Cleaver Scientific Ltd

EXPERTS IN ELECTROPHORESIS

# HORIZONTAL GEL SYSTEMS

## TYPICAL APPLICATIONS

Real time Electrophoresis. Perfect for running and tracking DNA without harmful UV.

## FEATURES:

- Contains everything except chemicals and reagents to perform horizontal electrophoresis and real-time gel free DNA band extraction and purification from runSAFE, and EtBr- and SYBR-stained agarose gels
- Combines the high resolution capability of the MSCHOICE system with the time-and space-saving convenience of a power supply and gel illuminator integrated within a compact bench top unit
- One viewing lid supplied, containing an amber emission filter for runSAFE and SYBR-stained gels which includes an extractor fan to keep the viewing pane free of condensation during electrophoresis
- Optional gel documentation system fits directly over the base unit and gel tank for imaging at the end of the electrophoresis run
- Perfect for education – let students learn the principles of electrophoresis by witnessing DNA size fractionation as it happens in the gel, in total safety from potentially hazardous UV and ethidium bromide!
- Money-saving – 30-50% less than the combined cost of a separate gel tank, power supply and transilluminator


# The Cleaver Scientific SAFE SERIES

Cleaver Scientific's 'Safe Series' has been developed to address the needs of researchers looking to work with safer alternatives to UV irradiation and ethidium bromide, both of which are known to have harmful mutagenic effects. Since starting with its award-winning* runVIEW™ electrophoresis system, the 'Safe Series' now includes the runDOC imaging system and its repertoire of runSAFE non-mutagenic, blue light fluorescent stains.

*Best Product Award at Lab Innovations 2013

## Real-time size fractionation and recovery of nucleic acids

runVIEW™ is an innovative new system which can be used to maximise the efficiency of DNA recovery from runSAFE, and EtBr- and SYBR-stained gels by minimising the number of steps involved in post-electrophoretic purification. runVIEW™ comprises the multiSUB™ MSCHOICE system with bluVIEW lid, containing an amber emission filter within its viewing pane, and a base unit with integrated power supply and blue LED gel illuminator. The amber emission filter has been optimised for safe, green-fluorescence emitting stains, including SYBR Green and runSAFE, while an additional bluVIEW lid, which is optional, contains an orange emission filter for EtBr and other red-fluorescence emitting stains. Both lids benefit from built-in extractor fans powered by the base unit for condensation-free viewing of real-time electrophoresis.

## Simple DNA recovery

To use runVIEW™ for gel-free DNA recovery is simple.

1. Cast a gel with two identical rows of wells using one of the matching pairs of 3mm combs supplied. Transfer to the tank, remove the combs, and add buffer just to cover the gel and fill the wells. Load DNA ('loading tier').
2. Replace the lid and apply the power. Turn on the blue LED and see the DNA samples migrate in real-time.
3. When the DNA bands of interest enter the second row of wells ('extraction tier'), stop the power, remove lid and harvest the DNA by pipette.

## Track DNA without harmful UV

Blue light is safe and has none of the detrimental effects of UV transillumination, including mutagenesis which can compromise cloning efficiency, while runVIEW™'s capacity to provide real-time visualisation of electrophoresis enables DNA to be tracked as it migrates through the gel. This allows the user to judge precisely when the band of interest is ready for extraction.

## Save on time-consuming gel elution techniques

Running DNA into a well containing buffer effectively purifies the DNA of agarose, eliminating the need for time-consuming gel excision and purification techniques that also result in sample loss. Once harvested, the DNA needs only to be cleaned by a straightforward ethanol precipitation when it is ready for further digestion or ligation.

## No expensive commercial gels

runVIEW™ works with standard runSAFE, SYBR Green and EtBr gels cast within the 15x7, 15x10 or 15x15cm MSCHOICE gel trays, and therefore does not require expensive precast gels and accessories.

## A self-contained system

The compact base unit, which houses the in-built power supply and blue LED transilluminator, is dual-voltage and portable, and allows electrophoresis, gel visualisation and extraction to be performed at the bench, without the inconvenience of having to transport gels to a darkroom elsewhere within the laboratory.

## Other benefits offered by runVIEW™ include:

- Power supply integrated within the base unit – adjustable in 1V or 1mA increments; timer function to 999 minutes for extended runs.
- Specialist combs for specialist applications - four multichannel compatible 1mm 20-/28-sample combs for rapid screening of nucleic acids from 96-well thermal cycler blocks and microplates. 3mm preparatory combs supplied for enhanced DNA recovery.
- Get real-time - existing MSCHOICE users may customise their system by purchasing the base station and bluVIEW lid.
- Versatile - power supply and gel illuminator may be used with other gels and electrophoresis systems.

