

**NARISHIGE**

Craftsman for your solutions

APR. 2017\_EMM2

# More precise, natural control.

## Motorized micromanipulation system for Patch Clamp



# EMM2

Three-axis motorized micromanipulator



- ◆ Minimum driving distance: 5nm
- ◆ New function: "Zero adjustment" and "4th-axis display mode"
- ◆ Memorize three positions and return functions

### Choice of 3 precision settings from 12 levels

4th axis (T-axis)  
ON/OFF

Coarse/ Fine / S.Fine  
(3 choices)

Set each precision  
from 4 parameters



Drum controller (XYZ-axes)

### Choice of 2 setting positions

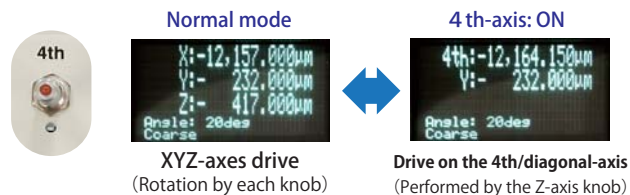


Horizontal or Vertical

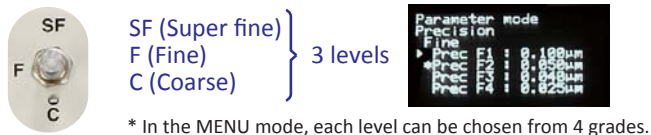
Set-up for in vitro recording / in vivo injection

## Function

### Approach on target is chosen from Z-axis or 4th-axis

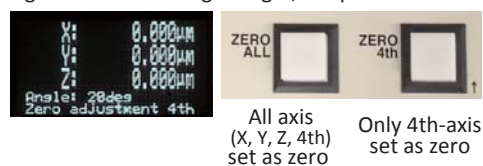


### Choice of 3 driving precision with a lever close at hand

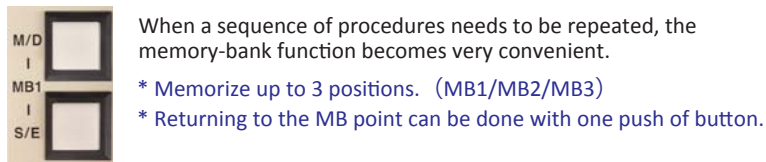


### Useful "Zero adjustment" function

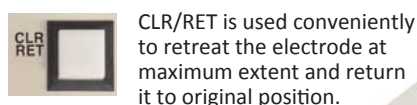
Right before touching a target, the point can be adjusted as zero coordinates.



### Memory-Bank function for repeating tasks



### Convenient retreat and return function



## Optional products

### Patch clamp headstage holder

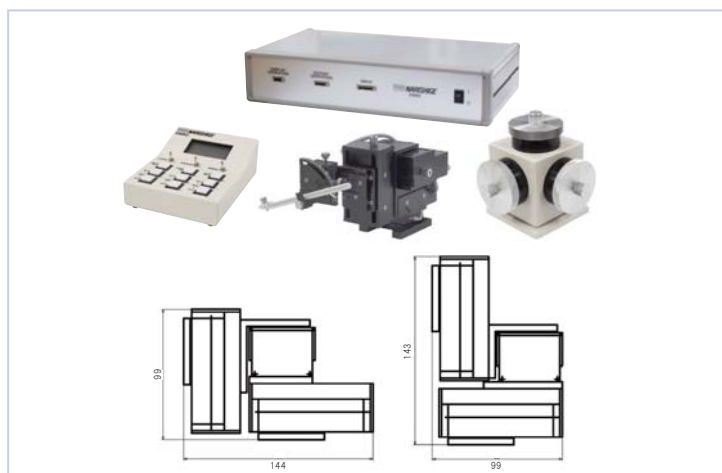
Amplifier makers/model	Headstage	Holder
Axon	Axopatch 200B	CV-203BU
	MultiClamp 700B	CV-7B
	Axoclamp 900A	HS-9A
HEKA	EPC-10	AP-13-3
	EPC-800	

\* Please contact your local Narishige representative for other models/headstages that are not listed above.

\* When mounting EPC-10/800 with AP-13-3, please use the dedicated attaching plate provided by HEKA.



## Specifications



Model name	EMM2		
Product name	Three-axis motorized micromanipulator		
Movement range	X, Y, Z axis 30mm each		
Drive system	5-phase stepping motor		
	Resolution	5nm	
	Max. driving speed	2.5mm/sec (Coarse)	
	Working voltage	AC100V~AC240V, 50/60Hz	
Dimensions/ Weights	Control box	W430 x H88 x D235mm	5.1kg
	Drive unit	W136 x H128 x D166mm	1.45kg
	Control unit	W120 x H56 x D159mm	0.8kg
	Drum controller	W138 x H131 x D138mm	1.5kg

EMM2 is NOT compliant with CE marking.