TechnoOptis

Instruction Manual

Measurement Program

MT-100

Rev.10

Introduction

Thank you so much for using our product, Measurement Program MT-100.

Measurement program MT-100 is the software for Digital Illuminance meter IM-600, UV Radiometer UVR-300, Luminance meter BM-9A, Phosphorescence luminance meter BM-100. The MT-100, which is installed in PC, can obtain, save, and calculate measured data.

This is instruction manual for MT-100. Refer this instruction manual carefully before using MT-100.

Recommendation for use

- Concurrent use of other software may impede communication with the measuring device. We recommend you close other programs while running MT-100.
- Avoid customized software and other programs not approved for general use on personal computers with the MT-100 installed. Such software may cause malfunctions.
- Save Phosphorescence luminance data between measurements.

Disclaimer

- We are not responsible for the damages caused by various problems such as, fire, earthquake, behaviors by other persons, other accidents, intentional or negligent or wrong use of the device by the operator, and the use of the device under abnormal conditions.
- We are not responsible for incidental damages arising from the use or unavailability of the software (loss of business income, business interruption, etc.).
- We are not responsible for the damages caused by the uses other than specified in the Instruction Manual.
- We are not responsible for the damages caused by the installation or execution of the software and the malfunction of other software and PC.
- We are not responsible for the damages caused by the malfunction due to the combination with the connecting devices.

Contents

INTRODUCTION 1
CONTENTS 2
MANUAL CONVENTIONS 3

1. OUTLINE 4

1.1 FEATURES AND FUNCTIONS 4
1.2 OPERATING ENVIRONMENT 5

2. PREPARATION 6

2.1 CONNECTING TO PC 6
2.2 USB DRIVER INSTRUCTION 7

3. BEFORE MEASUREMENT 8

3.1 STARTING-UP SOFTWARE 8
3.2 MEASUREMENT CONDITION 11

4. OPERATION 12

4.1 MEASUREMENT 12
4.2 OUTPUT DATA FILE 15
4.3 CALIBRATION FOR PHOSPHORESCENCE LUMINANCE PREDICTION 16
4.3.1 Calibration screen(BM-100) 18
4.4 STATUS OF PRE-MEASUREMENT 22
4.5 DATA FILE FOR CALIBRATION 24

5. TROUBLE SHOOTING 25

5.1 Q&A 25

Manual Conventions

This manual employs the following conventions for ease to use.

Notation	Description
[Measure] [Receive]	Square brackets are used to indicate the wording on buttons, tabs, menu item, keys on the keyboard and other similar items.
☞‘ ’	Indicates a reference to another section in this manual.
☞“ ”	Indicates a reference to another manual.
✸ **Request**	Indicates tips to remember to ensure operations go smoothly.
Memo	Indicates tips that are handy to know when performing an operation.

1. Outline

1.1 Features and Functions

-Feature

This software can communicate with designated Instruments, control the measuring, and operate the calibration.

-Function of obtaining measured data

Thie software can communicate with specific instrument, and conduct the specified number of measurements at specified intervals.

This software can display measured data in a software window, and output to a file in the PC.

-Calibration for Phosphorescence luminance prediction (available only to BM-100)

This software can calibrate BM-100 in order to predict the Phosphorescence luminance of user specified material. This software obtains measured data for the calibration from the BM-100 and determines the calibration data, and then write the calibratin data to the BM-100.

-Support instruments

This software is available to following instruments

IM-600, UVR-300, BM-9A, BM-100 (discontinued products)

-Communication

USB 2.0(Virtual COM port）

1.2 Operating environment

Operating environment of this software are as follows;

OS	Windows® 10 Pro(32bit／64bit) Windows® 11 Pro(64bit)
CPU	Intel® Core™ i3 2.4GHz or higher ※ In the 64bit, the MT-100 support amd64 only.
Memory	1GB or more
HDD	1GB or more
Port	USB 2.0 port(One port)
Display	1024×768 or more
Others	CD-ROM Drive
Language	English

※ Windows is a trademark and registered trademark by Microsoft Corporation.

※ Intel® is a trademark and registered trademark by Intel Corporation.

✸ **Request**	Other software installed in the PC and PC condition may affect the communication with the instrument. When there is problem with communication, contact your dealer or TechnoOptis.

2. Preparation

2.1 Connecting to PC

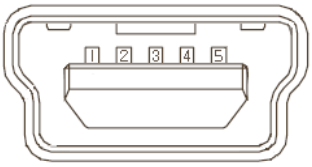
Use USB cable (Cable type :A connector – B Mini connector) to connect the instrument to PC.

Memo

- About specification of interface in PC, Refer to instruction manual of the PC.

Request	• Do not insert or remove connectors during power ON.

■Pin assignment



Mini USB B socket (for instrument side）

Instrument

Pin No.	Signal
1	VBUS
2	D－
3	D＋
4	GND
5	GND

■Communication parameter

This software and Instruments communicate via USB with virtual COM port. When you create communication program by yourself, set following communication parameter.

