



## POWER AMPLIFIER ITEC IDA 4 / IDA 8 MANUAL



Designed and Manufactured by  
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Austria / Europe

 **ITEC**  
itec-audio.com

Dear Customer!

The IDA amplifier series is ITEC's latest digital amplifier solution, specially designed for use with fixed installations, which thanks to innovative technology represents a highly efficient and therefore particularly energy-saving solution that can also cover a high power density with a small housing size. The built-in Class D modules are characterized by very high efficiency, excellent sound quality and perfect dynamics. The individual channels can be bridged, which results in a high level of flexibility in terms of the desired output power.

Please read this instruction manual carefully and observe all instructions in particular those safeties related to ensure a long lasting and trouble-free operation

Your ITEC acoustics team

### ITEC IDA 4 / IDA 8 – Features

- 230 VAC power supply
- Mute and switch off via external contact
- Control LEDs for all signal and operating states
- Monitoring contacts for operation and error messages
- Balanced inputs
- Up to 8 amplifier channels in a 2U 19 inch housing
- Installation depth 325 mm
- All connections with plug-in terminals
- Protection circuits: Automatic switch-off in the event of overtemperature, overload and short circuits
- 4 or 8 amplifier channels
- Bridged or parallel connection possible
- Gain of each channel individually adjustable

### Safety instructions

Please read this instruction manual carefully before installation and putting the “ITEC IDA” amplifier into operation. Keep this document easy to find on a safe place to have it available as a later reference.

Instruct all persons dealing with this device and make them familiar with its use and in particular with the safety regulations.

When installing the device, local connection conditions, required protective measures and all relevant standards must be observed.

Do not block, cover or obstruct the vent slots: The air circulation has to remain ensured.

The device is designed for installations in 19“ cabinets / racks / frame / housing. Improper installations in furniture, cabinets or distribution systems as well as a free putting have to be avoided.

Operate the device only via a grounded safety power outlet. Make sure the power cable is not damaged. Never remove the protective conductor from the mains cable.

Before connecting to the mains supply check that the data on the backside of the device match with the local network.

The device must necessarily be checked by trained personnel in case:

The power cable or plug are damaged, small objects or liquids got into the device, the device operates in a different way than usual, the device was exposed to a severe impact or the housing has been damaged.

Extended storage or operating in rooms with high humidity, during rain or under the influence of splash water can lead to damages or malfunctions.

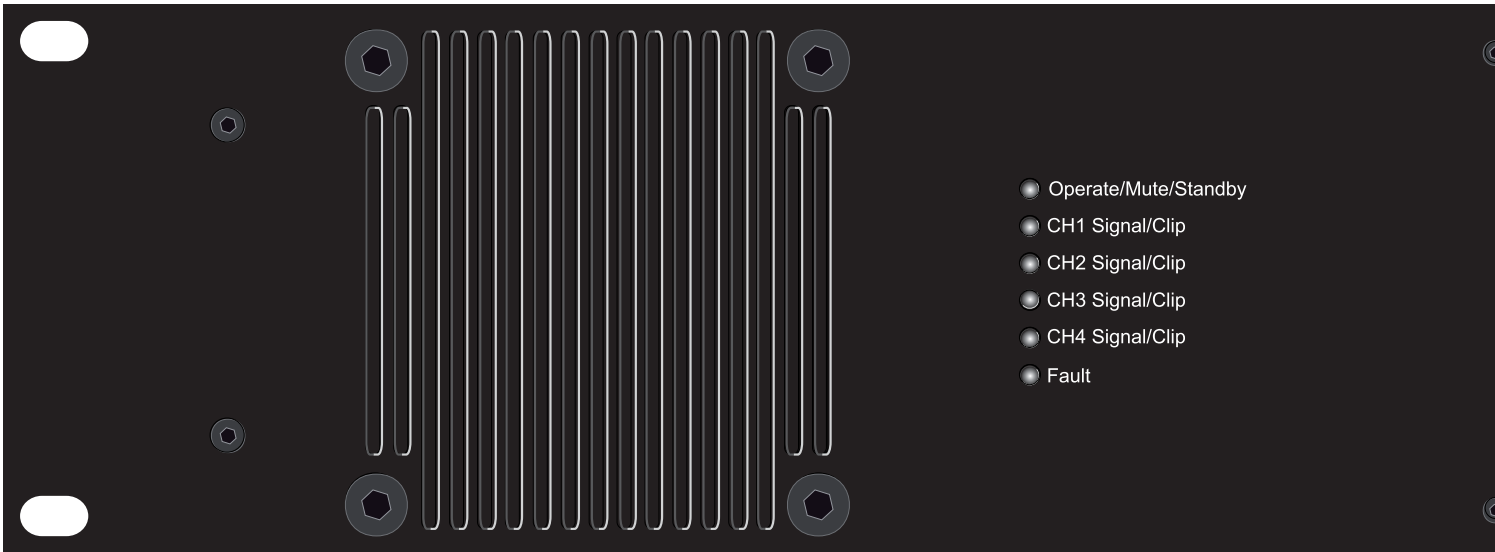
Do not apply temperatures above 50 °C, humidity larger than 95% or rain to the device.

