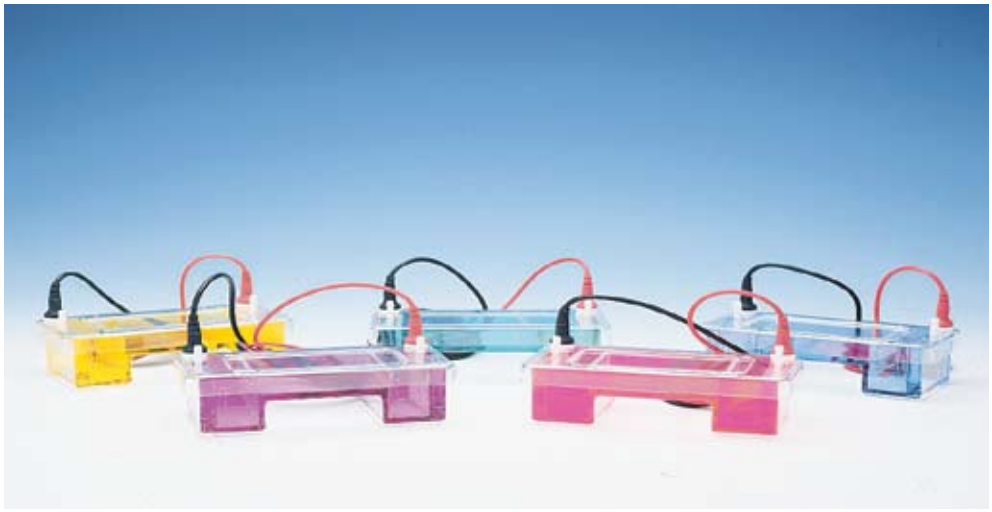
INSTRUCTION MANUAL

Horizontal Mini-Gel Systems

MGU-102T
MGU-202T



C.B.S. SCIENTIFIC COMPANY, INC

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ENGLISH

IMPORTANT USER INFORMATION

This Instruction Manual will explain how to use this product safely and effectively. Please read and carefully follow the instruction manual in its entirety.

The triangle/exclamation mark symbol alerts the user of the product to important operational, maintenance, and/or warranty requirements.

The triangle/lighting bolt symbol alerts the user of the product to potentially hazardous electrical exposure.

Failure to adhere to the instructions could result in personal and/or laboratory hazards, as well as invalidate any warranty. Always turn off the DC power source prior to disconnecting power cords from the product. Disconnect power cords from the power source first and then from the product. For maximum safety, always operate this system in an isolated, low traffic area, not accessible to unauthorized personnel. Never operate damaged or leaking equipment.

WARRANTY AND LIABILITY

This product was produced utilizing the highest practical standards of materials, workmanship, and design. C.B.S. Scientific warrants that the product has been tested and will meet or exceed published specifications. This warranty is valid only if the product has been operated and maintained according to the instructions provided.

C.B.S. Scientific warrants this product to be free from defects in materials and workmanship under normal service for one year from date of shipment. If the product proves defective during this period, C.B.S. Scientific will repair or replace it at our option, free of charge, if returned to us postage prepaid. This warranty does not cover: damage in transit, damage caused by carelessness, misuse or neglect, normal wear through frequent use, damage caused by solvent corrosion, damage caused by improper handling or user alteration, nor unsatisfactory performance as a result of conditions beyond our control. C.B.S. Scientific shall in no event be liable for incidental nor consequential damages, including without limitation, lost profits, loss of income, loss of business opportunities, loss of use and other related damages, however caused, nor any damage arising from the incorrect use of the product.

FRANÇAIS INFORMATION IMPORTANTE À L'USAGE DES UTILISATEURS

Le présent manuel d'utilisation explique la manière de se servir efficacement du produit en conditions de sécurité. Il est recommandé de soigneusement lire la totalité du manuel, avec ses consignes et ses instructions.

Le triangle avec point d'exclamation est un symbole destiné à avertir l'utilisateur du produit de l'importance de certaines exigences relatives au fonctionnement, à l'entretien et/ou à la garantie.

Le triangle avec flèche en zigzag est un symbole destiné à avertir l'utilisateur du produit de la possibilité d'exposition à des décharges avec danger de secousses électriques.

Tout manquement à l'observation des consignes et des instructions peut exposer les personnes et les biens à des dommages corporels et/ou matériels et peut annuler toute garantie. Il faut toujours interrompre l'alimentation de courant continu avant de déconnecter les cordons d'alimentation du produit. Déconnecter d'abord les cordons d'alimentation branchés sur la source de tension (alimentation de secteur) puis ceux branchés sur le produit. Pour une sécurité maximum, il faut toujours faire fonctionner ce système dans un lieu isolé, peu fréquenté, où le personnel non autorisé n'a pas accès. Ne jamais faire fonctionner un matériel endommagé ou affecté par des fuites.