Communication parameter

Baud rate	38400
Data length	7
Parity	ODD
Stop bit	1

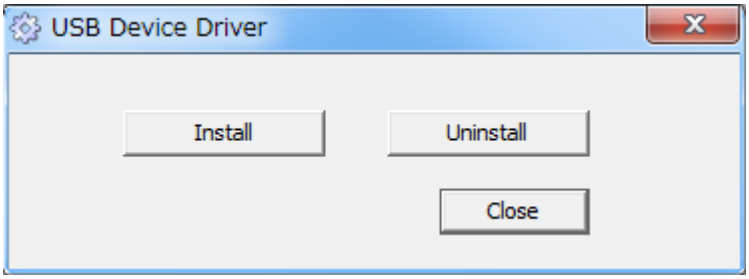
2.2 USB Driver Instruction

The procedure for instruction of USB driver into PC is as follows;

1 Insert the software CD-ROM into CD-ROM drive.

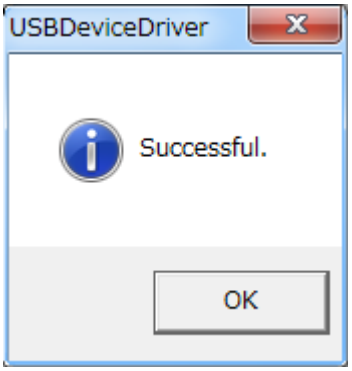
2 Select [USBDeviceDriver.exe] in the [Driver] folder in the CD-ROM drive, right-click and click [Run as administrator].

3 Following dialog will appear.



4 Click [Install] button.

5 Following message will appear after completing driver install. Click [OK] button.



6 Click [Finish] button to finish.

Memo

To uninstall, click [Uninstall] button for step 4 above.

Memo

The following 2 types of drivers are installed.

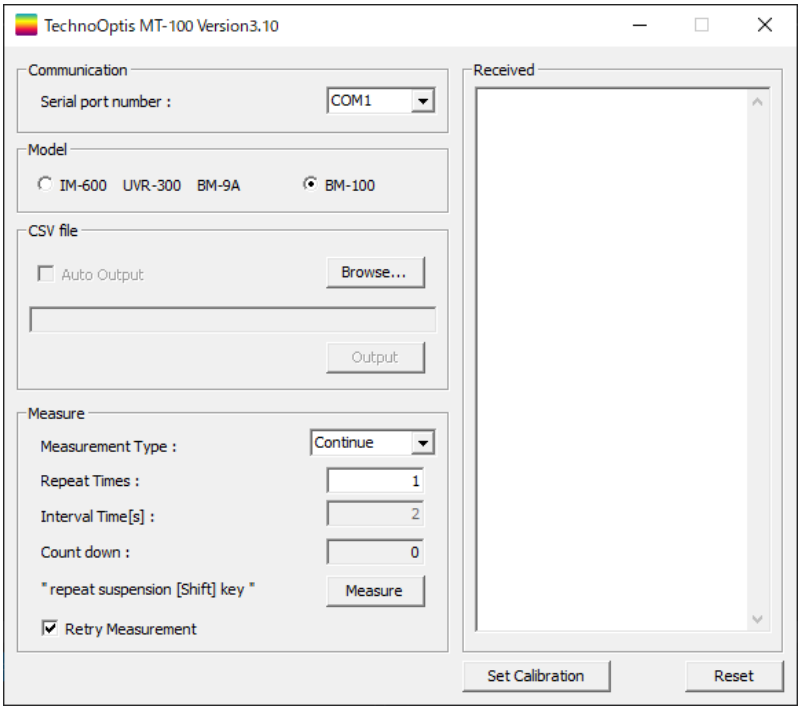
- Serial converter
- Serial port

3. Before measurement

3.1 Starting-up Software

The procedure for starting- up this software is as follows;

1 Double click the icon[ ] on the desktop, and then following window appears.



Request	• When you install this software into note PC, which do not have COM port configuration, the software start-up without communication to the instrument. • Be sure to connect the instrument to PC via cable, and turn on power of the instrument before start up this software.

2 Select communication port

Select COM port, connecting to the instrument, from [Communication] combo box.

3 Select model name

Select model name of the instrument, which connect to the PC, from [Model] group.

Request	• When you use BM-100 Display unit joined with optional detector unit, this software recognize the instrument as not BM-100 and select [IM-600 UVR-300 BM-9A].

4 Select output data

Measured data is output with CSV format at specified directory path.

Directly path is not specified right after start software. Press the [Browse…] button and specify the directory path and file name. When you change the directory path, set it with the same way.

The [Auto Output] check box become available after a directory path is specified. Check the [Auto Output] check box in [CSV file] group to output measured data. Remove the check not to output data.

When you operate [Set Calibration] in section 6, you need not to set this group.

Request	• File cannot be saved directly under the drive. So create a folder for saving file. • When directory path is not specified, the [Auto Output] check box is not available. • Select ON or OFF of “AutoOutput” before starting measurement. Selecting the “Auto Output” during measurement is not available.

