'Quick' User Guide for Hingmed WBP02A and Software

(Please also read all instructions in the Original Instruction manual, including warnings and all other important information)



1. Install HINGMED PC software

Before Start

Please uninstall any previous version of HINGMED PC software in the computer.

Remove previous program

There are two ways to remove the previous installation. Windows XP: Step 1: Click <Start>/<Settings>, then select Control Panel.

Step 2: In the Control Panel window, double click <Add>/<Remove> programs icon.

Step 3: Find out the item HINGMED English software x.x.x.x then remove it.

Windows Vista / Win 7:

Step 1: Click <Start>/<All programs>, then select <HINGMED English> folder.

Step 2: Press Remove icon and the program will be uninstalled automatically.

Install HINGMED PC software

The following steps guide the user to install the Hingmed PC software.

Step 1:

Put CD into CD drive, an auto-install program will guide the user step by step to complete the installation. If the program is not automatically installed, you can look for the "setup.exe" file in the CD and double click on it ,The installation wizard will note that if install the NET.2.0 Framework in Figure1.select "Yes" Then the dialog window will show up as in Figure2.

2	Preparing to Install	
	HingMed English version Setup is preparing th Wizard, which will guide you through the prog process. Please wait.	e InstallShield ram setup
	Configuring Windows Installer	
HingMed Englis	Configuring Windows Installer h version - InstallShield Wizard	>
HingMed English	Configuring Windows Installer h version - InstallShield Wizard Shield optionally uses the Microsoft (R) .NET 2.0 Fr d you like to install it now?	amework.
HingMed English	Configuring Windows Installer h version - InstallShield Wizard Shield optionally uses the Microsoft (R) .NET 2.0 Fr d you like to install it now?	amework.



	Proparing to Install
2	
	HingMed English version Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.
	Extracting: ISSetup.dll
	· · · · · · · · · · · · · · · · · · ·



Step 2: When the setup is prepared the dialog will show up as seen in figure3; It is recommended to Accept the terms of the license agreement ,then clicking <Next>, the installation will proceed automatically. dialog box.





Step 3 After the PC software setup successful ,it will jump to the dialog which set up the driver of the device ,the dialog will show up as seen in figure4. The installation will proceed automatically.Select "I accept the the agreement" and select "Next >" ,the dialog will show up as seen in figure 5



Figure 4





Step 5.The installation will proceed automatically.After successful installation, the dialog will show up as seen in figure 6,click <Finish>.



Figure 6

2.HingMed ABPM software User Interface

Below is the main screen of HingMed ABPM software.



Figure 7

2.1Data

Clicking<Data> button, will display screen as seen in figure 8.

All Records		In Searching
Sample 5-Arteriosclerosis	Search by patient nan	ne
Date of Admission:20-12-2013		
Measure Time: 20-12-2013 16:55:02	Search by Patient No.	
⊕ Sample 4-MS Hypertertension		-
Sample 3-Comparison Study	1	
		2
🖅 Sample 1-Systolic Hypertension 🌒		
	Basic Information	
	Patient ID:	Gender:
		Male C Female
	Name:	HIS No:
	L	
	Nationality:	Date of birth:
		09-02-2022 💌
	Phone No:	Postcode
	L	
	Email:	3
	ID Card No:	Social Security No:
	Address:	

Figure 8

(1) All records

A menu of all patients whose data is recorded is shown. Selecting a specific patient will display patient information. Patient information in area 3 can be modified if necessary.

(2) Search area

Search by patient name or no to display patient information.

2.2program

Click <Program> button, to display the dialog window as Figure 9, Selecting "Yes" will display the programming module as seen in figure 10



		Set Measure III	me		0
Patient No;	0	Time Type	Begin Time	End Time	Minutes
0222912253		Awake	07:30 -	21:00 -	30
HIS No:	In Hospital Date	Asleep	21:00 -	07:30	60
	09-02-2022 💌	Special1	Null	Null	Null
epartment:	Bed No:	Opecial	Noll -		Null
		special2			NUI
+	Quadra	Special3		Nuli	NUI
lame	Gender.				
0.0.11	se male se remale				
D Card No:	Weight:	Max Pressure	(mmHa)	Display	3
	Kg	280	▼] ³ /	Enabled	•
ocial Security No:	Height	Keypad		Intervals	
Ihana Nat	Age:	Enabled	•	Fixed	•
none No.	Age.	Awake Alarm		Asleen Alarm	n 🧳
ostcode:	l Email:	Enabled	-	Enabled	
		Highest SYS	mmHa)	Lowest SYS	(mmHa)
	1	170	•	90	•
adress:		Highest DIA(mmHg)	Lowest DIA(I	mmHg)
		120	•	60	•
me Name Patients		Measure Uni	t		
		mmHg	•		
		E Begin In F	ive Minutes		
		. Deginini			1

Figure 9

Figure 10

2.2.1Information area

<Create patient identity >

Enter Patient Name and gender to create the patient's identity before setting an ambulatory monitoring schedule to the device,

The Patient No is automatically created by the system and does not need to be modified.

