

**DMT**

STARTER TISSUE ORGAN BATH SYSTEM 752ET

- **Integrated system with built in amplifiers**
- **Ideal for multidisciplinary teaching labs**
- **Easy to use, low maintenance**
- **Compact and portable**

The affordable DMT Starter Tissue Organ Bath System 752eT offers flexibility for a wide range of pharmacological studies measuring contractile force (isometric or isotonic).

Suitable for cardiac, skeletal, and smooth muscle experiments, a selection of tissue mounts, stimulating electrodes, and chamber sizes allows educators to tailor experiments to their needs. Stimulation can be delivered via a data acquisition system such as ADInstruments PowerLab or with external stimulators.

Easy to use, low maintenance

The Starter system simplifies organ bath experiments by eliminating the limitations of traditional designs. Robust and free from fragile glassware or water jacketing, it enables quick chamber changes for different tissue sizes and straightforward drain and refill. Its intuitive design helps students, technicians, and educators focus on the science.

An integrated heating plate replaces water-based heating, while analog and digital outputs support seamless external data acquisition.

System features:

+FAST SETUP & EASE OF USE

- +Quick, easy setup
- +Intuitive operation for increased efficiency and productivity
- +Supplied with a convenient packaway carry case

+PRECISE EXPERIMENTAL CONTROL

- +Integrated buffer heater for maintaining temperature
- +Adjustable oxygenation

+EFFICIENT DATA ACQUISITION & CONNECTIVITY

- +Analog & digital outputs for external data acquisition
- +Connects to isometric and isotonic force transducers
- +Integrated amplifiers

+FLEXIBLE CHAMBER DESIGN

- +Multiple chamber sizes (20 & 50 mL)
- +Integrated drain valve for fast, mess-free buffer changes





SPECIFICATIONS

CHAMBER

Chamber volume (min)	20* or 50 ml
Chamber(s)	1
Chamber material	Glass
Chamber temperature range	20.0 to - 45°C. (Never below room temperature)
Chamber heating	Built in air circulation
Chamber temperature resolution	0.1 °C
Chamber temperature stability	±0.2 °C (When target temperature attained)
Micrometer resolution	0.01 mm
Mounting type	Pins, clips or hooks
Drain/fill	Automatic
Aeration	Yes

TRANSDUCER – ISOMETRIC

Output reading	Grams
Range	±160 g <+-0 to 1600mN>
Frequency range	0 - 50 Hz
Resolution	0.1 g
Calibration	Manually

TRANSDUCER – ISOTONIC (OPTIONAL)

Output reading	mm or µm
Angle range	±15 °
Movement	± 23.3mm (max)
Calibration	Manual
Lever length	95mm. 7 fixation point at 10mm intervals
Counterweight	2 x 5g

OUTPUT

Digital communication	1 USB
Analog output channel	1 BNC
Analog output range	Range 1 +-200mN +-2.5 Volt Resolution, > 0.1mN, Range 2 +-400mN +-2.5 Volt Resolution > 0.1mN, Range 3 +-800mN +-2.5 Volt Resolution > 0.1mN, Range 4 +-1600mN +-2.5 Volt Resolution > 0.2mN.
Output resolution	0.01g

MECHANICAL CONNECTIONS

Air connection	Max 0.5 Bar
Drain connection	Yes

POWER

Power supply (external)	24 VDC ±10%
Current (max.)	3.3 Amps

DIMENSIONS

*20 ml chamber supplied as standard



TISSUE SAMPLE HOLDERS



Triangle hooks (standard)

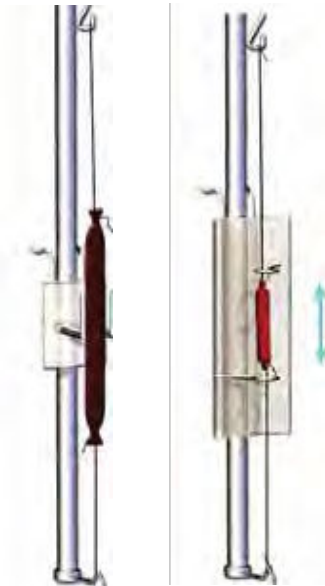


Closing pins



Pins

STIMULATING ELECTRODES



Triangular hooks with stimulation electrodes.



L-shaped Electrode (short/reverse) for field stimulation of mounted muscle ring preparations (eg aorta and bladder rings).



Vas deferens and Ileum Electrode for electric field stimulation.



Vertical Ring Electrode for field stimulation of mounted muscle, 3.5 mm apart. Also direct nerve stimulation.



L-shaped (short) Electrode for field stimulation of mounted muscle ring preparations (eg aorta and bladder rings).

An optional range of stimulating electrodes extend the range of experiments.



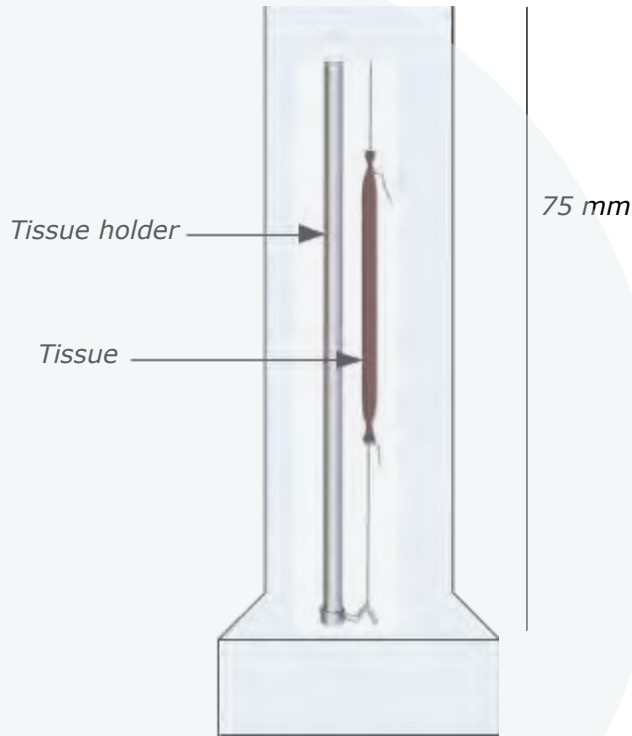
Horizontal Ring Electrode Type A for stimulating muscle eg Chick biventer cervicis muscle



Horizontal Ring Electrode Type B with mount



A CLOSER LOOK AT CHAMBERS



Design and dimension of the chamber. The temperature probe and oxygen are supplied at the base of the chamber, as is drainage.



Organ tissue bath chambers are available in 20 and 50 ml sizes. The long chamber size provides flexibility in tissue selection.



Starter Tissue Organ Bath is exclusively available from:
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