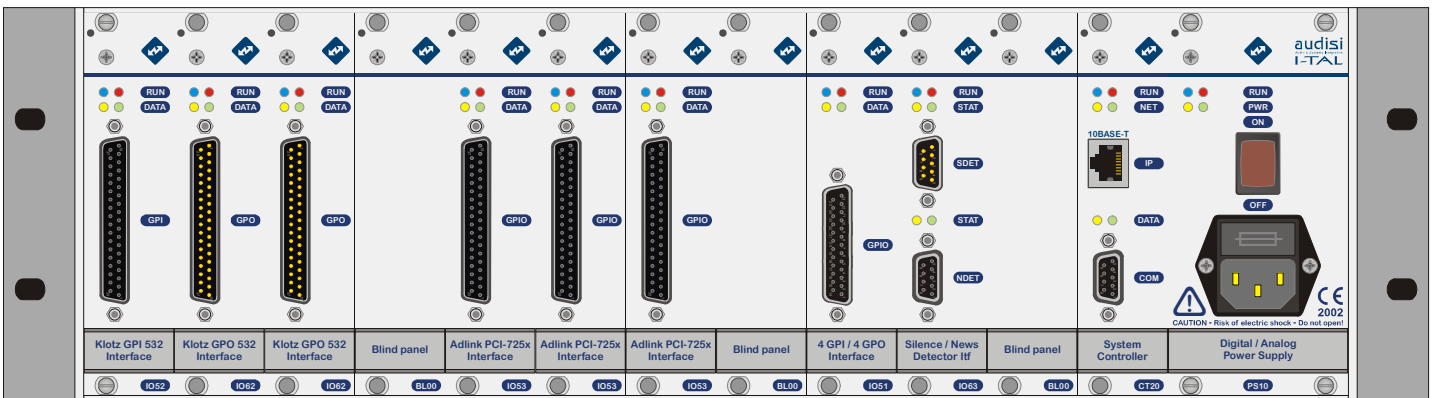
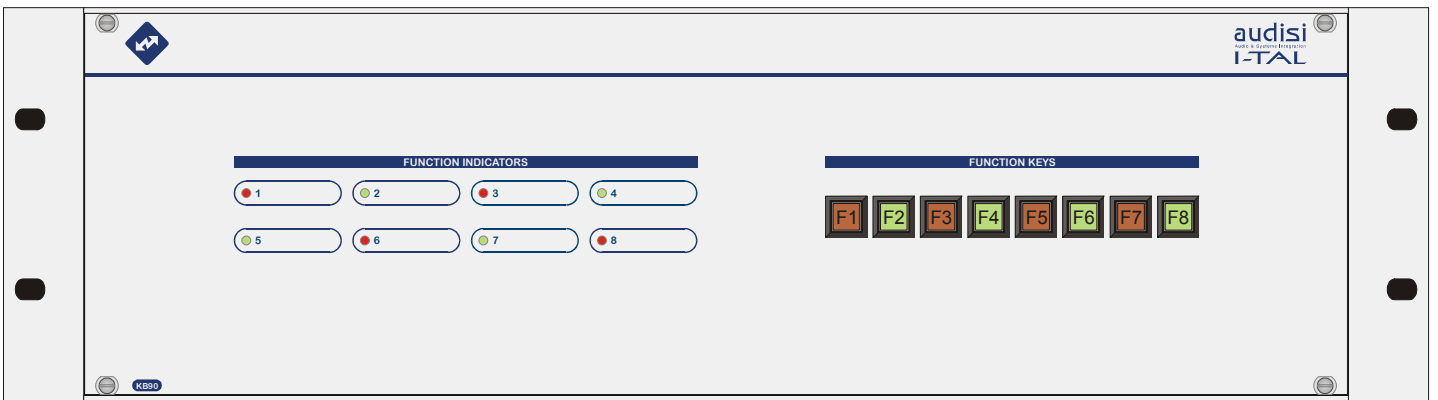


Custom hardware, Custom software and Consultancy for professional audio and systems integration

# I-TAL

## (Intelligent Tally/Audio/Light controller)

### Installation Manual



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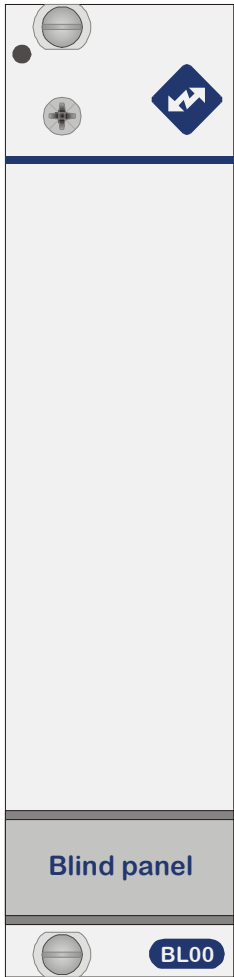
**Specifications and design are subject to change without notice for the purpose of improvement.**

