00 = Unit ID = 0.

C6: $C = SPW = 100 \mu s.$

 $6 = DF = 50 \mu s$.

 $08 = TD \text{ trigg delay of } 8 \times 50 \mu s = 400 \mu s.$

FF = PC = 100% light intensity.

Example 2:

FE, 02, EF, BA, 7F (five byte command)

FE = Start byte. 02 = Unit ID = 2.

 $E = SPW = 1200 \mu s.$ EF:

 $F = DF = 150 \mu s.$

BA = TD trigg delay of $130 \times 150 = 19.5 \text{ ms.}$

7F = PC = 50% light intensity

Table for SPW (strobe pulse width) and DF (trigg delay factor) settings

SPW higher nibb		DF lower nibbb	
SPW	μsec	DF	µsec
0	50	0	2
1	100	1	5
2	150	2	10
3	200	3	20
4	250	4	30
5	300	5	40
6	400	6	50
7	500	7	60
8	600	8	70
9	700	9	80
Α	800	А	90
В	900	В	100
С	1000	С	110
D	1100	D	120
Е	1200	Е	140
F	1500	F	150