VaSera Series

Sphygmomanometer and Sphygmograph Data Management System

VSS-50

Ver. 02

Operation Manual

- * Before using the product, please read this manual thoroughly.
- * Store this manual where it can be always referred to.



This manual is for the VSS-50 Version 02.

ACAUTION

Federal Law restricts this device to sale by or on the order of a physician.

CAUTION

- Only physician or persons instructed by physicians are allowed to use the equipment.
- The information contained in this document is subject to change without notice due to improvement in the equipment.

© 2015 Fukuda Denshi Co., Ltd.

No part of this document may be reproduced or transmitted in any form without the prior written permission of Fukuda Denshi Co., Ltd.

If this manual has pages missing or out of order, contact Fukuda Denshi for replacement.

Introduction

Thank you for purchasing this product.

The VSS-50 is a data management software for the VaSera series, Sphygmomanometer and Sphygmograph.

This manual also includes description of the "IC Card Maintenance Software" and "VSS-3: CSV Format Output Software".

Note

- (1) When connecting the VSS-50 to the VaSera Series Sphygmomanometer and Sphygmograph, refer also to its Operation Manual.
- (2) To prevent accidental data loss, it is recommended to back up the inspection data periodically.

Contents

1.	Gener	al Desc	cription	1
2.	Install	ing the	Software	2
	2.1	. Genera	al Description for Installation	2
	2.2	. Log Or	as Administrator	3
		Ū		
3.	VSS-5	0 Data	Management Software	4
	3.1	. Char	ging the Software from VSS-10	4
		3.1.1.	Uninstalling the VSS-10(V01-01, V01-02, V01-03, V02-01, V02-02, V03-01),	
			VSS-2, VSS-3	4
	3.2	. Insta	llation Procedure	5
		3.2.1.	Environment Setup (Single PC Operation)	10
		3.2.2.	Environment Setup (Multiple PC Operation)	11
		3.2.3.	Connecting to the Sphygmomanometer and Sphygmograph	13
	3.3	. Oper	ation Procedure	18
		3.3.1	Searching and Displaying the Registered Data	19
		3.3.2	Printing the Report	28
		3.3.3	Correcting the Inspection Data	29
		3.3.4	History of the Inspection Data	30
		3.3.5	Deleting the Inspection Data	30
		3.3.6	Displaying the Data for Each Pulse Beat	31
		3.3.7	Inspection Data Output to the CSV File	32
		3.3.8	Printing Multiple Data	33
		3.3.9	Correcting the Examinee Data	34
		3.3.10	Off-line Registration	35
		3.3.11	Graphic File Output	36
		3.3.12	Waveform Output to the CSV File	36
		3.3.13	Copying the Inspection Data	37
		3.3.14	Initializing the IC Card	38
		3.3.15	Menu	39
		3.3.16	Environment Setup	42
	3.4	Back	up of Inspection Data	50
		3.4.1.	Backup Procedure [Windows7, 8]	50
		3.4.2.	Restoration Procedure	51
4.	IC Car	d Main	tenance Software	.52
	4.1	. Start	up and Explanation of the Display	52
	4.2	. Sear	ching the IC Card Data	53

