**Futaba**

< For Windows >

Mold Marshalling System for
Measuring Resin Pressure inside Molds

Pressure measuring unit

MPSO1A

Data Acquisition Software

Instruction Manual

Thank you for your purchasing a product of Futaba Corporation.
Please read this Data Acquisition Software Instruction Manual
carefully and patronize the product for many years to come.
Do not use the product in any way other than explained in this
instruction manual.
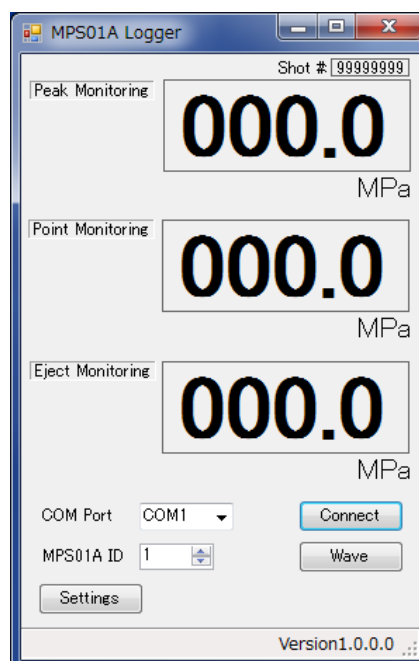
Before Use

This instruction manual explains the data acquisition software exclusively designed for pressure measuring unit MPS01A.

Before using the product, read this instruction manual carefully. After reading the manual, keep it in a safe place so that it can be read whenever needed.

Contents

1. Functions of MPS01A Data Acquisition Software

This "MPS01A Data Acquisition Software" allows you to observe pressure waveforms, store peak pressure values and other data measured using MPS01A, and set various conditions.

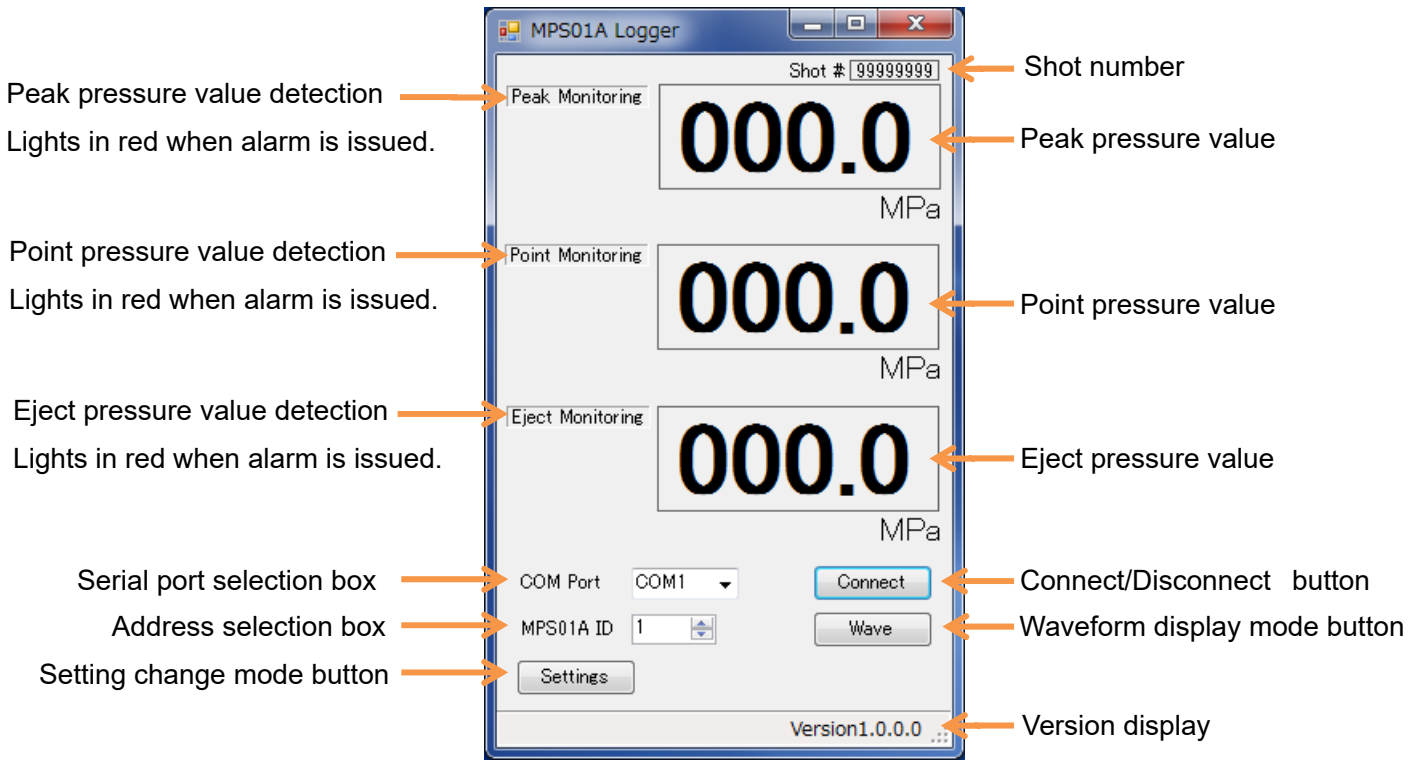## 2. Setting up the MPS01A Data Acquisition Software

There is no installer for this software.