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# BL00 - BLIND MODULE

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## Version 1.0



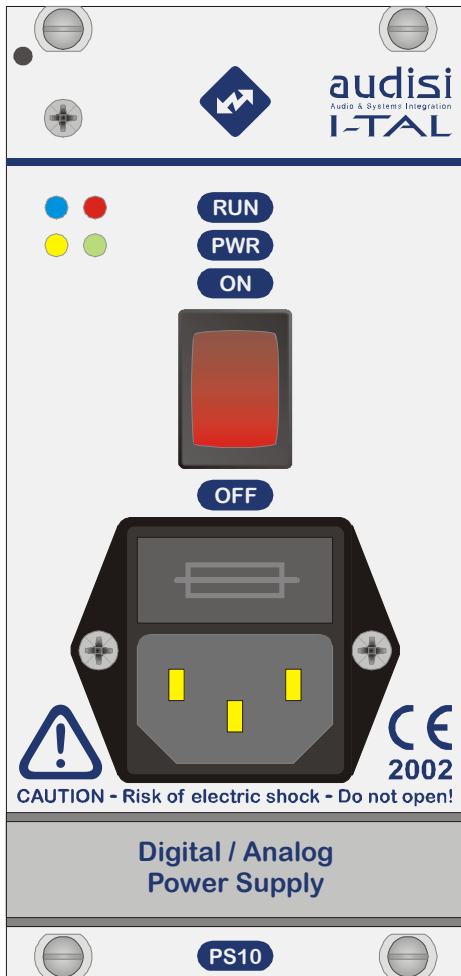
### Description

Use this module to fill up the empty slots in the frame. No control elements.

# PS10 - POWER SUPPLY

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## Version 1.0

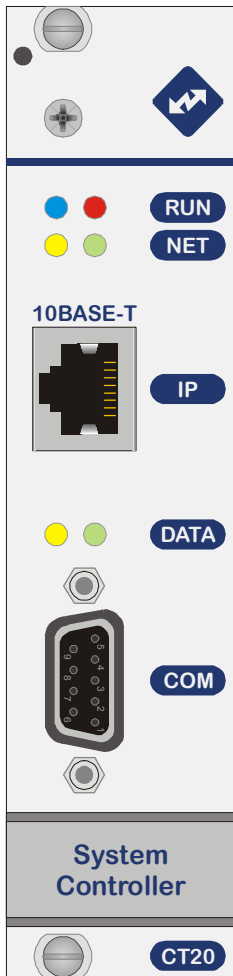


### Description

Digital (+12VDC) and analog (+/- 20VDC) power supplies for control and audio circuits. Mains entry is a normal Euro-style power connector with built-in fuses.

# CT20 - SYSTEM CONTROLLER

Version 1.0



## Description

This module is the interface between the I-TAL system and the installed modules. Control commands and status information can be sent and received using a proprietary instruction set by means of the 10 Base-T Ethernet connector using TCP/IP or via the COM connector. This can be configured as an RS-232 or RS-485 (half duplex) port.

**IP** Standard 10 Base-T Ethernet port

Connector	RJ-45 female (male connector on cable)	
Pin	Function	Type
1	Transmit +	Output
2	Transmit -	Output
3	Receive +	Input
6	Receive -	Input

**COM** RS-232 mode

Connector	D-Sub 9 female (male connector on cable)	
Pin	Function	Type
2	TXD	Output
3	RXD	Input
5	GND	DGND
7	Connected to pin 8	-
8	Connected to pin 7	-

**COM** RS-485 mode

Connector	D-Sub 9 female (male connector on cable)	
Pin	Function	Type
2	Data -	Input / Output
3	Data +	Input / Output
5	GND	DGND

