<u>SWITCHER-PCB V2.0 technical sheet</u> = a





1	Power input:	Connect a 12Vdc power supply to this connector. Please note the polarity. Max current is about 70mA. Multiple cards can be connected to the same power supply, if this can supply 70mA X # cards.
2	Indication ON/OFF:	Connect here a switch to set the indication LED's on or off, so you can do a blind speaker test. If no switch is used, place a wire between these two connections so the indication LED's will be on. See [13] for LED indication.
	AMP input 1:	Connect here the output (left and right) of the amplifier to feed the speakers. Low Z and 100V amplifiers are allowed. If speakers are connected to output 7[19] and 8 [20], jumpers [4] need to be placed.
4	AMP jumper:	If only one amplifier is used, 4 jumpers need to be placed here. 2 for the left channel and 2 for the right channel. No need to connect a wire bridge between AMP input 1 [3] and AMP input 2 [5].
5	AMP input 2:	Connect here the output (left and right) of the 2^{nd} amplifier to feed the speakers at output 7 and 8 [19] and [20]. The jumpers [4] need to be removed. Now the 1^{st} amplifier is only feeding the speakers at outputs $1 - 6$. An application with two amplifiers can be one low Z amplifier and one 100V amplifier. The first 6 speakers need then to be Low Z, the last 2 need to be 100V (can also reversed).



6 Addressing:	There are 8 than one ju feed the sp this card w feed the sp	There are 8 positions to place a single jumper. Never place here more than one jumper! If a jumper is in the first position, this card will feed the speakers 1-8. If a jumper is placed in the second position, this card will feed the speakers 9-16, and so on to the position 8 to feed the speakers 57-64.					
7 Control:	This male S Purpose Ou Connectior	This male SUB-D 9-pins connector must be wired to the General Purpose Outputs (GPO) of the AudioControl 12.8 with Feature Pack. Connection diagram:					
	SUB-D9	AC12.8 GPO					
	Pin 1	Output 1					
	Pin 2	Output 2					
	Pin 3	Output 3					
	Pin 4	Output 4					
	Pin 5	Output 5					
	Pin 6	Output 6					
	Pin 7	Output 7					
	Pin 8	Output 8					
	Pin 9	GND					
8 Loop Thru:	This Femal D9 [7] of th male-femal AudioContr over 30m.	e SUB-D 9-pins connector can be wired to the male SUB- ne next switcher card using a standard serial cable straight le full connected. Length of the total serial cable from the rol 12.8 to the last switcher card is not critical and can be					
9 Test Jumper:	These jump these jump they are nc	These jumpers are only for testing. Without AudioControl connected, these jumpers can set the output relays manually. In normal use, they are not present.					
¹⁰ Input LED:	These LED's AudioContr status is lov connected	s give the status of the control signal, coming from the rol 12.8. Note that the polarity is inversed. LED ON means w, LED OFF means status is high. If the card is not to an AudioControl 12.8, all LED's are on.					
¹¹ Power LED:	This LED is [1].	ON when power 12Vdc is connected to the power input					
¹² Output LED:	There is on (speaker pl	e LED per output. This LED is ON when the output is active aying). Maximum 1 output LED can be on simultaneously.					



13	Output Connector 1:	Output connector 1 can be connected to speaker 1. This speaker can
]	be Low Z or 100V depending of the amplifier, connected to AMP
		input 1.
		Pin 1 and 2 is right channel of output 1.
		Pin 3 and 4 is left channel of output 1.
		The LED indicator can be placed near the speaker to indicate the
		audience which speaker is playing. The connected LED need to accept
		12Vdc. To switch the LED off (for blind comparing), see [2].
14	Output Connector 2:	As per[13], but for output 2.
15	Output Connector 3:	As per [13], but for output 3.
16	Output Connector 4:	As per [13], but for output 4.
17	Output Connector 5:	As per [13], but for output 5.
18	Output Connector 6:	As per [13], but for output 6.
19	Output Connector 7:	Output connector 7 can be connected to speaker 7. This speaker can
]	be Low Z or 100V depending of the amplifier, connected to AMP input 2.
		Pin 1 and 2 is right channel of output 7.
		Pin 3 and 4 is left channel of output 7.
		Pin 5 and 6 is LED indicator of output 7.
		The LED indicator can be placed near the speaker to indicate the
		audience which speaker is playing. The connected LED need to accept
		12vac. To switch the LED off (for blind comparing), see [2].
	1	n only one ampliner is connected, see [4].
20	Output Connector 8:	As per [19], but for output 8.

