

WatchBP Analyzer

Software User Manual

Document No: Rev. Date: Revision: UMWBPA01-EN 2023-09-04 05

Table of Contents

1 Introd	uction	4
	nvironment Requirements	4
1.1.1	Compatible Devices	
1.1.2	Computer Requirements	
	bbreviations and Terms stallation	
	nterface	
	evice Areaatient Area	
	blder Area	
	easurement Area	
	eport Area	
3 Worki	ng with WatchBP Analyzer	13
	atient Registration	
	ogram Settings to the Device	
3.2.1	Bluetooth Connection	.14
3.2.2	Program ABPM	.15
3.2.2.1	Setting User Interface	.15
3.2.2.2	Program ABPM	.17
3.2.3	Program Office	
3.2.3.1	Setting User Interface	.17
3.2.3.2	Program to the Office Device	.18
3.3 Pe	erform Measurement by WatchBP Analyzer	
3.3.1	WatchBP Office ABI Measurement	
3.3.1.1	Setting User Interface	.18
3.3.1.2	Performing Measurement	.18
3.3.2	WatchBP Office Vascular Measurement	.19
3.3.2.1	Setting User Interface	.19
3.3.2.2	Performing Measurement	.20
3.4 De	ownload Readings from WatchBP Devices	.20
3.5 R	eview the Retrieved Readings	.22
	(port Report	
3.6.1	Report Tab of WatchBP O3 Series	.23
3.6.1.1	5	.24
3.6.1.2	2 Option Area	.24
3.6.1.3	Customization Area	.24
3.6.1.4	Input Auto Comment	.25
3.6.1.5	PDF Report	.26
3.6.2	Report Tab of WatchBP Office Series	.27
3.6.2.1	Setting Area	.27
3.6.2.2	2 Option Area	.27
3.6.2.3	Customization Area	.28
3.6.2.4	PDF Report	.28

Report Tab of WatchBP Home	29
3.1 Customization Area	29
3.2 Generate Report	29
3.3 PDF Report	
History Readings Management	
Delete a Measurement Folder	30
ivate the Device	31
AFIB / AFIB & Central BP options	31
ABI / PWV & Central BP options	31
Procedure of the Activation	32
ix A: Error Code List	34
ix B: SW Error Messages	35
ix C: Contact Information	36
ix D: Manufacturer Information	37
	 3.1 Customization Area

1 Introduction

WatchBP Analyzer is the dedicated blood pressure software of Microlife professional blood pressure monitoring product series. It can connect and transfer data from WatchBP Office device series, WatchBP Home device series and WatchBP O3 device series.

1.1 Environment Requirements

1.1.1 Compatible Devices

Devices Series	Model	Connection Method
WatchBP Office	2G (BP3SK1-3B)	USB & BT
	Vascular (TWIN200VSR)	USB & BT
	ABI (TWIN200ABI)	USB
	AFIB (TWIN200AFS)	USB
WatchBP O3	Ambulatory 2G (BP3SZ1-1)	USB & BT
	AFIB Ambulatory (BP3MZ1-1A)	USB
	Ambulatory (BP3MZ1-1)	USB
WatchBP Home	WatchBP Home (BP3MX1-1)	USB
	WatchBP Home A (BP3MX1-3)	USB
	WatchBP Home A BT (BP3MX1-3C)	USB (only support USB communication)

Note: Bluetooth connection doesn't support with Windows 7 & 8.

1.1.2 Computer Requirements

Item	Requirements
OS of Windows	Windows 10/ 11
Processor	1GHz and above

Ram	512 MB and above
Disk Space	4.5GB free hard disk space and above
Data communication Interface:	 (1) USB2.0 and above (2) Bluetooth 4.0 and above Note: Bluetooth communication doesn't support with Windows 7 & 8.

1.2 Abbreviations and Terms

The below abbreviations are shown in the software and explained as below

#	Abbreviations	Interpretations
1	SYS	Systolic blood pressure
2	DIA	Diastolic blood pressure
3	MAP	Mean arterial pressure
4	PP	Pulse pressure
5	cSYS	Central systolic blood pressure
6	cDIA	Central diastolic blood pressure
7	cPP	Central pulse pressure
8	ABI	Ankle brachial index
9	PWV	Pulse wave velocity
10	Limb	The specific limb of the measurement (only for simultaneous double cuffs
		measurements)
11	HR	Heart rate (beats per minute)
12	AFIB	Atrial fibrillation
13	PVP waveform	Pulse waveform of the measurement
14	CODE	Events or errors
15	ABPM	Ambulatory blood pressure monitor

1.3 Installation

Download the WatchBP Analyzer software from the Microlife website: <u>http://www.microlife.com/support/software-professional-products</u>. Double click on the downloaded installation program, the installation wizard dialog box will be shown.



Fig. 1 The installation wizard dialog box.

Click "Install" to start the installation of the WatchBP Analyzer. After successful installation, the dialog box will be shown as Fig 2.



Fig. 2

Then click "Finish" to complete the installation.

2 User Interface

Device		Patient				۹	Search	
Device Name: WatchBP 03	Program device	Name	ID	Gender	Age	DOB	Phys	New
Device ID: CD8AFD1059FE Jser ID: ABCDEFGHIJKLMNOabcdefghijklmno	Measure	aaa	dsd	Male	30	06.13.1993	mic	Edit
Batteries 5.5 V,	Measure	**/	1ws	Male	30	06.29.1993	112	Edit
Type: AFIB, Central BP	Download	×	xx	Male	30	06.29.1993		Delete
Folder watchbP Office 26	Measurement	Report						
WatchBP 03 2G ABPM Mode	Date 04.20.2017 00:0		AP PP cSYS cDIA cF				NOTE	
				3 60 ★ 5 75 ★		~ ~		
07.03.2023	04.20.2017 00:0	5 151 79 10	5 /2 15/ /2 65	5 /5 ×	~	1 <		
07.17.2023	04.20.2017 00:1	0 185 90 12	1 95 184 78 10)6 78 ★	\checkmark	\wedge		

Fig. 3

The user interface of WatchBP Analyzer is divided into four main areas and introduced as below.

2.1 Device Area

Device information will be shown when a WatchBP device is connected. The fields are interpreted as below.

Fields	Interpretation
Device name	The name of the WatchBP model.
Device ID	A unique device ID of the unit.
User ID	The patient ID that has been programmed to the device.
Batteries	The area displays the voltage and status of batteries of the WatchBP O3. If the voltage is low and thus may not last for 24-hour session, the " Renew battery " message will be highlighted.
Туре	It shows the version of the device.
Options	It shows the extra options of the device. AFIB – device with AF detector; Central BP – device with the possibility of taking central blood pressure measurement, PWV - device with the possibility of taking pulse wave velocity measurement

[Fields Interpretation]

[Button Functions]

The button functions are interpreted as below.

Buttons	Interpretation
Program device	For WatchBP O3 and Office, program the settings to the device. The button is enabled when a compatible WatchBP device is connected. Click the button to program the device.
	Note: This button cannot be pressed in WatchBP Vascular.
Measure	Start or Stop measurement (Only supported in WatchBP Office only)
	Set the measurement parameters, and then start a measurement.
	Note: This button is only supported in WatchBP Office.
Download	Download BP data from the device to the software.

2.2 Patient Area

Operators can register the patient in this area. Operators can manage the patient information in this area. Before programming settings to the device, initiating a measurement or downloading measurement data from device to PC, operators need to select a patient from the patient list first.

[Button Functions]

The button functions are interpreted as below.

Buttons	Interpretation						
New	Press the "New" button to register a new patient account.						
Edit	Press the "Edit" button to edit the selected patient account.						
Delete	Press the "Delete" button to delete the selected patient account.						
Search	Users could input the "name", "ID" or the "date of birth" to find out the specific patient.						

2.3 Folder Area

When users select the specific patient, the corresponding historical measurement folder of the patient will be shown. The folder name is created by data types and displayed by the sequence of date. Measurements in the same date will be merged into the same folder.

All of the folders are interpreted as below.

Folder	Interpretation
WatchBP O3 1G ABPM Mode	Measurements of ABPM Mode of WatchBP O3 1G
WatchBP O3 1G Casual Mode	Measurements of Casual Mode of WatchBP O3 1G
WatchBP O3 1G Home Mode	Measurements of Home Mode of WatchBP O3 1G
WatchBP O3 2G ABPM Mode	Measurements of ABPM Mode of WatchBP O3 2G
WatchBP O3 2G Manual Mode	Measurements of Manual Mode of WatchBP O3 2G
WatchBP Home Diagnostic Mode	Measurements of Diagnostic Mode of WatchBP Home
WatchBP Home Usual Mode	Measurements of Usual Mode of WatchBP Home
WatchBP Home A Diagnostic Mode	Measurements of Diagnostic Mode of WatchBP Home A
WatchBP Home A Usual Mode	Measurements of Usual Mode of WatchBP Home A
WatchBP Office Vascular	Measurements of WatchBP Office Vascular
WatchBP Office 2G	Measurements of WatchBP Office 2G
WatchBP Office Afib	Measurements of WatchBP Office Afib
WatchBP Office ABI	Measurements of WatchBP Office ABI

2.4 Measurement Area

When the specific folder is selected, the corresponding readings will be displayed. The different fields are displayed when the different folder is selected. Note: The abbreviation interpretation of the field could be referred to Ch. 1.2.

Fig.4 shows the measurement list of WatchBP O3. Fig.5 shows the measurement list of WatchBP Office. Fig.6 shows the double arm measurement of WatchBP Office ABI. Fig.7 shows the WatchBP Office Vascular measurement list. Fig.8 shows the usual mode readings of the WatchBP Home. Fig.9 shows the diagnostic mode readings of the WatchBP Home.