Never try to open the device by force or by unscrewing. The product does not contain parts that can be repaired by amateurs. Please contact the manufacturer or a local distributor.

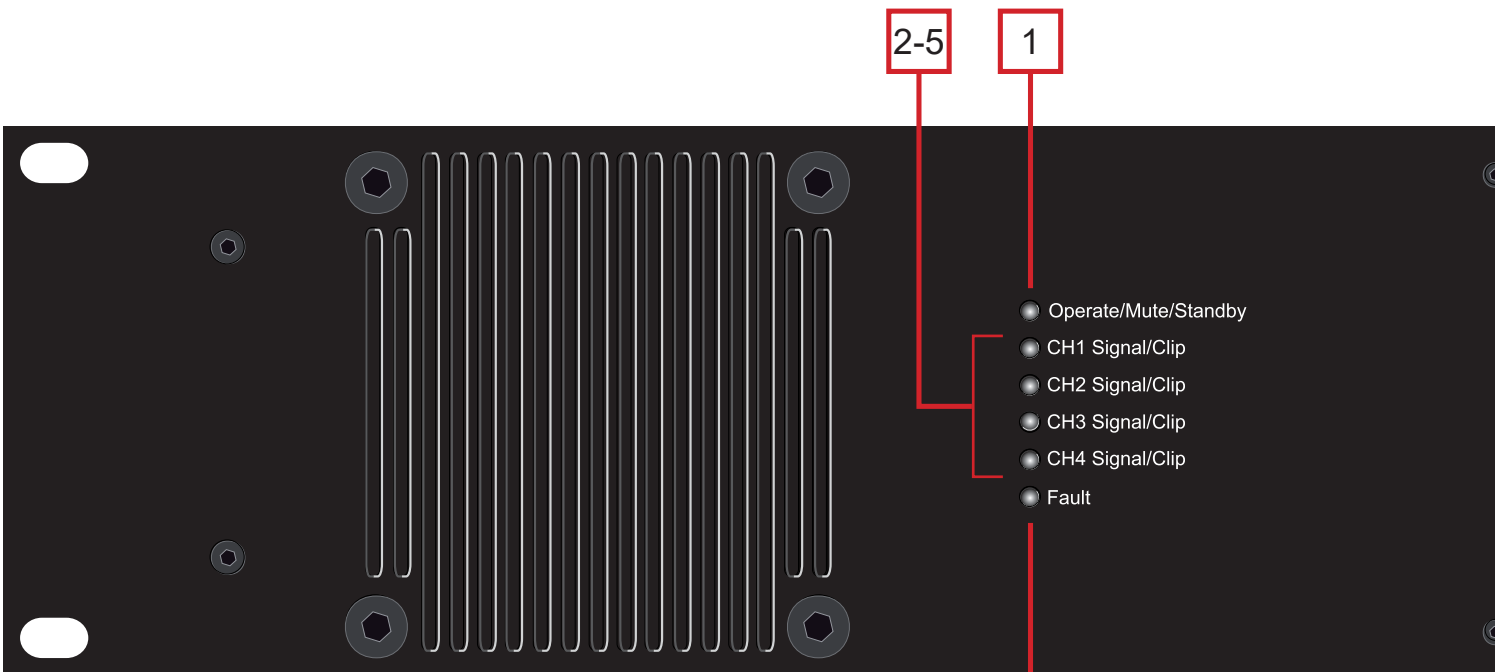
For cleaning use a soft, dry cloth only. Never use cleaning agents or solvents which attack the surface or could enter the device. Unplug the device before cleaning.

NOTE: Before carrying out any modifications of the device by a specialist, the device has to be disconnected from all power sources.