SWITCHER PCB V2



PROGRAMMING TABLE:

AC12.8 GENERAL PURPOSE OUTPUTS:

1	2	3	4	5	6	7	8	Card /output
ON	ON	ON	ON	ON	ON	ON	ON	1/1
OFF	ON	ON	ON	ON	ON	ON	ON	1/2
ON	OFF	ON	ON	ON	ON	ON	ON	1/3
OFF	OFF	ON	ON	ON	ON	ON	ON	1/4
ON	ON	OFF	ON	ON	ON	ON	ON	1/5
OFF	ON	OFF	ON	ON	ON	ON	ON	1/6
ON	OFF	OFF	ON	ON	ON	ON	ON	1/7
OFF	OFF	OFF	ON	ON	ON	ON	ON	1/8
ON	ON	ON	OFF	ON	ON	ON	ON	2/1
OFF	ON	ON	OFF	ON	ON	ON	ON	2/2
ON	OFF	ON	OFF	ON	ON	ON	ON	2/3
OFF	OFF	ON	OFF	ON	ON	ON	ON	2/4
ON	ON	OFF	OFF	ON	ON	ON	ON	2/5
OFF	ON	OFF	OFF	ON	ON	ON	ON	2/6
ON	OFF	OFF	OFF	ON	ON	ON	ON	2/7
OFF	OFF	OFF	OFF	ON	ON	ON	ON	2/8
ON	ON	ON	ON	OFF	ON	ON	ON	3/1
OFF	ON	ON	ON	OFF	ON	ON	ON	3/2
ON	OFF	ON	ON	OFF	ON	ON	ON	3/3
OFF	OFF	ON	ON	OFF	ON	ON	ON	3/4
ON	ON	OFF	ON	OFF	ON	ON	ON	3/5
OFF	ON	OFF	ON	OFF	ON	ON	ON	3/6
ON	OFF	OFF	ON	OFF	ON	ON	ON	3/7
OFF	OFF	OFF	ON	OFF	ON	ON	ON	3/8
ON	ON	ON	OFF	OFF	ON	ON	ON	4/1
OFF	ON	ON	OFF	OFF	ON	ON	ON	4/2
ON	OFF	ON	OFF	OFF	ON	ON	ON	4/3
OFF	OFF	ON	OFF	OFF	ON	ON	ON	4/4
ON	ON	OFF	OFF	OFF	ON	ON	ON	4/5
OFF	ON	OFF	OFF	OFF	ON	ON	ON	4/6
ON	OFF	OFF	OFF	OFF	ON	ON	ON	4/7
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	4/8
ON	ON	ON	ON	ON	OFF	ON	ON	5/1
OFF	ON	ON	ON	ON	OFF	ON	ON	5/2
ON	OFF	ON	ON	ON	OFF	ON	ON	5/3
OFF	OFF	ON	ON	ON	OFF	ON	ON	5/4
ON	ON	OFF	ON	ON	OFF	ON	ON	5/5
OFF	ON	OFF	ON	ON	OFF	ON	ON	5/6
ON	OFF	OFF	ON	ON	OFF	ON	ON	5/7
OFF	OFF	OFF	ON	ON	OFF	ON	ON	5/8