Measurement Report													
	Date	SYS	DIA	HR	MAP	PP	cSYS	cDIA	cPP	AFIB	Exclude	PVP wave	CODE
3	07.30.2018 10:21	119	76	68	82	43	119	73	46			\sim	4,8
4	07.30.2018 10:22	119	78	68	86	41	120	75	45			\sim	4,8
5	07.30.2018 10:23	117	82	76	93	35	116	77	39	*		\sim	4,8
6	07.30.2018 10:25	115	78	72	87	37	116	75	41			\sim	4,8

_			
F	in		Λ
	ıу	•	-

Meas	surement Report					U							
Average without first measurement													
	Date	SYS	DIA	HR	MAP	PP	cSYS	cDIA	cPP	AFIB	PVP wave	CODE	NOTE
	Average	120	76	69	86	44	121	72	49				
1	04.17.2019 10:44	128	77	66	85	51	130	71	59		\sim		
2	04.17.2019 10:45	114	73	70	79	41	115	71	44		\sim		
3	04.17.2019 10:47	118	78	70	93	40	119	75	44		\sim		



-		-											
	Date	SYS	DIA	MAP	PP	ABI	Limb	HR	AFIB	Exclude	PVP wave	CODE	NOTE
1-1	05.20.2020 15:14	131	79	87	52		RightArm	93			\sim		
1-2	05.20.2020 15:14	140	92	98	48	1.07	RightLeg	93			\sim		
2-1	05.20.2020 15:15	129	72	82	57		RightArm	88			\sim		
2-2	05.20.2020 15:15	136	88	99	48	1.05	RightLeg	88			\sim		
3-1	05.20.2020 15:18	128	73	82	55		LeftArm	90			\sim		
3-2	05.20.2020 15:18	142	88	98	54	1.11	LeftLeg	90			\sim		

Fig. 6 Double arm measurement of WatchBP Office ABI

Note: The first number indicates the order of recording. The dash and number after the first number indicate that the blood pressure of different limbs was measured at the same time. (The examples are framed by red blocks)

	Date	SYS	DIA	MAP	PP	cSYS	cDIA	cPP	ABI	PWV	Index of cycle	Limb	Posture	HR	AFIB	Exclude	PVP wave	CODE	NOTE
1	2020.12.02 15:29										1	LeftArm		124				ER 5,	Abnormal result,
2	2020.12.02 15:31	104	61	70	43	107	61	46			2	LeftArm		65			\sim		
3-1	2020.12.03 13:22	93	52	71	41				1.58	1234	1	LeftArm	Supine	56			\sim		
3-2	2020.12.03 13:22	147	92	115	55				1.58	1234	1	LeftLeg	Supine	56			~		
4-1	2020.12.03 13:24	92	51	63	41				1.59	1234	2	LeftArm	Supine	58			\sim		
4-2	2020.12.03 13:24	146	87	106	59				1.59	1234	2	LeftLeg	Supine	58			\wedge		
5	2020.12.03 13:37	152	98	110	54	135	88	47			1	LeftArm	Supine	58			\sim		
6	2020.12.03 13:38	146	94	112	52						2	LeftArm	Supine	61				ER 15,	Abnormal central blood pressure reading,

Fig. 7 WatchBP Office Vascular measurement list

Note: The first number indicates the order of recording. The dash and number after the first number indicate that the blood pressure of different limbs was measured at the same time. (The examples are framed by red blocks)

Me	asurement	Re	port					
	Date		SYS	DIA	PP	HR	AFIB	Exclude
1	19.08.2022	10:47	134	68	66	45		
2	19.08.2022	11:25	122	106	16	124		
3	19.08.2022	11:38	164	81	83	73	*	
4	22.08.2022	16:38	160	73	87	81	*	
5	22.08.2022	20:39	105	72	33	80		

Fig. 8 Usual Mode readings of the WatchBP Home

Me	asurement R	eport					
	Date	SYS	DIA	PP	HR	AFIB	Exclude
	Average	130	77		62		
	Morning Average	127	76		61		
	Evening Average	133	77		63		
	Day 1						
I	02.07.2011 07:00	151	96	55	61		
2	02.07.2011 07:03	150	95	55	60		
3	02.07.2011 19:00	151	96	55	61		
L	02.07.2011 19:03	150	95	55	60		
	Day 2						
5	03.07.2011 07:00	121	71	50	61		
5	03.07.2011 07:03	122	72	50	62		
	Day 3						
7	04.07.2011 07:00	121	71	50	61		
8	04.07.2011 07:03	122	72	50	62		
9	04.07.2011 19:00	121	71	50	61		
0	04.07.2011 19:03	122	72	50	62		
	Day 4						
11	05.07.2011 07:00	121	71	50	61		

Fig. 9 Diagnostic Mode readings of the WatchBP Home

The fields of measurement area are explained as below.

[Fields Interpretation]

Fields	Interpretation
Exclude	If the Exclude field is checked, the corresponding reading will be excluded in
	the analysis and the report.
Average without first	Users could check the box to average the data without the first measurement.
measurement:	
Pulse Volume	When double clicking on the data showing a small wave icon, the PVP
Plethysmographic (PVP)	waveform of the corresponding measurement will be displayed (only for the
waveform:	central BP option). (Fig. 10a and 10b)
Code and Note:	Displays the codes of errors or events and brief description of the codes. Refer
	"Code, note and potential cause and remedy" for detail.

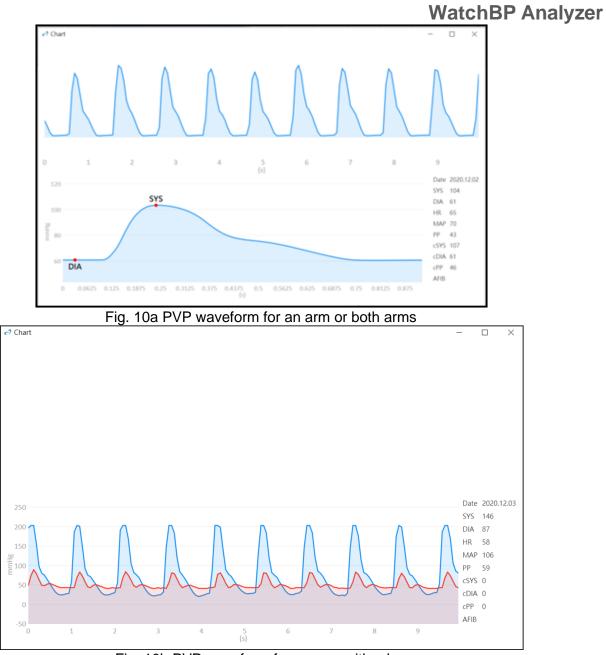


Fig. 10b PVP waveform for an arm with a leg

2.5 Report Area

[Button Functions]

The button functions are interpreted as below.

Buttons	Interpretation
Setting Office Blood	Choose the threshold of systolic and diastolic from the drop-down menus. The
Pressure Threshold	values over the chosen threshold will be shown in red in the report.
Report option	Click to hide AFIB result.
Customization	You can type the name of center/hospital, and upload an image file as your customized logo and the information you provided above will be displayed in the PDF report, folder, and XLSX report. You can choose the storage path here.
Generate PDF Report	Click to generate a PDF report for the selected Measurement Folder.
Open Folder	Open the folder that contains the reports of the selected patient.
Generate XLSX report	Click to generate an Excel report of the selected Measurement Folder.

Report	
14589	
Clearwater Hospital	
	Select Image File
C:\Microlife\WatchBP Analyzer\Report	Path
ate PDF Report Open Folder	Generate XLSX
	14589 Clearwater Hospital C:\Microlife\WatchBP Analyzer\Report

Fig. 11

3 Working with WatchBP Analyzer

3.1 Patient Registration

You can manage the patients' information on the patient information area (Fig 12).

Name	ID	Gender	Age	DOB	Physician	New
Green Lantern	GL	Male	30	1988.07.27	Dr. 1	Edit
Harley Quinn	HQ	Female	68	1950.07.02	Dr. Quinzel	Delete
Super Man	SM	Male	30	1988.09.05	doctor2	Delete

Fig. 12

(1) Add a new patient:

Step1: Click the **New** button, a dialog box will be shown. (Fig 13a). Step2: Input the patient ID, Name, Sex and Date of Birth; Physician ID, Email (optional) and Phone number (optional), then click **Ok** button to finish the patient registration.

Note: The operator cannot register a used Patient ID. (Fig. 13b)

Patient Information

Patient	
💄 Name	
ç [¶] Sex	● Male ○ Female
📥 Date of Birth	6/13/1993
Physician	
🖾 Email	
📞 Phone	
I	OK Cancel

Fig. 13a

Patient Info	ormation	
Patient		
Patient ID	Microlife	
	The patient ID is already in use. Please enter a different patient ID.	
💄 Name		
ç [™] Sex	Male O Female	_
📥 Date of Birth	7/24/1993	
Physician		•
		_
Se Phone		_
	OK Cancel	
	Fig. 13b	

(2) Edit the patient information:

Step1: Select a patient and then click **Edit** button, the patient information dialog box with the record will be displayed.

Step2: Edit the information and click Okay button to save the changes.

(3) Delete the patient:

Step1: Select the patient's account and then click **Delete** button. Then, a confirmation screen will be shown.

Step2: Press "yes" to delete the selected patient account from the list.

3.2 Program Settings to the Device

WatchBP Analyzer allows users to program settings to the device. First of all, users have to connect the WatchBP device to the WatchBP Analyzer. There are two ways to connect with the device: (1) Connect by USB cable, (2) Connect via Bluetooth.

Note: Program device will automatically clear all measurement data from the device. Make sure the measurement data on the device are downloaded to the PC before you program the device!

3.2.1Bluetooth Connection

Model	Pairing – device	Ready to pair	Connected
WatchBP Office	Press and hold the	Bluetooth indicator	Shows Bluetooth indicator on
(BP3SK1-3B)	MODE button for 7	flashes	device. Displays device
(BPSSKI-SB)	seconds		information on the Analyzer.
WatchBP Office Vascular	Press and hold the	Bluetooth indicator	Shows Bluetooth indicator on
	MODE button for 7	flashes	device. Displays device
(TWIN200VSR)	seconds		information on the Analyzer.
WatchBP O3	Press and hold the	Bluetooth indicator	Shows Bluetooth indicator on
	Start/Stop button for 3	flashes	device. Displays device
(BP3SZ1-1)	seconds		information on the Analyzer.
Note: Bluetooth commu	vication doosn't support	with Windows 7 8 9	

Note: Bluetooth communication doesn't support with Windows 7 & 8.

