

## Rotating Arena – manual

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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.

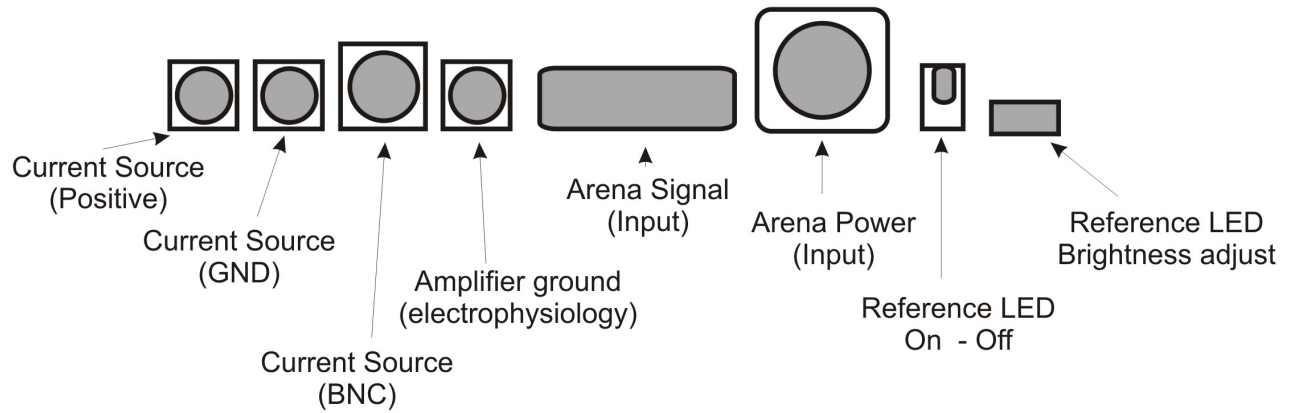


Figure 2 : Connectors and controls

- **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    |

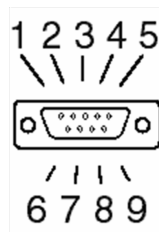


Figure 3 : Arena Power DIN 6 connector

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

| Pin | Assignment |
|-----|------------|
| 1.2 | Motor GND  |
| 3.4 | Motor +12V |
| 5   | Repro +    |
| 6   | Repro -    |

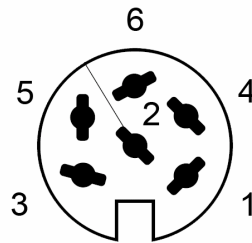


Figure 4 : Arena Power DIN 6 connector

- **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.

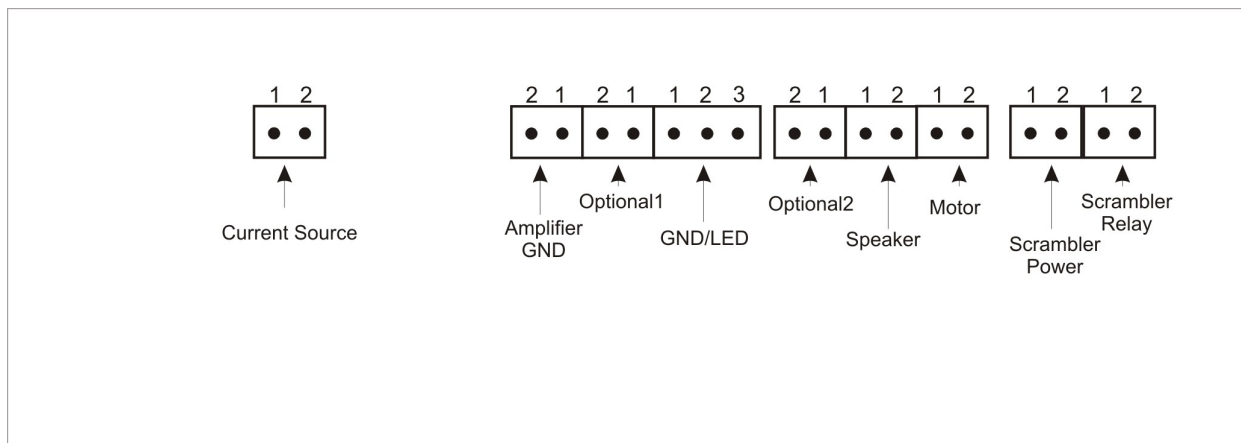


Figure 5 : PCB connections

| 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            |