	4.3	Corre	ecting the IC Card Data	54
	4.4	Reco	overing the IC Card Data	55
	4.5	Rem	oving the IC Card	56
5.	VSS-3	CSV F	ormat Output Software	57
	5.1.	VSS-3	Uninstallation Procedure	57
	5.2.	VSS-3	Installation Procedure	57
	5.3.	Startin	g the Program	57
6.	Trouble	eshoo	ting	58
	6.1.	Troul	oles during Installation	59
		6.1.1.	"Another installation is in progress" is displayed. [Windows7/ From V01-01]	59
	6.2.	Trou	oles during Startup	60
		6.2.1.	"A database was not ready." is displayed. [Windows7/ From V01-01]	60
		6.2.2	"VssRemoteServer.sfOpenCommunication failure" is displayed. [Windows7	7
			From V01-01]	61
		6.2.3	Communication Status of the PC [Windows7/ From V01-01]	63
	6.3	Trou	bles during VS-2000 Connection	64
		6.3.1	During the on-line registration, the PC icon on the VS-2000 flashes, and "PC LI	١K
			ERROR" is displayed. [Windows7/ From V01-01]	64
	6.4	Trou	oles during Operation	68
		6.4.1	The VSS-50 data cannot be displayed on the Client PC. [Windows7/ From V01-068)1]
		6.4.2	The share folder is automatically created on the VSS-50. [From Windows 7	
			V01-01]	68
		6.4.3	"There is no non-transmitted data." is displayed, and off-line registration cannot	be
			performed [Windows7/ From V01-01]	68
		6.4.4	When a report is printed, the header part is missing, or the report does not fit in	
			one page. [Windows7/ From V01-01]	68
7.	Sample	e Repo	ort	69
	7.1.	Over	view 1 Report	69
	7.2.	Over	view 2 Report	70
	7.3	Deta	il Report	71
	7.4	Stan	dard A Report (Without BPB)	72
	7.5	Stan	dard A Report (With BPB)	73
	7.6	Time	Series Report	74
	7.7	Time	-Series Report (Waveform)	75
	7.8	TBI F	Report	76
	7.9	ABI/	TBI Report	77
	7.10) Post-	ABI Report (Landscape)	78
	7.11	I Post-	ABI Report (Portrait)	79

7.12	Post-ABI Trend Report	80
7.13	Standard Report	81
7.14	Trend Report	82
7.15	Examinee C Report	83
7.16	Simple Examination Report	84
7.17	Brachium BP Report	85

1. General Description

The VSS-50 Data Management Software acquires, displays, prints, corrects, and manages the inspection data measured on the VaSera Series Sphygmomanometer and Sphygmograph. The IC Card Maintenance Software is used to correct the examinee information of the inspection data, or to recover the damaged inspection data stored in the IC card.

The VSS-3 CSV Format Output Software is used to output all inspection data stored in the IC card in CSV format.

Install the respective VSS-50, VSS-3 software before using.

The recommended operating requirements are as follows.

(1) OS	: Windows7 (Home Premium/ Professional/ Ultimate) 32/64bit			
	Windows8.1 3	2/64bit		
	Windows8.1 p	ro 32/64bit		
(2) CPU	: Comply with the	he recommended system requirements of OS		
(3) Memory	: Comply with the	ne recommended system requirements of OS		
(4) Resolution	: 1024 x 768 do	ot or higher, High Color (16bit) or higher		
(5) HDD (Disk Space)	: Application	180MB		
	Data	10GB (100 thousand data)		
(6) PCMCIA or USB connection	: Required for using the IC card			
	CF card reade	er / writer		
(7) USB port	: Required to us	se Software Protector (CodeMeter)		
(8) LAN	: Required for on-line registration of inspection data.			
(9) CD-ROM Drive	: Required for in	nstalling the VSS-50, VSS-3		
When connecting of	ther systems to	VSS-50, a higher performance operating		
environment than th	environment than the specification above is required.			

There are following features for the VSS-50.

- (1) The data management can be performed for not only the numeric data but also the waveform data of the inspection data.
- (2) The VSS-50 system can be operated on multiple PC (maximum 10). The data managed by one PC (Server) can be displayed / printed on other computers (Client).
- (3) The inspection data stored on the IC card can be registered off-line on the VSS-50
- (4) The examinee information can be acquired from the host computer and used on the VaSera Series Sphygmomanometer and Sphygmograph.
- (5) The inspection result can be output in JPEG/PDF graphic file format.
- (6) The examination data can be entered from the result output file of examination device other than VaSera series.
- (7) Any VSS-50 data can be selected to be printed or output to the CSV file.

2. Installing the Software

2.1. General Description for Installation

The software installation procedure will be generally performed by our service representative. To use this software, first install the software. To upgrade the software, uninstall the old version of VSS-10 (including VSS-2, VSS-3) before installing the new version.