## TECHNICAL SPECIFICATION

| runVIEW™ Viewing Dock | | | |
|---|---|---|---|
| Transilluminator Wavelength | 470nm | Timer | 1-999 minutes with alarm |
| Voltage/ Resolution | 25-150V / 1V | Safety Device | No load detection |
| Current/ Resolution | 300mA / 1mA | Operating Temperature | Ambient to 40°C |
| Power | 30 W | Dimensions | 293 x 220 x 80 mm |
| Operating Mode | Constant Voltage or Current | Rated Voltage | 100-240V, 50/60Hz |
| **runVIEW™ Gel System** | | | |
| Gel Dimensions (W X L) | 15 X 7, 15 x 10 & 15 X 15cm | bluVIEW Lid Design | CSL-RVLID1 - bluVIEW lid - bluVIEW lid – Amber (runSAFE & SYBR stains); Built-in extractor fan powered by base unit |
| Unit dimensions (W X D X H) | 26.5 X 17.5 X 9cm | Combs | 2 x extra thick 3mm preparatory combs double sided, 4 & 16MC and also 20/28MC. 2 x 1mm doubled sided combs, 4 & 16MC and 4 x double sided combs 20 & 28MC |
| Buffer volume | 500ml | Comb Thickness | 1&3mm |

## ORDERING INFORMATION

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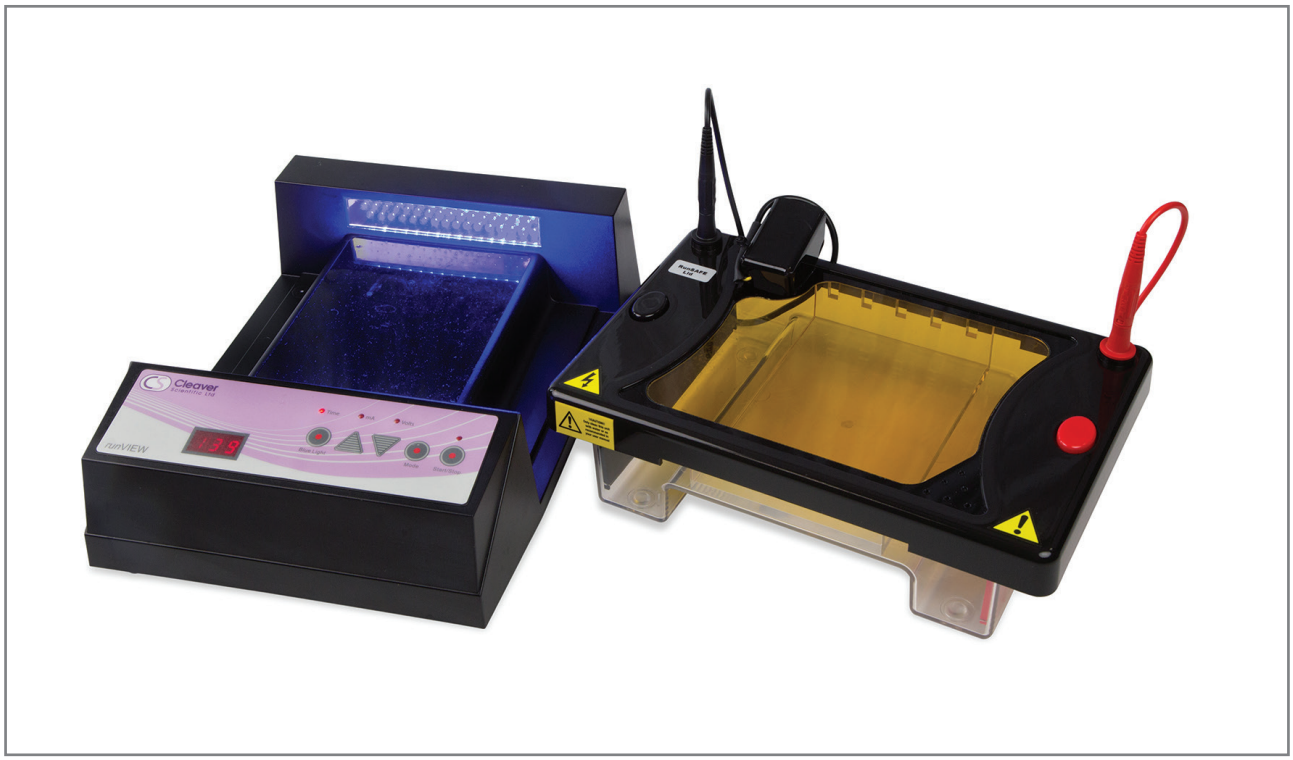
| CSL-RVMSCHOICE7 | runVIEW™ system complete with 15 x 7cm gel tray, 1 set of casting dams & 8 combs. | | |
| CSL-RVMSCHOICE10 | runVIEW™ system complete with 15 x 10cm gel tray, 1 set of casting dams & 8 combs. | | |
| CSL-RVMSCHOICE15 | runVIEW™ system complete with 15 x 15cm gel tray, 1 set of casting dams & 8 combs. | | |
| CSL-RVMSCHOICETRIO | runVIEW™ system complete with 15 x 7, 15 x 10 and 15 x 15cm gel trays, 3 sets of casting dams & 8 combs. | | |
| CSL-RVLID1 | runVIEW™ bluVIEW lid - Orange (EtBr) optional | MS15-1/2-1 | Comb 1 & 2 sample, 1mm thick |
| CSL-RVLID2 | runVIEW™ bluVIEW lid - Amber (runSAFE) standard | MS15-4/10MC-1 | Comb 4 & 10MC sample, 1mm thick |
| CSL-RVHOOD | runVIEW™ VIEWING HOOD | MS15-20/28MC-1 | Comb 20 &28MC sample, 1mm thick |
| CSL-RVBSBVLID | runVIEW™ base station & bluVIEW lid (RVLid2) | MS15-4/2M-3 | Comb 4 sample 2 Marker, 3mm thick |
| CSL-RVBLED-MOD | Replacement blue light module, includes: MMPCB-BLUE-LED-MTX-V3-1 (blue light LED) and PPL-20-SI-L37-5-2M (silicone heat dispersion pad) | MS15-6/2M-3 | Comb 6 sample 2 Marker, 3mm thick |

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