Memo

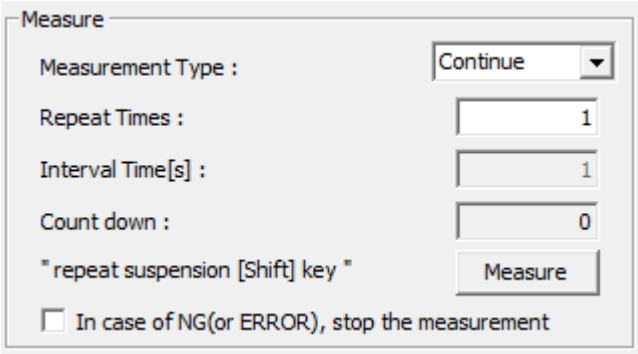
- When an existing files is specified as data saving destination, new data are added at the end of existing data in he file.

5 Start measurement

When check box [Retry measurement] is not checked, the measuring will stop after receiving [NG/ERROR/Time over error] command from the instrument. In this case, the MT-100 saves measured data until measuring stop in CSVfile.

When check box [Retry measurement] is checked, the MT-100 will recognieze [NG/ERROR/Time over error] command as invalid value when receiving [NG/ERROR/Time over error] command, and then continue measuring.

In the [Measurement Type] combo box in [Measure] group, select the [Continue] in order to conduct continuous measuring, or select the [Interval] in order to conduct measuring at specified intervals, Enter the number of measurement times in the [Repeat Times]. When you select the [Interval], enter the interval time in the [Interval Times]. And then, click the [Meausre] button. When you conduct [Set Calibration] in section 6, this operation is not required.



Memo

- Valid values for the number of measurements from 1 to 99999.
- Minimum interval time is 2 sec.
- Enter from 1 to 99999 values in [Repeat Times] when you select [Continue].
- Enter 2 or more values in [Repeat Times] when you select [Interval].
- When you select [Interval], 99999 = [Repeat Time] × [Interval Times] is maximum value.

6 Conduct the calibration for Phosphorescence luminance prediction (available only to BM-100).

Click [Set Calibration] button.

Operation description☞'4.3 Calibration for Phosphorescence luminance prediction'

Memo

- Calibration for Phoshorescence luminance prediction is available only to BM-100' standard detector.

Request	• Do not turn off the power of the BM-100 or do not put in /out USB connector during this software start-up process, otherwise this software can not detect the BM-100. • Turn on the power of BM-100 before this software start-up process.

3.2 Measurement condition

Measurement is conducted according to following conditions.

-Measurement range：	Auto range (STR0 command) Refer to instruction manual for each instrument
-Number of measurements：	The number of measurement times you specify
-Measurement interval：	About 0.5 sec (Continue) Specified interval times (Interval)
-Unit：	Refer to instruction manual for each instrument

☞"IM-600 Manual 4.2 Output format"

☞"UVR-300 Manual 4.2 Output format"

☞"BM-9A Manual 4.2 Output format"

☞"BM-100 Manual 4.2 Output format"

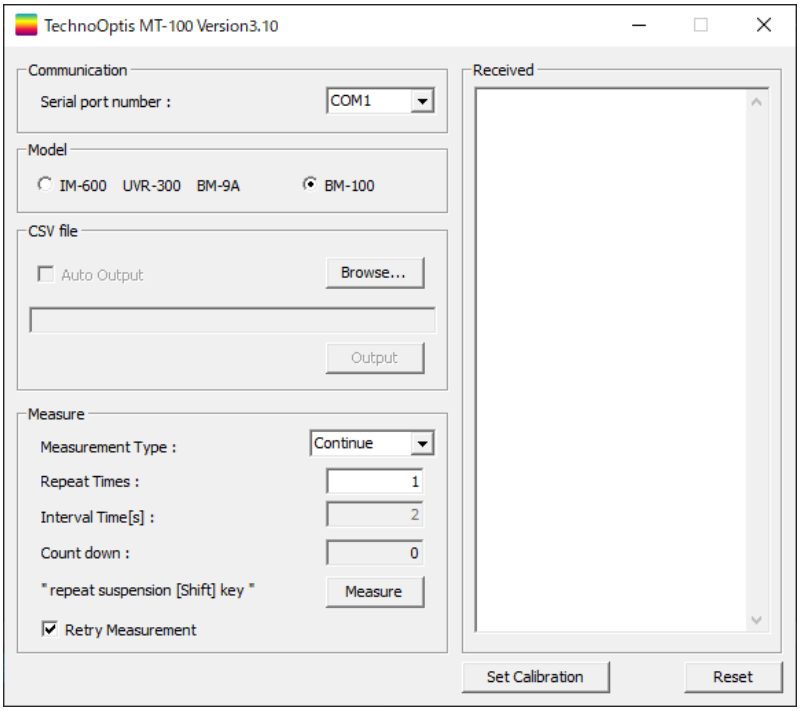
✸ **Request**	• Measurement interval is about 0.5 sec., but the speed of data output might be delayed due to the PC environment. • Receiving time interval may vary briefly.

4. Operation

4.1 Measurement

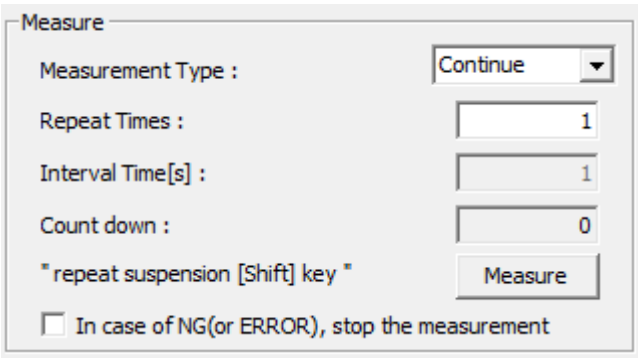
This software can operate the measurement in the instrument which is connected to the PC. Initial screen will open after MT-100 start-up. Specify Serial port number, Model name of instrument, and output data.

