

# Recommended Models for Brain Slice Patch Clamp Recording For use with Leica DMLFS

There are two types of micromanipulators used for brain slice patch clamp recording to be installed on an isolation system: Water Hydraulic Micromanipulator and Manually-operated Micromanipulator.

Select a combination of micromanipulators best-suited to the intended use.

## Isolation System I T S — L

Permits the microscope to travel smoothly in the X-Y plane allowing vibration-free stable operation.

A sturdy and large-sized stage operable independently of the microscope

Multiple units of manipulators installable on the stage

#### Manually-operated NMN-21

Free from drift occurrence and electrical noise. Albeit manually operated, the special mechanism makes hand vibration hardly detectable. Available at an affordable price.

#### Water Hydraulic System MHW-3

Remote controlled water hydraulic system free from vibration. The time-proven manipulator widely supported by many users

#### Manually-operated NMN-25

Slim body permits multiple settings. Same features as NMN-21 Available at an affordable price

### **Typical Combinations**

	Example 1	Example 2	Example 3
Isolation System	ΠS−L	ΠS−L	ΠS−L
Micromanipulator for recording	MHW-3	MHW-3	NMN-21/25
Micromanipulator for stimulating	MHW-3	NMN-21/25	NMN-21/25
Patch Clamp Headstage Holder	For connecting to a patch amplifier, use an optionally available patch clamp headstage holder adaptable to		
	each headstage model		

#### MHW-3 **NMN-25** 1. Using water in place of oil reduces the expansion factor Manually-operated and drift-free Special mechanism helps absorb hands 2. The use of 1:5 cartridges reduces drift to approx. 1/5> shaking into the main body and thus hand All this adds up to reduce the rate of drift vibration is hardly detectable even under occurrence to about 1/20\(\sigma\) as compared to high magnification. the conventional oil hydraulic system. ITS-L Magnetic Stainless Steel Stage This model allows a microscope to travel smoothly in the X-Y plane. Its construction ensures NMN-21 outstanding stability and the large Manually-operated and drift-free. stage permits the installation of multiple units of manipulators. Special mechanism helps absorb hands shaking into the main body and thus hand vibration is hardly detectable even under high magnification.