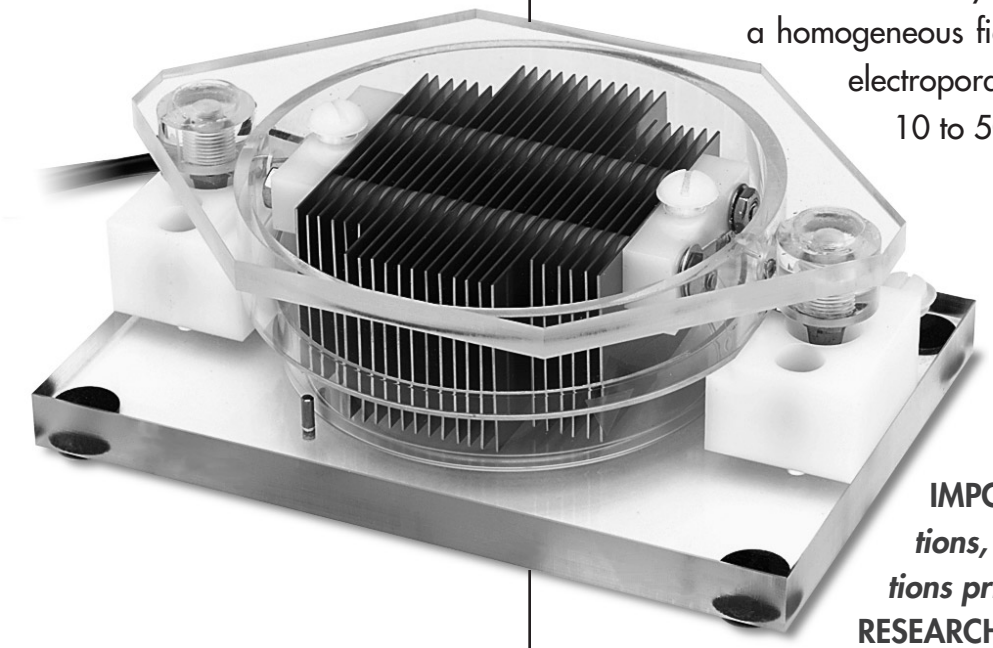
Petri Dish Electrodes

INSTRUCTIONS
MODEL 366

The Petri Dish Electrode is designed to be used with a 100 mm petri dish which functions as the electroporation chamber. To perform electroporation or electrofusion, the samples are placed in the petri dish and the electrode assembly is lowered into the dish. The electrodes are 2 mm apart and are made of stainless steel . They are parallel and thus create a homogeneous field. They are designed to electroporate volumes ranging from 10 to 50 ml.



IMPORTANT: ***Read all Instructions, Warnings and Precautions prior to use.*** **FOR RESEARCH PURPOSES ONLY**

ELECTRICAL & TECHNICAL SPECIFICATIONS

Standard Capabilities

Voltage Range:	0 - 2000V DC (Do not use AC current)
Pulse Length Range:	1 µsec - 40 msec
Pulse Number Range:	1-99 (Depending on voltage)
Operating Temperature:	5° - 40° C
Intended Use:	Indoor Use
Relative Humidity:	20-80%
Maximum Altitude:	2000m (6562 ft)
Pollution Degree:	II
Insulation Degree:	CAT I

Physical Characteristics

Dimensions:	6″ x 4″ x 2.5″ (length x width x height)
Volume Range:	10-50 ml
Electrode Gap:	2 mm
Electrode Material:	Stainless Steel

Generator Compatibility	ECM 830, 630, 2001, 600, T 820
Monitoring	Enhancer 400 Recommended

BTX®
The Electroporation Experts

DEFINITION OF SYMBOLS

Warning – Refer to instructions for use in order to find the nature of any potentional hazard and any actions which have to be taken.

Caution – Risk of electric shock. Dangerous voltage that could result in injury or loss of life.

SAFETY GUIDELINES

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. To avoid potential hazard, use this product only as specified. Only qualified BTX personnel should perform service procedures.

Arcing can occur at high voltages. An unfavorable combination of parameters such as high voltage settings and a small sample volume with a highly conductive medium might lead to flashover between the electrodes (ARC) and/or explosive evaporation of the medium. Reduce voltage, pulse length, or increase sample volume to avoid repeating this condition.

Connect and disconnect properly. Do not connect or disconnect cables of product while generator is powered on.

Do not operate with suspected failures. If you suspect there is damage to the product, have it inspected by qualified BTX service personnel.

Do not contact electrodes. To avoid fire or shock hazard, observe all ratings and markings on the product or in the manual before using the device.