3. Before measurement'



In the [Measurement Type] combo box in [Measure] group, select the [Continue] to conduct continuous measuring or the [Interval] to conduct measuring at specified intervals, Enter the number of measurement times in the [Repeat Times]. When you select the [Interval], enter the interval time in the [Interval Time]. And then, click the [Meausre] button to start a measuring.

☞'3.2 Measurement condition'



Memo

- The valid value for the number of measurements from 1 to 99999.
- Minimum interval time is 2 sec.
- Enter from 1 to 99999 values in [Repeat Times] when you select [Continue].
- Enter 2 or more values in [Repeat Times] when you select [Interval].
- When you select [Interval], 99999 = [Repeat Time] x [Interval Times] is maximum value.
- When check box [Retry measurement] is not checked, the measuring will stop after receiving [NG/ERROR/Time over error] command from the instrument. In this case, the MT-100 saves measured data until measuring stop in CSVfile.
- Press [Shift] key in the PC for a few seconds to stop the measurement. After measurement stop, the [Count down] is reset.

Request	• When you conduct continuous measurement long time, pay attention to battery life or use AC adapter (optional accessory). • When communication between MT-100 and instrument due to accident, measuring is stop. • In this case, measured data may not be saved in CSV file.

Measured data are displayed on the [Receive] field. When [Auto Output] is checked before measurement start, the measured data is saved at the specified directory path also.

☞'4.2 Output data file'

Request	• Select if output data is On or Off at [Auto Output] check box before Measurement start. Even if you check [Auto Output] check box during measurement, measured data are not output. • The speed of data output might be delayed due to PC environment.

Even when the [Auto Output] check box is not checked before meausring, the MT-100 save only latest measured data in CSV file if you click the [Output] button afther the measuring. The location of CSV file should be specified after clicking [Output] button.

Memo

- Measured data to be saved is overwriteen by latest date at each measuring.
- Meausred data to be saved is deleated when the MT-100 is closed.

4.2 Output data file

Output data is CSV format file.

Output data is saved in the directory path which is described in the dialog.

Memo

- When you specify the existing file to output, new data is appended to the end of existing data.
- As file size grow larger, writing and reading might slow down.

Output data are described as follows;

[Continue]

```
YYYY/MM/DD,HH:MM:SS,Measured data 1,RangeNo.Unit(Return)
YYYY/MM/DD,HH:MM:SS,Measured data 2,RangeNo.Unit(Return)
                    ・
                    ・
                    ・
YYYY/MM/DD,HH:MM:SS,Measured data n,RangeNo.Unit(Return)
```

[Interval]

```
Time[1],YYYY/MM/DD,HH:MM:SS,Elapsed time[s],Measured data 1,RangeNo.Unit(Return)
Time[2],YYYY/MM/DD,HH:MM:SS,Elapsed time[s],Measured data 2,RangeNo.Unit(Return)
                    ・
                    ・
                    ・
Time[n],YYYY/MM/DD,HH:MM:SS,Elapsed time[s],Measured data n,RangeNo.Unit(Return)
```

※About the measured data, refer to instruction manual for each instrument.

Memo

- MT-100 convert spaces in data array which instruments output into Commas.

☞"IM-600 Manual 4.2 Output format"

☞"UVR-300 Manual 4.2 Output format"

☞"BM-9A Manual 4.2 Output format"

☞"BM-100 Manual 4.2 Output format"

4.3 Calibration for Phosphorescence luminance prediction

The function of Clabiration for phosphorescence luminance prediction is available only to BM-100.
This software obtains measured data for the calibration from the BM-100 and determines the calibration data, and then write the calibratin data to the BM-100.

☞"BM-100 Manual 2.5 Calibration for Phosphorescence luminance prediction"

Request	• Do not turn off the power of BM-100, or do not plug unplug the connector during MT-100 start-up, otherwise MT-100 can not communicate with BM-100. • Turn on the power of BM-100 before MT-100 start-up, otherwise, MT-100 can not detect BM-100.

Memo

- Only one pattern data canbe saved in the BM-100. Each time one set of pre-measurement for each pattern succeed, old patern data in the BM-100 is overwritten with new data.
- So, each time one set of pre-measurement for each pattern succeed, transfer the pattern data to the PC by using this software, or make a note of three patterns data and enter them into the MT-100 manually.

In the calibration for Phosphorescence Luminance Prediction, be sure to use pre-measurement data obtained by BM-100.

