

Inductive Power Accessory

for Wireless Recording and Stimulation Applications

PRODUCT OVERVIEW

Triangle BioSystems, presents the perfect solution for longterm wireless recording and stimulation applications. This unique inductive power accessory is designed to keep a wireless head-stage's internal battery perpetually charged, thereby enabling indefinite and uninterrupted device operation.



The wireless power system consists of four major pieces: a proprietary non-linear power amplifier, a custom-sized magnetic field emission coil, a magnetic field harvester coil, and a power harvesting circuit installed within the head-mounted device. The power amplifier provides AC power to the emission coil, which induces a harmless magnetic field within its perimeter. The harvester coil, tuned to receive maximal energy from the magnetic field, feeds any gathered energy to the harvester circuit. The harvester circuit then utilizes this energy to power the wireless device and to recharge its internal battery.

This inductive power accessory opens up a previously unavailable experimental paradigm, allowing longterm continuous monitoring or stimulation of the brain while facilitating natural animal behavior.

FEATURES

- Enables indefinite recording time for W/S-Series headstages
- Magnetically controlled on/off battery and transmitter switches
- LED indicators for headstage power and battery charging
- Biocompatible packaging available
- Modular design ideal for most experimental environments
- Compact battery further reduces headstage size and weight
- Upgrades available for previously purchased standard headstages
- Magnetic fields guaranteed to be safe and undetectable by animals

SYSTEM OVERVIEW





Inductive Power Accessory

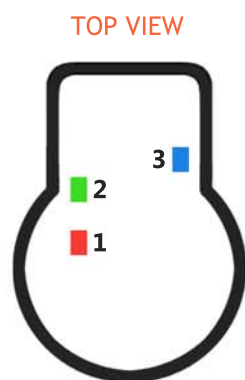
SPECIFICATIONS

PARAMETER	5,16 Ch	32 Ch	64 Ch	UNITS	NOTES
Power Supply					
Voltage Input	120	120	120	VAC	
Power Input	28	28	28	Watts	
Field frequency	1.136	1.136	1.136	MHz	
Mechanical Specs					
Length	35.8	37.7	40.6	mm	Edge to Edge
Width	24.1	27.8	33.6	mm	Edge to Edge
Height	12.2	12.4	12.4	mm	Edge to Edge
Weight	4.5	5.1	5.7	grams	

MECHANICAL



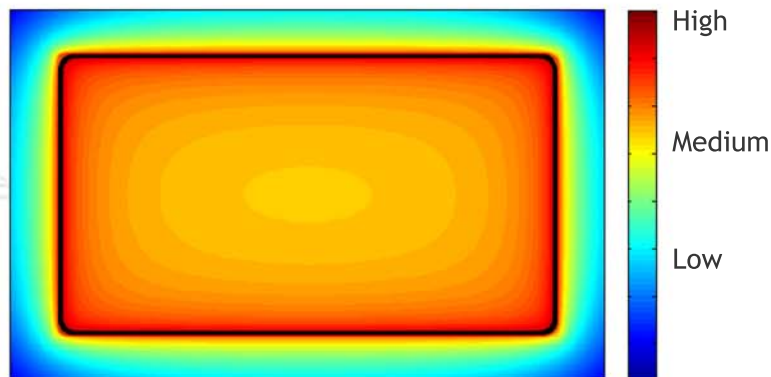
INDICATORS



- ① Red: battery is enabled
- ② Green: battery is charging
- ③ Blue: transmitter is enabled

We understand that not all experiments are considered equal. That's why we offer custom emission coils for unique workspace shapes and sizes.

Typical Field Strength



Top Down View of Rodent Cage

