

	CABLE DIAGRAM		DESIGNER	SIGNATURE	DATE
	AMPLIFIER CONTROL		MINERVINI	SIGNATURE	11/02/2004
	TITLE		PCB DESIGNER	SIGNATURE	PCB REF
ASSEMBLY CODE	APG012C		MINERVINI		APG012C
					SHEET
					1/1







level of the interlock signal becomes high (this line has a pull-up towards the +5V power supply voltage as well) and the interlock protection activates switching off the amplifier. Note that in case the interlock protection is not used, the pin 4 of the DB9 telemeasure connector and the earth pin (pin 5) must be short circuited. Otherwise it is possible to disable the monitoring of the interlock chain from menu (see user manual). Figure 2 shows a typical usage for the digital input signals to turn on and off the amplifier and for the interlock alarm.

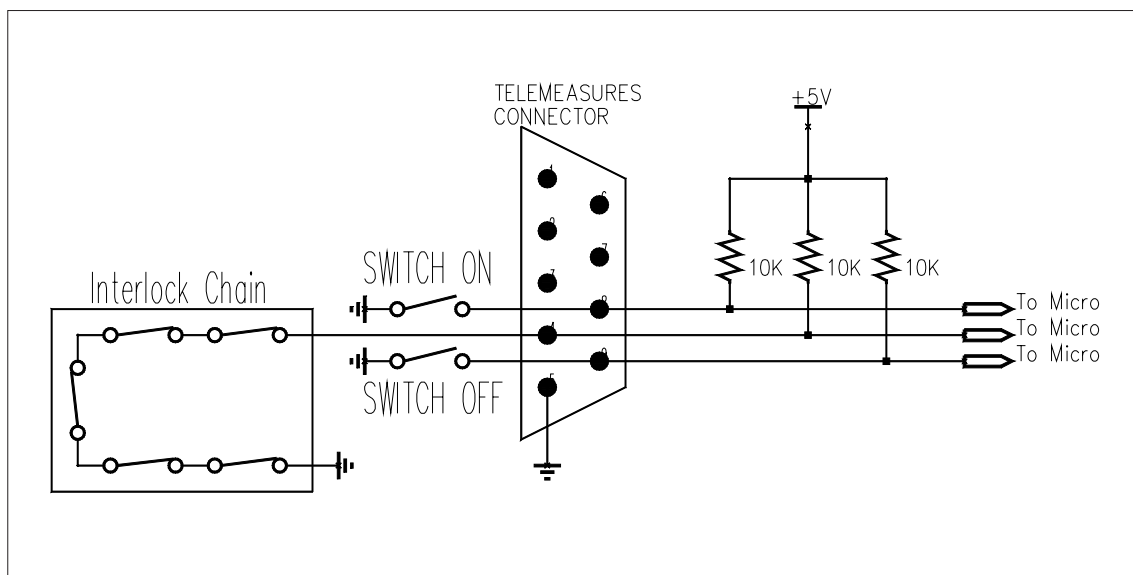


Figure 2: Usage of the digital input signals of the telemeasures connector

## AGC / EXCITER

The connector called J10, as the telemeasures connector and the RS485 bus, is wired to a DB9 female connector placed on the rear panel of the amplifier. This connector allow the implementation of an automatic gain control between an exciter and the amplifier. A voltage signal related to the forward output power supplied by the amplifier is provided through two pins of the AGC connector. Connecting one of these to the relevant input pin of the exciter, this can pursuit a given voltage level, so that the output power is always constant. In order to avoid that, in case of an alarm decreasing the forward power, the exciter increases its output level due to the AGC, thus damaging the amplification stages, the connector is provided with two digital output lines called AGC Alarm. Under alarm conditions, this lines are brought by the micro-controller at a low level, so that the exciter can stop the AGC.

Table 4 shows the connection between the J10 connector on the board and the DB9 connector on the rear panel, along with the description of each pin (the direction of the pin is referred to the position of the micro-controller on the board).