# IO51 - 4 GPI / 4 GPO INTERFACE

Version 1.0



## Description

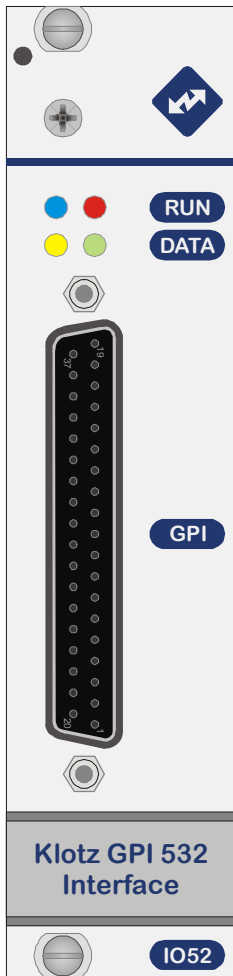
Fully isolated control inputs and outputs. Inputs have opto-couplers and will accept voltages in the range of +5VDC..+24VDC. Outputs have SPDT relays able to switch loads up to 1A @ 30VDC or 0,3A @ 150VAC.

### GPIO Inputs / Outputs / Supply

Connector	D-Sub 25 female (male connector on cable)	
Pin	Function	Type
1	GPO output 1 n.o.	Relais
14	GPO output 1 n.c.	Relais
2	GPO output 1 common	Relais
15	GPO output 2 n.o.	Relais
3	GPO output 2 n.c.	Relais
16	GPO output 2 common	Relais
4	GPO output 3 n.o.	Relais
17	GPO output 3 n.c.	Relais
5	GPO output 3 common	Relais
18	GPO output 4 n.o.	Relais
6	GPO output 4 n.c.	Relais
19	GPO output 4 common	Relais
7	GPI input 1 opto-coupler anode (+)	Opto-coupler
20	GPI input 1 opto-coupler cathode (-)	Opto-coupler
8	GPI input 2 opto-coupler anode (+)	Opto-coupler
21	GPI input 2 opto-coupler cathode (-)	Opto-coupler
9	GPI input 3 opto-coupler anode (+)	Opto-coupler
22	GPI input 3 opto-coupler cathode (-)	Opto-coupler
10	GPI input 4 opto-coupler anode (+)	Opto-coupler
23	GPI input 4 opto-coupler cathode (-)	Opto-coupler
11, 24	Power supply +5VDC, 100mA max	Supply
12, 25	Digital ground	DGND
13	Frame, shield	FRAME

# IO52 - KLOTZ GPI 532 INTERFACE

Version 1.0



## Description

16 control inputs for connecting the outputs of e.g. a Klotz GPI 532 interface. Inputs become active as soon as they are connected to the digital ground (active low).

### GPI Inputs

Connector	D-Sub 37 female (male connector on cable)	
Pin	Function	Type
1	GPI input 1	Input
20	Digital ground	DGND
2	GPI input 2	Input
21	Digital ground	DGND
3	GPI input 3	Input
22	Digital ground	DGND
4	GPI input 4	Input
23	Digital ground	DGND
5	GPI input 5	Input
24	Digital ground	DGND
6	GPI input 6	Input
25	Digital ground	DGND
7	GPI input 7	Input
26	Digital ground	DGND
8	GPI input 8	Input
27	Digital ground	DGND
9	GPI input 9	Input
28	Digital ground	DGND
10	GPI input 10	Input
29	Digital ground	DGND
11	GPI input 11	Input
30	Digital ground	DGND
12	GPI input 12	Input
31	Digital ground	DGND
13	GPI input 13	Input
32	Digital ground	DGND
14	GPI input 14	Input
33	Digital ground	DGND
15	GPI input 15	Input
34	Digital ground	DGND
16	GPI input 16	Input
35	Digital ground	DGND
17	n.c.	-
36	n.c.	-
18	n.c.	-
37	n.c.	-
19	n.c.	-

# IO53 - ADLINK PCI-725X INTERFACE

Version 1.0



## Description

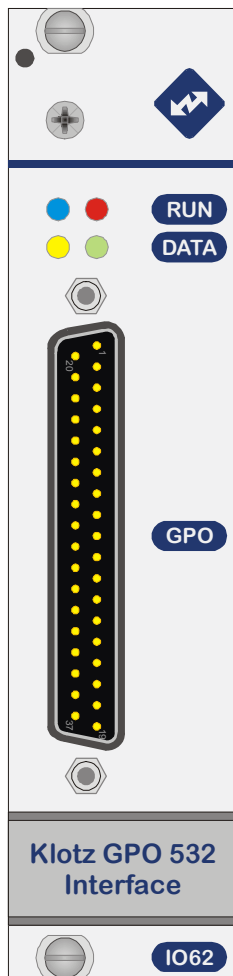
8 control inputs and 8 control outputs for connecting to an Adlink I/O board. Inputs become active as soon as they are connected to the digital ground (active low). Active outputs supply a voltage of +5VDC (active high).