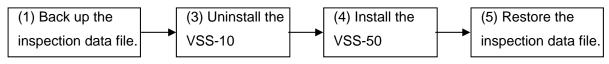
[To Install the Program for the First Time]

To use the VSS-50 software for the first time, install the VSS-50 software (including VSS-3) with the following procedure.

- (1) Perform "2.2. Log On as Administrator" (Refer to p.3).
- (2) Install VSS-50, VSS-3. (Refer to "3.2. Installation Procedure" p.5).

[To Change the Program from VSS-10]

Follow the procedure below to upgrade the software version.



- (1) Back up the inspection data file and setup file currently stored in the PC. (Refer to "3.4 Backup of Inspection Data" p.50)
- (2) Log on to the computer as explained in "2.2. Log On as Administrator" (p.3).
- (3) Uninstall VSS-10 (VSS-1, VSS-2, VSS-3). (Refer to "3.1. Changing the Software from VSS-10" p.4.)

[Refer to the following "CAUTION".]

- (4) Install the VSS-50, VSS-3. (Refer to "3.2. Installation Procedure" p.5.)
- (5) Restore the inspection data file and setup file backed up on procedure (1). (Refer to "3.4.2. Restoration Procedure" p.51.)

If upgrading or installing only the VSS-3 software, follow the procedure explained in "5.1. VSS-3 Uninstallation Procedure" (p.57), "5.2. VSS-3 Installation Procedure" (p.57) to uninstall or install the respective software.

CAUTION: Make sure to uninstall the VSS-10 (VSS-1, VSS-2, VSS-3) before installing the new version.

2.2. Log On as Administrator

The user must log on as "Administrator" to install the VSS-50. Otherwise, the following message will be displayed intercepting the installation process.

In such case, click "Abort" and cease the installation process. Log on again as "Administrator" and start the installation process again.



To install the software as administrator, right-click "menu.exe" on the CD-ROM and select "Run as administrator".

3. VSS-50 Data Management Software

The VSS-50 Software acquires, displays, prints, corrects and manages the inspection data measured on the Sphygmomanometer and Sphygmograph.

To use the VSS-50 system, it is necessary to install the VSS-50 software program to the PC. (Refer to "2. Installing the Software" (p.2))

The installation operation will be generally performed by our service representative. Refer following for the installation procedure.

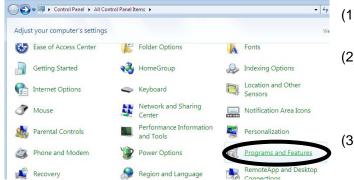
3.1. Changing the Software from VSS-10

If VSS-10 or VSS-1 is already installed, it is necessary to uninstall it before installing the VSS-50. If the VSS-10 or VSS-1 is not installed, proceed to "3.2. Installation Procedure" (p.5).

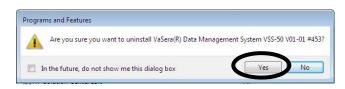
CAUTION: When upgrading the software, back up the inspection data to prevent accidental data loss. For procedures, refer to "3.4 Backup of Inspection Data" (p.50)

3.1.1. Uninstalling the VSS-10(V01-01, V01-02, V01-03, V02-01, V02-02, V03-01), VSS-2, VSS-3

Follow the procedure below to uninstall the VSS-10.



- (1) Open "Control Panel" window.
- (2) Double-click "Programs and Features".
- (3) From "Programs and Features", select "VaSera(R) Data Management Software VSS-10" and remove.



(4) Uninstall the VSS-2 and VSS-3 using the same procedure explained above.

3.2. Installation Procedure

Follow the procedure below to install the program.

- (1) Install the CodeMeter Runtime Kit.
- (2) Install the VSS-50 software program.
- (3) Check the VSS-50 operation.
- (4) Install the PDF Writer.

1. Install the CodeMeter Runtime Kit.

Follow the procedure below to install the CodeMeter Runtime Kit.

_ 🗆 🗙

Cancel

閉じる(C)

- (1) Set the CD-ROM with the install software to the CD-ROM drive, right-click "menu.exe", and run as administrator.
- (2) Select "CodeMeter Runtime Kit Ver.5.00d".
- (3) Click the key with \bigcirc as shown below.



