# TM2441–16 ABPM Data Manager

# INSTRUCTION MANUAL

## Simplified Manual



1WMPD4003682E

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## 1. Introduction

This document is a simplified manual for installation and operation of the optional software "ABPM Data Manager (TM2441-16)" for the ABPM recorders (TM2440 and TM2441). In order to understand this software and make full use of it, please read this manual thoroughly before use and keep it in an easily accessible place for future reference.

ABPM : Ambulatory Blood Pressure Monitor

## 2. Compliance

The software conforms to Medical Devices Directive 93/42/EEC. This is evidenced by the CE mark of conformity accompanied by the reference number of a designated authority.

The software conforms to RoHS Directive 2011/65/EU.

## 3. System Requirements

Computer CPU	:	1GHz or faster processor
Memory	:	2 GB or more
Operating System	:	Windows 10 (x64), Windows 11 (x64)
SVGA	:	800 x 600 pixels or more recommended
Disk	:	DVD drive (Drive corresponding to enclosed
		media)
Hard Disk	:	24 GB available space
Printer	:	Environment in which XPS format files can be printed

Patient / measurement data can be managed using this product database (MySQL 8.0). If MySQL is already installed, there is possibility that it will not work properly.

## 4. Installing the ABPM Data Manager

1. Insert the software DVD into the DVD drive on your computer and run "Setup.exe".

Name	Туре		
AND	File folder		
😂 Setup.exe	Application		

2. Click the Install key to install the ABPM Data Manager.

Software V	1 Data Manager Installer Close
	Install

#### 4. Installing the ABPM Data Manager

3.

Click the Next key.			
🕼 ABPM Data Manager	-		×
Welcome to the ABPM Data Manager Setup Wizard			
The installer will guide you through the steps required to install ABPM Data M computer.	lanager	on your	
WARNING: This computer program is protected by copyright law and interne Unauthorized duplication or distribution of this program, or any portion of it, m or criminal penalties, and will be prosecuted to the maximum extent possible of	itional tr ay resul under th	eaties. t in seve e law.	re civil
< <u>B</u> ack		Can	cel

- 4. Click the Next key.
- If the user account control popup window appears during software installation, please allow changes to the computer.



 Click the Close key on the window below after the installation is completed. Then proceed to installation of files necessary for software startup.



 When the ABPM Data Manager is installed automatically, the following window is displayed. If the compatible software already exists in the computer, the software is not installed. This installation requires 10 minutes.



4. Installing the ABPM Data Manager

7. Click the OK key.

Click the Close key after this installation to close the installer program.



When the software installation is completed, ABPM Data Manager is installed in "C: ¥ANDTools" and the following shortcut is created on the desktop.



When the installer is displayed at the time of initial software startup a popup for user account control is displayed. Please allow changes to the computer if prompted.

## 5. Uninstalling the ABPM Data Manager

 Insert the software DVD into the DVD drive on your computer and run "Setup.exe".

Name	Туре
AND	File folder
👺 Setup.exe	Application

2. Click the Uninstall key to delete the ABPM Data Manager.

Boftware Ve	Data Manager Installer rX.X.X	Close
	Update	
1	Uninstall	)
÷		

- 3. Specify the ABPM Data Manager. Click the Uninstall key.
- X If you uninstall MySQL used by program, that may affect operation.
- When MySQL is uninstalled, all of the data in the database is deleted.

醓 Select Uninstall Items	Close
ABPM Data Manager	
MySQL + MySQL Connecto	r
·····.	
Uninstall	
······································	

## 6. Reinstalling the ABPM Data Manager

- The last settings are reset to factory settings by reinstalling the ABPM Data Manager. Memorize last settings before reinstalling.
- Insert the software DVD into the DVD drive on your computer and run "Setup.exe".

Name	Туре
AND	File folder
🔓 Setup.exe	Application

2. Click the Re-install key or Update key to overwrite the ABPM Data Manager.

Software Ve	Data Manager Installe rX.X.X	r Close
	Re-Install or	Update
	Uninstall	

3. Proceed to step 3 at page 3.

## 7. Connection Procedure

## 7.1. Initial Settings of the TM2440 / TM2441

1. Confirm the blood pressure measurement is stopped.

Connect the recorder to the personal computer using the USB cable.



- 2. Run the ABPM Data Manager.
- When the software cannot communicate, the following message is displayed.



When the NO key is clicked, the following message is displayed.