2.2.2program Parameters

Set Measure time

User can set Day period, Night period and measurements interval in this dialog window. The selections of awake and asleep time are between 00:00 to 23:00. The measurement intervals can be set at 5,10,15, 20, 30,45,60,90 or 120 minutes.

If more specific measurement times are required, these can be set up from special 1 to special 3 options.

2.2.3 other Parameters

< max measurement>

The highest inflation pressure during measurements, can be set and programmed to the device. It is recommended to set the "max pressure" to 40mm Hg above the expected systolic value for the patient.

<display>

The user can set the screen to "Disable", for the device to show only time and battery capacity. It is recommended to set the display to "Enabled", so that the user can view the BP measurement, time and battery capacity at all times.

<Keypad>

The "Keypad" can be set as "Disabled" or "Enabled". It is recommended to set it as "Disabled" to prevent the patient from measuring abnormally during the monitoring period.

<Time Interval>

User can set the "Interval" as "standard" or fixed mode. It is recommended to set as the "standard" mode where the interval time has +/-2min of deviation. In the "fixed" mode there is no deviation.

2.2.4 Alarm

The "awake alarm" and "asleep alarm" can be enabled to alert the user with a beep if

BP measurements fall outside the minimum and maximum range of the programmed

systolic and diastolic values which can be set up by the user.

On completing the process above, press the <OK> button to program the setting to the device. All previous data saved in the device will be deleted and the new patient No will be saved to the device

On completion the message shown on figure 11 will be displayed.

Programme success!		×
	Programn	ne success!
C T at an dear strategy at		Castern

Figure 11

2.3Read

Before reading records

Connect the device and PC via USB cable.

Step 1:Click on the "Read" icon to display the <Read> dialog windows as seen in figure 12.

ecolus. •	
0 1 0	Read Record timeSpan Bluetooth
Patient No;	- Same Nami
2021129115824	
HIS No:	In Hospital Date
	09-12-2021 _
Department	Bed No:
Name *	Gender
	🕼 Male C Female Save
ID Card No:	Weight:
	kg
Social Security No:	Height
	cm
Phone No:	Age:
	Electron II.

Figure 12

Step2:Pressing the <Read>button, it will display the screen seen in figure 13. The BP records will upload from device to the PC.

3 1 3	Read F Record timeSpan F Blue	tooth
Patient No;		Same Name
202112140350		
HIS No.	In Hospital Date	
Department	×	
Name •	Search Success	ř
ID Card No:	Confirm	
Social Security No	Height	
Phone No:	Age	
00:	Email:	

Figure 13

Step 3:The chart below will be displayed. The user can View data analysis and print report