CodeMeter Runtime Kit v5.00d will be installed in a per-user folder and be available just for your user account. You do not need local Administrator privileges.

CodeMeter Runtime Kit v5.00d will be installed in a per-machine folder by default and be available for all users. You can change the default installation folder. You must have local Administrator privileges.

Back

Installation Scope

Installation Scope

User name: Organization:

🗒 CodeMeter Runtime Kit v5.00d Setup

Choose the installation scope and folder

🔿 Install just for you (tsuda)

all for all users of this machine

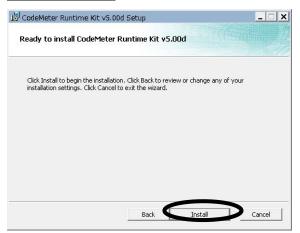
License Agreement



Destination Folder Setup

Select the way your	want features to be in	octalled
		the way features will be installed.
	leMeter Runtime Kit	This features installs the CodeMeter Runtime Kit on your computer. This feature requires 19MB on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 12MB on your hard drive.
		Browse

Begin Installation



😸 CodeMeter Runtime Kit v5.00d Se	etup		_ 🗆 X
Installing CodeMeter Runtime H	(it v 5.00d		
Please wait while the Setup Wizard insta Status:	ills CodeMeter Runti	me Kit v5.00d.	
]			
	Back	Next	Cancel

End of Installation

🖞 CodeMeter Runtime Kit	v5.00d Setup
al Affertium, 212	Completed the CodeMeter Runtime Kit v5.00d Setup Wizard Click the Finish button to exit the Setup Wizard.
Build 1077	
	Back Finish Cancel

2. Install the VSS-50 software.

- (1) Insert the install CD into the CD-ROM drive, right-click "menu.exe", and run as administrator.
- (2) Select "VSS-50 VaSera Data Management System".
- (3) Click the keys indicated by O as shown below.

	Destination Folder Setup
😾 VaSera(R) Data Management System VSS-50 V01-01 #453	🔡 VaSera(R) Data Management System VSS-50 V01-01 #453
Welcome to the VaSera(R) Data Management System VSS-50 V01-01 #453 Setup Wizard	Select Installation Folder
The installer will guide you through the steps required to install VaSera(R) Data Management System VSS-50 V01-01 #453 on your computer.	The installer will install VaSera(R) Data Management System VSS-50 V01-01 #453 to the following folder.
	To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse". Folder:
	Ci¥Program Files¥Fukuda Denshi¥VSS-10¥ Browse
	Disk Cost
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil	Install VaSera(R) Data Management System VSS-50 V01-01 #453 for yourself, or for anyone who uses this computer:
or criminal penalties, and will be prosecuted to the maximum extent possible under the law.	C Everyone
	C Just me
Cancel < Back Next >	Cancel < Back Next >
Begin Installation	End of Installation
Confirm Installation	Installation Complete
The installer is ready to install VaSera(R) Data Management System VSS-50 V01-01 #453 on your computer.	VaSera(R) Data Management System VSS-50 V01-01 #453 has been successfully installed.
Click "Next" to start the installation.	Click "Close" to exit.
Cancel < Back Next>	Cancel < Back Close

3. Operation Check of the VSS-50

When the setup (VSS-50 install process) is complete, VSS-50 program will be added to the Windows system.



After inserting the provided CodeMeter to the USB connector of the PC, select "VaSera (R) Data Management System VSS-50" from the Start menu and verify that the VSS-50 system properly operates.

Install the VSS-3 using the same procedure explained in "(1) Install the VSS-50 Program".