The default recorder port is set to "AUTO" on the "Options" window in the factory settings. If you want to specify the recorder port to be fixed, set a port at the "Options" window.

🚰 Options		2	-		×
Nomal Settings     Basic     UI     Diagnostic     Department     PP Measure Settings     Report Settings     Print Settings     Database Settings     FTP Server Settings     Recorder Type     Deve Settings	Recorder Info Recorder Port	COM1	✓ Auto		
	Hospital Info Hospital Name: Report Sub Head:	Hospital Name BP Analysis			
Data settings ▶ Language Settings	Other Info Report Font Size: Report UUID:	18 ID	•		
			ок	Cance	el

The following window is displayed when the software is activated.

Input the license code obtained by the icon to the "Enter License code" field.

Click the Register key. The following window will not be displayed from the next startup.



## 7.2. Downloading Data

Click the Download key to download data from TM2440 / TM2441 to the computer.



The "Patient Info" window will be displayed after the data download is complete.

- If you need to identify each patient, be sure to input each person's name in the "Name" field. File management is performed with the stored content.
- Input bedtime and wakeup time in the "Sleep Time" field for processing data.
- Input other necessary details. Each entry data is separately saved to each record for the patient. Click the <u>Save</u> key to apply the settings and the data list window will be displayed.

#### 7. Connection Procedure

🚻 Patient Info						-	×
File: hirose1			Date: 2018-03-07		Time: 11:00		
Search by Name or No.		input					
Basic							_
Name	input		Social Insurance		Medical Insurance		
Telephone			Outpatient No.		Hospitalization No.		
Details							
Sex		>	Age	0	Height	0	
Address					Weight	0	
Outpatient Info							
Department		~	Bed No		Insurance		
Sleep Time	From		То	Comments			
0:00~23:00	00:00		07:00				
Report Comments							_
							~
L							
		Reset	Save	Save and Print	Cancel		
			· · · · · · · · · · · · · · · · · · ·				

Name	Τ
	Туре
Data	Folder
Language	Folder
Log	Folder
Setup	Folder
UI	Folder
zh-Hans	Folder
ABPMDataManager.exe	Application
	Data Language Log Setup UI zh-Hans ABPMDataManager.exe

#### 7.3. Views

😁 I 🔂	ABPM	Data Man	ager												
• •		Comm	on		Viev	/S	۰. 	Sear	ch		Custo	mization			
ы	•		1		ġ.	9	$\bigcirc$	Ð	thi	۵			2		2
Save	Export	Datalist	Minute List	Summary	Day	Night	Partial	Partial Settings	Histogram	Pie Graph	Trend Graph	Scatterplot	Print	Layout	Patient
Measure	e Data			Di	ata View					Char	t View		Data	Report	Fill Info

Data List : Blood pressure measurement time, blood pressure value, pulse rate and waveform are displayed.

- Minute List : The position average information for 1 minute is displayed as "x, y, z". The variation integrated value with respect to the position average information is displayed as "Activity". The average value information on temperature and pressure is displayed as "Atmospheric Temperature".
  - Summary : Summary of all sections.
    - Day : Summary at waking up.
    - Night : Summary at sleep.
    - Partial : Summary of arbitrary processing section by partial settings.
- Partial Settings : All or arbitrary processing sections can be set.