Simply copy the "MPS01Alogger.exe" contained in the supplied CD to the desktop, etc. on the PC and launch it to use the application.

If you want to delete the software, delete it directly on the Explorer, etc.

3. Saving Numerical Data

3-1. When this software starts up, the screen shown below appears

Peak pressure value detection
Lights in red when alarm is issued. → Peak Monitoring

Shot number → Shot # 99999999

Peak pressure value → 000.0 MPa

Point pressure value detection
Lights in red when alarm is issued. → Point Monitoring

Point pressure value → 000.0 MPa

Eject pressure value detection
Lights in red when alarm is issued. → Eject Monitoring

Eject pressure value → 000.0 MPa

Serial port selection box → COM Port COM1

Connect/Disconnect button → Connect

Address selection box → MPS01A ID 1

Waveform display mode button → Wave

Setting change mode button → Settings

Version display → Version1.0.0.0

3-2. Select a COM port

Select a COM port for the PC that you want to use (the COM port to which RS485 communication device is connected). Refer to Ports (COM & LPT) on the device Manager.

3-3. Select the MPS01A ID

Select the address set on the MPS01A unit.

When the unit is shipped from the factory, it is set to 1.

3-4. Press the [Connect] button to start saving the numerical data.
  After the molding cycle is finished, each data is saved.

  Saved data
        Saved location C:¥Users¥username¥MMS_DATA¥year-month folder
        Saved by date.

        Types of saved data
   Date & time saved, shot number, alarm detection result, alarm detection
                description, peak pressure value, time to peak, point pressure (pressure at
                t-second point) value, eject pressure value

        Alarm detection code
                None: No alarm
                Z1: Peak pressure value detection
                T: Point pressure value detection
                EJ: Eject pressure value detection

4. Displaying Waveforms

Check the serial port and address on the main screen, and then press the [Wave] button.

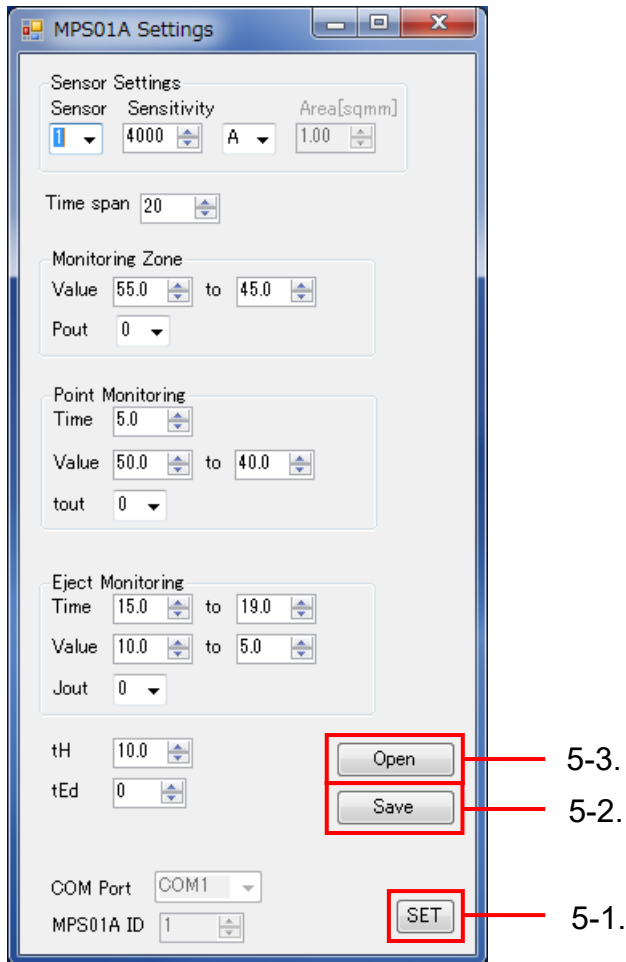The waveform screen is displayed. When the measurement is started, a waveform is displayed.
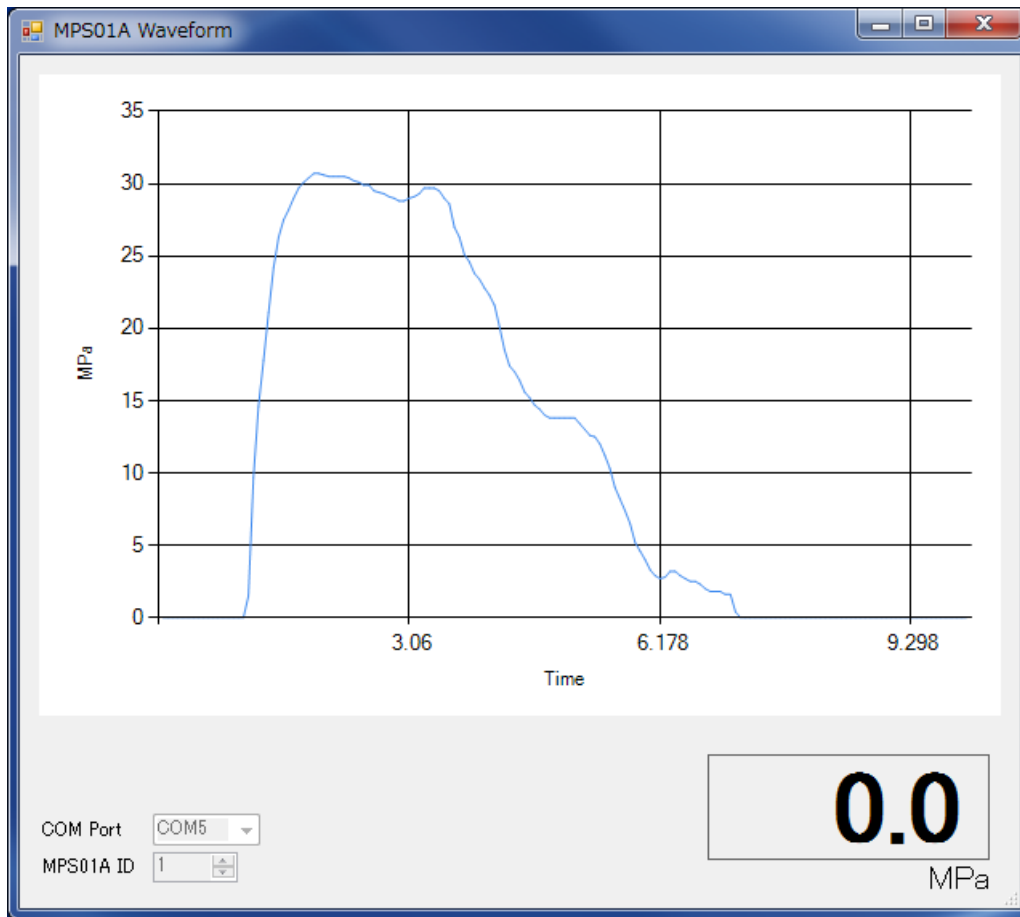
5-1. Setting measurement conditions