Step1: Click Bluetooth at the upper right of the WatchBP Analyzer, then the available Bluetooth device will

be shown. Step2: Select the specific WatchBP device and click the **Connect** button to connect it. (Fig. 14)

♂ Watch8P Analyzer v1.0.0.33				– 🗆 X
microlife WatchBP				Bluetooth About
Device	Patient	Bluetooth		Q. Search
Device Name: Program device Device ID: Batteries Measure Type: Download	Name Mix Data 01 New 03 Device E3-13 (no AFIB)	Name: WatchBP 03 MAC: DD2A718867CF Pair: True Signal Strength: -56 db	D08 1943.02.01 1979.11.13 2005.06.15	Physician New Dr. A+ Edit abcdefghijkimnop Delete
Folder Measurement	Report	Connect Close		
				Copyright © Microlife Corporation. All rights reserved.

Fig. 14

Step3: Device information will be displayed once the connection is successful.





Note: If the Bluetooth connection keeps failing, please reset the Bluetooth bonding by pressing and holding the Mode button of the device for 7 seconds (WBP Office 2G and Office Vascular) or Start/Stop button of the device for 3 seconds (WBP O3 2G) and then start the connection again. Refer to user manual of the device for clearing bonding.

3.2.2 Program ABPM

3.2.2.1 Setting User Interface

There are two types of ABPM mode: (1) 2-schedules and (2) 5-schedules

Program ABPM

		Meas Sch	urem nedul			irement erval	CBP Meas Inte		Silent Mode	Central BF
	9	*	2	21	15	-	15	v	\checkmark	
	21	-	~	9	15	-	15	∇	\checkmark	
Auto	_	C		nual	ressure		_	e BP readin	l atory Opt	
*Auto is	s Reco	mmeno	ded	~	mmHg					

*Program device will automatically clear all measurement data on the device

Fig. 16: 2 schedules

Program ABPM

				rement dule			suremer nterval	nt	Measurement Reminder	Central BP
1	7	*	~	23	*	15		*	\checkmark	\checkmark
2	23	*	~	7	*	60		*		
3		v	~		Ŧ			v		
4		Ŧ	~		Ŧ			Ŧ		
5		Ŧ	~		Ŧ			Ŧ		
Setting Hi	ghest	Infla	tior	Pres	sure			s	Setting Ambulat	ory Option
Auto		Ом	lanua	ıl				C	Hide BP reading	
*Auto is R	ecomn	nende	d	mm	пНg					
				_		am		ncel		

*Program device will automatically clear all measurement data on the device

Fig. 17: 5 schedules

<Setting measurement periods>

Click the number of periods you want to have.

Set the start and stop hours to the period by the drop-down menu.

Select the interval time between each measurement.

Select the interval time between central blood pressure measurement. (For 2-schedule WBP O3 2G device) Select 'Measurement Reminder' to able Measurement reminder, in which the device will partially inflate to approximately 50 mmHg and immediately deflate the cuff to remind the patient of the upcoming

measurement, one minute before the next scheduled measurement. (For 5-schedules ABPM device) Select 'Silent mode' to disable the warning beep before starting the measurement. The patient will still get a warning 1 minute before the measurement by means of a short inflation of the cuff. The patient should keep the arm still during blood pressure measurement. (For 2-schedules ABPM device)

Click the Central BP if you want to measure the central blood pressure. (Optional, the device should support central blood pressure measurement)

<Setting Highest Inflation Pressure>

The "Highest Inflation Pressure" can be programmed to the device. The 'Auto' option is recommended because then the device will automatically inflate the cuff to the optimal cuff pressure. With the 'Manual' option you can select 180, 200, 220 or 240mmHg. The suggested Inflation Pressure is 30 to 40 mmHg above the expected systolic blood pressure value of the patient. If the selected Highest Inflation Pressure selected is too low to measure a patient's blood pressure it may result in re-pumping or erroneous blood pressure measurement values.

<Setting Ambulatory Option>

Select the 'Hide BP reading' to hide the readings of the measurement results during monitoring. This is the recommended option (default).

3.2.2.2 Program ABPM

When the above settings are done, click **Program** button to program the settings to the connected WatchBP O3 device.

3.2.3 Program Office

3.2.3.1 Setting User Interface

Number of measurements	5 👻
Countdown time before the first measur	rement 15 👻
Interval time between measurements	15 -
Average without first measurement	
Child Mode (safeguard)	Measurement options
◯ Enable	✓ Hide BP reading
mmHg	🗹 Enable Central Blood Pressure Measurement
Progra	am Cancel

<Setting Number of measurements>

The number of measurements can be set from 1 to 6 measurements. Both the Count-down time before first measurement and Interval time between measurements can be set at 15, 30, 60, 120, 180, 240 and 300 seconds. Average without first measurement can be selected if Number of measurements is 3 measurements or more. When selected, the first measurement will be discarded from the average blood pressure value.

<Child Mode (safeguard)>

On default this mode is on Disable – the device automatically inflates the cuff to an optimal cuff pressure for blood pressure measurement. While enable is selected and confirmed by program, the device automatically inflates the cuff to an optimal cuff pressure not higher than the pressure selected for Child Mode, however, the device may re- inflate the cuff to a pressure higher than the selected pressure if needed.

<Measurement options>

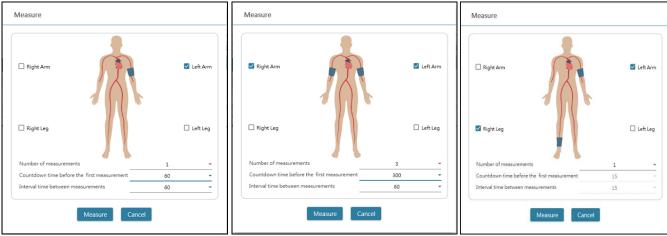
Hide BP readings and enable central BP measurement can be programmed to the device. Please refer to the instruction manual of the device for detail of the features.

3.2.3.2 Program to the Office Device

When the above settings are done, click **Program** button to program the settings to the connected WatchBP Office device.

3.3 Perform Measurement by WatchBP Analyzer

3.3.1 WatchBP Office ABI Measurement



3.3.1.1 Setting User Interface

Fig. 19

Example of the selection of an arm (left), both arms (middle) and Ankle-brachial Index measurement (right).

<Select the Intended Limb(s)>

Choose the intended limb(s) for the measurement at the top area. Note: only allow the selection of an arm, both arms, or an arm with a leg (ABI measurement).

<Setting Number of measurements>

The **Number of measurements** can be set from 1 to 6 measurements when you want to measure the blood pressure of an arm or both arms. Both the **Count-down time before first measurement** and **Interval time between measurements** can be set at 15, 30, 60, 120, 180, 240 and 300 seconds.

3.3.1.2 Performing Measurement

When the above settings are done, click Measure button to program the settings to the connected WatchBP

Office ABI and then the measurement will be started.

The status of the measurement procedure is shown in the device information area, measurement readings will be automatically downloaded after each measurement.

During the measurement, the **Measure** button will be switched to **Stop** button; Click **Stop** button if users would like to stop the measurement. (Fig. 20)



3.3.2 WatchBP Office Vascular Measurement

3.3.2.1 Setting User Interface

🗆 Right Arm		🗹 Left Arm
🗆 Right Leg	•፤ <u>160</u> cm	🗌 Left Leg
Number of measurements	1	*
Countdown time before the first meas	ement 15	*
Interval time between measurements	15	*
Patient's position	Supine	*
Child Mode (safeguard) Enable O Disable 180 mmHg	Measurement options Hide BP reading Enable Central Blood Pressure M Repeat when error 	easurement

Fig. 21

<Select the Intended Limb(s)>

Choose the intended limb(s) for the measurement at the top area.

<Setting Patient's Height>

The **patient's height** can be set by typing or by adjusting the bar of height. **Note: The patient's height is crucial for PWV. Please set the height correctly when taking the PWV measurement.**

<Setting Number of measurements>

The **number of measurements** can be set from 1 to 6 measurements when you want to measure the blood pressure of an arm or both arms. Both the **count-down time before first measurement** and **Interval time between measurements** can be set at 15, 30, 60, 120, 180, 240 and 300 seconds.

<Child Mode (safeguard)>

On default this mode is on **enable** – the device automatically inflates the cuff to an optimal cuff pressure for blood pressure measurement. While **disable** is selected, the device inflates the cuff to an optimal cuff pressure not higher than the selected pressure in the **Child Mode**, however, the device may re-inflate the cuff to a pressure higher than the selected pressure if needed.

3.3.2.2 Performing Measurement

Hide BP readings and **Enable Central BP Measurement** can be programmed to the device. Please refer to the instruction manual of the device for detail of the features.

When the above settings are done, click **Measure** button to program the settings to the connected WatchBP Office Vascular and then the measurement will be started.

The status of the measurement procedure is shown in the device information area, measurement readings will be automatically downloaded after each measurement.

During the measurement, the **Measure** button will be switched to **Stop** button; Click **Stop** button if users would like to stop the measurement. (Fig. 22)

Device				
Device Name: Device ID:	Office Vascular D4888073EFF1	Program device		
Batteries	6.7 V	Stop		
Туре:	AFIB, Central BP, ABI, PWV	Download		
Status: 1/6	Countdown: 44	Fix 00	Status: 1/6	Countdown: Stop

Fig. 22

3.4 Download Readings from WatchBP Devices

Step1: Users need to connect the device to the WatchBP Analyzer first to download the readings from the WatchBP device. Users could refer to Ch 3.2 and 3.2.1 to know how to connect the device. Once the device connection is successful, the device information will be displayed in the Device area as below.