# ITEC IDA 4 / IDA 8 - FRONT VIEW

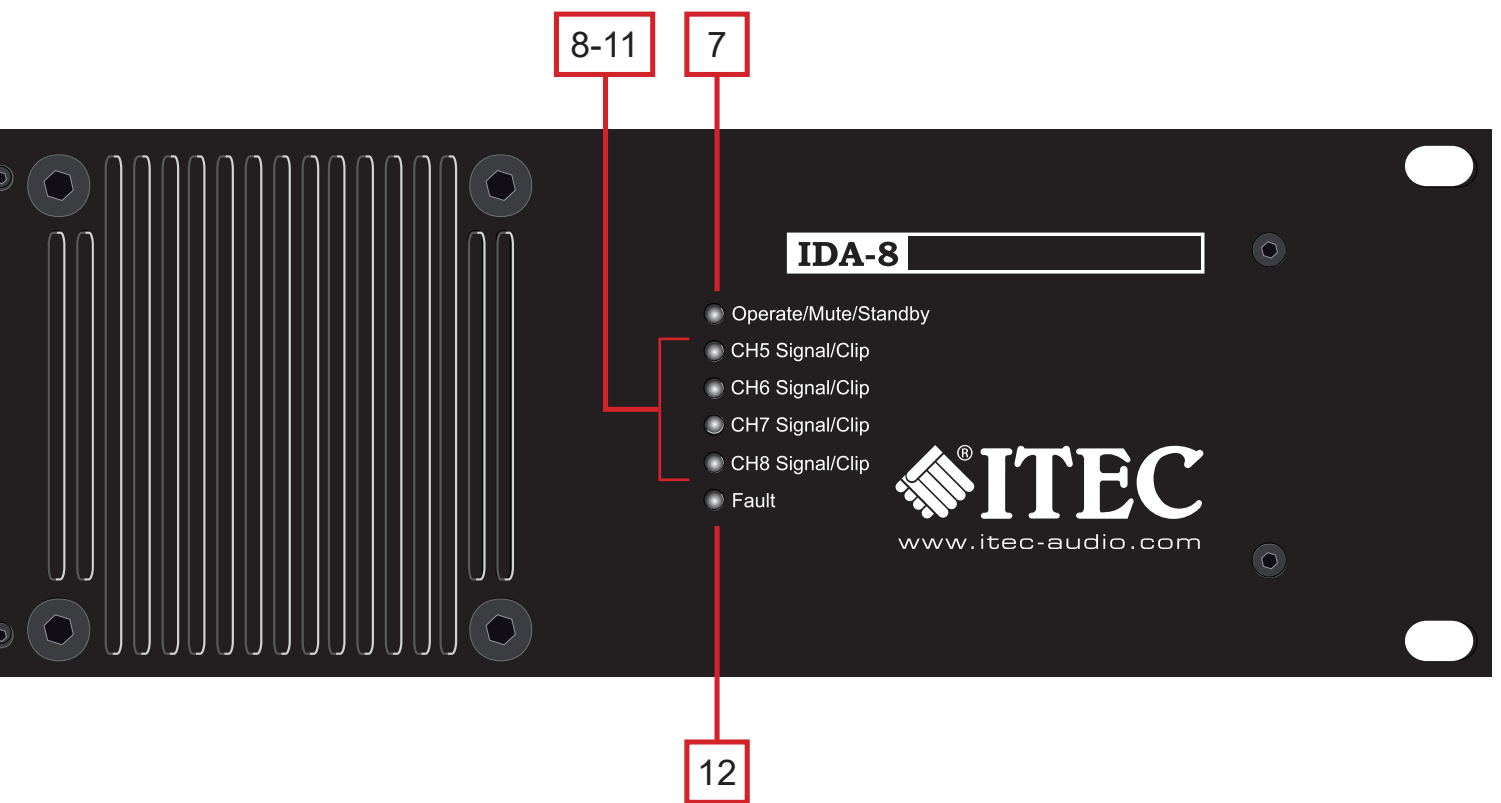
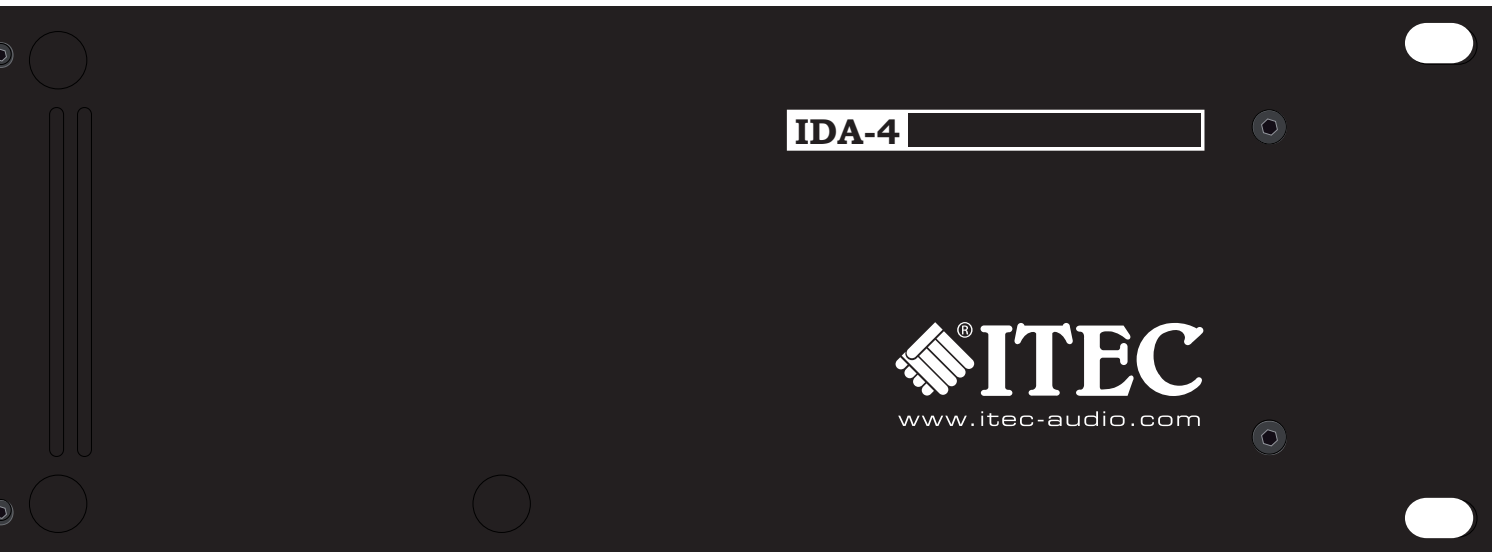