GARANTIE ET RESPONSABILITÉ

Le produit a été fabriqué conformément aux normes applicables les plus exigentes en matière de matériaux, de main d'oeuvre, de conception et d'ingéniérie. C.B.S. Scientific garantit que le produit a subi des essais et que ses performances rempliront les conditions des spécifications publiées ou leur seront même supérieures. La présente garantie n'est valide que si le produit a fonctionné et a été entretenu conformément aux consignes et instructions fournies.

C.B.S. Scientific garantit que le produit sera dépourvu de vices de matériaux et de main d'oeuvre, en conditions de service normales, pendant un an à compter de la date d'expédition. Au cas où le produit s'avérerait défectueux pendant cette période de garantie, C.B.S. Scientific réparera ou remplacera le produit, à sa discrétion et gratuitement, si le produit lui est retourné port payé d'avance. La garantie ne couvre pas les dommages de transport; les dommages causés par l'imprudence, le manque de soins, l'abus ou la négligence; l'usure normale résultant d'une utilisation fréquente; les dommages causés par la corrosion des solvants; et les dommages causés par la manipulation inadéquate ou des changements apportés par l'utilisateur. La garantie ne couvre pas non plus les performances non satisfaisantes résultant de conditions hors du contrôle de C.B.S. Scientific. C.B.S. Scientific ne pourra en aucun cas être tenue responsable de dommages indirects, y compris, de manière non limitative, la perte de bénéfices, le manque à gagner, la perte d'occasions d'affaires, l'impossibilité d'usage ou tous autres dommages associés, quelle qu'en soit la cause, ni de dommages résultant de l'usage incorrect du produit.

ESPAÑOL INFORMACIÓN IMPORTANTE PARA EL USUARIO

El presente instructivo explica la manera de usar este producto en forma segura y efectiva. Sírvase leerlo en su totalidad y seguir detenidamente las indicaciones que contiene.

El símbolo del triángulo con exclamación llama la atención del usuario a requisitos importantes para el uso y mantenimiento del producto, así como para la validez de la garantía.

El símbolo del triángulo con rayo llama la atención del usuario a la posibilidad de riesgos eléctricos.

El incumplimiento de las instrucciones aquí señaladas podría dar lugar a riesgos a la persona, al laboratorio o a ambos y podría anular toda garantía. Siempre apague la fuente de corriente continua antes de desenchufar los cables eléctricos del producto. Primero desconecte los cables de la fuente de energía y después del producto. Para mayor seguridad, siempre use este sistema en un área aislada, de poco movimiento de personas e inaccesible a personal no autorizado. Jamás use equipo que presenta algún daño o fuga.

GARANTÍA Y RESPONSABILIDAD

Este producto fue fabricado de acuerdo con las normas más estrictas que sean factibles en cuanto a materiales, mano de obra y diseño. C.B.S Scientific garantiza que se sometió el producto a pruebas y que cumplirá o excederá las especificaciones publicadas. Esta garantía será válida únicamente si se usa y se da servicio de mantenimiento al producto de acuerdo con las instrucciones señaladas.

C.B.S. Scientific garantiza que este producto se encontrará libre de defectos de materiales y mano de obra por un período de servicio normal de un año a partir de la fecha de embarque. Si el producto resulta defectuoso durante este período, C.B.S. Scientific lo reparará o lo repondrá, a criterio de C.B.S., libre de cargos, si se devuelve el producto a C.B.S. porte pagado. Esta garantía no cubre daños sufridos en tránsito, daños provocados por descuido, mal uso o negligencia, desgaste normal como consecuencia del uso excesivo, daños atribuibles a corrosión provocada por solventes, daños causados por el uso indebido o alteraciones realizadas por el usuario ni rendimiento insatisfactorio atribuible a circunstancias fuera del control de C.B.S. Scientific. C.B.S. Scientific en ningún caso asumirá responsabilidad por daños incidentales o subsecuentes, incluyendo, en forma no limitativa, la pérdida de utilidades, de ingresos, de oportunidades comerciales o del uso del producto y otros daños afines, fuere cual fuere su origen, ni por daños derivados del uso incorrecto del producto.

DEUTSCH WICHTIGE INFORMATION FÜR DEN BENUTZER

Diese Bedienungsanleitung beschreibt wie man dieses Produkt sicher und wirksam benutzt. Bitte lesen und befolgen Sie alle Anweisungen in dieser Anleitung.

Das Dreieck mit Ausrufezeichen weist den Benutzer des Produktes darauf hin, daß wichtige Bedienungs-, Wartungs- und/oder Garantievorschriften zu beachten sind.

Das Dreieck mit Zickzackblitz warnt den Benutzer des Produktes vor möglichen Gefahren durch elektrische Spannungen.