Device		
Device Name:	WatchBP Home A	
Device ID:	BT011	
User ID:	1001	
Batteries	4.4 V, Renew battery	
Type:	AFIB	Download

Fig. 23

Step2: Select a patient by clicking anywhere of that patient bar.

tient				Q Search		
Name	ID	Gender	Age	DOB	Physician	New
Green Lantern	GL	Male	30	1988.07.27	Dr. 1	Edit
Harley Quinn	HQ	Female	68	1950.07.02	Dr. Quinzel	Delete
Super Man	SM	Male	30	1988.09.05	doctor2	Delete

Fig. 24

Step3: Click the **Download** button to transfer the BP data from the device to the **Folder** of that patient in WatchBP Analyzer. If the selected patient ID on the software is different from the patient ID that has been programmed to the device, a message as below will be shown. Users need to select which patient ID needs to be assigned to retrieve the data. (Fig. 25, WatchBP O3 only). Once the patient ID is selected, click **Continue** button to download the data.

Fig. 25 (HQ and SM are the patient ID examples)

Step4: If the device was programmed to also perform central blood pressure measurement, another dialogue as below will be displayed. Check the check box before **transfer waveform data** and click **Continue** button to download the waveform. (Fig. 26)

Download
transfer waveform data (It may takes a few minutes to download all the raw data)
Continue Back

Fig. 26

Step5: When the data download is done, the corresponding date and time folder will be added to the assigned patient.

3.5 Review the Retrieved Readings

Step1: Select the specific date from the folder area. The Folder is named by the device or measurement mode. All of the folders could refer to the Ch.2.3.

Folder	
WatchBP Home A Diagnostic Mode	~
WatchBP Office Vascular	~
WatchBP Office 2G	\sim
WatchBP 03 2G ABPM Mode	^
07.03.2023	
07.03.2023 07.17.2023	
	~
07.17.2023	~

Fig. 27

Step2: Click Measurement Tab to review the measured records of the Folder.

Meas	urement Report												
	Date	SYS	DIA	HR	MAP	PP	cSYS	cDIA	cPP	AFIB	Exclude	PVP wave	CODE
3	07.30.2018 10:21	119	76	68	82	43	119	73	46			\sim	4,8
4	07.30.2018 10:22	119	78	68	86	41	120	75	45			\sim	4,8
5	07.30.2018 10:23	117	82	76	93	35	116	77	39	*		\sim	4,8
6	07.30.2018 10:25	115	78	72	87	37	116	75	41			\sim	4,8
											_		

Fig. 28

3.6 Export Report

Step1: Select the specific date from the folder area.

Folder	
WatchBP Home A Diagnostic Mode	\sim
WatchBP Office Vascular	~
WatchBP Office 2G	\sim
WatchBP 03 2G ABPM Mode	^
07.03.2023	
07.17.2023	
WatchBP 03 2G Manual Mode	\sim
WatchBP 03 1G ABPM Mode	\sim
WatchBP 03 1G Casual Mode	~
Fig. 00	

Fig. 29

Step2: Click Report Tab to view the settings and generate report of the Measurement Folder.

WatchBP Office, WatchBP O3 and WatchBP Home series have different user interface of report tab. It's described as below.

3.6.1 Report Tab of WatchBP O3 Series

The report tab of WatchBP O3 is shown as below. It can be divided into (1) setting area, (2) option area and (3) customized area.

Measurement	Report						
Setting Blood Pr	essure Threshold						
	24-hour SYS	130	▼ mmHg	24-hour DIA	80	▼ mmHg	
	Day SYS	135	▼ mmHg	Day DIA	85	▼ mmHg	
	Night SYS	120	➡ mmHg	Night DIA	70		
Setting Actual A	wake / Asleep Time						
		Awake Time	14	 Asleep Time 	16 👻		
Report Option Hide error and Hide AFIB resu							
Customization Physician	MICROLIFE						
Centre/Hospital	Hospital						
Customized logo	C:\Users\betsy.huang\Desktop\						Select Image File
Report Folder	C:\Microlife\WatchBP Analyzer\Repo	rt					Path
	Generate PDF Report			Open Folder		Generate XLSX R	leport



3.6.1.1 Settings Area

Setting B	Blood Pressure	Threshold							
5	24-hour SYS	130		mmHg		24-hour DIA	80	*	mmHg
	Day SYS	135	*	mmHg		Day DIA	85	*	mmHg
	Night SYS	120	*	mmHg		Night DIA	70	*	mmHg
Setting /	Actual Awake / /	Asleep Tin	ne						
		Awake Tin	ne	7	*	Asleep Time	22	*	

Setting Blood Pressure Threshold:

Users can use the default threshold values (as recommended by the guidelines) or select another threshold value for 24h-hour, day and nighttime blood pressures.

Setting Actual Awake/ Asleep Time:

Users could modify the awake and asleep time according to patient's actual lifestyle. The awake time can be selected from 00:00 to 23:00, asleep time can also be selected from 00:00 to 23:00.

3.6.1.2 Option Area

Report Option

Hide error and event messages
Hide AFIB result

Fig. 32

Hide error and event messages:

The error and event can be hidden in the PDF report. **Hide AFIB result:** The AFIB alert can be hidden in the PDF report.

3.6.1.3 Customization Area

Report	
Dr. Doctor	
Hospital	
C:\Users\Public\Pictures\Sample Pictures\Tulips.jpg	Select Image File
C:\Microlife\WatchBP Analyzer\Report	Path
te PDF Report Open Folder Generate XLS	X Report
	Dr. Doctor Hospital C:\Users\Public\Pictures\Sample Pictures\Tulips.jpg C:\Microlife\WatchBP Analyzer\Report

Fig. 33

Users can set (1) Physician Information, (2) Hospital Name, (3) Report Logo and (4) Save Folder Path at this

3.6.1.4 Input Auto Comment

Click the **Generate PDF Report** button, an **Auto comment** dialog appears with the comments will be automatically generated. The comments can be modified or added manually.

Auto comment
Daytime Normotension, Isolated 24-h Diastolic Hypertension, Isolated NightTime Diastolic Hypertension, White Coat Hypertension, Non-Dipper
Save Cancel

Fig. 34

Then click **Save** button to generate the report.