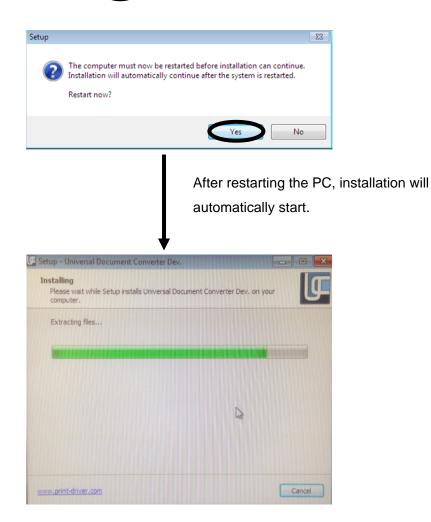
If the CodeMeter is not inserted to the USB, the following message will be displayed.
 If operating on the Client PC, insert the CodeMeter to the Server PC.

VssDBM.ex	xe: Start Error		×
8	One of the following * CodeMeter 102683: Failure reason: Cm	licenses is required: 33940001:1 Container Entry not four	nd, Error 200.
		Retry	Cancel

4. Install the PDF Writer (Universal Document Converter).

Install this software to output the color report in PDF format.

- (1) Insert the install CD into the CD-ROM drive, right-click "menu.exe", and run as administrator.
- (2) Select "PDF Writer (Universal Document Converter) Ver6.5".
- (3) Click the keys indicated by O as shown below.



3.2.1. Environment Setup (Single PC Operation)

Environm	nent Setup	×
Server D	evice Folder Print format Print item General	
Remote	Sener	14
l'emote :	server Semig	
C:\Use	rs\Public\AppData\FukudaDenshi\VSS-10	
	Add Remove 🗖 Set	
-	c picture output	1
None	Folder C.VImage Browse	
Report	○ Overview1 ✓ Overview2 ✓ ExamineeA Standard A(NO BPB) ✓ Standard A(BPB) □ TBI △ ABI TBI □ Detail □ SeriesData □ POST ABI □ POST ABI Trend □ Standard B □ Trend □ ExamineeB ExamineeC □ SimpleExamination □ BrachiumBp	
	Initialize	
	<u>Se</u> tup <u>C</u> ancel	

- (1) Start the VSS-50 program and open the Environment Setup window by clicking "Set environment" on the "Maintenance" menu.
- (2) If operating the VSS-50 on single computer, the "Remote server" section should be left blank.

For other details for Environment Setup, refer to "3.3.16 Environment Setup" (p.42).

Reference About the "Server PC"

If operating the program on single computer, leave the "Remote server" section blank as this PC will operate as the "Server PC".

3.2.2. Environment Setup (Multiple PC Operation)

	ment Setup Device Folder Printformat Printitem C)eneral
Remote		Setting
-Volum C:\Us	e ers\Public\AppData\FukudaDenshi\VSS-10	
	Add Remove	🗆 Set
Automat	tic picture output	
None	Folder C:\Image	Browse
	BP PAD P	OST ABI
Report	○ Overview1 ✓ Overview2 ✓ Examin ○ Standard A(NO BPB) ✓ Standard A(NO BPB) ✓ Standard B □ TBI □ ABI TBI □ Detail □ SeriesE □ POST ABI □ POST ABI Trend □ Trend □ Standard B □ Trend □ Trend □ ExamineeB □ Examin □ Brachiu	rd A(BPB) Data I R-R eeC
		Initialize

Server PC

- Start the VSS-50 program and open the Environment Setup window by clicking "Set environment" on the "Maintenance" menu (see below).
- (2) If operating the VSS-50 as Server, leave the "Remote server" section blank.

CAUTION: For the VSS-50 System, only one PC should be set as the Server PC. If more than one PC is set, the system will not properly operate.

Client PC

- (1) Start the VSS-50 program and open the Environment Setup window by clicking "Set environment" on the "Maintenance" menu
- (2) In the case where VSS-50 is used as a client, open the "Set remote server" window by clicking on the "Setting..." button of Remote server, Then click on the "Browse..." button and enter the computer name of VSS-50 which is currently applied to a "Remote server" as a server.