Nichtbeachtung dieser Anweisungen kann zu persönlichen und/oder labortechnischen Schäden führen und gleichzeitig alle Garantien als nichtig erklären. Die DC Stromzufuhr muß immer, vor dem Entfernen der Stromkabel vom Produkt, abgeschaltet werden. Die Stromzufuhrkabel müssen zuerst von der Steckdose und erst dann vom Produkt entfernt werden. Um höchste Sicherheit zu gewährleisten sollte dieses System in einem abgesonderten und besonders ruhigen Bereich eingesetzt werden und vor Unbefugten sicher sein.

GARANTIE UND HAFTUNG

Dieses Produkt wurde unter Anwendung von Produkten mit höchster Qualität und aus Materialien mit bester Verarbeitung und modernstem Design hergestellt. C.B.S Scientific garantiert, daß das Produkt getestet wurde und alle publizierten Spezifikationen übertrifft. Diese Garantie ist jedoch nur gültig, wenn das Produkt nach der beigefügten Bedienungsanleitung bedient und gewartet wurde.

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ITALIANO INFORMAZIONI IMPORTANTI PER L'UTENTE

Questo manuale spiega come utilizzare questo prodotto in maniera sicura ed efficiente. Si pregai di leggere e seguire con cautela le istruzioni di ogni parte di questo manuale.

Il triangolo contenete il simbolo di un punto esclamativo avverte l'utente di importanti requisiti relativi al funzionamento, manutenzione e/o garanzia del prodotto.

Il triangolo contenete il simbolo di un lampo avverte l'utente del prodotto della possibilità di pericoli dovuti a corrente elettrica.

La mancata osservanza delle istruzioni può essere causa di pericolo alla propria persona ed al laboratorio, oltre a poter annullare la garanzia. Prima di distaccare il cordone d'alimentazione dal prodotto, spegnere sempre la sorgente di corrente continua. Distaccare i cordoni d'alimentazione prima dal lato della sorgente di tensione e poi dal lato del prodotto. Per maggior sicurezza, mettere sempre in funzione il prodotto in un'area isolata con poco traffico che non sia accessibile al personale non autorizzato. Non mettere mai in funzione un'apparecchiatura che sia danneggiata o abbia perdite.

GARANZIA E RESPONSABILITÀ

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SECTION 1
General Information

1.1 Introduction

The Horizontal Mini-Gel systems, MGU-102T and MGU-202T, provide a compact format to rapidly separate and identify DNA and RNA fragments, PCR products and synthetic oligonucleotides, while using minimal quantities of expensive reagents. The tapered baffle system allows gel casting directly onto the unit or removable trays without having to seal with agarose plugs or tape. The gel bed and gel tray are UV transparent. Combs are offered in several thicknesses and formats to accommodate a wide variety of experimental applications.

1.2 Specifications

Constructions

Buffer chamber, lid	Acrylic
Electrodes	Platinum wire .012" diameter
Power cords	FR Urethane, rated 7500V, 200mA, 65° C
Tapered baffles	Acrylic
Combs	Polycarbonate, Anodized Aluminum or Teflon
Adjustable comb backing	Acrylic
UVT Gel Tray (optional)	U-V transparent acrylic
Safety Certification	EN61010-1-1993 (IEC1010-1)

	MGU-102T	MGU-202T
Shipping weight	**3 lb.**	**3 lb.**
Overall Size (l)x(w)x(h)	**18.2cm x 8cm x 9cm**	**20cm x 9.7cm x 10cm**
Gel Size	**5.5cm x 8.5cm**	**7.5cm x 10cm**
Recommended buffer volume:		
with gel tray	**150 ml**	**250 ml**
without gel tray	**140 ml**	**235 ml**
Distance between electrodes	**14.5 cm**	**21 cm**
Voltage limit	**250VDC**	**250VDC**

1.3 Safety

Power to the MGU-102T or MGU-202T units is to be supplied by an external DC voltage power supply that must be ground isolated so that the DC voltage output floats with respect to ground. For any power supply used, the maximum specified operating parameters for the units are:

Maximum Limits
250VDC voltage
15 watts power
60 mA current
50°C ambient temperature

Current to the unit, provided from the external power supply, must enter the unit through the lid assembly, providing a safety interlock to the user. Current to the unit is broken when the lid is removed. **Do not attempt to use the unit without the safety lid. Always turn the power supply off before removing the lid, or when working with the unit in any way. Follow safety precautions specified by the power supply manufacturer.**

