

Scrambler – manual

Bio-Signal Group Corp. 2007

Warning !



The Scrambler is designated to be used only for stimulation of the animals during behavioural experiments. Any other use is strictly prohibited without prior consultation with the supplier.

It is strictly prohibited to touch the **OUTPUT** connector or the conductors connected to the connector, when the device is on.

- § Risk of electric shock, may interfere with electrical devices such as pacemakers
- § This high voltage instrument is not intended for clinical measurements using human subjects.
- § Do not touch the Output connector either directly or indirectly e.g. through a wire connected to the connector while the device is on. Before any manipulation with the wires connected to the Output connector make sure that the device is turned off.
- § Do not open the device, or connect different accessories than the ones specified in the device documentation. In case of problems operating the device, contact Bio-Signal Group Corp for repairs. Do not attempt to repair the device yourself.
- § As with all electrical devices, use caution when operating the device. Keep the device away from liquids.
- § Bio-Signal Group Corp. does not assume responsibility for injury or damage due to the misuse of this instrument.

The scrambler is an optional accessory for the Constant Current Source. It makes it possible to use the Constant Current Source with the Mouse Grid.

The basic function of the Scrambler is to transform 2-pole output from the Current Source ("INPUT" connector) into 5-pole pulse output ("OUTPUT" connector), which is then connected to the Grid. The scrambler increases the effectivity of shock deployment by creating combinations across all the poles and then passing current through them.

The second function of the Scrambler is to disconnect the optional amplifier ground ("GND" connector) when the shock is deployed and reconnect it when the shock is active. This makes it possible to record electrophysiology signals in experiments, where the shocking is used.

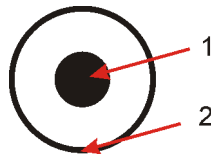


Back panel connectors

- **DC power input** - 12V / 200mA

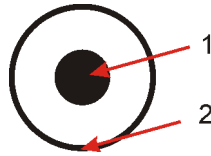
Front panel connectors

- **GND** – optional connection for the analog amplifier ground



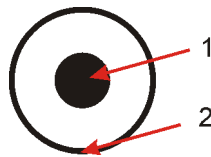
Pin	Assignment
1	GND
2	GND

- **INPUT** – 2-pole Current Source input



Pin	Assignment
1	Positive pole (+)
2	Negative pole (-)

- **RELAY** – output relay control



Pin	Assignment
1	Positive pole (+)
2	Negative pole (-)

- **OUTPUT** – 5-pole scrambler output



Pin	Assignment
1	Pole #1
2	Pole #2
3	Pole #3
4	Pole #4
5	Pole #5

Optional Scrambler adjustment

When the ground switching is not used, internal relays should be removed and replaced by wire connection as shown on the following figure.