Environment Setup	>
Server Device Folder Print for	rmat Print item General
Remote server	
Remote server	Setting

🔻 Set remote s	erver	_ 🗆 X
Local address ⊢Remote server	RS10270FDT(10.0.200.65)	
Remote server	10240	Browse
Timeout	3 Second	Initialize
Test 1.Ping test 2.Connection te 3.Server test	st	Test
	S <u>e</u> tup	Cancel

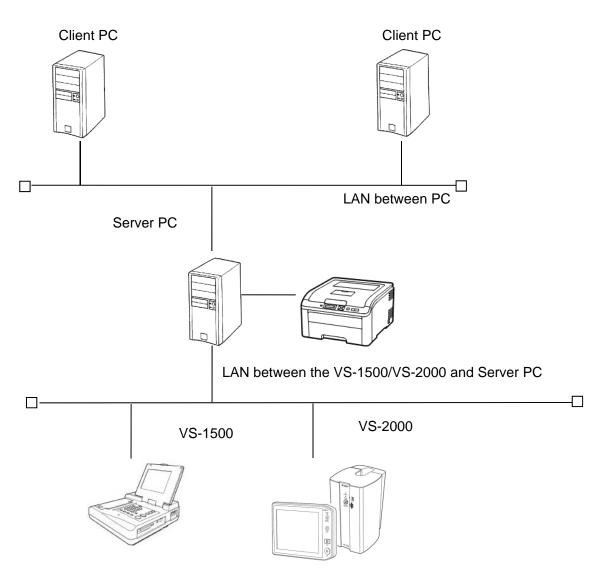
CAUTION: For Client PC to connect to the Server PC, register the logon name (user name) of the Client PC on the Server PC.

For other details of Environment Setup, refer to "3.3.16 Environment Setup" (p.42).

Reference About the "Server PC When operating the VSS-50 on more than one computer, the "Server PC" performs as the data management (receives the data from the Sphygmomanometer and Sphygmograph). The Client PC can only reference the data of the Server PC. The VSS-50 can be operated on maximum of 10 computers.

Network Configuration

The following is an example of network configuration.



CAUTION: If the hospital network is busy, a communication failure may occur during data transmission from the Sphygmomanometer and Sphygmograph to the Server PC. To avoid such problems, use a separate LAN for the Sphygmomanometer and Sphygmograph transmission.

3.2.3. Connecting to the Sphygmomanometer and Sphygmograph

In this section, VSS-50 network connection procedure is explained using the example of Windows 7 TCP/IP setting.

Note that procedure may differ depending on the usage environment.

1. Attach the LAN adapter

The procedure may differ depending on the usage environment. (Desktop or laptop PC, the LAN adapter is built-in or external, etc.) Refer to the operation manual of the respective LAN adapter for attaching the LAN board and installing the device driver. If the LAN adapter is built-in type, refer to the operation manual of the PC.



2. Perform network setting.

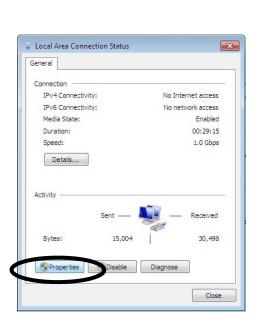
- (1) Click "Start" on the taskbar.
- (2) Click "Control Panel.

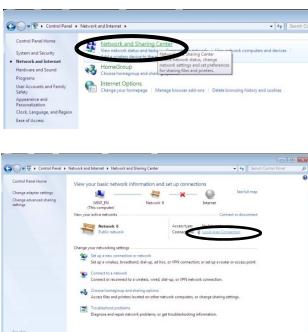
3. Local Area Connection

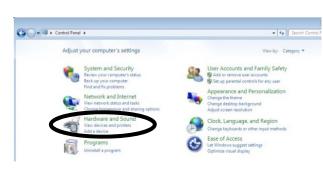
- (1) The "Control Panel" window will be displayed.
- (2) Click "Network and Internet" in the Control panel.
- (3) Click "Network and Sharing Center".

- Control Panel + Control Panel Home Change ada Change adv settings -× 0 WIN7_EN Network 6 Public networ * ess hro t to a wireless, wired, dial-up, or eð, -HomeGroup Internet Opti
- (4) Click "Local Area Connection".