SECTION 2

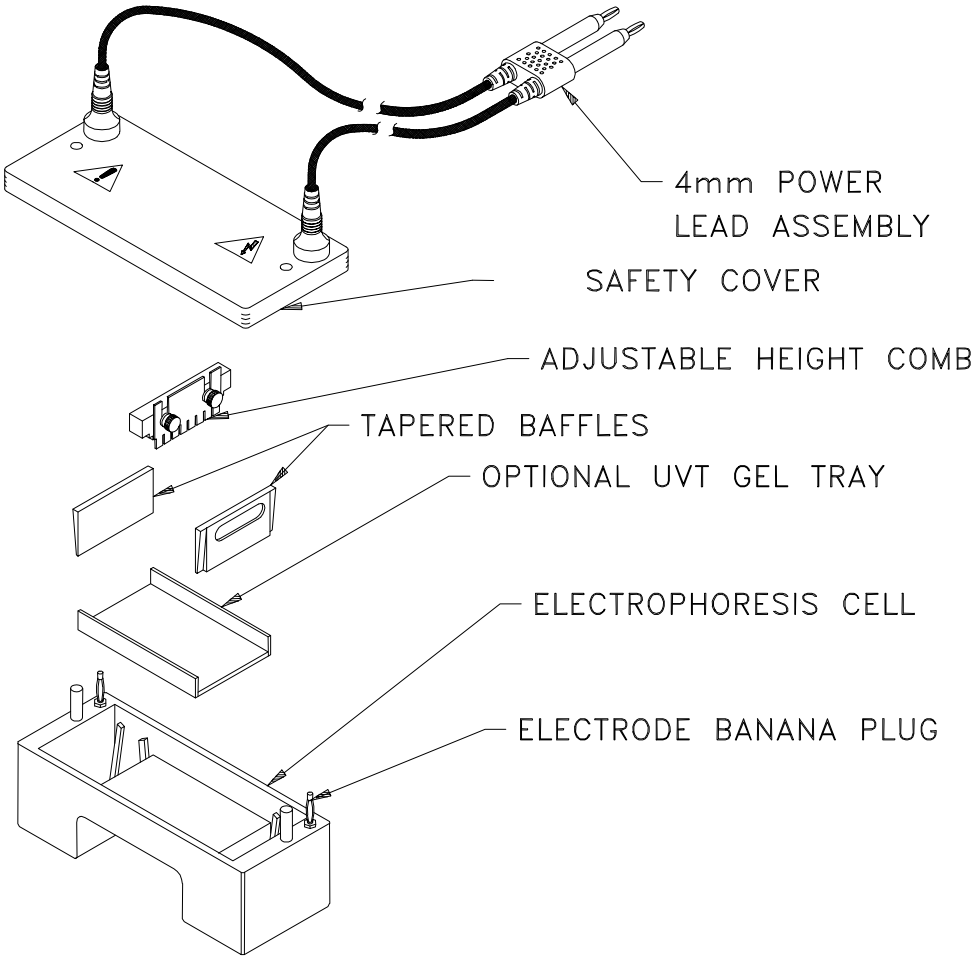
Description of Parts

2.1 Unpacking

Please verify that your MGU-102T or MGU-202T unit comes complete with the following components:

- Mini-Horizontal electrophoresis unit
- Tapered baffles (2)
- Safety cover with attached DC power cords
- Adjustable height comb (1 each of your choice)

2.2 Components/Assembly



SECTION 3
Instructions for Use

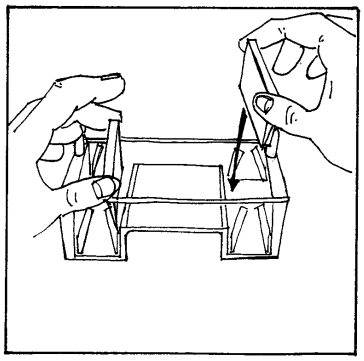
3.1 Mini-Gel Unit Preparation and Gel Casting

Place Mini-Gel unit on a level work surface in an authorized work area. Place the adjustable height comb assembly over the gel bed or gel tray. Loosen the white screws holding the comb to the backing and adjust comb depth (generally 2mm). Gently tighten the adjusting screws and set the comb aside. **See Table 1 for comb volumes**.

The Mini-Gel unit provides the user with three options for gel casting: (a) **gel casting directly into unit**, (b) **gel casting directly into unit using gel tray**, or (c) **gel casting in gel tray outside of unit**.

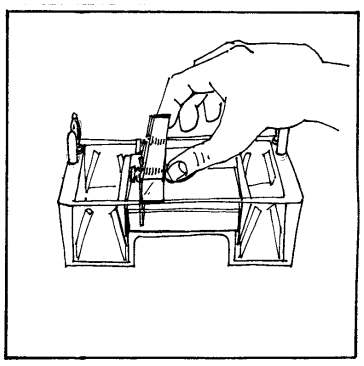
A. Gel Casting Directly into Unit.

