Strobe, 4Ch, 8A, PAD1 1432/8 RS232 operated

This package consists of:

PAD1 1432/8, Strobe control unit
LKA1 1036 Power/com. cable, 5m
LKA1 1033T Trigger cable, 5m
For program, see www.latab.se

Specifications	
Voltage supply	24V DC(±10%)
Current requirement	max. 2,5A
Protection class	IP30
Operation temperature	0°C ....+65 °C
Storage temperature	-40°C....+80 °C
Storage humidity	max. 80%

No of channels	4
Power output	Max. 8A/channel
Light intensity	0 to 100%.
Strobe pulselength	5 to 1500 μsec
Trigger frequence	max. 200Hz at 8A
Communication	RS232/485

Warning!
Do not connect to other than 24 V DC

Power cable		
Red	24 VDC	Pin 5
Black	0 V	Pin 4

Trigger cable	Trigg + white cable	Trigg- brown cable
Channel 1	Pin 1	Pin 6
Channel 2	Pin 2	Pin 7
Channel 2	Pin 4	Pin 8
Channel 2	Pin 5	Pin 9

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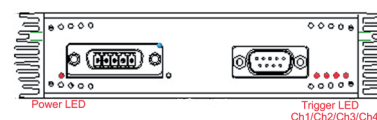Trigger range: 5-24VDC, 20mA

Light head connector:
Pull back the spring-loaded housing before connecting and disconnecting.

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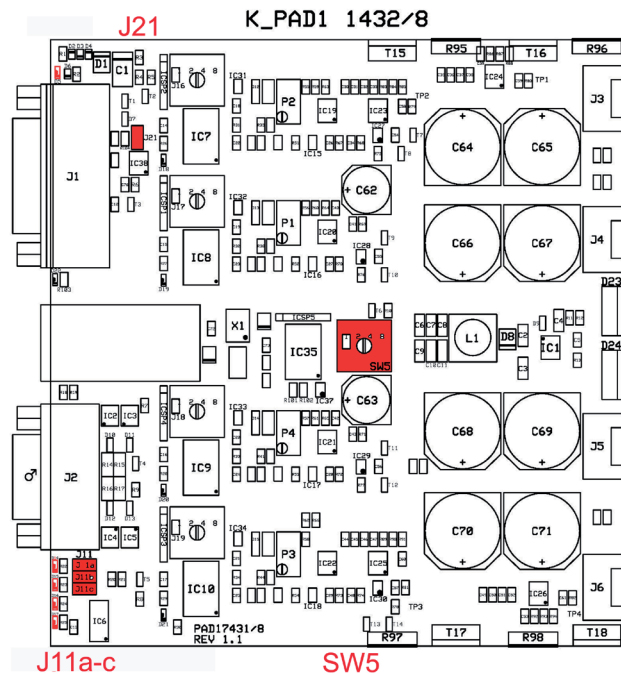Member of the Polytec organization **Polytec**

35
153,4
129,4
126
20
Ø4,2 (4X)
31   55,4   31

LED indication

Power LED
Trigger LED
Ch1/Ch2/Ch3/Ch4
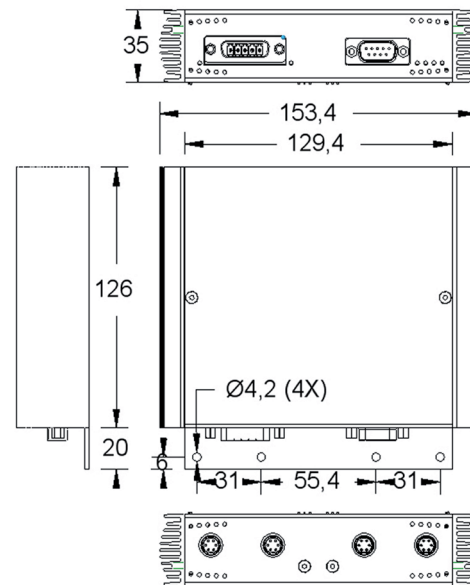
LAT elektronik AB
Krossgatan 18
SE-162 50 Vällingby
Sweden
Phone +046 8704 9225 • e-mail: info@latab.se

Adjustment:

Open the units by unscrewing top cower

K_PAD1 1432/8

J21

J11a-c   SW5

Adjustable parameters for each channel:

Light Intensity	LI	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

Communication, SW5:

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, SW5.
The PC control software handles max. eight units, (available on www.latab.se).

Common trigger, J1a-c.

Installing jumper J1a-c will enable channel 2-4 to be triggered simultaneously using channel 1 as master channel.

Termination jumper, J21:

Termination jumper J21 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
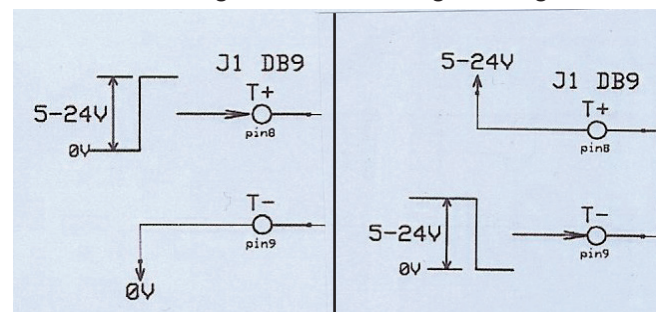
PAD1 1432/8 control protocol

This program has the possibility to send either 1 channel at a time or commad for all 4 channels. The comand for 1 channel is 6 bytes and the comand for all 4 channels are 14 bytes

One channel control string (hex) are 6 bytes, to be sent in the following order:
1)Start byte: FE.
2)Unit ID-byte: 00-0F. Corresponding to SW1 inside the controller.
3)Channel ID   01-04
4)SPW/DF-byte: 00-FF. Higher nibble = SPW. Lower nibble = DF
5)TD-byte: 00-FF. Trigg delay
6)LI-byte: 00-FF. 0-100% light intensity

Example 1:
FE, 00, 01, C6, 08, FF (six byte command)
FE = Start byte.
00 = Unit ID = 0.
01 = Channel 1
C6:   C = SPW = 1000 µs.
        6 = DF = 50 µs.
08 = TD trigg delay of 8 x 50µs = 400µs.
FF = LI = 100% light intensity.

Four channels control string (hex) 14 bytes to be sent in the following order:
The first two bytes are the same followed by 4,5,6 for channel 1 and then the same for channel 2,3 and 4.

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

SPW higher nible		DF lower nible	
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
A	800	A	90
B	900	B	100
C	1000	C	110
D	1100	D	120
E	1200	E	140
F	1500	F	150