3.6.1.5 PDF Report

Wato Ambulatory Bio Measurement	od P	rest		C)3			iam iex ige	of bi		HQ Harley Q Female 68 07.02.19			Phys Ema Phot		NY .	Dr. Qui Hadayi	Babc.o	om
Day and Night	Peri	ođ		_		-		16	10 — QL	-								_	
		TIM			ERVAL														
Day: Night:		7-2		30 1				24	- 0	-			-					**	Ax
regnt.		20	410.	301		_				1 1	~	~	1	4			3	JY1	NIA
Actual Awake	/ Ask							211	10 -	Ful	-	V-		1	77	~	al	Y	Y W
Awaka: Asleep:			0 h 7 h					2						- V	V		NA.		
		-	17					(MCLEVELDIA)	0				-						
BP Threshold								1	1	-	NA	-	-	1	1		_	~ 1	1. 1
24-hr: Day:				nmHg nmHg				1	10	M	IV	V	ii:	1	AP	V			VN
Night:				nmHq						-	1.					-	5		1111
Deathers								.4	- 01	-									
Readings Total Readings		63																	
Successful:		60	95.2					10	10	-									
AFIB:		18	30.0	%)				£.4	10 -	-			-		m	+++	-	~	
White Coat W	Indov	۲						-	40 -	-			-	-				-	
		SY	8	DU					10	1		1	-					-	AFIB • Normal
Readings 1st hr Max		2 136	8	2	2			Med.		11								1	
	_	-	2		·	_			10:00	12:00 14	00 16:00	18:00	20:0	0 22:0	0 00:00	0 02:00 0	4:00 96:0	0 08.00	10:00 12:00
Night-time Dip	1%																		
and the second second																			
		SY			DIA		19												
Dip%		5Y1			DIA 6 %		5	Aver	rage	Blood Pre		-		MAP	pp	cSYS	cDIA	cPP	AFIB(%)
Dip% BP Load	1	8%			6%	-	Ű.	24-h	r .	SYS 124(8)	D6A 81(6)	HF	(4)	MAP 95	PP 42	-(-)	cDIA -(-)	cPP	AFIB(%) 18(30)
Dip% BP Load Day readings		8%				-			r ko	SYS	DIA	HR	(4) (3)						
Dip% BP Load Day readings		8%	35/8/		6 % 53.8 %	-		24-h Awai	r ko	5YS 124(8) 127(6)	DIA 81(6) 83(6)	HR 68 68	(4) (3)	95 97	42 44	**	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings		8% ≥ 1 ≥ 1	35/8/	0	6 % 53.8 %	575		24-h Awai Aslo	r ka ep	5YS 124(8) 127(6)	DIA 81(6) 83(6)	HR 68 68	(4) (3) (5)	95 97 90	42 44 38	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings The sys on 12 13.2018		8% ≥ 1 ≥ 1	35/8/	0	6 % 53.8 % 85.7 % TMC 21.90	8Y8		24-h Aosto HR 63	r ko op uv ss	5YS 124(8) 127(6) 117(5)	DIA 81(6) 83(6) 78(6) 78(6)	HR 68(68) 69(876 1	(4) (3) (5)	95 97 90 R MP 15 91	42 44 38	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Take sys GA 12.13.2018 10.20 138 94	HR 1	≥ 1 ≥ 1	35/8/	0	6 % 53.8 % 85.7 % Twe 21.90 22.00	107	044	24-h Aoval Aslo 63 63	rka op	5YS 124(8) 127(6) 117(5)	DIA 81(6) 83(6) 78(6) 78(6)	HR 68 68 69 878 1 121	(4) (3) (5) 78 4 78 7	95 97 90 8 8 15 91 14 101	42 44 38	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13.2018 10.0 132 46 11.00 132 46 11.00 132 46 11.00 133 46	HR 1	8 % ≥ 1 ≥ 1	35/8/	0	6 % 53.8 % 85.7 % 756 21.50 22.00 22.00 22.00 22.00 22.00	107 122 121	04 80 75 77 88	24-h Aslo Aslo 63 63 63 79	r ka op	5YS 124(8) 127(6) 117(5)	D6A 81(6) 83(6) 78	HR 68 69 69 121 131 127 146	(4) (3) (5) 34 H 75 C 75 7 73 7	95 97 90 8 407 15 91 14 97 15 97	42 44 38	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings 112 13.2018 10.0 133 66 11.30 119 35 11.30 119 35	70 1 65 1 64 87	8 % ≥ 1 ≥ 1	35/8/	0	6 % 53.8 % 85.7 % 700 2100 2200 2200 2300 2300 2300	107 122 121 108	04 80 75 77 88	24-h Aostal Asla 63 63 65	r ko op	5YS 124(8) 127(6) 117(5)	D6A 81(6) 83(6) 78	HR 68(68) 69(121 131 127 145 121	(4) (3) (5) (5) (6) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 8 407 15 91 14 97 15 97 17 97	42 44 38 **	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13.2018 10.0 132 46 11.00 132 46 12.00 130 40 12.00 120 40 12.00 121 77 12.45	100 1 1 70 1 1 70 1 70 1	8 % ≥ 1 ≥ 1	35/8/ 20/71	0	6 % 63.8 % 85.7 % 7145 2120 2200 2230 2300 2330 2300 2134 12.41 2000	107 122 121 105 105 108	AN 10 17 14 14 45	24-h Awal Aslo 60 60 79 71 78	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	\$Y8 124(8) 127(6) 117(5) *** cocce	DIA 81(6) 83(6) 78	HR 68(68(69) 121 131 127 146 121 124 121	(4) (3) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 15 91 15 91 14 97 15 97 15 97 15 87 15	42 44 38 * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13 2018 10 12 12 12 12 01 120 120 12 00 120 121 12 00 120 120 12 00 120 121 12 00 120 120 12 00 1	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 % ≥ 1 ≥ 1 ≥ 1	35/8/ 20/71	cooe	6 % 53.8 % 85.7 % 7mm 21:90 22:90 22:90 22:90 23:90 23:90 23:90 12:142 0000 00:30	107 122 121 105 105 108 119	······································	24-h Awal Aslov 60 60 79 71 78 71	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SYS 124(8) 127(6) 117(5) *** * *	DIA 81(6) 83(6) 78	HR 68(68(69) 121 131 127 146 121 124 121 124 121 124 121	(4) (5) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 15 91 15	42 44 38 * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13 2018 10 23 46 11 20 119 25 12 20 121 20 40 12 20 121 20 40 12 30 120 28 13 00 120 28 13 00 120 28 13 00 28 10	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 % ≥ 1 ≥ 1	35/8/ 20/71	cooe	6 % 63.8 % 85.7 % 7145 2120 2200 2230 2300 2330 2300 2134 12.41 2000	107 122 121 105 105 108	AN 10 17 14 14 45	24-h Awal Aslov 60 60 79 71 78 71 75	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	\$Y8 124(8) 127(6) 117(5) *** cocce	DIA 81(6) 83(6) 78	HR 68(68(69) 121 131 127 146 121 124 121	(4) (3) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 15 91 15 91 14 97 15 97 15 97 15 87 15	42 44 38 * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 1030 128 04 1130 138 64 1130 138 65 1230 120 85 1230 120 75 1330 129 85 1400 104 65 1430 127 75	20554072 78715868	8 % ≥ 1 2 ≥ 1 06 01 96 90 91 92 99 75 92	35/8/ 20/71	cooe	6 % 63.8 % 85.7 % 7mm 21.90 22.00 22.90 22.90 22.90 22.90 23.90 23.90 23.90 0.20 0.00 0.00 0.00 0.00 0.00 0.00 0	107 122 121 105 105 108 108 119 117 119 118		24-h Axiala Aslo ## 60 66 79 71 75 77 75 75	1.000 1 33333 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SYS 124(8) 127(6) 117(5) *** * *	DIA 81(6) 83(6) 78	HR 68 68 69 121 121 121 121 121 121 121 121 121 12	(4) (3) (5) (4) (5) (5) (4) (5) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 8 M 15 91 15	42 44 38 * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13 2018 10 13 41 11.00 13 44 11.00 13	11 11 11 11 11 11 11 11 11 11 11 11 11	8 % ≥ 1 1 ≥ 2 1 05 05 95 95 95 95 95 95 95 95 95 95 95 95 95	35/8/ 20/70	cooe	6 % 53.8 % 85.7 % 21.90 22.90 22.90 23.90 20.90	107 122 121 108 108 119 117 119 118 114		24-h Axea Aslo 60 60 79 71 78 71 79 71 66	120 1 11111 1 1111 1 1111	SYS 124(8) 127(6) 117(5) *** * *	DIA 81(6) 83(6) 78	HR 68(68(69) 121 127 145 127 145 127 145 121 124 125 122 145 122 145 122 145 122 145 122	(4) (5) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 6 97 90 6 97 90 6 97 90 8 97 90 8 97 90 8 97 90 8 97 90 90 90 90 90 90 90 90 90 90 90 90 90	42 44 38 * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13.2018 13 20 128 12 0 218 13 0 129 13 0 129 13 0 128 13 0 128 13 0 128 13 0 128 13 0 128 13 0 128 15	● 70554472 767158456572	8 % ≥ 1 1 ≥ 1 1 06 01 90 90 90 90 90 90 90 90 90 90 90 90 90	35/8/ 20/71	cooe	6 % 63.8 % 85.7 % 7mm 21.90 22.00 22.90 22.90 22.90 22.90 23.90 23.90 23.90 0.20 0.00 0.00 0.00 0.00 0.00 0.00 0	107 122 125 108 108 108 108 119 117 118 117 118 114 117 107		24-hh Asia ## 60 06 79 71 78 71 78 70 66 70 66	1200 1 1212 1 1 12 1 1 1 1 1 1 1 1 1 1 1	SYS 124(8) 127(6) 117(5) *** * *	DIA 81(6) 83(6) 78	HER 680 680 690 121 131 127 127 140 120 121 124 120 122	(4) (3) (3) (4) (3) (4) (3) (4) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (4) (5) (5) (5) (5) (5) (5) (5) (5	95 97 90 8 44 15 91 15 87 15 88 16 97 15 88 16 97 16 97 16 97 16 97 16 97 16 97 16 97 17 98 18 90 17 190 18 90 19 90 10 90 100 100 100 100 100 100 100 100 100 1	42 44 38 * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13.2018 100 133 146 11.30 119 45 12.30 121 77 12.45 13.00 120 85 14.00 104 65 14.30 127 76 15.90 125 66 1600 127 76 15.90 125 66 1600 127 76 15.90 127 85 15.90 128 86 15.90 128	2055年172 7675866657279	8 % 2 2 2 M 06 01 98 00 78 00 99 76 00 90 90 90 90 90 90 90 90 90 90 90 90	35/8/ 20/70	cooe	6 % 63.8 % 85.7 % 21.90 22.00 23.90 23.90 23.90 12.33 00.00 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.000000	107 122 121 125 125 125 125 125 125 125 125		24-hh Asia ## 6555777 7877 7877 6876 69		SYS 124(8) 127(6) 117(5) ** * *	DIA 81(6) 83(6) 78	HER 680 680 690 121 131 127 124 121 124 125 125	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 8 44 15 101 15 10 16 10 17 15 10 16 10 10 10 10 10 10 10 10 10 10 10 10 10 1	42 44 38 * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:13/014 100 123 14 10 123 14 10 123 14 10 123 14 10 123 14 15 14 1 12 12 14 1 1 1 1 1 1 1 1 1 1 1 1 1	2055年172 7675866657279	8 % ≥ 1 1 ≥ 1 1 06 01 90 90 90 90 90 90 90 90 90 90 90 90 90	35/8/ 20/70	0 CODE 1	6 % 53.8 % 85.7 % 21.50 22.00 22.00 22.00 22.00 22.00 22.00 22.00 22.00 20.00 0.00 0.00 0.000 0.000	107 122 125 108 108 108 108 119 117 118 117 118 114 117 107	······································	24-hh Asia ## 6555777 7877 7877 6876 69	1200 1 1212 1 1 12 1 1 1 1 1 1 1 1 1 1 1	SYS 124(8) 127(6) 117(5) *** * *	DIA 81(6) 83(6) 76(5) 76(5) 78	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12 13 2018 50 30 136 94 11 30 139 85 12 30 121 77 12 45 13 30 120 85 14 30 120 85 14 30 120 85 14 30 127 75 15 40 127 75 15 40 127 75 15 40 127 85 15 40 127 85 15 40 127 85 15 40 128 85 15 40	1 2015年1122 2017年11日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日	8 % ≥ 1 1 2 2 1 1 2 2 2 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 1	35/8/ 20/70	0 CODE 1	6 % 63.8 % 85.7 % 21.90 22.00 22.00 22.00 22.00 22.00 23.00 23.00 23.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	107 122 121 125 125 125 125 125 125 125 125		24-hada		SYS 124(8) 127(6) 117(5) ** * *	DIA 81(6) 83(6) 78	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 8 44 15 101 15 10 16 10 17 15 10 16 10 10 10 10 10 10 10 10 10 10 10 10 10 1	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 1030 128 94 1130 138 94 1130 138 64 1130 138 65 1230 120 75 1230 121 77 1245 120 120 78 1330 128 85 1400 104 65 1400 104 65 1400 124 85 1400 125 85 1400	1 2015年1122 2017年11日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日	8 % ≥ 1 1 ≥ 2 1 06 01 98 99 975 90 99 975 90 99 975 90 99 975 90 99 91	35/8/ 20/70	0 coooe 1	6 % 63.8 % 85.7 % 21.90 22.90 22.90 22.90 22.90 23.90 20	107 122 121 106 108 108 119 119 118 114 117 108 115 117 108 115 117 108		24-hada # 68-687971 7871 7877 6670 66671 74 67 66		SYS 124(8) 127(6) 117(5) ** * *	DIA 81(6) 83(6) 76(5) 76(5) 78	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:13.2018 10:33 130 130 130 130 130 130 130 120 120 120 120 120 120 120 120 120 12	第 70時料町2 76719時時時27944町科町	8 % ≥ 1 1 2 2 1 1 2 2 2 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 1	35/8/ 20/70	0 CODE 1	6 % 63.8 % 85.7 % 7100 21.90 22.00 22.90 23.90 20.90 20.90 23.90 20.	