- Operate/Mute/Standby
- CH1 Signal/Clip
- CH2 Signal/Clip
- CH3 Signal/Clip
- CH4 Signal/Clip
- Fault



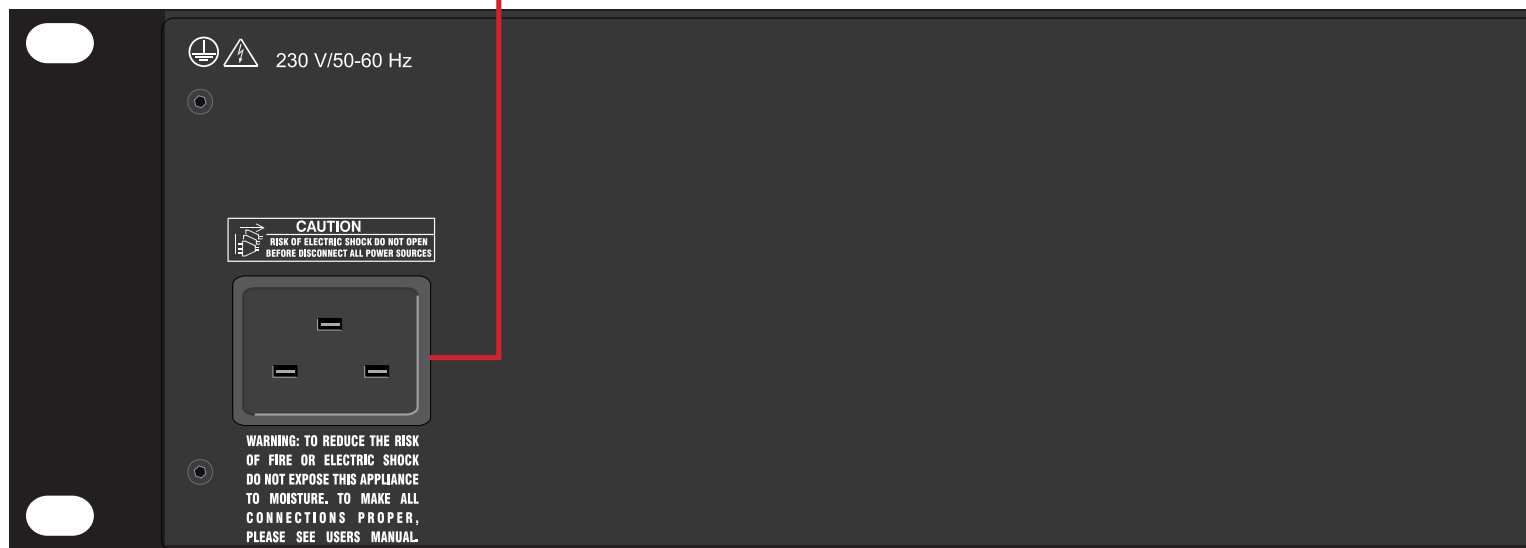
- Operate/Mute/Standby
- CH1 Signal/Clip
- CH2 Signal/Clip
- CH3 Signal/Clip
- CH4 Signal/Clip
- Fault

	LED	Designation	Description
INFORMATION	1 / 7	Operate/Mute/Standby	green = normal mode yellow = muted red = switched off
	2-5 / 8-11	CH1-4 Signal/Clip CH5-8 Signal/Clip	green = input signal yellow = clipping
	6 / 12	Fault	red = error



# ITEC IDA 4 / IDA 8 - BACK VIEW

G



## Terminal designation

Terminal Block	Pin	Des.	Description
Audio In	A	1	IN 1+ Analog audio input 1, positive
		2	GND Signal ground
		3	IN1 - Analog audio input 1, negative
		4	IN 2+ Analog audio input2, positive
		5	GND Signal ground
		6	IN 2- Analog audio input 2, negative
		7	IN 3+ Analog audio input 3, positive
		8	GND Signal ground
		9	IN 3- Analog audio input 3, negative
		10	IN 4+ Analog audio input 4, positive
		11	GND Signal ground
		12	IN 4- Analog audio input 4, negative

Terminal Block	Position	Description	
Volume Control (per channel)	B	0	-19,6 dB
		1	-14,2 dB
		2	-10,9 dB
		3	-9,1 dB
		4	-4,7 dB
		5	-4,1 dB
		6	-3,6 dB
		7	-3,3 dB
		8	-0,1 dB
9	0 dB		