#### 7. Connection Procedure

Layo	out of D	)ata	a List	t								
	1. Bl	00	d pre	essure	e mea	surer	nent	time,	bloc	od p	ressure va	alue,
	рι	ulse	e rate	e (MA	P, DP	are c	alcul	ated	valu	es).		
_	2 E	vcli	ision	∙ Me	asure	ment	resu	lte wi	th "	/" a	re evclude	and are
	Z. L/		13101		asure	nent	leau		ui v	a		
	nc	ot r	eflec	ted in	i grapr	is an	d rep	ort re	sult	S.		
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1	m	~~~		nont			5				5	
U		ca	Suici	nent.								
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	ADDA Data Manager	_							<b>`</b>	<u> </u>		
	Common		Vine		Search		Curtomizati					-   8   ×
nn e					Search			an in the second se				
Taye Ex	port Datalist Mini	ne Surr	imary Day	Night Partial	Partial Histo	gram Pie	Trend Scatter	plot Print	Layoj P	atient		
M sure E	uta Us	·	Data View		Settinos	Graoh Chart	Granh View	Data	port r	nto (		
Q Cur	rent Data											-
finpur	Date	Time	SYS	DIA	MAP	DP	PUL	Status	Exclude	Wave	Comments	^
1	2018/03/07	11:44	104	77	86	75	73	HB		Wave		
2	2018/03/07	11:46	104	72	82	75	73	HB		Wave		
3	2018/03/07	12:00	100	70		400		AA 8		Wave	Pulse Err	
4	2018/03/07	12:03	126	76	92	102	81	AA		Wave	PA4_IHB_	
5	2018/03/07	12:30	116	82	93	90	78	AA		Wave		
0	2018/03/07	13:00	115	75	00	69	78	AA		Wave	110	
-	2018/03/07	14:00	106	21	03	91	00	AA		Wave	HB_	
0	2018/03/07	14:00	113	77	93	0/	76	AA		Wave		
9	2018/03/07	14:30	113	76	09	99	00	AA		Wave		
11	2018/02/07	15-20	115	81	02	80	69	AA		Mave		_
12	2018/03/07	16:00	110	78	88	75	69	AA		Maye	rc_no_	_
13	2018/03/07	16:30	***	***	***	***	***	AA10	<b>v</b>	Wave	Motion Err	
14	2018/03/07	16:32	119	78	91	89	75	AA	<b>v</b>	Wave	MArt36_IHB	
15	2018/03/07	17:00	112	80	90	77	69	AA		Wave		
16	2018/03/07	17:30	126	90 1	102	95	76	AA		Wave	НВ	
17	2018/03/07	18:00	113	81	91	77	69	AA		Wave		
18	2018/03/07	18:30	120	98 1	105	90	75	AA	2	Wave	MArt56_IHB_	
19	2018/03/07	19:00	119	86 î	97	89	75	AA		Wave		
20	2018/03/07	19:30	117	88 î	97	83	71	AA		Wave		
21	2018/03/07	20:00	121	91 1	101	85	71	AA		Wave	P12_	
22	2018/03/07	20:30	128	94 1	105	84	66	AA		Wave		
23	2018/03/07	21:00	118	85 ↑	96	73	62	AA		Wave		
24	2018/03/07	21:30	124 î	85 ↑	98	76	62	AA		Wave		
25	2018/03/07	22:00	130 1	91 î	104	72	56	AA		Wave		
26	2018/03/07	22:30	166 1	100 1	122	102	62	AA		Wave		, I I I I I I I I I I I I I I I I I I I

#### 7.4. Chart View

Each list can be confirmed at "Data View" in "Views".

Histogram : Histogram is displayed.

Pie Graph : Pie chart is displayed.

Trend Graph : Line graph is displayed.

Scatter Plot : Correlation graph is displayed.

For the display of "Trend Graph", you can display the item for which the check box is marked. The graphs for acceleration and activity are exclusive, and only one of them can be displayed.



## 7.5. Layout

Specify items to be printed and mark the checkbox for selected items.

Template Settings		-	×
Template Select			
Template : Standar	rd Print Template		 1.
Layout		Hospital Name BP Apalysis	
Summary	Summary Settings BP Avg	Name:SampleData Sex:Male Age:0 Hospitalization No: Outestingt No. Red No.	
🗌 Data	Awake Avg	Time:11:44 2018-03-07 14:30 2018-03-08 ID:	
Partial Data	Max Percentage	Valid readings:47 items Sleep Time:21:00 09:00	
BP Data	Circadian	(1)BP Avg 111/77 mmHg(Reference130/80 mmHg)	
Histogram	Pulse     Morning	(2)Awake Avg 116/80 mmHg(Reference135/85 mmHg)	
Pie Graph	Comment	(3)Sleep Avg 105/73 mmHg(Reference120/70 mmHg)	
Trend Graph		(4)Max SYS: 166mmHg In22:30 Max DIA: 100mmHg In22:30	
Scatterplot		Min SYS: 73mmHg In 05:00 Min DIA: 52mmHg In 05:00	
		(5)Awake BP: Sleep BP:	
Anch	Saue	SYS(>145 mmHg) 0.00% SYS(>120 mmHg) 14.29%	~
Арруу	Save	検索する文字所の入力 ・ ・	÷

## 7.6. PDF Output

PDF output is possible by running "Export" for details set at layout.