### GPIO Inputs / Outputs

Connector	D-Sub 37 female (male connector on cable)	
Pin	Function	Type
1	GPI input 1	Input
20	GPI input 4	Input
2	Digital ground	DGND
21	Digital ground	DGND
3	n.c.	-
22	n.c.	-
4	GPI input 2	Input
23	GPI input 5	Input
5	Digital ground	DGND
24	Digital ground	DGND
6	n.c.	-
25	GPI input 6	Input
7	GPI input 3	Input
26	Digital ground	DGND
8	Digital ground	DGND
27	GPI input 7	Input
9	n.c.	-
28	Digital ground	DGND
10	GPI input 8	Input
29	n.c.	-
11	Digital ground	DGND
30	Digital ground	DGND
12	GPO output 1	Output
31	Digital ground	DGND
13	GPO output 2	Output
32	Digital ground	DGND
14	GPO output 3	Output
33	Digital ground	DGND
15	GPO output 4	Output
34	Digital ground	DGND
16	GPO output 5	Output
35	Digital ground	DGND
17	GPO output 6	Output
36	Digital ground	DGND
18	GPO output 7	Output
37	Digital ground	DGND
19	GPO output 8	Output

# IO62 - KLOTZ GPO 532 INTERFACE

Version 1.0



## Description

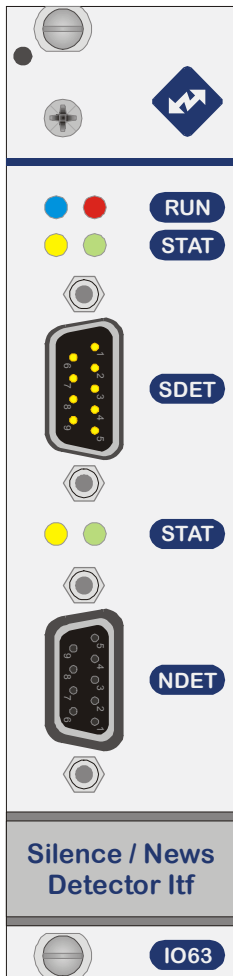
16 control outputs for connecting the inputs of e.g. a Klotz GPI 532 interface. Active outputs supply a voltage of +5VDC (active high).

### GPO Outputs

Connector Pin	D-Sub 37 male (female connector on cable) Function	Type
1	GPO output 1	Output
20	Digital ground	DGND
2	GPO output 2	Output
21	Digital ground	DGND
3	GPO output 3	Output
22	Digital ground	DGND
4	GPO output 4	Output
23	Digital ground	DGND
5	GPO output 5	Output
24	Digital ground	DGND
6	GPO output 6	Output
25	Digital ground	DGND
7	GPO output 7	Output
26	Digital ground	DGND
8	GPO output 8	Output
27	Digital ground	DGND
9	GPO output 9	Output
28	Digital ground	DGND
10	GPO output 10	Output
29	Digital ground	DGND
11	GPO output 11	Output
30	Digital ground	DGND
12	GPO output 12	Output
31	Digital ground	DGND
13	GPO output 13	Output
32	Digital ground	DGND
14	GPO output 14	Output
33	Digital ground	DGND
15	GPO output 15	Output
34	Digital ground	DGND
16	GPO output 16	Output
35	Digital ground	DGND
17	n.c.	-
36	n.c.	-
18	n.c.	-
37	n.c.	-
19	n.c.	-

# IO63 - SILENCE / NEWS DETECTOR INTERFACE

Version 1.0



## Description

Dedicated interfaces for external silence detector (XiniX) and news detector (M&I).

### SDET Inputs / Output

Connector	D-Sub 9 male (female connector on cable)	
Pin	Function	Type
1	n.c.	-
6	Connected to 8 and 9	-
2	Start input - (active low, pin 5 common +)	Input
7	Enable output	Output
3	n.c.	-
8	Connected to 6 and 9	-
4	Stop input - (active low, pin 5 common +)	Input
9	Connected to 6 and 8	-
5	+12VDC supply input from SDET	Supply

### NDET Input / Output

Connector	D-Sub 9 female (male connector on cable)	
Pin	Function	Type
1	n.c.	-
6	n.c.	-
2	Digital ground via 100 ohm resistor	DGND
7	n.c.	-
3	End Of News input (active low)	Input
8	n.c.	-
4	Start output (+5VDC when active)	Output
9	n.c.	-
5	Digital ground via 100 ohm resistor	DGND