Terminal Block	Switch	Des.	Description	
Volume Gain	C	1	IN 1 gain A +3 dB	+9 dB (1+2)
		2	IN 1 gain B +6 dB	
		3	IN 2 gain A +3 dB	+9 dB (3+4)
		4	IN 2 gain B +6 dB	
		5	IN 3 gain A +3 dB	+9 dB (5+6)
		6	IN 3 gain B +6 dB	
		7	IN 4 gain A +3 dB	+9 dB (7+8)
		8	IN 4 gain B +6 dB	

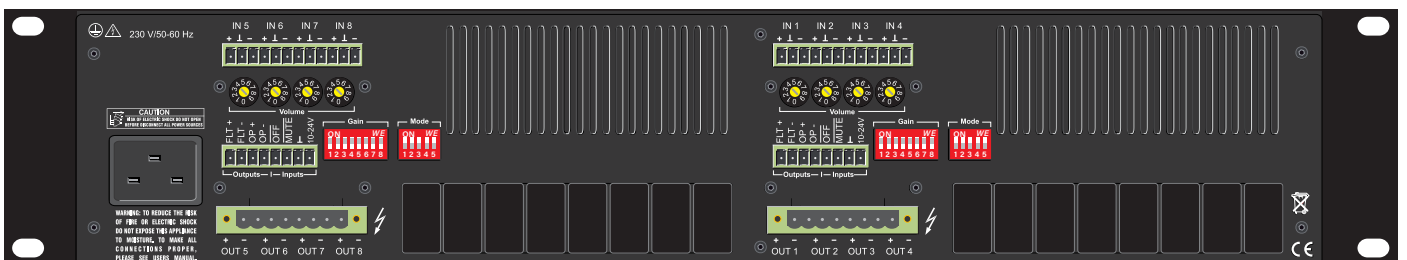
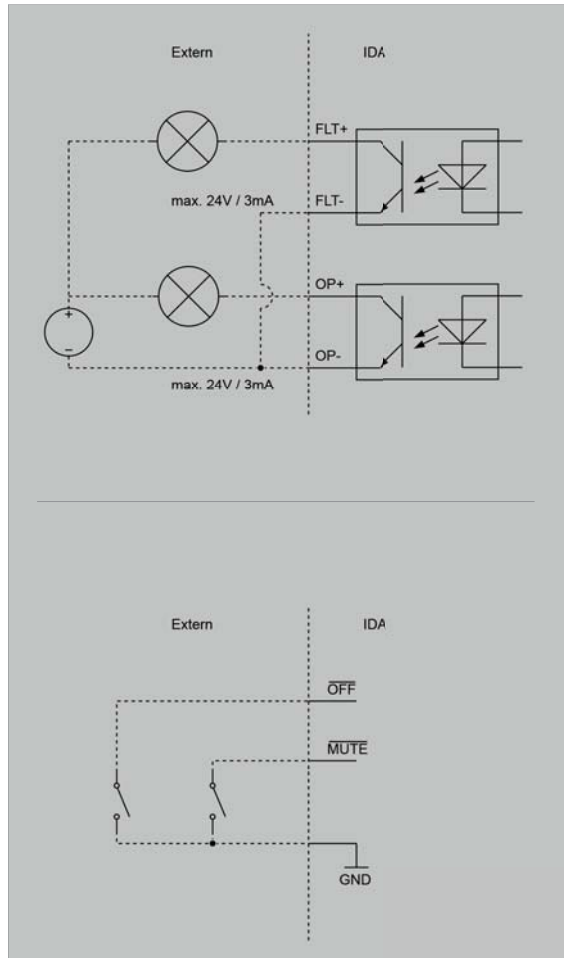
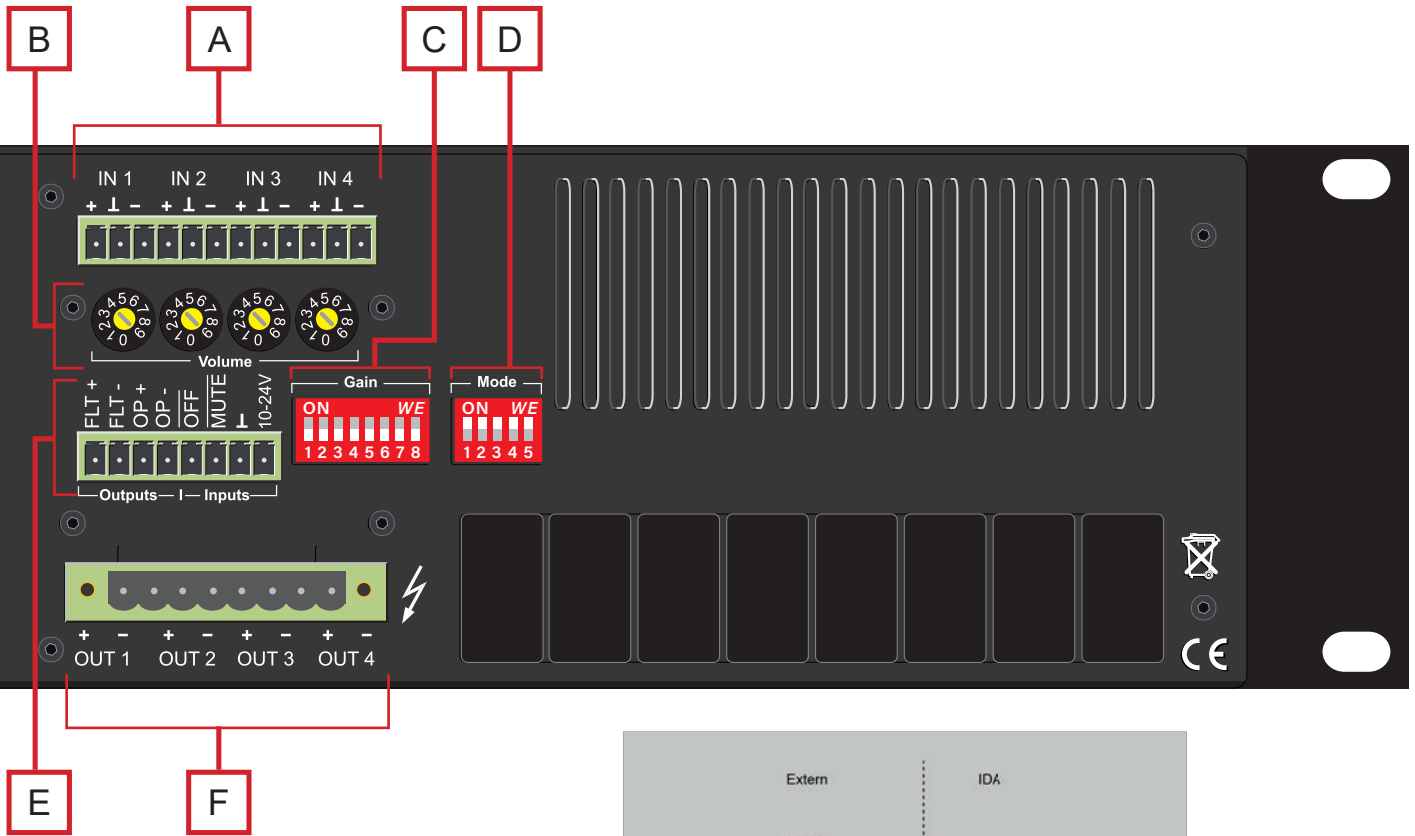
Terminal Block	Switch	Des.	Description	
Mode	D	1	IN 1&2	IN 1 on channel 1&2
		2	IN 1&3	IN 1 on channel 1&3
		3	IN 3&4	IN 3 on channel 3&4
		4	IN 2&4	IN 2 on channel 2&4
		5	IN 1&4	IN 1 on channel 1&4