1. Slide the tapered baffles snugly into the grooves next to the bed, handles to the outside. The tapered baffles will rest friction tight against the gel bed. Do NOT press the baffles too tightly into the stops.



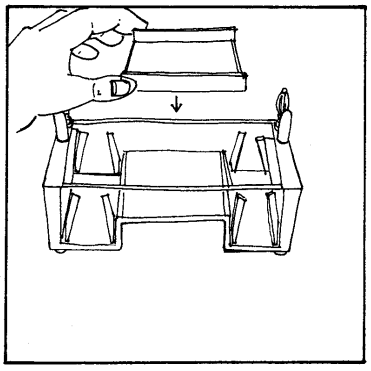
2. Position the gel comb, remembering, current travels from negative (black cathode) towards positive (red anode). Pour the agarose solution onto the gel bed. Allow the agarose slab to cool uncovered until it turns opaque.

3. Slide the baffles out of their slots and store in the slots provided at either end of the unit near both terminals.



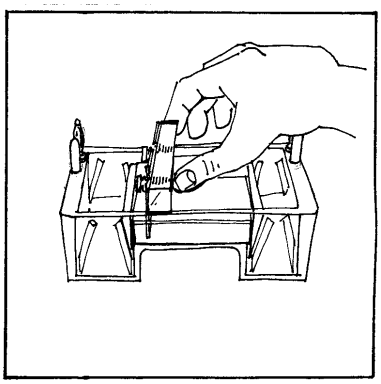
B. Casting Directly into Unit Using Gel Tray.

1. Insert gel tray in unit. Simultaneously slide the tapered baffles snugly into the grooves next to the bed, handles to the outside at the same time. The tapered baffles will rest friction tight against the gel tray. Do NOT press the baffles too tightly into the stops.



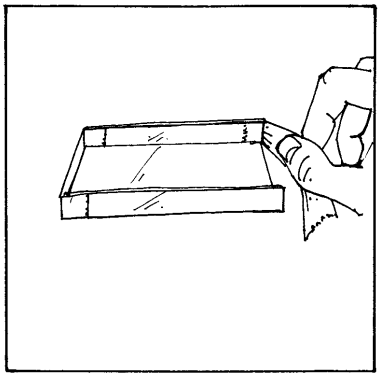
2. Position the gel comb, remembering, current travels from negative (black cathode) towards positive (red anode). Pour the agarose solution onto the gel bed. Allow the agarose slab to cool uncovered until it turns opaque.

3. Slide the baffles out of their slots and store in the slots provided at either end of the unit neat both terminals.

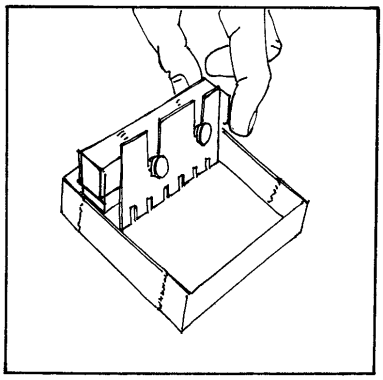


C. Gel Casting into Gel Tray Outside of Unit.

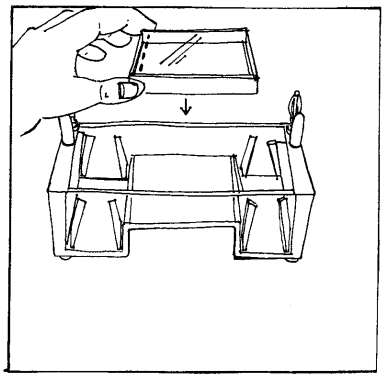
1. Tape both ends of gel tray with tape.



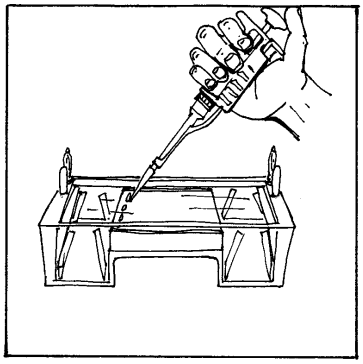
2. Position the gel comb in the gel tray at one end. Pour the agarose solution onto the gel bed. Allow the agarose slab to cool uncovered until it turns opaque.
   NOTE: (Optional storage) Pre-cast gels can be stored for up to one month if wrapped in plastic wrap and stored at 4°C. Remove combs prior to storing.



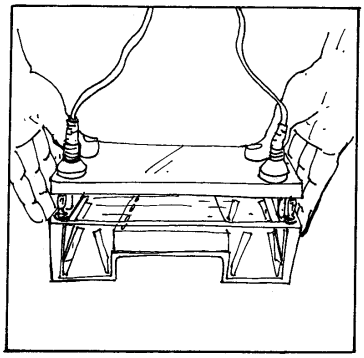
3. Remove comb and gel tape at each end. Position the tray in the unit, remembering, current travels from negative (black cathode) towards positive (red anode).