Check the serial port and address on the main screen, and then press the [Settings] button.

The measurement conditions set in the measuring unit to which the PC is connected are read, and the Settings screen is displayed.

Input each measurement condition, and then press the [SET] button to set the measurement conditions of the measuring unit.

5-2. Saving measurement conditions

To save the measurement conditions, press the [Save] button.

The file name input screen is displayed.

Select a folder to save the file, input the file name, and then press [Save].

5-3. Setting measurement conditions by reading the saved conditions

Press the [Open] button to read saved measurement conditions.

The read measurement conditions are displayed. If you want to change any of the conditions, change them and then press the [SET] button.

No.	Display code	Parameter	Setting range	Remarks
1	Sensor	Sensor product type	1 to 9	
2	Sensitivity	Sensitivity	0 to 9999	
3		Curvature coefficient	A to Z	
4	Area	Pressure receiving area	0.01 to 99.99 mm^2	※1
5	Time span	Molding cycle	3 to 600 s	
6	Monitoring Zone Value	Peak pressure lower limit	0.0 to 200.0 MPa	
7	Monitoring Zone to	Peak pressure upper limit	0.0 to 200.0 MPa	
8	Pout	Output (peak pressure)	0 to 3	※2
9	Point Monitoring Time	T-second point in monitoring	0.0 to 600.0s	
10	Point Monitoring Value	Point pressure lower limit	0.0 to 200.0MPa	
11	Point Monitoring to	Point pressure upper limit	0.0 to 200.0MPa	
12	tout	Output (Point)	0 to 3	※2
13	Eject Monitoring Time	Eject monitoring start time	0.0 to 600.0s	
14	Eject Monitoring to	Eject monitoring end time	0.0 to 600.0s	
15	Eject Monitoring Value	Eject pressure lower limit	0.0 to 200.0MPa	
16	Eject Monitoring to	Eject pressure upper limit	0.0 to 200.0MPa	
17	Jout	Output (Eject)	0 to 3	※2
18	tH	Threshold value	0.0 to 200.0MPa	
19	tEd	Error cancel time	0 to 600s	※3

※1: This parameter is valid only for the button-type sensors of which type is 4 through 9.
Input the tip area of the ejector pin referring to the "Quick reference table for pressure receiving area of ejector pin" on Page 21.
※2: Values other than "0" cannot be set at the same time.
※3: If "0" is set for the output setting, this parameter is invalid.

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The specifications may be changed for improvement without prior notice.　　　MPS01A-1611W-B1E