Terminal Block	Pin	Des.	Description		
Control I/O	E	1	FLT+	Collector	Optocoupler for error status closed = ok, open = error
		2	FLT-	Emitter	
		3	OP+	Collector	Optocoupler for operating status closed = ok, open = switched off
		4	OP-	Emitter	
		5	IOFF	Switch off power supply open = switched on, GND = switched off	
		6	IMUTE	Switch off power amplifier open = switched on, GND = switched off	
		7	GND	Signal ground	
		8	10-24V	Reserved, no connection required	

Terminal Block	Pin	Des.	Description	
Audio Out	F	1	OUT 1+	speaker line/output 1, positive
		2	OUT 1-	speaker line/output 1, negative
		3	OUT 2+	speaker line/output 2, positive
		4	OUT 2-	speaker line/output 2, negative
		5	OUT 3+	speaker line/output 3, positive
		6	OUT 3-	speaker line/output 3, negative
		7	OUT 4+	speaker line/output 4, positive
		8	OUT 4-	speaker line/output 4, negative

Terminal Block	Description
Supply	G C19/C20 connectors 100-240VAC 50-60Hz Max. 16A current consumption

# ITEC IDA 4 / IDA 8



## Variants

IDA 4 and IDA 8 differ in the number of modules that can be used. These modules are completely independent in terms of function and connection terminals. With the IDA 4 either a 4x150W or a 4x750W module can be installed. The IDA 8 has two of these modules.

This results in the following variants:

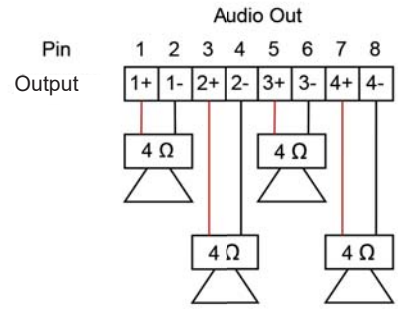
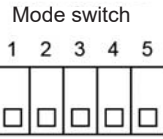
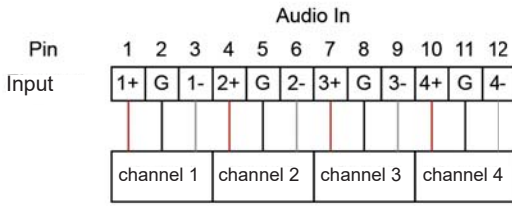
Designation	Output power	Ausgangsleistung
IDA 4-600		4x150W @ 4Ω
IDA 4-3000		4x750W @ 4Ω
IDA 8-1200		8x150W @ 4Ω
IDA 8-3600	4x750W @ 4Ω	4x150W @ 4Ω + 4x750W @ 4Ω
IDA 8-6000		8x750W @ 4Ω