107 122 106 108 108 108 108 108 119 117 108 117 108 115 117		24 ht 65 65 73 71 75 77 75 75 75 66 71 74 67 67 72		SYS 124(8) 127(6) 117(5) ** * *	DIA 81(6) 83(6) 76(5) 76(5) 78	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:13.2015 10:32 126 12:10 123 11:30 126 12:20 121 12:20 121 12:20 121 12:30 120 12:30 120 12:30 120 12:30 120 12:30 120 12:30 120 12:30 120 15:30 125 15:30 125 15:30 125 15:30 125 17:30 138 17:30 138 17:30 138 17:30 138 17:30 128 18:30 128 18:30 128 18:30 128 18:30 128	第 70時料約72 7575時時時分275654468 691	E % 2 ≥ 2 1 1 005 005 005 006 </td <td>35/8/ 20/70</td> <td>0 coooe 1</td> <td>6 % 53.8 % 85.7 % 21.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 23.90 20</td> <td>107 122 121 106 108 119 118 117 118 114 117 108 115 117 100 108 115 117 110</td> <td></td> <td>24Awala</td> <td></td> <td>SYS 124(8) 127(6) 117(5) ** * *</td> <td>DIA 81(6) 83(6) 76(5) 76</td> <td>HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11</td> <td>(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7</td> <td>95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8</td> <td>42 44 36 * * * * *</td> <td>* * *</td> <td>-(·) -(·)</td> <td></td> <td>18(30) 10(26)</td>	35/8/ 20/70	0 coooe 1	6 % 53.8 % 85.7 % 21.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 23.90 20	107 122 121 106 108 119 118 117 118 114 117 108 115 117 100 108 115 117 110		24Awala		SYS 124(8) 127(6) 117(5) ** * *	DIA 81(6) 83(6) 76(5) 76	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:13.2018 50.30 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 14:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 12:1 13:0 14:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0	2054年22 2013年88日の274日の日日	E % ≥ 1 1 ≥ 2 1 1 06 001 902 903 904 905 <td>35/8/ 20/70</td> <td>0 coooe 1</td> <td>6 % 53.8 % 85.7 % 1100 22.00 22.00 23.00 23.00 23.00 15.14 00.00 01.00 00.00 01.</td> <td>107 122 121 106 108 108 119 119 118 117 118 114 117 100 118 117 100 118 117 110 108 117 110 119 119 119 119 119 119 119 119 119</td> <td></td> <td>24-ha</td> <td></td> <td>\$YS 124(8) 127(6) 117(5) ** * * *</td> <td>DIA 81(6) 83(6) 76(5) 76</td> <td>HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11</td> <td>(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7</td> <td>95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8</td> <td>42 44 36 * * * * *</td> <td>* * *</td> <td>-(·) -(·)</td> <td></td> <td>18(30) 10(26)</td>	35/8/ 20/70	0 coooe 1	6 % 53.8 % 85.7 % 1100 22.00 22.00 23.00 23.00 23.00 15.14 00.00 01.00 00.00 01.	107 122 121 106 108 108 119 119 118 117 118 114 117 100 118 117 100 118 117 110 108 117 110 119 119 119 119 119 119 119 119 119		24-ha		\$YS 124(8) 127(6) 117(5) ** * * *	DIA 81(6) 83(6) 76(5) 76	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4) (3) (5) H (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7	95 97 90 85 91 85 91 85 91 85 81 85 82 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 85 8	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:13.2018 50.30 130 130 130 130 130 130 120 130 120 120 120 120 120 120 120 120 120 12	2054年22 2013年88日の274日の日日	E % 2 ≥ 2 1 1 005 005 005 006 </td <td>35/8/ 20/70</td> <td>0 coooe 1</td> <td>6 % 53.8 % 85.7 % 21.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 23.90 20</td> <td>107 122 121 106 108 108 119 119 118 117 118 114 117 100 118 117 100 118 117 110 108 117 110 119 119 119 119 119 119 119 119 119</td> <td></td> <td>24Awala</td> <td></td> <td>\$YS 124(8) 127(6) 117(5) ** * * *</td> <td>DIA 81(6) 83(6) 78(6) 78(6) 78(6) 1100 1130 1130 1130 1130 1130 1130 113</td> <td>HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12</td> <td>(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0</td> <td>95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90</td> <td>42 44 36 * * * * *</td> <td>* * *</td> <td>-(·) -(·)</td> <td></td> <td>18(30) 10(26)</td>	35/8/ 20/70	0 coooe 1	6 % 53.8 % 85.7 % 21.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 22.90 23.90 20	107 122 121 106 108 108 119 119 118 117 118 114 117 100 118 117 100 118 117 110 108 117 110 119 119 119 119 119 119 119 119 119		24Awala		\$YS 124(8) 127(6) 117(5) ** * * *	DIA 81(6) 83(6) 78(6) 78(6) 78(6) 1100 1130 1130 1130 1130 1130 1130 113	HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12	(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0	95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:13.2018 50.30 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0 14:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 12:1 13:0 14:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0 15:0	2054年22 2013年8885727445445 1111	E % ≥ 1 1 ≥ 2 1 1 06 001 902 903 904 905 <td>35/8/ 20/70</td> <td>0 coooe 1</td> <td>6 % 53.8 % 85.7 % 1100 22.00 22.00 23.00 23.00 23.00 15.14 00.00 01.00 00.00 01.</td> <td>107 122 121 106 108 108 119 119 118 117 118 114 117 100 118 117 100 118 117 110 108 117 110 119 119 119 119 119 119 119 119 119</td> <td></td> <td>24-ha</td> <td></td> <td>\$YS 124(8) 127(6) 117(5) ** * * *</td> <td>DIA 81(6) 83(6) 78(6) 78(6) 78(6) 1100 1130 1130 1130 1130 1130 1130 113</td> <td>HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11</td> <td>(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0</td> <td>95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90</td> <td>42 44 36 * * * * *</td> <td>* * *</td> <td>-(·) -(·)</td> <td></td> <td>18(30) 10(26)</td>	35/8/ 20/70	0 coooe 1	6 % 53.8 % 85.7 % 1100 22.00 22.00 23.00 23.00 23.00 15.14 00.00 01.00 00.00 01.	107 122 121 106 108 108 119 119 118 117 118 114 117 100 118 117 100 118 117 110 108 117 110 119 119 119 119 119 119 119 119 119		24-ha		\$YS 124(8) 127(6) 117(5) ** * * *	DIA 81(6) 83(6) 78(6) 78(6) 78(6) 1100 1130 1130 1130 1130 1130 1130 113	HER 680 680 690 127 137 127 142 127 142 127 142 127 142 127 142 127 142 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 127 145 117 117 117 117 117 117 117 117 117 11	(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0	95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12:03.018 90.30 13:03.019 13:0 13:0 13:0 13:0 13:0 13:0 13:0 13:0	1 1 1 1 1 1	8 % ≥ 1 1 ≥ 2 1 00 90 <td>* *</td> <td>t coose a a t</td> <td>6 % 53.8 % 85.7 % 1107 21.90 22.90 22.90 23.90 23.90 23.90 23.90 0.</td> <td>107 122 121 106 108 108 108 108 119 119 119 107 108 115 117 100 108 115 117 110 108 115 117 110 108 115 117 110 108 118 117 118 118 118 118 118 118 118 11</td> <td></td> <td>24 And # 8558 77 767 787 787 887 74 887 88 55 1978</td> <td></td> <td>5YS 124(8) 127(6) 117(5) *** ccce * * * * *</td> <td>DIA 81(6) 83(6) 78</td> <td>HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12</td> <td>(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0</td> <td>95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90</td> <td>42 44 36 * * * * *</td> <td>* * *</td> <td>-(·) -(·)</td> <td></td> <td>18(30) 10(26)</td>	* *	t coose a a t	6 % 53.8 % 85.7 % 1107 21.90 22.90 22.90 23.90 23.90 23.90 23.90 0.	107 122 121 106 108 108 108 108 119 119 119 107 108 115 117 100 108 115 117 110 108 115 117 110 108 115 117 110 108 118 117 118 118 118 118 118 118 118 11		24 And # 8558 77 767 787 787 887 74 887 88 55 1978		5YS 124(8) 127(6) 117(5) *** ccce * * * * *	DIA 81(6) 83(6) 78	HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12	(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0	95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)
Dip% BP Load Day readings Night readings Night readings 12.13.2015 130 130 130 130 130 130 130 130 130 130	70554572 7575565572 75 75 557 545 55 72 75 557 545 55 72 75 557 545 55 72 75 557 545 55 72 75 557 545 55 75 75 557 545 55 75 75 557 545 55 75 75 75 55 75 75 75 75 75 75 75 75	8 % ≥ 1 1 2 2 1 101 903 903 903 904 900 905 900	* * * *	o coore s a t coates tensi	6 % 63.8 % 85.7 % 750 22:00 22:00 22:00 23:00 23:00 23:00 23:00 00:0	107 122 121 106 108 108 108 119 119 119 119 107 108 115 117 100 108 115 117 110 108 115 117 110 108 115 117 118 117 108 108 108 108 108 108 108 108 108 108		24 wate # 555577 75775776765977465265 555 (ype		5YS 124(8) 127(6) 117(5) *** ccce * * * * *	DIA 81(6) 83(6) 78	HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12	(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0	95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26) 8(38)
Dip% BP Load Day readings Night readings Night readings 12:13.2018 93.9 12:0 12:0 12:0 12:0 12:0 12:0 12:0 12:0 12:0 12:0 12:0 12:0 13:0 13:0 14:0 15:0 15:0 15:0 15:0 15:0 12:1 12:2 12:1 13:0 12:5 13:0 13:0 12:1 13:0 12:1 13:0 14:1 15:0 12:1 13:0 14:1 15:0 12:1 13:0 14:1 15:0 12:1 <td>70554572 7575565572 75 75 557 545 55 72 75 557 545 55 72 75 557 545 55 72 75 557 545 55 72 75 557 545 55 75 75 557 545 55 75 75 557 545 55 75 75 75 55 75 75 75 75 75 75 75 75</td> <td>8 % ≥ 1 1 2 2 1 101 903 903 903 904 900 905 900</td> <td>* * * *</td> <td>o coore s a t coates tensi</td> <td>6 % 63.8 % 85.7 % 750 22:00 22:00 22:00 23:00 23:00 23:00 23:00 00:0</td> <td>107 122 121 106 108 108 108 119 119 119 119 107 108 115 117 100 108 115 117 110 108 115 117 110 108 115 117 118 117 108 108 108 108 108 108 108 108 108 108</td> <td></td> <td>24 wate # 555577 75775776765977465265 555 (ype</td> <td></td> <td>5YS 124(8) 127(6) 117(5) *** ccce * * * * *</td> <td>DIA 81(6) 83(6) 78</td> <td>HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12</td> <td>(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0</td> <td>95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90</td> <td>42 44 36 * * * * *</td> <td>* * *</td> <td>-(·) -(·)</td> <td></td> <td>18(30) 10(26)</td>	70554572 7575565572 75 75 557 545 55 72 75 557 545 55 72 75 557 545 55 72 75 557 545 55 72 75 557 545 55 75 75 557 545 55 75 75 557 545 55 75 75 75 55 75 75 75 75 75 75 75 75	8 % ≥ 1 1 2 2 1 101 903 903 903 904 900 905 900	* * * *	o coore s a t coates tensi	6 % 63.8 % 85.7 % 750 22:00 22:00 22:00 23:00 23:00 23:00 23:00 00:0	107 122 121 106 108 108 108 119 119 119 119 107 108 115 117 100 108 115 117 110 108 115 117 110 108 115 117 118 117 108 108 108 108 108 108 108 108 108 108		24 wate # 555577 75775776765977465265 555 (ype		5YS 124(8) 127(6) 117(5) *** ccce * * * * *	DIA 81(6) 83(6) 78	HE 68 68 69 12 12 12 12 12 12 12 12 12 12 12 12 12	(4)(3)(5) H 0 7 0 7 0 0 0 0 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 7 0 0 0 7 0 0 7 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0 0 0 7 0 0 0 0 7 0 0 0 0 0 7 0	95 97 90 8 54 91 8 54 91 8 55 91 8 55 91 90 8 55 91 90 90 8 55 91 90 90 90 90 90 90 90 90 90 90 90 90 90	42 44 36 * * * * *	* * *	-(·) -(·)		18(30) 10(26)