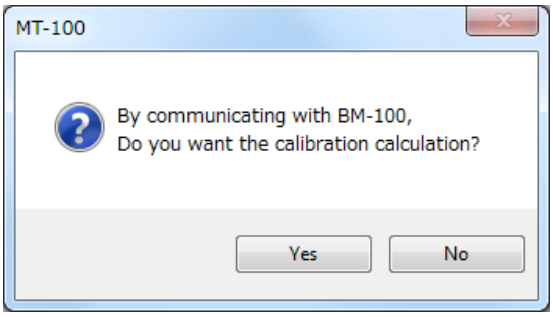
☞"BM-100 Manual 2.5 Calibration for Phosphorescence luminance prediction"

Request	• In the calibration for Phosphorescence Luminance Prediction, If you use measured data obtained by using other than the BM-100. The MT-100 can not calibration user-specified material correctly. And it may cause error in phosphorescence prediction.

☞"BM-100 Manual 2.4 Phosphorescence luminance prediction"

When you select “BM-100” in the select model name.

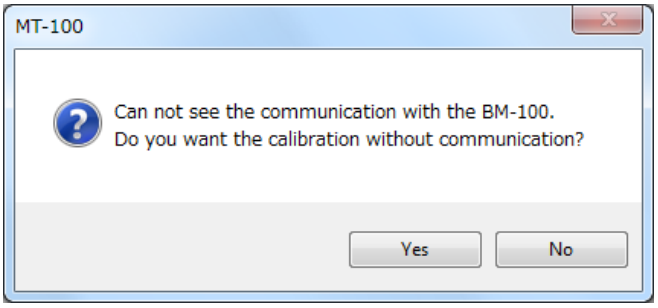
Following message will appear after clicking [Set Calibration] button in the initial screen.



Click [Yes] button to communicate with the BM-100. When there is no problem with the communication, the “BM-100 Set Calibration” screen will appear.

When you click [No] button, the “BM-100 Set Calibration” screen with some buttons non-activated will appear.

When there is problem with communication, following message will appear.



If you click [Yes] button, the “BM-100 Set Calibration” screen with some buttons non-activated will appear.

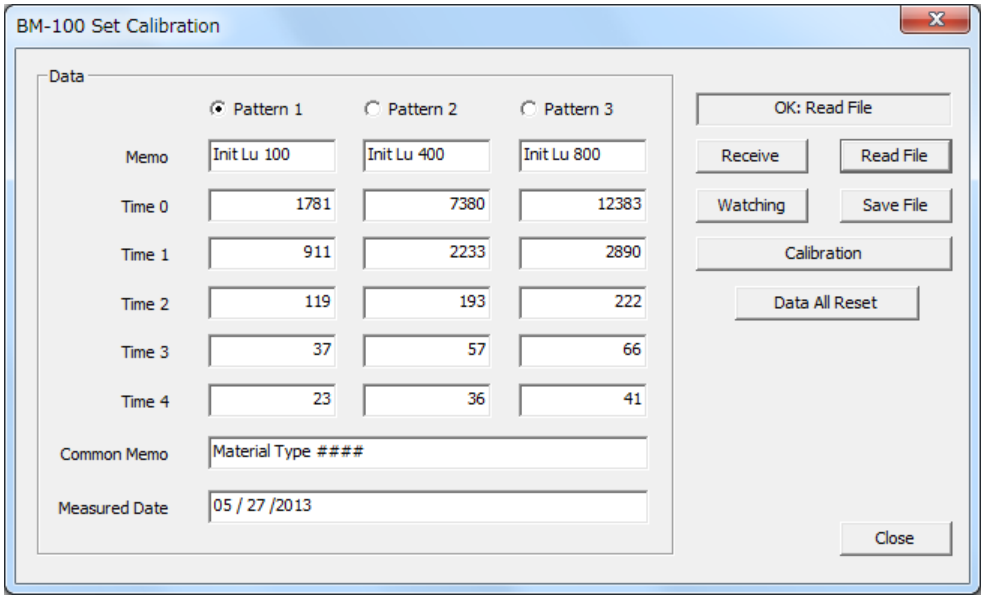
If you click [No] button, the “BM-100 Set Calibration” screen will not appear.

Memo

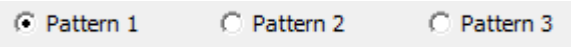
- If you open Calibration screen without communication to the BM-100, following buttons will not be available.
  [Receive] button
  [Watching] button
  [Calibration] button

4.3.1 Calibration screen(BM-100)

When connecting to BM-100, Calibration screen appear as below;



■Pattern button [Pattern1- Pattern3]



Select one column from Pattern 1 to 3 for the “Data entry field”, in which you want to enter pre-measurement data.

Pre-measurement data are entered to specified pattern column by clicking [Receive] button.

Memo

- Only one pattern data can be transferred to this softwer at one time.

■Memo space [Memo]

Use this space as much as you’d like（Max 20 character）

For example, write the excitation illuminance value.

■Data entry field [Time0～Time4]　　（Entry is required）

Unit　mcd/m^2

Enter the pre-measurement data in Time 0 through Time4.

Negative values and characters other than numerics can not be entered.

Each pre-measurement data must be entered in descending order of value along with increasing the number of “Time” (from Time 0 to Time 4) as follows; otherwise, MT-100 can not determine the calibration data.

Pre-measurement data in Time 0 ＞ Pre-measurement data in Time1 ＞ Pre-measurement data in Time2 ＞ Pre-measurement data in Time3 ＞ Pre-measurement data in Time4

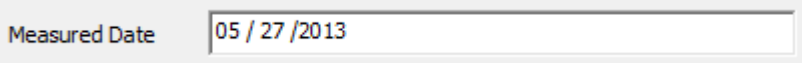
When there are the same values in the different pattern, MT-100 can not determine calibration data.