Furthermore, individual channels of the modules can be bridged or operated in parallel. This allows the following variants to be realized:

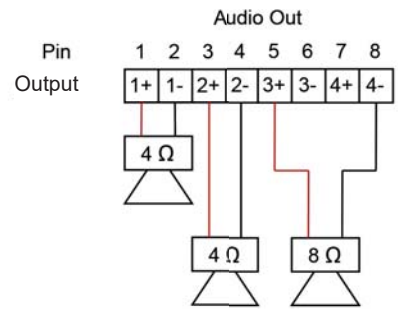
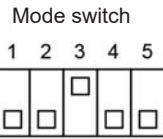
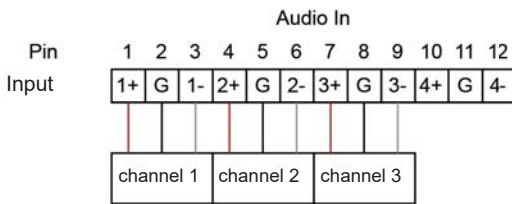
	4x150W Module	4x750W Module
1x bridged	2x150W @ 4Ω + 1x300W @ 8Ω	2x750W @ 4Ω + 1x1400W @ 8Ω
2x bridged	2x300W @ 8Ω	2x1400W @ 8Ω
1x parallel	2x150W @ 4Ω + 1x300W @ 2Ω	2x750W @ 4Ω + 1x1400W @ 2Ω
2x parallel	2x300W @ 2Ω	2x1400W @ 2Ω
bridged parallel	1x600W @ 4Ω	1x2400W @ 4Ω



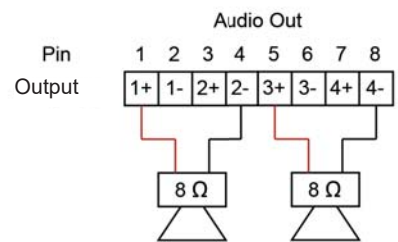
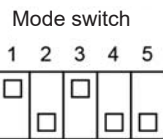
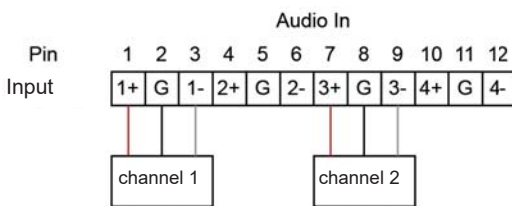
4x single (SE)



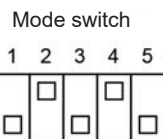
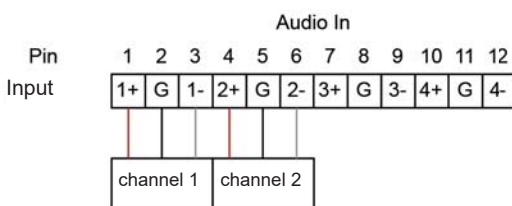
1x bridged (SE/BTL)



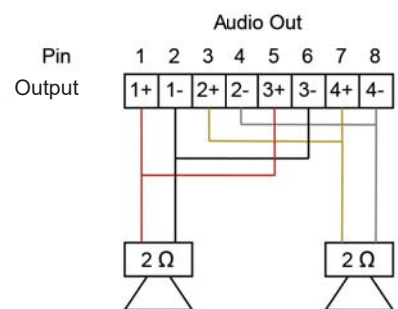
2x bridged (BTL)



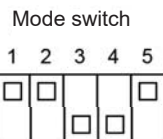
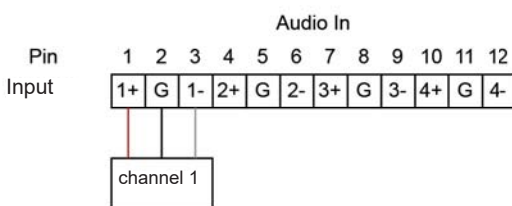
2x parallel (PTL)



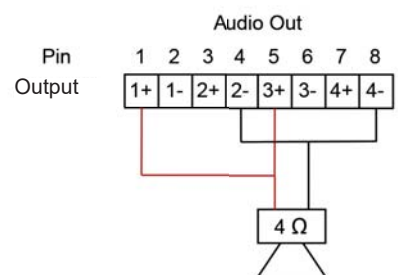
In addition, a jumper inside the device is required for this mode