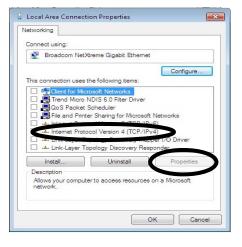
- (5) "Local Area Connection Status" window is displayed.
- (6) Click "Properties" button.







TCP/IP Setup 4.



eneral	
	ed automatically if your network supports u need to ask your network administrator s.
tain an IP address aut	tomatically
() Use the following IP addr	ress:
ID a dress:	192 . 168 . 2 . 100
Subnet mask:	255.255.255.0
Default gateway:	192.168.2.1
💿 Obtain DNS server addre	ess automatically
Output the following DNS set	rver addresses:
Preferred DNS server:	· • •
Alternate DNS server:	1. 1. I
🕅 Validate settings upon e	Advanced
	OK Cancel
	OK Cancel
Local Area Connection Pro	
Vetworking	operties
Vetworking	operties
Vetworking	agabit Elhemet
Vetworking Connect using:	Sigebit Ethemet Configure Wring items:
Vetworking Connect using: Broadcom NetXtreme C This connection uses the follo Citert for Microsoft N Trend Micro NDIS 6	agenties
Broadcom NetXtreme C This connection uses the follo Client for Microsoft N Trend Micro NDIS 6 QoS Packet Schedu	agenties

 Link-Layer Topology Discovery Mapper I/O Driver
 Link-Layer Topology Discovery Responder Install... Uninstall Properties Description Allows your computer to access resources on a Microsoft network. OK Cancel × Local Area Connection Status General Connection IPv4 Connectivity: No Internet access IPv6 Connectivity: No network access Media State: Duration: Enabled 00:29:15 Speed: 1.0 Gbps Details... Activity

Sent —

Properties Blagnose Diagnose

Bytes:

15,004

T

Received

30,498

Close

- (1) Select "Internet Protocol Version 4 (TCP/IPv4U).
- (2) Click "Properties" button.

- (3) Select "Use the following IP address"
- (4) Set the IP address and subnet mask IP
- (5) Click "OK" button.

(6) Click "OK".

(7) Click "Close"



 Control Panel + Network and Internet + HomeGioup Control Panel + Network and Internet + HomeGioup Share with other home computers running Windows 7 This computer can't connect to a homegroup, your computer's network location must be set to Home. What is a network location With a homegroup, you can have files and printers with other computers running Windows 7. You can also stream must be clocit. The homegroup protected with a password, and you'll always be able to choose what you date with things. Change advanced having settings.
To create or join a homegroup, your computer's network location must be set to Home. What is a network location? White is an endwork location? White homegroup, you can share first and privites with other computers running Windows 7. You can also them media to devices. The homegroup is protected with a password, and you'll always be able to choose what you share with the group. One media BootCompare
What is a network location? With a homegroup, you can share files and printers with other computers running Windows 7. You can also stream media to devices. The homegroup is protected with a password, and you'll always be able to choose what you share with the group.
stream media to devices. The homogroup is protected with a password, and you'll always be able to choose what you alway with the group.
while more about normegnes,
change advanced sharing securgs
Create a homegroup OK

(1)	Click "homegroup	and sharing options".
-----	------------------	-----------------------

(2) Click "Change advanced sharing settings".

🕜 🖉 🗣 🍪 🕨 Control Panel 🕨	Network and Internet + Network and Sharing Center + Advanced sharing settings	• 49 Search Control Pane	۹ I
Cha	inge sharing options for different network profiles		î
	Sovis creates a separate network profile for each network you use. You can choose specific o profile.	options for	
Hon	ne or Work		
Pub	lic (current profile)	•	
	Network discovery		
	When network discovery is on, this computer can see other network computers and de visible to other network computers. What is network discovery?	wices and is	E
	Turn on network discovery Turn off network discovery		
	File and printer sharing		
	When file and printer sharing is on, files and printers that you have shared from this co be accessed humanism the network.	mputer can	
	Turn on file and printer sharing Turn off file and printer sharing		
	Public folder sharing		
	When Public folder sharing is on, people on the network, including homegroup memb access files in the Public folders. What are the Public folders?	ers, can	
	 Turn on sharing so anyone with network access can read and write files in the F Turn off Public folder sharing (people logged on to this computer can still acce folders) 		
	File sharing connections		-
	Save changes	Incel	

- (3) Click "Turn on file and printer sharing".
- (4) Click "Save changes" button.