■Common memo [Common Memo]

Enter the type of user-specified material or others for your purpose.

(Max entry 256 figure)

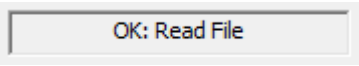
■Date [Measured Date]



Enter the date (MM／DD／YYYY).

The date when the “BM-100 Set calibration” screen opens is described as default.

■Status

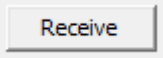


Current status and result of operation by clicking each button are displayed.

Ready：	There are empty in the Data entry field.
Wait：	There is no empty in the Data entry field. (When you enter the measured data manually, this message does not appear.)
Successfully：	Calibration and writing calibration data into the BM-100 succeed.
NG：	Calibration failed.
OK: Read File：	Reading file succeed.
NG: Read File：	Reading file failed.
OK: Save File：	Saving file succeed.
NG: Save File：	Saving file failed.

OK: Receive：	Starting-up Status dialog succeed.
NG: Receive：	Starting-up Status dialog failed.
NG: Send：	Writing calibration data failed.
Canceled：	Canceled.
Status：	Other than above description.

■[Receive] button

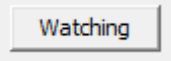


Click this button to read pre-measurement data from the BM-100. The pre-measurement data are entered in specified column in the “Data entry field”.
Existing data in the column are overwritten by new pre-measurement data.

Memo

- This function is available only when the BM-100 is in communication.
- Only one pattern data can be transferred to this softwer at one time.

■[Watching] button



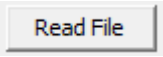
Click this button to display the “BM-100 status” dialog of pre-measurement.
Operations in the “BM-100 Set Calibration” screen are not accepted while this Status dialog opens.

Memo

- This function is available only when the BM-100 is in communication.

Operation description ☞‘4.4 Status of pre-measurement’

■[Read File] button



Click this button to read the data file saved in the PC and enter the data into the ”Data entry field”.

Memo

- All existing data in the “Data entry field” are overwritten by new data.

File format ☞‘4.5 Data file for calibration’

■[Save File] button

Save File

Click this button to save all the data in the “Data entry field” into specified directory path as Data file for calibration.

File format ☞‘4.5 Data file for calibration’

■[Calibration] button

Calibration

Click this button to start the calibration based on total 15 pre-measurement data of 3 patterns of Time 0 - Time 4 in the “Data entry field”. After the calibration is completed, the calibration data are written in BM-100 automatically.

Memo

- This function is available only when the BM-100 is in communication.
- This function is available only when the BM-100 is in communication and BM-100 is in following status.
  「Auto range」
  「Manual range」
  「Calibration」

■[Data All Reset] button

Data All Reset

Click this button to reset all data in the “Data entry field” and make field blank.
Date field is described date when calibration is conducted.

■[Close] button

Close

Click this button to close the “BM-100 Set Calibration” screen.

4.4 Status of pre-measurement

The dialog shows the status of pre-measurement for the calibration in the BM-100. It takes 5400 seconds (90 minutes) for BM-100 to conduct pre-measurement. You can see progress of pre-measurement every time you open this “BM-100 Status” dialog.

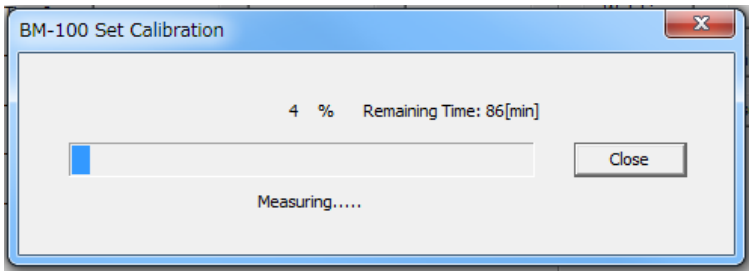
During the pre-measurement, this status dialog beeps at 2 seconds intervals.

When the pre-measurement is completed, message and beeper notify you of the completion of the pre-measurement. The beeps keep sounding until you confirm the notification.

Read measured data from BM-100 after completing pre-measurement.

When error happens in the BM-100 or communication disconnection while status dialogue appear, message and beeper notify you of it. The beeps keep sounding until you check the notification.

☞“BM-100 Manual 2.5 Calibration for phosphorescence luminance prediction”



■Progress bar

Showing the progress of the pre-measurement by 0 - 100% and the remaining time.

■Status

Showing the status of pre-measurement in the BM-100.

Waiting ：Waiting status(Beep ：About 2 second intervals)

Measuring... ：Pre-measurement status(Beep：About 2 second intervals)

Completed : Pre-measurement is completed(Beep：Repeat 2 consecutive times)

Error ：Error(Beep ：Repeat 3 consecutive times)

Not Calibration：BM-100 is not in calibration status.(No beep sound)

Status ：Initial condition

■[Close] button

Click this button to close the status dialog.

Even when pre-measurement progress does not reach 100%, the status dialog can be closed by clicking [Close] button.

Request	• When battery go dead during pre-measurement, measured data temporary saved in the instrument are deleted.