3.2 Running the gel

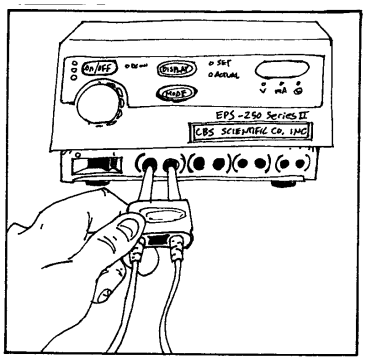


1. Add enough buffer to fill both reservoirs and overflow the surface of the gel to a depth of 2-3mm. Gently remove the comb. Flush out any air bubbles in the wells. Load the samples into sample wells. NOTE: DO NOT FORGET TO LOAD DNA SIZE STANDARD. Place the safety cover on the unit.



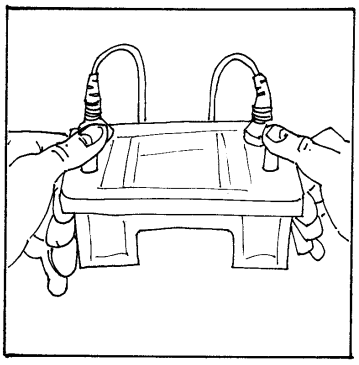
2. Connect the leads to the power supply, matching the color-coded red to red and black to black. **See Section 4.1 for recommended power conditions.**

3. Begin separation by electrophoresis.



3.3 Removing the gel

Turn the power supply off and disconnect the leads from the power supply. Remove the safety cover from the Mini-Gel unit by placing thumbs on white posts next to red & black connectors, then pushing down while pulling up with fingers under lid. **DO NOT pull on power cords.**



Gently lift the gel or gel tray from the unit. **Always wear gloves, eye protection and protective clothing** if buffer and/or gel contain Ethidium Bromide. Ethidium Bromide is a powerful mutagen; gloves, eye protection and protective clothing should always be worn when handling the gel or buffer solutions. See Material Data Safety Sheets.

View separated fragments under UV light, using proper protection for eyes and skin (see manufacturer's instructions).

3.4 Maximum Well/Comb Volumes

NOTE: To calculate sample well volume expressed in millimeters (mm) of height, divide maximum volume by tooth depth.

MGC Comb for MGU-102T # of wells	Tooth width mm	Spacing between teeth mm	Overall length of comb mm	Tooth depth mm	1.0mm thickness volume per tooth microliters (ul)	2.0mm thickness volume per tooth microliters (ul)
1	49.4	1.57	49.4	6.35	313	616
3	15.4	1.57	49.4	6.35	97	195
8	4.77	1.57	49.4	6.35	30	60
10	3.5	1.57	49.4	6.35	22	44
12	2.6	1.57	49.4	6.35	16	32
14	2.0	1.57	49.4	6.35	12	24
16	1.6	1.57	49.4	6.35	10	20
MHC Comb for MGU-202T # of wells	**Tooth width mm**	**Spacing between teeth mm**	**Overall length of comb mm**	**Tooth depth mm**	**1.0mm thickness volume per tooth microliters (ul)**	**2.0mm thickness volume per tooth microliters (ul)**
1	69.8	1.5	69.8	6.35	443	886
3	22.2	1.5	69.8	6.35	141	282
5	12.6	1.5	69.8	6.35	80	160
8	7.3	1.5	69.8	6.35	46	92
10	5.5	1.5	69.8	6.35	34	68
12	4.3	1.5	69.8	6.35	27	54
14	3.5	1.5	69.8	6.35	22	44
16	2.8	1.5	69.8	6.35	17	34

SECTION 4
Running Conditions

4.1 Recommended Power

The recommended power conditions for optimal resolution are 50 to 150V, constant, and 25 to 80 mA. The usual run time will vary for the voltage chosen but should range from 15 to 60 minutes, monitoring nucleic acid migration by progress of marker dyes. Constant power is not a necessity, but it produces uniform heat throughout the run. Be sure the polarity is correct i.e. that the DNA is loaded near the cathode (black electrode) to run toward the anode (red terminal).

Agarose gels may be stored for several days at 4°C wrapped in plastic wrap. Seakem Agarose (FMC) is used (normally) for preparative and analytical gels. Other types of agarose can be used for special purposes.