Fig. 35 WatchBP O3 ABPM report

Note: The file name of the report is built with the patient ID, device name, date and time the report is created for example: PatientID_WatchBPO3_2018_11_05_10_54.pdf.

3.6.2 Report Tab of WatchBP Office Series

The report tab of WatchBP Office is shown as below. It can be divided into (1) setting area, (2) option area and (3) customized area.

Measurement	Report			
Setting Office B	lood Pressure	Threshold		
ş	SYS	140	▼ mmHg	
C	DIA	90	← mmHg	
Report Option				
Hide error and Hide AFIB resu Average witho	ult			
Customization Physician	MICROLIFE			
Centre/Hospital	Hospital			
Customized logo	C:\Users\betsy	.huang\Deskto	p\	Select Image File
	C:\Users\betsy	.huang\Deskto	p	Path
Report Folder				
·	rate PDF Repo	rt	Open Folder	Generate XLSX Report

3.6.2.1 Setting Area

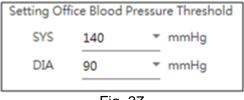
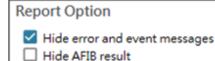


Fig. 37

Setting Office Blood Pressure Threshold:

Users can use the default threshold or define threshold by themselves.

3.6.2.2 Option Area



Average without first measurement

Fig. 38

Hide error and event messages:

The error and event can be hidden in the PDF report. **Hide AFIB result:** The AFIB alert can be hidden in the PDF report. **Average without first measurement:** The first measurement:

The first measurement can be excluded when the average blood pressure is calculated.

3.6.2.3 Customization Area

Measurement	Report	
Customization		
Physician	Dr. Doctor	
Centre/Hospital	Hospital	
Customized logo	C:\Users\Public\Pictures\Sample Pictures\Tulips.jpg	Select Image File
Report Folder	C:\Microlife\WatchBP Analyzer\Report	Path
Genera	te PDF Report Open Folder Generate XL	SX Report
Genere	open oder	5X Report
	Fig. 00	

Fig. 39

Users can set (1) Physician Information, (2) Hospital Name, (3) Report Logo and (4) Save Folder Path at this area. When the above settings are done, press the **Generate PDF Report/ Generate XLSX Report** button to generate the report.