Figure14

Step 4 View data analysis A. statistics figure

Press <statistics>button, to view a statistics table, as the figure below

		8		la o	-	1	•		DF						
				н + н			ý 🍋			X					
and Statistics	His	stogram	Pie Chart	Correlati	on Hour Avera	ge Dra	dvice Patient	Preview PDF F	ile	Exit					
n Statistics															
				*						×					
Overall	ime:	20th 18:56	-21th 19:23	Total:24:24	Effective:38	otal:40(s	(676)	As	leep	Time:22:00	-07:30 10	tal:9:30 Effe	ective:9 Total:9	100%)	
SVS (mm	Ha)	Mean 142	12.62	Max 175	20th 21-23	Min 118	21th 07:52	SVS (mm		Mean 137	5D 7 12	Max 153	20th 22:53	127	21th 02:53
DIA (mn	Ha)	77	6.07	88	21th 15:53	62	21th 06:53	DIA (mn	Ha)	71	5.40	80	20th 22:53	62	21th 06:53
Mean (mn	Ha)	98	7.01	112	21th 15:53	85	21th 07:53	Mean (mn	Ha)	92	5.35	104	20th 22:53	87	21th 02:53
HR (t	om)	82	10.13	106	21th 15:23	63	21th 08:23	HR (b	pm)	75	5.32	88	20th 22:53	70	21th 00:53
Diff (mn	Ha)	64	11.33	101	20th 21:23	46	21th 10:53	Diff (mn	Ha)	66	6.00	77	21th 06:53	58	21th 03:53
Asleep Dip:	:	SYS:4.4%	(Non Dipp	er)	DIA: 10.4% (D	ipper)		BPLoad:		SYS: 100.0	%	DIA:0.0%			
BPLoad:	:	SYS:71.19	6		DIA:0.0%			BP Variation Con		SYS:4.82		DIA: 19.44	4		
Smoothness Inde	x::	SYS:0.04			DIA:-0.02										
BP Variation Cor	:	SYS:24.60			DIA:-41.05										
Morning Surge:	:			8											
ASI:	1		0.	79											
Aw	ake	Time:07:30	-22:00 Tota	al:15:0 Effe	ctive:29 Total:3	1(93%)		Whit	e Co	at Time:18:	56-19:53	Total:0:57 E	ffective:3 Total	3(100%)	0
		Mean	SD	Max	Time	Min	Time		-	Mean	SD	Max	Time	Min	Time
SYS (mn	Hg)	143	13.55	175	20th 21:23	118	21th 07:53	SYS (mn	Hg)	155	5.72	163	20th 19:23	150	20th 19:53
DIA (mn	Hg)	79	4.82	88	21th 15:53	69	21th 07:53	DIA (mn	Hg)	78	2.05	81	20th 18:56	76	20th 19:23
Mean (mn	Hg)	100	6.44	112	21th 15:53	85	21th 07:53	Mean (mn	Hg)	103	0.94	104	20th 18:56	102	20th 19:53
HR (t	pm)	85	10.21	106	21th 15:23	63	21th 08:23	HR (b	pm)	84	5.91	89	20th 18:56	76	20th 19:53
Diff (mn	Hg)	64	12.50	101	20th 21:23	46	21th 10:53	Diff (mn	Hg)	77	7.32	87	20th 19:23	71	20th 18:56
		SVS-62 19	6	DIA:0.09	6			BPLoad:		SYS:100.09	%	DIA:0.0%			
BPLoad:	1.0	010.02.17								010.100.0					

Figure 15

Press <histogram>button, to view a serires of bar-charts as per figure 16.





Figure 16

Figure 17

Prerss <Correlation>button,to display a sires of correlation graphs as per figure 18



Figure 18

Press the <Hour average>button to display an hourly systolic/diastolic graph as per figure 19

			· · · · · · · · · · · · · · · · · · ·							
	Time	Systolic BP	Diastolic BP	Mean BP	Pulse	Heart Rate	SYS*Rate/1000	Date	<u> </u>	
	18:00-18:59	152	81	104	71	89	13.5	20-12-2013		
	19:00-19:59	156	77	103	79	82	12.9	20-12-2013		1
	20:00-20:59	135	75	95	60	91	12.3	20-12-2013		Comparison
	21:00-21:59	164	74	104	89	94	15.4	20-12-2013		
	22:00-22:59	153	80	104	73	88	13.5	20-12-2013		
	23:00-23:59	140	73	94	67	76	10.6	20-12-2013		Systolic BP
	00:00-00:59	139	75	96	64	70	9.7	21-12-2013		
	01:00-01:59	136	76	95	60	73	9.9	21-12-2013		Diastolic BP
	02:00-02:59	127	68	87	59	72	9.1	21-12-2013		
	03:00-03:59	130	72	91	58	70	9.1	21-12-2013		E
	04:00-04:59	132	65	87	67	78	10.3	21-12-2013		Heart Rate
	05:00-05:59	134	68	89	66	72	9.6	21-12-2013		
50	-								25.0	I SYS*Kate/100
50 00									25.0	I SYS Katerioo
150 100		<u>~</u>					~		25.0	1 SYSYRATE/100
150 150		<u>~</u>					~		25 0 20 0 15 0 10 0	1 SYSYKATE/100
150 150 100	(25 0 20 0 15 0 10 0 5 0	i srs*kalenuu

Figure 19

B.Trend figure function

The sky blue background is the white-coat period, representing the first hour of measuring

The light gray Shadow represents the "asleep" period

The green Shadow represents the morning surge period which are the first two hours after getting up from bed.

The more detail refer to see 2.4.1.3 color section below.

C. Records

This area displays measurement records during the monitoring period, including systolic and diastolic values, heart rate, measurement times, position and comments

D.Threshold and analysis item selection

Pressing the <Edit Awake/Asleep Period>button, enables modifying the Awake and Asleep times. Then press the <Update> button to complete this modification as shown in Fig 20.