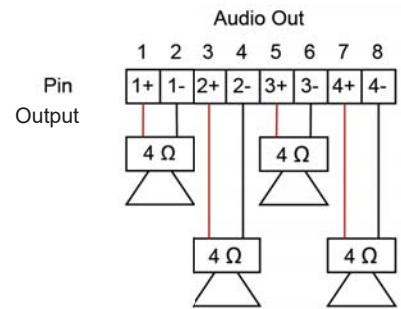
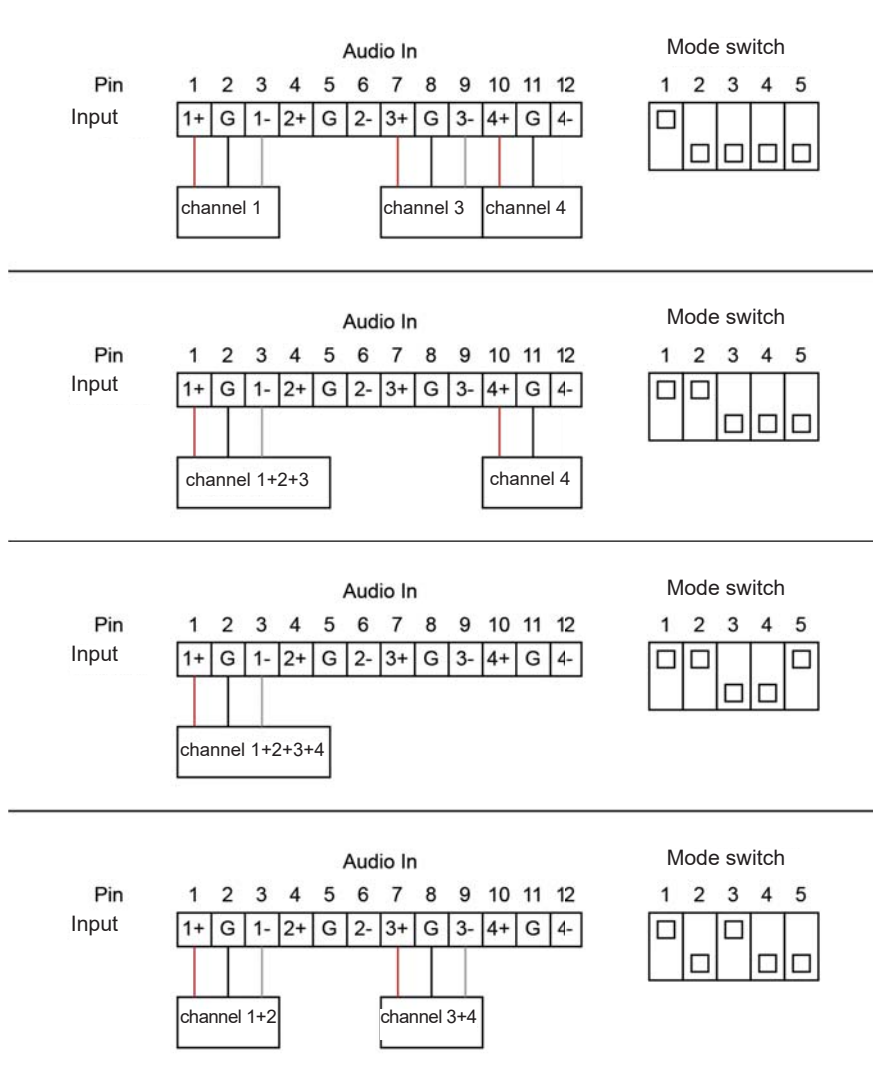
bridged parallel (PBTL)



In addition, a jumper inside the device is required for this mode



The mode switch can also be used to switch a signal to several speaker lines.





# ITEC IDA 4 / IDA 8 - SPECIFICATIONS



	Min.	Typ.	Max.
Output power (IDA 4-600)		4x 150W@4Ohm	
Output power (IDA 4-3000)		4x 750W@4Ohm	
Output power (IDA 8-1200)		8x 150W@4Ohm	
Output power (IDA 8-3600)		4x 150W@4Ohm + 4x 750W@4Ohm	
Output power (IDA 8-6000)		8x 750W@4Ohm	
Power supply	85 VAC	100-240 VAC	264 VAC
Power consumption			16 A
Power requirement IDA 4-600			150 W
Power requirement IDA 4-3000			700 W
Power requirement IDA 8-1200			300 W
Power requirement IDA 8-3600			850 W
Power requirement IDA 8-6000			1400 W
Power requirement Standby IDA 4			10 W
Power requirement Standby IDA 8			20 W
Power requirement Off IDA 4			2 W
Power requirement Off IDA 8			4 W
THD + N (from 0.1 W to 50% Load)		< 0.05 %	< 0.1 %
Signal-to-noise ratio (20 Hz – 20 kHz, A-weighted, @ 8 Ω)		> 115 dB	
Input impedance		20 kOhm	
Frequency response	10 Hz	-	30 kHz
Voltage gain	9 dB	29 dB	37,3 dB
<b>GENERAL TECHNICAL SPECIFICATION</b>			
Dimensions (L x H x D)	482 mm x 88,5 mm x 325 mm		
Weight (IDA 4-600)	4,1 kg		
Weight (IDA 4-3000)	4,7 kg		
Weight (IDA 8-1200)	6,1 kg		
Weight (IDA 8-3600)	6,7 kg		
Weight (IDA 8-6000)	7,3 kg		

All information without guarantee. Subject to technical changes.