3.6.2.4 PDF Report

AtchBP	Office	Patient ID Name Sex Age Date of birth	harlequin Harley Quinn Female 31 07.27.1988	Health faci Physician Email Phone Study date	-	NameOftheHospital Dr. Quinzel Harley@abc.com 1.234-587-690 05.20.2020
light Arm - Average(2)				L	eft Arm - A	verage(3)
	MAP PP HR 85 55 91					SYS DIA MAP PP HR 126 74 84 52 89
atest measurement				L	alost meas	urement
Ante Time SYS DIA 5.20.2020 15:15 129 72						Time SYS DIA MAP PP HR 15:21 122 77 89 45 91
~~~~~	$\sim$	1	X		$\sim$	~~~~~
Os 1s 2s 3s	4 s			0	s 1s	2 s 3 s 4 s
tight Leg - Average(2), Al	N 1.06	1		C 4	eft Leg - A	verage(3), ABI 1.09
	MAP PP HR 99 48 91			- -	atest meas	SYS DIA MAP PP HR 142 89 98 53 89 urement
ate Time SYS DIA 5.20.2020 15:15 136 88						Time SYS DIA MAP PP HR 15:21 135 90 99 45 91
$\sim\sim\sim\sim$	$\sim$				$\sim$	~~~~~
Os 1s 2s 3s	4.5				5 15	2 5 3 5 4 5
Jat of Individual readings Nght Arm Jate 5.20.2020 5.20.2020	Time 15:14 15:15	SYS 131 129	DIA MAP 79 87 72 82	PP 52 57	HR 93 88	AFIB -
	10.10	12.0	72 O2	01	00	
eft Arm Jato	Time	SYS	DIA MAP	PP	HR	AFIB
5.20.2020	15:18	128	73 82	55	90	
5.20.2020 5.20.2020	15:20 15:21	129 122	72 82 77 89	57 45	86 91	
5.20.2020	10:21	144	// 69	40	91	
light Leg	Time	SYS	DIA MAP	PP	HR	ABI
5.20.2020	15:14	140	92 98	48	93	1.1
5.20.2020	15:15	136	88 99	48	88	1.0
eft Leg						
lato	Time	SYS	DIA MAP	PP	HR	ABI
5.20.2020 5.20.2020	15:18 15:20	142 149	88 98 90 97	54 59	90 86	1.1
5.20.2020	15:21	135	90 99	45	91	1.0
			Page 1 of 1			microlif

#### 3.6.3 Report Tab of WatchBP Home

Measurement	Report		
Customization			
Physician	Dr. Doctor		
Centre/Hospital	Hospital		
Customized logo	C:\Users\Public\Pictures\Samp	le Pictures\Tulips.jpg	Select Image File
Report Folder	C:\Microlife\WatchBP Analyzer	\Report	Path
Genera	te PDF Report	Open Folder	Generate XLSX Report
		Fig. 41	

#### 3.6.3.1 Customization Area

Users can customize the (1) **Physician, (2) Centre/Hospital name** and (3) the **logo of the report** to show on the PDF report. In addition, users also could set the storage path of the report.

Customization		
Physician	microlife	
Centre/Hospital	Hospital	
Customized logo	D:\Users\Morris.Huang\Desktop\squirtle.png	Select Image File
Report Folder	C:\Microlife\WatchBP Analyzer\Report	Path

Fig. 42

#### 3.6.3.2 Generate Report

When the above settings are done, users can press the **Generate PDF Report/ Generate XLSX Report** button to generate the report.

#### 3.6.3.3 PDF Report

Watcl Measurement Re		Ho	ome	Sex		ale		Health fac Physician Email Phone Study dat		Hospital Dr. Doctor doctor.dr@retuo.gwuy tel1234567890 #12345(12: 02.07.2011
			100	DATE	TIME	5Y5	DIA	HR	pp	AFIB
	SYS	DIA	HR	Day 1						
werage	130.5	78.7	62.2	02.07.2011	07:00	151	96	61	55	
Norming Average	127.5	76.3	61.3	02.07.2011	07:03	150	95	60	55	
Evening Average	133.1	77.1	62.9	02.07.2011	19:00	151	96	61	55	
				02.07.2011	19:03	150	95	60	55	
				Day 2						
				03.07.2011	07:00	121	71	61	50	
				03.07.2011	07:03	122	72	62	50	
				Day 3						
				04.07.2011	07:00	121	71	61	50	
				04.07.2011	07:03	122	72	62	50	
				04.07.2011	19:00	121	71	61	50	
				04.07.2011	19:03	122	72	62	50	
				Day 4						
				05.07.2011	07:00	121	71	61	50	
				05.07.2011	07:03	122	72	62	50	
				05.07.2011	19:00	120	70	60	50	
				05.07.2011	19:03	121	71	61	50	
				Day 5						
				06.07.2011	07:00	121	71	61	50	
				06.07.2011	07:03	122	72	62	50	
				06.07.2011	19.00	125	75	65	50	
				06.07.2011	19.03	120	70	60	50	
				Day 6						
				07.07.2011	19:00	120	70	60	50	
				07.07.2011	19.03	121	71	61	50	
				Day 7						
				18.08.2023	23.46	164	80	72	54	
				18.08.2023	23.49	162	04	72	78	

#### Fig. 43 WatchBP Home report (Diagnostic Mode)

# 3.7 History Readings Management

#### 3.7.1 Delete a Measurement Folder

Step1: Select a patient in the patient list.

Step2: Then the corresponding measurement folder of this patient is shown.

Step3: Select the specific date from the folder area.

Step4: Right click the mouse on the folder, the Delete option will be shown.

Step5: Press the **Delete** button and then the folder will be deleted.

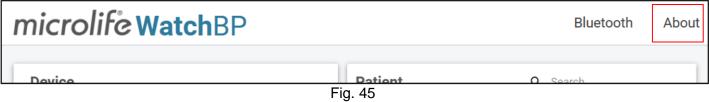
Folder	
WatchBP O3	^
09.05.2018	
11.05.2018	
09.18.2018	Delete
09.09.2019	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
09.11.2019	
09.12.2019	

Fig. 44

# 4 Activate the Device

WatchBP Analyzer provides activation functions for distributor to unlock the settings of the devices.

Step1: Click About button on the upper right on the WatchBP Analyzer.



Step2: Then the corresponding activation option dialog will be shown.

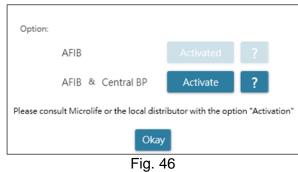
Note: Based on the connected device to decide what options are shown.

# 4.1 AFIB / AFIB & Central BP options

The Atrial Fibrillation Detector (AFIB) and Central Blood Pressure unlock options are provided with (1) **WatchBP 03 2G (model BP3SZ1-1)** and (2) **WatchBP Office (model BP3SK1-3B)**. There are three device models provided:

(1) Advance: standard ABPM or office blood pressure monitor (OBPM)

- (2) AFIB: standard ABPM or OBPM with Microlife Atrial Fibrillation Detector
- (3) **AFIB & Central BP**: standard ABPM or OBPM with Microlife Atrial Fibrillation Detector and Central Blood Pressure measurement



## 4.2 ABI / PWV & Central BP options

The ankle-brachial index (ABI), brachial-ankle pulse wave velocity (PWV), and

Central Blood Pressure measurement unlock options are provided with WatchBP Office Vascular (model TWIN200 VSR). There are three device models provided:

(1) Advance: standard WatchBP Office Vascular.

- (2) ABI: standard WatchBP Office Vascular with ankle-brachial index (ABI) measurement
- (3) PWV & Central BP: standard WatchBP Office Vascular with ABI, CBP and PWV measurement.

Туре:						
ABI	Activate	?				
PWV & Central BP	Activate	?				
Please consult Microlife or the local distributor with the option "Activation"						
Okay						
Fig. 47						

## 4.3 **Procedure of the Activation**

Activation key is needed to activate the lock features. Users have to contact Microlife or the local distributor to have the activation key. The Activation procedure is described as below.

Note: Activation key is not free of charge, please contact Microlife or the local distributor for the details.

Step1: Click on the question mark (?) button at the right side of the Activate button.

Туре:						
ABI	Activate	?				
PWV & Central BP	Activate	?				
Please consult Microlife or the local distributor with the option "Activation"						
Okay						

Fig. 48

Step2: Then device information dialog will be shown as below.

Please copy and transfer the distributor for activation key of Device ID: EBB417515EA3 Firmware version: RP3.2020.09.1 Feature to be activated: ABI	he specific device ID	e or the local

Fig. 49

Step3: Send the device information to Microlife or the local distributor.

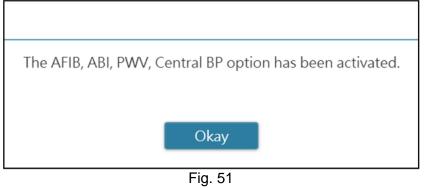
Step4: The vendor will send back the activation key to the qualified users.

Step5: Click the Activate button of the specific option and the below dialog will be displayed.



Fig. 50

Step6: Input the **Activate Key** and press the **Confirm** button. If the key is valid, the activated message dialog will be shown as below. When the dialog is displayed, it means the option is activated successfully.



# Appendix A: Error Code List

CODE	NOTE	Potential cause and remedy
1	Pill record	
2	device power on	
3	device power off	
4	Low battery	
5	Empty battery	
6	Re-try measurement	
	Measurement manually	
7	terminated	
8	Manual measurement	
Er 1	Signal too weak	The pulse signals on the cuff are too weak. Reposition the cuff and repeat the measurement.
Er 2	Error signal	During the measurement, error signals were detected by the cuff, caused by e.g. movement or muscle tension. Repeat the measurement, keeping your arm still.
Er 3	No pressure in the cuff	An adequate pressure cannot be generated in the cuff. A leak may have occurred. Replace the cuff if necessary. Repeat the measurement.
Er 5	Abnormal result	The measuring signals are inaccurate, and no result can therefore be displayed. Read through the checklist for performing reliable measurements and then repeat the measurement.
Er 11	Signal too weak during central blood pressure measurement	The pulse signals on the cuff are too weak. Re-position the cuff and repeat the measurement.
Er 12	Error signal during central blood pressure measurement	During the measurement, error signals were detected by the cuff, caused by e.g. movement or muscle tension. Repeat the measurement, keeping your arm still
Er 13	Cuff pressure errors during central blood pressure measurement	An adequate pressure cannot be generated in the cuff. A leak may have occurred. Check if the cuff is correctly connected and is not too loose. Replace the batteries if necessary. Repeat the measurement
Er 15	Abnormal central blood pressure reading	The measuring signals are inaccurate and no result can therefore be displayed. Read through the checklist for performing reliable measurements and then repeat the measurement.
Er 21	Error signal during collecting pulse wave signals	Check if the cuff is correctly connected and is not too loose. Replace the blood pressure cuff if necessary. Repeat the measurement.
Er 23	Cuff pressure errors during collecting pulse wave signals	Check if the cuff is correctly connected and is not too loose. Replace the blood pressure cuff if necessary. Repeat the measurement.
Er 25	Abnormal result of baPWV reading	Check if the cuff is correctly connected and is not too loose. Replace the blood pressure cuff if necessary. Repeat the measurement.
Er F	The device has gone into "single fault condition"	Re-position the cuff and repeat the measurement. Replace the batteries if necessary. If the error persists, contact Microlife or local distributor
Er A	Flash memory error	Possible hardware fault. Try again. If the error persists, contact Microlife or local distributor
НІ	Pulse or cuff pressure too high	The pressure in the cuff is too high (over 299 mmHg) OR the pulse is too high (over 239 beats per minute). Relax for 5 minutes and repeat the measurement.
LO	Pulse too low	The pulse is too low (less than 30 beats per minute). Repeat the measurement.

Note:

The CODE is shown at measurement list on Measurement Tab, PDF and Excel report. The NOTE (the message provided by the software) is shown on Analyzer.

# Appendix B: SW Error Messages

#	Error/ Alert Message	Potential cause
1	Not supported	[USB Connection] The connected device is not supported by the WatchBP Analyzer
2	Connection Timeout	[USB Connection] The connection time out.
3	Connect_Error! Please try again	[USB Connection] During the device connection, some expected errors are occurred.
4	Pairing code doesn't match. Please press and hold the MODE button of the device for 7 seconds to enter Bluetooth pairing mode first, then press and hold Start/Stop button for 5 seconds to reset the connection. After the connection is cleared, enter the Bluetooth pairing mode again and then click 'Connect' button of the Analyzer to repair the device.	[BT Connection] If the BT pairing is removed in the WatchBP Office devices.
5	Pairing code doesn't match. Please press and hold the MODE button of the device about 7 seconds to enter Bluetooth pairing mode first, then press and hold Start/Stop button about 5 seconds to reset the connection. After the connection is cleared, enter the Bluetooth pairing mode again and then click 'Connect' button of the Analyzer to repair the device.	[BT Connection] If the BT pairing is removed in the WatchBP Office vascular devices.
6	Pairing code doesn't match. Please press and hold the Start/Stop button of the device about 5 seconds to reset the connection first. Then enter the Bluetooth pairing mode of device. When the Bluetooth icon is shown on the LCD, click 'Connect' button of the Analyzer software to reconnect with the device.	[BT Connection] If the BT pairing is removed in the WatchBP O3 devices.
7	Opps!The Bluetooth is turned off. Please go to the setting page to turn on the Bluetooth first.	[BT Connection] The BT setting of the PC is not turned on.

# **Appendix C: Contact Information**

#### **Europe / Middle-East**

/ Africa

#### Asia

MicrolifeAG Espenstrasse 1399443 Widnau, Switzerland Tel. +41 71 727 7000 Fax. +41 71 727 7011 Email: watchbp@microlife.ch www.watchbp.com

Microlife Corporation 9F., No.431, Ruiguang Rd., Neihu Dist., Taipei City 114, Taiwan, China Tel. +886 2 8797 1288 Fax +886 2 8797 1283 Email: watchbp@microlife.com.tw www.watchbp.com

#### North / Central / South America

Microlife USA, Inc. 1617 Gulf to Bay Blvd 2nd Floor, Suite A Clearwater, FL 33755, USA Tel. +1 727 442 5353 Fax +1 727 442 5377 Email: msa@microlifeusa.com www.watchbp.com

# **Appendix D: Manufacturer Information**

The manufacturer information can be found on the equipment labeling:

#### MicrolifeAG

Espenstrasse 1399443 Widnau, Switzerland Tel. +41 71 727 7000 Fax. +41 71 727 7011 Email:watchbp@microlife.ch www.watchbp.com

#### Microlife Corporation

9F., No.431, Ruiguang Rd., Neihu Dist., Taipei City 114, Taiwan, China Tel. +886 2 8797 1288 Fax +886 2 8797 1283 Email: <u>watchbp@microlife.com.tw</u> www.watchbp.com

#### **ONBO Electronic CO., Ltd.**

No. 138, Huasheng Road, Langkou Community Dalang Street, Shenzhen, China Tel. +86 755 28120227 www.watchbp.com

The authorized representative for Microlife Cooperation in Europe is:

Microlife UAB P. Lukšio g. 32 08222 Vilnius, Lithuania