	000	n. [7	aouro Codo	-
18.00	1200	n n Fe	 Sample 1	-
Awake : P	rom 07:30 To	22:00 Time To 0	əet Uşı	
	8.00	12.00	58.00	2438
0.00				

Figure 20

<Edit Threshold>

Press <Edit Thresholds>,to display the dialog windows as per figure 21. BP thresholds according to NICE or other guidelines can be set here. Press the <update> button to confirm these values.





Step 5 Give some Advice and print

Press the "Doctor's advice" button to input any relevant advice offered to the patient. Click "save" to display this on the final report.

Advice		×
Advice		
Medications.		
Doctor	Medications Dose Frequency Add Add Add Add Add Add Add Add Add Ad	

Figure 22

<Preview>Button

This function allows the user to select the level of detail(standard or general summary) displayed on the final report and allows the user to identify which of the above information (Statistics,Trend,Histogram,Pie,Correlation, Average,Detail,Position,Doctor sign) appears on the final report.

rint Information-		
🔽 Statistics	🔽 Trend	
🔽 Histogram	🔽 Pie	
🔽 Correlation	🔽 Average	
🔽 Detail	🔽 Pos	
🔽 Doctor sign		
C Standard Summa	ry 🗭 General Su	nmary
Preview	Print Ex	it

Figure 23

<PDF file>Button

Press to select the print page information and save the content to the PDF report.

Print Page Selected	×
-Print Information -	
🔽 Statistics	🔽 Trend
🔽 Histogram	🔽 Fie
🔽 Correlation	🔽 Average
🔽 Detail	🔽 Pos
🔽 Doctor sign	
C Standard Summar	ry 🕫 General Summary
Pri	nt

Figure 24



Figure 25

2.4Management

Click<Management>button,then select "configure".it will show up as seen in figure 26

Data	Drogram	Road	Management	Evit					
Data	Program	Reau	Import Export	LAR.					
			Configure	•	8	DataBase			
			Help Web Site			Color			
			About			Hospital			
			Hardat	-		Bluetooth Management			
			Data			LogoFile Signature	Read		
									

Figure 26

2.4.1 Management hospital information

Click sub-menu"hospital", the user can key in the hospital Name, Address, Internet, Telephone. These information will show on the report.

Hosptial Name:	Internet:	
l Address:	Telephone:	

Figure 27

2.4.1.1 Upload the Logo file

Click sub-menu"Logofile"button, it will show up as seen in figure 28. User can upload a file which the format is ".png" of as the hospital logo, it will show on the report.



Figure 28

2.4.1.2 Upload the signature file

Click sub-menu"Signature" button, it will show up as seen in figure 29. User can upload

a file which the format is ".png" of as the hospital logo, it will show on the report.



2.4.1.3 color

Clicking the sub-menu"Color" button, will display as seens in figure 30. This can be used to view or modify the colours representing the various functions that appear within the "Statistic" feature.



Figure 30

3.Scenarios of HingMed ABP software

Scenario 1:login the patient information and program

Step1: Connect the device and PC via USB cable and click the "program" button, the dialog window will show as below.



Figure 31

Step 2:Parameters of configuration.

] UpLoad								Step	2		2
				Set	Measure T	me			890		
Patient No;				Time	е Туре	Begin T	īme	End Tin	ne	Minute	es
2022210122959				Awak	(e	07:00	-	21:30	-	30	-
HIS No:		In Hospital Date	-	Aslee	ep _	21:30	-	07:00	-	45	•
Department:		Bed No:		Spec	ial1 _	Null	-	Null	-	Null	-
				Spec	ial2	Null	-	Null	-	Null	
				Spec	ial3	Null	•	Null	•	Null	
Name *	Stop 1	Gender:		L							
Hingmed	step i	Male C Fema	ale		Ctop 2						
ID Card No:		Weight:			Step 3			Disala	2		_
		1	kg	Ma	ax Pressur	e(mmHg)		Display	<u> </u>		2
Social Security No:		Height:			ou nod	<u> </u>		Enable	eu e	<u> </u>	
			cm		pobled			Fixed	S		8
Phone No:		Age:	_		nableu			Fixed	40		_
		1		Av	vake Alarm	<u> </u>		Asleep	Alarm	۱ <u> </u>	
Postcode:		Email:	_		lisabled	-		Disabl	led	•	2
Address:		1	_								
Same Name Patients -				M	easure Ur	it					
				n	nmHg	-					
					Begin In	Five Minute	s				
				Stond			940 34 (44)				
				Step4		Blu Blu	etooth	າ 📲	E,	nt	

Figure32



Step 2-2:Set ambulatory day and night measuring period, For example, set 07.00~

21:30 with 30 minutes interval for awake time, $21:30 \sim 07.00$ with 45 minutes interval for asleep time.