ON	ON	OFF	ON	OFF	ON	ON	6/1
ON	ON	OFF	ON	OFF	ON	ON	6/2
OFF	ON	OFF	ON	OFF	ON	ON	6/3
OFF	ON	OFF	ON	OFF	ON	ON	6/4
ON	OFF	OFF	ON	OFF	ON	ON	6/5
ON	OFF	OFF	ON	OFF	ON	ON	6/6
OFF	OFF	OFF	ON	OFF	ON	ON	6/7
OFF	OFF	OFF	ON	OFF	ON	ON	6/8
ON	ON	ON	OFF	OFF	ON	ON	7/1
ON	ON	ON	OFF	OFF	ON	ON	7/2
OFF	ON	ON	OFF	OFF	ON	ON	7/3
OFF	ON	ON	OFF	OFF	ON	ON	7/4
ON	OFF	ON	OFF	OFF	ON	ON	7/5
ON	OFF	ON	OFF	OFF	ON	ON	7/6
OFF	OFF	ON	OFF	OFF	ON	ON	7/7
OFF	OFF	ON	OFF	OFF	ON	ON	7/8
ON	ON	OFF	OFF	OFF	ON	ON	8/1
ON	ON	OFF	OFF	OFF	ON	ON	8/2
OFF	ON	OFF	OFF	OFF	ON	ON	8/3
OFF	ON	OFF	OFF	OFF	ON	ON	8/4
ON	OFF	OFF	OFF	OFF	ON	ON	8/5
ON	OFF	OFF	OFF	OFF	ON	ON	8/6
OFF	OFF	OFF	OFF	OFF	ON	ON	8/7
OFF	OFF	OFF	OFF	OFF	ON	ON	8/8
	ON OFF OFF ON OFF OFF OFF	ON ON ON ON OFF ON OFF ON OFF ON OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF ON ON ON ON ON ON OFF ON OFF ON OFF ON OFF OFF ON OFF ON OFF ON OFF ON ON OFF ON OFF ON ON ON OFF ON ON ON OFF ON <t< td=""><td>ON ON OFF ON ON OFF OFF ON OFF OFF ON OFF OFF ON OFF OFF OFF OFF ON OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF ON ON ON ON ON ON OFF OFF ON ON OFF ON OFF OFF ON OFF OFF ON OFF OFF ON OFF ON OFF ON ON OFF ON ON OFF OFF</td><td>ONONOFFONONONOFFONOFFONOFFONOFFONOFFONOFFONOFFOFFONOFFOFFOFFONOFFOFFOFFONOFFOFFOFFOFFOFFOFFONOFFOFFOFFONOFFOFFONONOFFONONOFFONONONOFFOFFONONOFFOFFONOFFONOFFOFFONOFFONOFFONOFFOFFOFFONOFFOFFOFFONOFFOFFONOFFOFFOFFONOFFOFFOFFONOFFOFFOFFONOFFOF</td><td>ONONOFFONOFFONONOFFONOFFOFFONOFFONOFFOFFONOFFONOFFOFFONOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFONONONOFFOFFONONONOFFOFFOFFONONONOFFOFFOFFONONONOFFOFFOFFONONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFO</td><td>ONONOFFONOFFONONONOFFONOFFONOFFONOFFONOFFONOFFONOFFONOFFONOFFONOFFOFFONOFFONONOFFOFFONOFFONONOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFOFFONONONOFFOFFONOFFONONOFFOFFONOFFONONOFFOFFONOFFONOFFONOFFOFFONOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFF<</td><td>ONONOFFONOFFONONONONOFFONOFFONONOFFONOFFONOFFONONOFFONOFFONOFFONONOFFONOFFONOFFONONONOFFOFFONOFFONONONOFFOFFONOFFONONONOFFOFFONOFFONONOFFOFFOFFONOFFONONOFFOFFOFFONOFFONONOFFOFFOFFONOFFONONONONONOFFOFFONONONONONOFFOFFONONONONONOFFOFFONONOFFONONOFFOFFONONOFFONONOFFOFFONONOFFONONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFOFFOFFOFFONONOFFONOFFOFFOFFON<t< td=""></t<></td></t<>	ON ON OFF ON ON OFF OFF ON OFF OFF ON OFF OFF ON OFF OFF OFF OFF ON OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF OFF ON ON ON ON ON ON OFF OFF ON ON OFF ON OFF OFF ON OFF OFF ON OFF OFF ON OFF ON OFF ON ON OFF ON ON OFF OFF	ONONOFFONONONOFFONOFFONOFFONOFFONOFFONOFFONOFFOFFONOFFOFFOFFONOFFOFFOFFONOFFOFFOFFOFFOFFOFFONOFFOFFOFFONOFFOFFONONOFFONONOFFONONONOFFOFFONONOFFOFFONOFFONOFFOFFONOFFONOFFONOFFOFFOFFONOFFOFFOFFONOFFOFFONOFFOFFOFFONOFFOFFOFFONOFFOFFOFFONOFFOF	ONONOFFONOFFONONOFFONOFFOFFONOFFONOFFOFFONOFFONOFFOFFONOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFONONONOFFOFFONONONOFFOFFOFFONONONOFFOFFOFFONONONOFFOFFOFFONONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFOFFOFFOFFOFFONOFFO	ONONOFFONOFFONONONOFFONOFFONOFFONOFFONOFFONOFFONOFFONOFFONOFFONOFFOFFONOFFONONOFFOFFONOFFONONOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFOFFONONONOFFOFFONOFFONONOFFOFFONOFFONONOFFOFFONOFFONOFFONOFFOFFONOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFFONOFFONOFFOFFOFF<	ONONOFFONOFFONONONONOFFONOFFONONOFFONOFFONOFFONONOFFONOFFONOFFONONOFFONOFFONOFFONONONOFFOFFONOFFONONONOFFOFFONOFFONONONOFFOFFONOFFONONOFFOFFOFFONOFFONONOFFOFFOFFONOFFONONOFFOFFOFFONOFFONONONONONOFFOFFONONONONONOFFOFFONONONONONOFFOFFONONOFFONONOFFOFFONONOFFONONOFFOFFONONOFFONONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFONOFFOFFONONOFFOFFOFFOFFOFFONONOFFONOFFOFFOFFON <t< td=""></t<>

<u>Note:</u> Outputs 7 and 8 of the AC12.8 are not used in the standard speaker switcher PCB. These outputs can be used in a special made speaker switcher PCB, where SUB speakers can be connected to outputs 7 and 8 of the PCB. The SUB speakers then can play along with the top speakers.

Dimensions:

W x H = 280 x 75 mm