	I AND A	nalysis Software									
		Common	Vie	vs	Sear	ch	c	ustomization			
Fil Save	Export	Datalist Minute	Summary Day	Night Par	ial Partial	tille Histogram	Pie Tr	end Scatterplot	Print	Layout	Patient
Measun	e Data	List	Data Viev	,	Settings		Data	Report	Fill Info		

#### 7.7. Recorder

By running the recorder, it is possible to customize the default settings for the recording data of the TM2441 series.

Refer to the TM2440 / TM2441 instruction manual for the further details.



When the Save key is clicked, TM2441 operation mode is set to the mode selected on the tab. If you move the mouse cursor over the tab, you can check the description for each mode.

ID 222	Date						
	Ambulatory Blood Pr	essure Measurement Co	ndition Settin	nas			
Display		ABP(Auto)			ABP	(Auto.Sleep)	
• 0N	Auto Start Time	Operation Time		Section	Time	Interva	
O OFF	(Hours)	(Hours)		(Hours)		(mins)	
	OFF ~	OFF ~	1	0	~	30	~
			2	OFF	~	OFF	~
	Preset Time		-	055		055	
	2: All Time: 30 mins	ins 22:00-07:00: 30 mins	3	OFF	-	orr	-
			4	UFF	~	OFF	v
	Preset 1	Preset 2	5	OFF	Ŷ	OFF	v
			6	OFF	~	OFF	~
	•Auto Start Time is !	Start time of the automat	6 ted measurem	OFF	~	OFF	Ÿ
	•Auto Start Time is •Operation time is 0	Start time of the automat Operation time of the aut	6 ted measurem comated meas	OFF ient urement	~	OFF	~
	•Auto Start Time is : •Operation time is 0 Self Measurement of	Start time of the automat Operation time of the aut Blood Pressure Conditio	6 ted measurem comated measurem	OFF	2	OFF	~
	•Auto Start Time is 5 •Operation time is 0 Self Measurement of OBP	Start time of the automat Operation time of the aut Blood Pressure Conditio AOBP	6 ted measurem comated measurem on Settings HBP	OFF	ANBP	OFF	ASE
	•Auto Start Time is 1 •Operation time is 0 Self Measurement of OBP MeasurementCount	Start time of the automat Operation time of the aut Blood Pressure Conditio AOBP	6 ted measurem comated meas on Settings HBP Start Time of	OFF urement of Alarm (I	ANBP Hours)	OFF	ASE
	Auto Start Time is : Operation time is : Self Measurement of OBP MeasurementCount 2	Start time of the automat Operation time of the aut Blood Pressure Conditio AOBP	6 ted measurem comated measurem on Settings HBP Start Time of 7	OFF urement of Alarm (I	ANBP Hours)	OFF	ASE
	*Auto Start Time is : Operation time is : Self Measurement of OBP MeasurementCount 2 v Interval (mins)	Start time of the automat Operation time of the aut Blood Pressure Condition AOBP	6 ted measurem om Settings HBP Start Time of 7 22	OFF eent urement	ANBP Hours)	OFF	ASE
	+Auto Start Time is 1 •Operation time is 0 Self Measurement of MeasurementCount 2 v Interval (mins) 1 v	Start time of the automat Operation time of the aut Blood Pressure Condition AOBP	6 ted measurem comated measurem HBP Start Time of 7 22 OFF	OFF eent urement	ANBP Hours)	OFF	ASE
	·Auto Start Time is : ·Operation time is 0 Self Measurement of OBP MeasurementCount 2 v Interval (mins) 1 v	Start time of the automat Diperation time of the aut Blood Pressure Conditio AOBP	6 ted measurem comated measurem on Settings HBP Start Time of 7 22 OFF OFF	OFF eent urement of Alarm (I	ANBP Hours)	OFF	ASE
	-Auto Start Time is : -Operation time is C Self Measurement of OBP MeasurementCount 2 v Interval (mins) 1 v	Start time of the automat Operation time of the aut Blood Pressure Condition AOBP	6 ted measurem comated meas on Settings HBP Start Time of 7 22 OFF OFF OFF	OFF eent urement of Alarm (I	ANBP fours)	OFF	ASE
	•Auto Start Time is : •Operation time is C Self Measurement of OBP MeasurementCount 2 v Interval (mins) 1 v	Start time of the automat Operation time of the aut Blood Pressure Condition AOBP	6 ted measurem omated measurem HBP Start Time of 7 22 OFF OFF OFF	OFF eent urement of Alarm (I	ANBP łours)	OFF	ASE

## 7.8. Manual

Refer to the "Manual" in the help menu about detailed methods of

operations and settings concerning the software.



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