4.2 Recommended Buffers

Type*	Concentrated Stock/liter	Final Concentration
TAE	50X - 242 gm Tris base	1X - 0.04M Tris-acetate
(Tris-acetate)	57.1ml glacial acetic acid	0.001M EDTA
	100 ml 0.5M EDTA (pH 8.0)	
TBE	5X - 54 gm Tris base	0.5X - 0.045M Tris-borate
(Tris-borate)	27.5 gm boric acid	0.001M EDTA
	20 ml 0.5M EDTA (pH 8.0)	

10X - Loading Buffer (DNA)*
0.25% Bromophenol blue
0.25% Xylene cyanol
20 % Ficoll Type 400
0.1M EDTA, pH 8.0

Ethidium Bromide Staining

One can add to the buffer only, the agarose gel solution only (after the solution has been made molten and the temperature has dropped to 55°C), or can be added after the electrophoresis run and the gel stained separately. Use at a final concentration of 0.1μg/ml from a 1mg/ml stock solution. Ethidium bromide is a Mutagen. ALWAYS wear gloves. Dispose of solutions in accordance with the safety regulations of your institution.

4.3 References

Hames, B.D., Rickwoood, D. (ed.) (1990). *Gel Electrophoresis of Nucleic Acids. A Practical Approach.* 2nd edn. IRL Press, Oxford. Ch **2**.

Sambrook, J., Fritsch, E.F., Maniatis, T. (1989). *Molecular Cloning. A Laboratory Manual*. 2nd edn. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York. Ch **6**.

Ausubel, F.M., Brent, R., Kingston, R.E., Moore, D.D., Seidman, J.G., Smith, J.A., Struhl, K. (ed) (1993). *Current Protocols in Molecular Biology*. Vol. 1, Greene Publishing Associates, Inc. and John Wiley & Sons, Inc., Ch. **2**.

SECTION 5
Maintenance of Equipment

5.1 Care and Handling

The plastic components of the Mini-Horizontal units are fabricated from acrylic and polycarbonate. Electrodes and connectors are made from pure platinum, stainless steel, and chrome plated brass. As with any laboratory instrument, adequate care ensures consistent and reliable performance.

After each use, rinse buffer chamber, gel tray and combs with de-ionized water. Wipe dry with a soft cloth or paper towel, or allow to air dry. Whenever necessary, all components may be washed gently with water and a non-abrasive detergent, and rinsed and dried as above. *Never* use abrasive cleaners, glass cleaning sprays or scouring pads to clean the components, as these will damage the unit and components.

Additional precautions:

- Do not autoclave or dry-heat sterilize the apparatus or components.
- Do not expose the apparatus or components to phenol, acetone, benzene, halogenated hydrocarbon solvents or alcohols.
- Avoid prolonged exposure of the apparatus or components to UV light.
- Do NOT treat with diethylpyrocarbonate (DEPC)-treated water for extended periods at 37°C. A brief rinse with DEPC-water is sufficient after a thorough wash, followed by a quick rinse in 50% ethanol.

5.2 Maintenance

The following inspection and maintenance procedures will help maintain the safety and reliable performance of the Mini-Horizontal systems. Replacement parts can be ordered by calling 1-858-755-4959 or by contacting your local distributor.

- Banana plugs and power cords should be inspected regularly. If the banana plugs become loose or do not feel friction tight replace the plugs or power cords.
- Should power cord assemblies (connectors, wire or shrouds) show any signs of wear or damage (e.g. cracks, nicks, abrasions, or melted insulation), replace them immediately.
- The platinum wire is secured to the banana jack by compression between a stainless washer and the jack nut. The nut/washer interface should be tight and free of corrosion.

SECTION 6
Horizontal Mini-Gel Kits and Accessories

Cat. #	Item
MGU-102T	**Horizontal Mini-Gel Kit-CE**, with tapered gates. Gel bed dimensions are 5.5cm x 8.5cm. Includes one comb, please specify comb cat. # from list below.
MGU-102T-FL	**Horizontal Mini-Gel Kit-CE with Flip Lid**, with tapered gates. Gel bed dimensions are 5.5cm x 8.5cm. Includes one comb, please specify comb cat. # from list below.
MGU-202T	**Horizontal Mini-Gel Kit-CE**, with tapered gates. Gel bed dimensions are 7.5cm x 10cm. Includes one comb, please specify comb cat. # from list below.
MGU-202T-FL	**Horizontal Mini-Gel Kit-CE with Flip Lid**, with tapered gates. Gel bed dimensions are 7.5cm x 10cm. Includes one comb, please specify comb cat. # from list below.

Color Coded Midi-Gel Option:
Available for the MGU-102T and MGU-202T models. To specify color desired, please add the following color code to the end of the catalog number: -Y (Yellow), -P (Purple), -B (Blue), -PK (Pink), or –G (Green). For example, to specify a green MGU-102T place order for catalog # MGU-102T-G.