Step2-3:Set<max pressure>,<display>,<keypad>,<Intervals>,<Awake

Alarm>,<Asleep Alarm>.

Step2-4: Click OK" button to set the configuration to the device. It will clear all data from the device memory. If successful, the dialogue window is shown as below.

Step 3: Fit the device on the arm of the patient, then push the middle button of

the device to start measuring. After the measuring is completed, the BP value will shown on the screen. After that the device will automatically measure according to the program which set up on the step 2.

Scenarios 2:Read records (when the programming parameters have

been set on the same pc used for reading records)

See section 2.3 for further information on this

Scenarios 3:Read records (when the programming parameters have

been set on a different pc to the one used for reading records

Step 1:Click the <Read>button on Read dialog window interface,to display as seen in figure 33,and select "Yes".

Go on researc	1?	×
New Patient?P	lease sel <mark>ect</mark> "yes" to	move forward.
	Yes	No



Step 2:Click "Confirm" button, as show in figure 34, it will start to upload the records from device.

ecords: U	
0 1 0	Record timeSpan C Bluetooth
	Same Name
Patient No;	
20211214162749	
HIS NO.	in Hospital Date
	14-12-2021 👻
Department.	×
	Please complete patient information.
Name !	1
ID Card Nitt	Confirm
and the such that	Contract of the second s
social security No.	- Chargen.
Phone Mo-	Ann
Colore Have	- market and a second s

Figure 34

2 2	Read Record timeSpan Blueboth	
Patient No:	Same t	Varme
20211214162749		
HIS No:	In Hospital Date	
	14-12-2021	
Department	×	
Name	Search Success!	
	e Save	
ID Card No:	Confirm	
0	kg	
Social Security No:	cm	
Phone No:	Age:	

Figure 35

Step 3:After search success it will be displayed as in figure 35. Click"Confirm" to

display as in figure 36.

Step 3-1 Key in the patient information.

Step3-2 Click"Add"button to confirm."Add Success!" will pop up

Step3-3 press "Confirm" to see report as shown in figure 14.

2 1 2	Read C Record timeSpan C Bluetooth	
Patient No:	Same N	ame
20211214162749		
HIS No:	In Hospital Date	
	14-12-2021	
Department:	×	
Step 1	Add Successi Step 2	
Name *	Step 3	
Hingmed	e Save	
ID Card No:	Confirm	
Social Security No:	Height:	
Phone No:	Age	
10000		

Figure 36

Scenarios 4: Research the records and view the records

Search by patient name	4222:20214221721 A
2	4222:20214221721 A
4	000000000000000000000000000000000000000
	20210423 202142318
Search by Patient No	20210423 202142310
	1727:2021422172734
	1233:2021422172652 *
	Step 2
Basic Information	
Patient ID:	Gender:
2021423103616	
Name:	HIS No:
20210423	
Nationality:	Date of birth:
	·
Phone No:	Postcode
Email:	
ID Card No:	Social Security No:
Address:	
	Basic Information Patient ID: 2021423103616 Name: 20210423 Nationality: Phone No: Email: ID Card No: Address:

Figure 37

Step 1: key in the key word in search box

Step 2: view the search results and click one of the records

Step 3: click the related records , to show the date of Admission

Step 4:click the the date of Admission, to show the measurement time

Step 5: double click the measurement time to display dialog window seen as figure 14.

Step 6:press the <preview>button then follow the instructions shown previously to print the report.

Scenarios 5:Turn on or turn off device

Turn on the device

Long press the the middle button for about 5seconds ;the screen will display the time.

Turn off the device

In order to shut down the device, long press the middle button for 5 seconds;the screen will pop up "Whether want to shutdown" with options "Yes" "NO".Press the appropriate button corresponding to "YES" or "NO" and then press the middle button to finally confirm shutdown.



Note: EXCEPTION TO ABOVE

The device is internally programmed to prevent shutdown during the following period; from 3 hours before the programmed "sleep" start time to 2 hours before the programmed sleep time

For example, if the night time is set to 22:00-7:00, the shutdown is prohibited during the period of 19:00-5:00. The monitor will display "EC66" if the middle button is long pressed.

If shut down during of the device is essential during the period identified above, use a data cable to connect to the computer to retrieve the uploaded data, and then long press to select shutdown.