

Rotating Arena – manual

© Bio-Signal Group Corp. 2006, rev B

The Rotating arena is a DC motor powered rotating plate with a diameter of 820mm. It consists of three main pieces :

- Metal stand
- Base with Motor and Swivel
- Rotating top

The Base with the Motor and Swivel is attached to the Stand by screws. On the top of the Base, there is an aluminum plate, which has a locker from the bottom, connected to the rotating contact during the normal operation. On the top of the aluminum plate, there is a stainless-steel basin attached by 4 screws.



Figure 1 : Rotating Arena

Attached to the Arena base you will find connectors for interconnecting the Arena to the Control Box and also various controls.

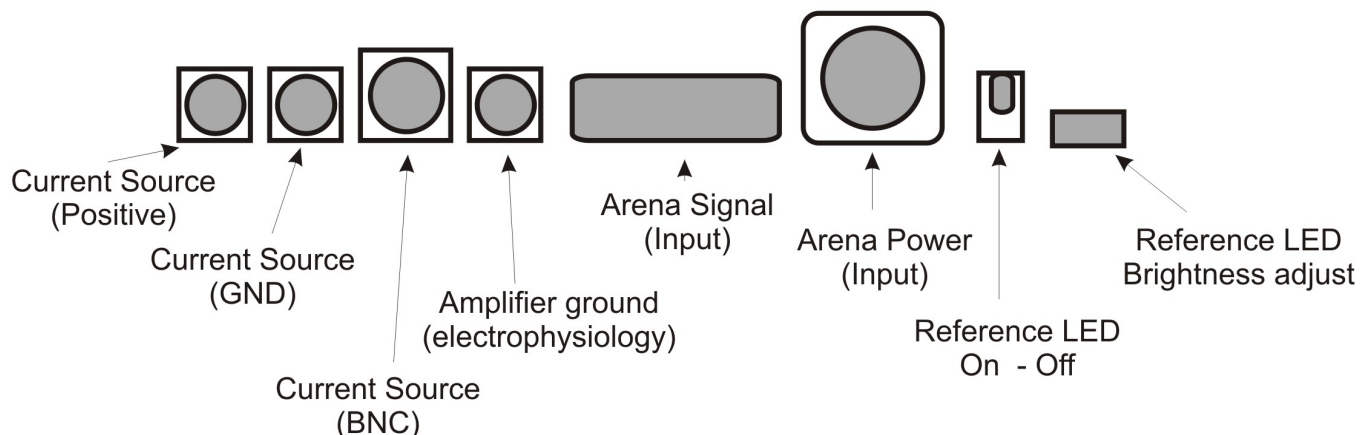


Figure 2 : Connectors and controls

- **Current Source (Positive)** – terminal for the positive pole of the Current Source
- **Current Source (GND)** – terminal for the negative pole of the Current Source
- **Current Source (BNC)** – terminal for positive and negative pole of the Current Source
- **Amplifier ground** – RCA connector for connecting the ground of the amplifiers when simultaneously recording electrophysiology and running Avoidance experiment.
- **Arena Signal** – DB-9 connector for low-power signals (Current Source ground, Arena LED power, Relay power). The pinout is the following :

Pin	Assignment
1	Arena Relay
2	Arena Relay
3	Arena LED +
4	ARENA LED GND
5	CS GND
6	Optional 1
7	Optional 2
8	Optional 3
9	Optional 4

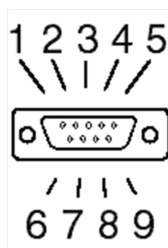


Figure 3 : Arena Power DIN 6 connector

- **Arena Power** – DIN-6 connector for high-power signals (Arena Motor, Speaker). The pinout is the following :

Pin	Assignment
2,5	Motor GND
1,3	Motor +12V
4	Repro +
6	Repro -

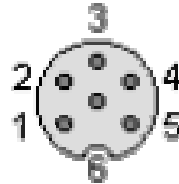


Figure 4 : Arena Power DIN 6 connector

- **Reference LED (On – Off)** – when the switch is in the upper position, Reference LED is turned OFF.
- **Reference LED Brightness adjust** – adjusts the level of Reference LED brightness.

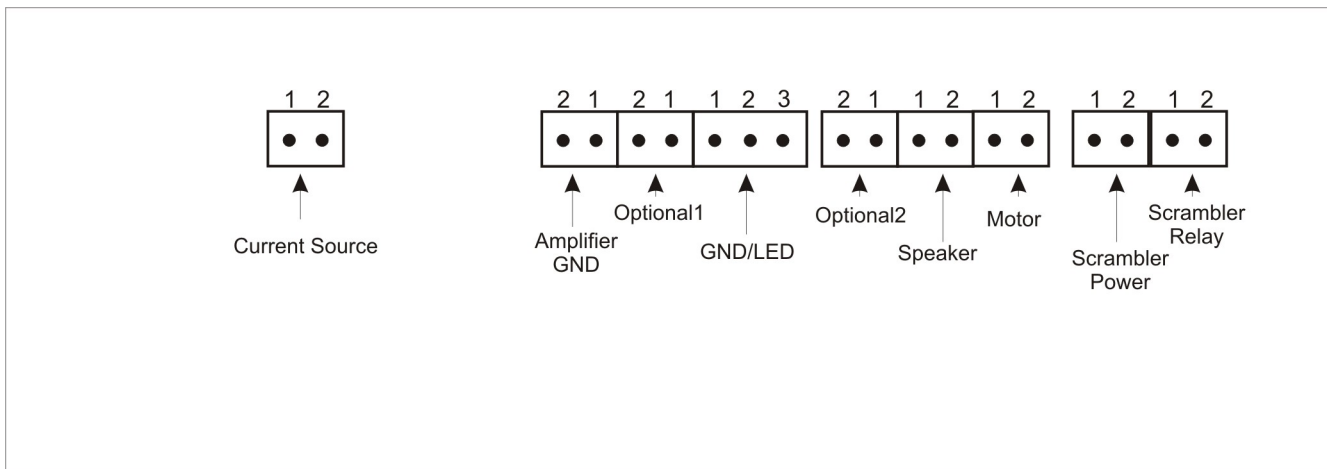


Figure 5 : PCB connections

Socket	Pin	Assignment
Current Source	1	CS Positive
	2	CS Negative
Amplifier GND	1	GND
	2	-
Optional1	1	-
	2	-
GND/LED	1	Arena LED +12V
	2	Arena LED GND
	3	CS GND - Control Box
Optional2	1	-
	2	-
Speaker	1	LoudSpeaker +
	2	LoudSpeaker -
Motor	1	Motor GND
	2	Motor + 12V
Scrambler Power	1	Scrambler +12V
	2	Scrambler + 12V
Scrambler Relay	1	RELAY +
	2	RELAY GND