Mini-Gel Accessories

MGU-102T combs
(Available in Polycarbonate or Teflon-coated aluminum*)

Cat. #	Comb dimensions
MGC-1001	1mm x 1 well
MGC-1003E	1mm x 3 equal wells
MGC-1003M	1mm x 2 well + middle marker
MGC-1008	1mm x 8 well
MGC-1010	1mm x 10 well
MGC-1012	1mm x 12 well
MGC-1014	1mm x 14 well
MGC-1016	1mm x 16 well
MGC-2001	2mm x 1 well
MGC-2003E	2mm x 3 equal wells
MGC-2003M	2mm x 2 well + middle marker
MGC-2008	2mm x 8 well
MGC-2010	2mm x 10 well
MGC-2012	2mm x 12 well
MGC-2014	2mm x 14 well
MGC-2016	2mm x 16 well

* To specify Teflon combs add "-TF" to end of cat. #.

MGU-202T combs
(Available in Polycarbonate or Teflon-coated aluminum*)

Cat. #	Comb dimensions
MHC-1001	1mm x 1 well
MHC-1003E	1mm x 3 equal wells
MHC-1003M	1mm x 2 well + middle marker
MHC-1008	1mm x 8 well
MHC-1010	1mm x 10 well
MHC-1012	1mm x 12 well
MHC-1014	1mm x 14 well
MHC-1016	1mm x 16 well
MHC-2001	2mm x 1 well
MHC-2003E	2mm x 3 equal wells
MHC-2003M	2mm x 2 well + middle marker
MHC-2008	2mm x 8 well
MHC-2010	2mm x 10 well
MHC-2012	2mm x 12 well
MHC-2014	2mm x 14 well
MHC-2016	2mm x 16 well

* To specify Teflon combs add "-TF" to end of cat. #.

Dual Sided MGU-152T Combs (can be used with the MGU-102T)
(Available in Polycarbonate or Teflon-coated aluminum*)

Cat. #	Comb dimensions
MGC-10-0810	1mm x 8 well/10 well
MGC-10-1216	1mm x 12 well/16 well
MGC-15-0810	1.5mm x 8 well/10 well
MGC-15-1216	1.5mm x 12 well/16 well
MGC-20-0810	2mm x 8 well/10 well
MGC-20-1216	2mm x 12 well/16 well

* To specify Teflon combs add "-TF" to end of cat. #.

Dual Sided MGU-252T Combs (can be used with the MGU-202T)
(Available in Polycarbonate or Teflon-coated aluminum*)

Cat. #	Comb dimensions
MHC-10-1014	1mm x 10 well/14 well
MHC-10-0816	1mm x 08 well/16 well
MHC-15-1014	1.5mm x 10 well/14 well
MHC-15-0816	1.5mm x 08 well/16 well
MHC-20-1014	2mm x 10 well/14 well
MHC-20-0816	2mm x 08 well/16 well

* To specify Teflon combs add "-TF" to end of cat. #.

Mini Gel Trays (UV Transparent)

Cat. #	Item
MGT-122	Gel Tray for the MGU-102T
MGT-222	Gel Tray for the MGU-202T

Replacement Baffles

Cat. #	Item
BAFFLES-102T	Tapered Baffles for MGU-102T
BAFFLES-202T	Tapered Baffles for MGU-202T

Winged Gel Trays

Cat. #	Item
WGT-5585	Winged gel tray, 5.5cm x 8.5cm
WGT-7510	Winged gel tray, 7.5cm x 10cm

Gel Sealing Tape

Cat. #	Item
GT-72-10	1” thick x 72 yards
GT-72-15	1.5” thick x 72 yards

Mini-Horizontal Gel Caster, MGU-102T

Mini-Horizontal Gel Caster, MGU-202T

Cat. #	Item
GCT-101	Gel casting tray, single
GCT-103	Gel casting tray, three
GCT-106	Gel casting tray, six

Cat. #	Item
GCT-201	Gel casting tray, single
GCT-203	Gel casting tray, three
GCT-206	Gel casting tray, six

Power Supply

Cat. #	Item
EPS-300-II	Mini Power Supply, with timer, CV or CC, 10-300V, 110V/60Hz, current range:4-500mA, 90 watts
EPS-300-IIV	Mini Power Supply, with timer, CV or CC, 10-300V, 220V/50Hz, current range:4-500mA, 90 watts
EPS-3000-III	Constant Power Supply, 0-3000 Volt, 110V/60Hz, Series II
EPS-3000-IIV	Constant Power Supply, 0-3000 Volt, 220V/50Hz, Series II

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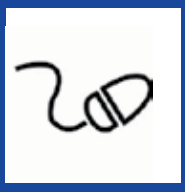
CONTACT INFORMATION

Telephone:
Local or International
858-755-4959
Toll Free: 800-243-4959

Fax: 858-755-0733



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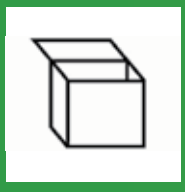

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