4.5 Data file for Calibration

Data file for calibration is CSV format file.

Data are described as follows;

Memo

- Describe a model name in 6th row in order to distinguish data file between for BM-100.
- Data file for calibration can be written manually also. In this case, be sure to follow the format.

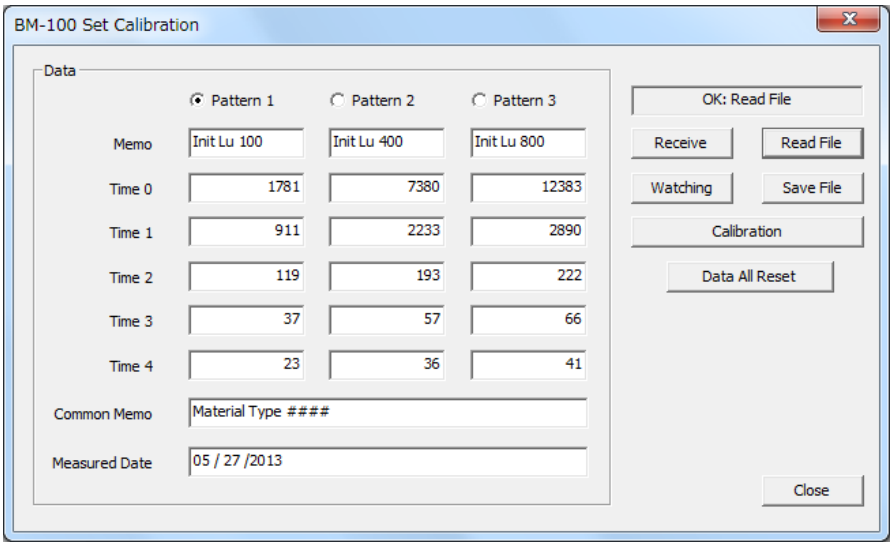
For BM-100

```
Measured Date（Return）
Common Memo（Return）
(Pattern 1)Memo,Value0,Value1,Value2,Value3,Value4（Return）
(Pattern 2)Memo,Value0,Value1,Value2,Value3,Value4（Return）
(Pattern 3)Memo,Value0,Value1,Value2,Value3,Value4（Return）
BM-100
```

(Example)

Data in the “BM-100 set Calibration” screen as below are saved as above format.

```
05 / 27 / 2013
Material Type ####
Init Lu 100,1781,911,119,37,23
Init Lu 400,7380,2233,193,57,36
Init Lu 800,12383,2890,222,66,41
BM-100
```



5. Trouble shooting

5.1 Q&A

Q1. ”BM-100 Set Calibration” screen does not appear.

A1. Calibration screen appear only when you select “BM-100” in initial screen. When you use BM-100, select “BM-100”.

Q2. Even when the MT-100 is in communication with BM-100, Calibration screen does not appear.

A2. ***1*** Check if BM-100 connect to PC via USB cable.

2 Check if the power of BM-100 is ON. Check buttery life or AC adapter connection. Turn on the power of BM-100 after checking battery life or AC adapter connection, and then, restart the MT-100.

You can select serial communication port, which is connected to the BM-100 only while the power of BM-100 is ON. Specify the serial communication port in the software after the BM-100 power ON.

Q3. [Receive] button, [Watching] button, and [Calibration] button are non-activated and not available.

A3. You might select [No] for the dialog “By communicating with BM-100, Do you want the calibration calculation?”.

Q4. Even when BM-100 is in communication, error message appear after pressing [Receive], [Watching], or [Calibration] buttons.

A4. ***1*** The power of BM-100 might turn off or USB cable might remove from BM-100 during calibration screen.

2 Error happen in the BM-100.

Q5. The data, which are obtained from saved data file, are displayed incorrectly in “Data entry field” in the “BM-100 Set Calibration” screen.

A5. The data file might be not described according to specified format. Correct the description of data in the CSV filed data and save it again.

File format ☞‘4.5 Data file for calibration’

Q6. The existing data in the “Data entry field” disappear or are overwritten by new data after pressing [Read File] in the “BM-100 Set Calibration” screen.

A6. Even one existing data is left in the “Data entry field”, confirmation message appear before overwriting. If you do not want to overwrite the data, select [NO] in the confirmation message. When there is blank in the file data, the blank appear in the “Data entry field”.

[Read File]Button ☞‘4.3 Calibration for phosphorescence luminance prediction’

Q7. Even when clicking [Save File] button in calibration screen in order to salve files, data can not be saved.

A7. ***1*** The number of characters in the [Memo] or [Common Memo] is over the limit.

Memo, Common Memo ☞‘4.3 Calibration for phosphorescence luminance prediction’

2 Character other than numerics or negative value are entered in the “Data entry field”.

Q8. [NG] or [NG:Send] error message appear after pressing [Calibration] button.

A8. ***1*** For BM-100, All 15 boxes in the “Data entry field” might not be entered.
Or characters other than numerics or negative values are entered in the “Data entry field”.

Data entry field ☞‘4.3 Calibration for phosphorescence luminance prediction’

2 In the “Data entry field”, Data may not be entered in descending order of value along with increasing the number of “Time” (for BM-100, from Time 0 to Time 4).