Avoid exposure to contact. Do not touch the device during pulsing as there is a possiblity for shock to occure. Do not insert fingers between electrodes during pulsing sequence.

Wear proper eye protection during electroporation.

Do not operate in an explosive environment.

Do not operate in wet/damp conditions.

INSTRUCTIONS FOR USE

WARNING HIGH VOLTAGE. Make sure the BTX Pulse Generator is switched off before continuing

1. Attach the banana cable into the voltage output of the BTX Pulse Generator. If using the Enhancer 400, attach the cables to the Enhancer and then attach the cables from the Enhancer to the generator. Refer to the Enhancer for instructions for use.
2. Following instructions for the BTX Pulse Generator, set the appropriate parameters on the generator.
3. Prepare tissue and sample for electroporation.
4. Deliver the electroporation pulse(s) to the sample.
5. Remove the electrodes carefully and prepare for the next experiment.

MAINTENANCE

Warning: Do not attempt maintenance while the Petri Dish Electrode is plugged into a pulse generator. Clean the electrode surfaces with a soft cloth or tissue. If necessary, moisten the cloth or tissue with a dilute detergent solution.

TROUBLESHOOTING

Please contact BTX Technical Service at any of the numbers listed on the following page in the event of any failure.

WARRANTY

The BTX Instrument Division of Genetronics, Inc. (Genetronics) warrants that Petri Dish Electrodes are free of defects at time of delivery to the user. If a defect is found, product may be returned for exchange only within a period of 90 days from time of delivery from BTX or an authorized Genetronics Distributor. If any defects covered by this warranty appear within the above period, Genetronics shall have the option of repairing or replacing the product at its expense. Such repair or replacement shall be the customer's exclusive remedy for breach of warranty or for negligence. This warranty does not extend to any product which has been (a) subjected to misuse, neglect, accident or abuse, (b) repaired or altered by anyone other than Genetronics without Genetronics' express and prior approval, (c) used in violation of instructions furnished by the BTX Instrument Division of Genetronics, Inc. Manufacturer shall not be liable for any special or consequential damages or for loss, damage or expense (whether or not caused by or resulting from Manufacturer's negligence) directly or indirectly arising from use of the product sold here under either separately or in combination with any other product or from any other cause.

The above warranty shall be in lieu of and excludes all other expressed or implied warranties of merchantability, or fitness for any purpose, or otherwise. Without limiting the generality of the foregoing, Manufacturer shall not be liable for any claims of any kind whatsoever, as to the product delivered or for non-delivery of equipment, and whether or not based on negligence.

Manufacturer will correct any malfunction not caused by operator abuse at no charge for parts and labor. All service under the warranty will be made at the Genetronics, Inc. San Diego, California, USA facilities or at another location approved by Genetronics, Inc. Owner will ship product prepaid to San Diego, California. Manufacturer will return the product, after servicing, freight prepaid to owner's address.

Warranty is VOID if the product is changed in any way from its original factory design or if repairs are attempted without written authorization by Manufacturer.

Warranty is VOID if parts or connections not manufactured by Manufacturer are used with a BTX product.

Note: Under no conditions should any product be returned without prior approval and a returned goods authorization (RGA) number from manufacturer.

TECHNICAL & CUSTOMER SERVICE

BTX® is the ultimate resource for technical information on the use of high voltage electric fields for performing high efficiency cell fusion, embryo manipulation, gene transfer, bacterial transformation and general electroporation of molecules and drugs into cells. We constantly track and monitor all scientific publications in this area. Our Technical Service group extracts and enters pertinent information, such as results and parameters from these papers into a Database Management System. The resultant database can be accessed and searched on any combination of the field identifiers.

For technical assistance or information, contact the BTX Instrument Division of Genetronics, Inc. Technical Service group:

Phone: 1-800-597-0580 1-858-597-6006
Fax: 1-858-597-9594
E-mail: tech@genetronics.com

If outside the United States and Canada: call 858-597-6006 or contact your nearest BTX Distributor.

BTX®
A Division of Genetronics, Inc.
11199 Sorrento Valley Road
San Diego, CA 92121-1334 U.S.A.

For any inquiry or request for repair service, contact the BTX Instrument Division of Genetronics, Inc. Customer Service group in writing or by the following:

Phone: 1-800-289-2465 1-858-597-6006
Fax: 1-858-597-9594
E-mail: cust@genetronics.com

If outside the United States and Canada, call 1-858-597-6006 or contact your nearest BTX Distributor.

ORDERING INFORMATION

System Model	Available Configurations
366	Petri Dish Electrode, 2mm gap, Stainless Steel
Accessory Model	**Description**
4001	Enhancer 400 w/ Computer & Printer Interface