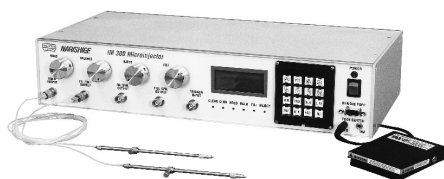


Are programmable injectors complicated ?



Our programmable injector (IM-300) is widely used in varied research applications such as microinjections under inverted microscopes (transgenic animals, etc) as well as stereomicroscopes (Xenopus, etc). The IM-300 might be thought to be complicated as it provides programming function, but in fact, you can perform microinjection without using the programming function. In this news, we will explain how to perform microinjection without using the programming function.

(It is not complicated, after you learn the operation as follows!)

1. This is a key point. You plug the footswitch in the INJ footswitch jack port.
2. Turn on the power switch. The LCD display window shows initial screen. In the initial screen, you can configure the buzzer setting in actions.

ON for

+ST
1

 or OFF for

R-ST
0

 is used to configure the buzzer setting.

※The buzzer setting is allowed only in the initial screen. When you need to go back to the initial screen, turn the power off and on again.

3. Press the MODE button to go to the Sequence screen (programming function). You press the MODE button once again to skip the screen to go to the Pressure setting screen as you do not use the Sequence function at this time. You rotate the INJECT knob to configure INJ pressure value.

P-FILL	60.0	psi
INJ	20.5	psi
BALN	2.5	psi
HOLD	3.2	-iH2O

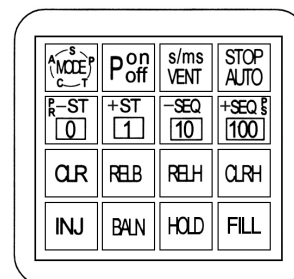
LCD screen

4. Press the MODE button to go to the Timer setting screen. Action time of injection can be configured from 0.01 up to 327.67 seconds. Alternatively, the MANUAL mode and CONTINUE mode are available to use.

INJ

R-ST	+ST	-SEQ	+SEQ
0	1	10	100

buttons are used to configure the action time.



Control Key Pad

◆Example of Timer setting◆

- To configure 1 second: →Press

+ST
1

 once.
- To configure 1.27 second: →Press

+ST
1

 once. Then select m/s with

s/ms
VENT

 button.
- Press

+SEQ
100

 twice and

-SEQ
10

 seven times, and press

s/ms
VENT

 again to finish.

■What is the MANUAL mode?

In this mode, injection is kept activated while the footswitch is stepped on. Press

R-ST
0

 to select the MANUAL mode.

■What is the CONTINUE mode?

In this mode, injection starts when the footswitch is stepped on, and the action finishes when the STOP button is pressed. When you input values over 327.68 seconds, the CONTINUE mode is chosen. (When you operate over 327.68 seconds, you confirm operating time counted on the LCD screen.)

* The LCD screen displays action time.

5. Press the MODE button to go to Count setting screen. Available Count value is from 1 up to 255. If you configure value of **【100】** in injection function, the injection is performed 100 times with configured time and pressure when the footswitch is stepped on once.
6. Press the MODE button to go to the Action screen. In the Action mode, injection is performed with time/pressure/count configured in the above process.

Finally, you treadle the footswitch to perform injection.

(Before you perform injection, please be sure that the BALANCE function is activated to prevent capillary phenomenon.)
(When you perform FILL/HOLD functions, you operate corresponding buttons on the control key pad.)

We will discuss the programming function of the IM-300 in another issue.