Data entry field ☞‘4.3 Calibration for phosphorescence luminance prediction’

3 Data at each pattern may be the same values. In this case, Calibration does not start.

Data entry field ☞‘4.3 Calibration for phosphorescence luminance prediction’

4 0 might be entered in the “Data entry field”. Check if measured values are correct.

5 There may be problem in the calibration data determined by PC. Conduct the pre-measurement again.

6 When mode in the BM-100 might be selected to other than「Auto range」,「Manual range」, or 「Calibration」, Calibration data can not be written to the BM-100 even if Calibration succeed.

☞“BM-100 Manual 2 Measurement procedures”

7 Refer to A4.

Q9. Measured data does not appear or [NG: Receive] appear when Clicking [Receive] button in the “BM-100 Set Calibration” screen.

A9. ***1*** You might not select one in the [Pattern].

[Pattern] button ☞‘4.3 Calibration for phosphorescence luminance prediction’

2 The BM-100 might be in 「Calibrating」status or 「Calibration error」status. In this case, measured data can not be obtained from the BM-100.

3 There may be problem in saved data in the BM-100.

4 Refer to A4.

Q10. Measured data in the “Data entry field” are overwritten after pressing [Receive] button.

A10. ***1*** You may select wrong pattern in the [Pattern].

2 Even when one existing data is left in the “Data entry field, confirmation message appear before overwriting. If you do not want to overwrite the data, select [NO] at the confirmation message.

When there is blank in the file data, the blank appear in the “Data entry field”.

Q11. ”BM-100 Status” dialog does not appear even after pressing [Watching] button.

A11. ***1*** the BM-100 may already finish pre-measurement.

2 The status of BM-100 may be in Phosphorescence luminance prediction. The Phosphorescence luminance prediction is different from pre-measurement. Conduct pre-measurement again.

☞“BM-100 Manual 2.5 Calibration for phosphorescence luminance prediction”

3 Refer to A4.

Q12. All data are not deleted even after pressing [Data All Reset] button.

A12. ***1*** Today’s Date is left in the [Measured date] even after pressing [Data All Reset] button.

2 When you select [No] in Reset confirmation message, the data are not deleted.

Q13. When click [Close] button, the “BM-100 Set Calibration” screen is not closed.

A13. When there are data in the “Data entry field” (15 boxes for BM-100), confirmation message appear to check if closing window without saving data or not if you select [NO], Window is not closed.

When data has been saved beforehand, even when there are data in the “Data entry field”, and confirmation message do not appear.

Q14. Progress bar do not proceed in the “BM-100 status” dialog.

A14. ***1*** Pre-measurement time is 5400 sec (90 minutes) for BM-100, so progress bar look very slow. Beep sound at 2 second intervals during waiting status and pre-measurement status.

2 [Measuring…] message appear during pre-measurement.
[Waiting] message appear when Calibration standby status with Hold switch ON and CAL button are ON in the BM-100.

3 [Not Calibration] mean that BM-100 is not in Calibration status. No Beep sound.

☞“BM-100 Manual 2.5 Calibration for phosphorescence luminance prediction”

4 [Error] message means that pre-measurement might be canceled by shifting BM-100 or there are problems with measured data. Try pre-measurement again.
Or communication error might happens. Please see A4.
Beep repeat 3 consecutive times.

☞“BM-100 Manual 5.1 Instrument error code”

Q15. Beep do not sound.

A15. ***1*** 64bit PC do not have beep function. Please connect speaker to the PC.

2 Other than case ***1***, check the beep sound setting in the PC.

Q16. Even when clicking [Measure] button in the initial screen, measurement do not start.

A16. There may be error in [Communication] or [Model] in the initial window.

Q17. Measured data cannot be saved in initial screen.

A17. Measured data with csv file cannot be saved directry under the drive. So create a folder for saving file.

Q18. Even when specifying a directory path for data saving, the file is not created.

A18. The file is created only when starting a measurement. So files not be created when a directory path is specified only.

Q19. [Time over error.] appear.

A19. This error appears when PC doesn’t receive measured data within 10sec after PC send commands to instrument. Unstable measurement condition may cause communication problem.

Q20. [Send error.] appear.

A20. There are problem in communication between PC and instrument, or Power switch of instrument is off, or Battery may dead, or AC adapter may be not connected correctly. Check battery life and AC adapter connection. And then, start up this software after turning on this instrument.

Q21. [Receive error.] appear.

A21. PC and instrument do not communicate correctly. Reboot both instrument and PC.

Q22. [Measurement stop.] appear.

A22. This error appears and measuring stops when [Retry Measurement] is checked off and problem happen in communication. When [Retry Measurement] is checked on, instrument retry measuring even after communication error happening.

●If the trouble are not solved after above mentioned action., the software might need to be repaired. please contact your dealer or TechnoOptis Co., Ltd.

Please have the following information available when making an inquiry:

• Software Version:	After starting up the MT-100 software, version information is displayed in the title bar.
• Personal computer:	Your personal computer model and currently installed software
• Environment:	Type of measurement light source, instrument settings, measurement values, measurement status, etc.
• Description of problem:	As detailed as possible.

Inquiries: Refer to the back cover of this manual.

Measurement Program

MT-100

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