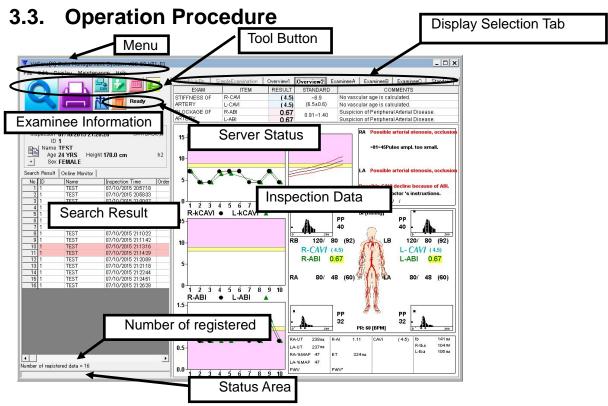
NOTE

- The IP address differs depending on the network environment.
- Set the same IP address on the Sphygmomanometer and Sphygmograph ("NETWORK SETTING"). For the Sphygmomanometer and Sphygmograph setup procedure, refer to its Operation Manual.
- Do not connect the Sphygmomanometer and Sphygmograph to the currently used network. This may result in a transmission error between the Sphygmomanometer and Sphygmograph and PC.
- Change the selection to "Use the following IP address" if "Obtain an IP address automatically" is set.

Assign an IP address which will not overlap with the IP address assigned by DHCP server (including rooter, etc.).

If the adjustment with the DHCP server (including rooter, etc.) is required, consult with your network administrator, or refer to the operation manual of the DHCP server and rooter.

 If the firewall software is installed in the PC, the communication between the Sphygmomanometer and Sphygmograph and VSS-50 cannot be established. Adjust the firewall setting so that the Sphygmomanometer and Sphygmograph and VSS-50 can communicate with the port number "8192".



The VSS-50 is operated through the "Menu" and "Tool button". The display type for the "Inspection Data" section can be selected on the "Display Selection Tab".

If "Ready" is displayed in the "Server Status" area, it indicates that the Environment Setup has been properly performed and VSS-50 is properly operating. If the PC is operating as Server, it is ready to register the inspection data from the VS-2000

The Description of Each Display Area

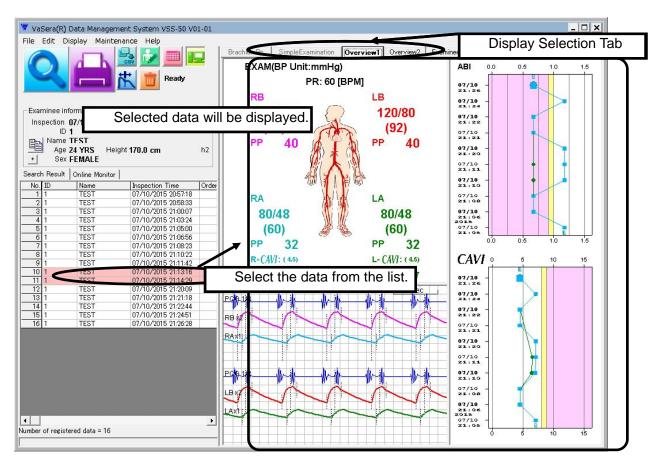
Examinee Information	: The examinee information (ID, name, inspection date, age, height, and sex) is displayed.
Server Status	: The operation status of the Server is displayed.
Ready	: The Server is properly operating and is ready to search, display, and print the data.
Under preparation	: The Server database is under preparation.
Subject change	: The Server PC is preparing to display the data.
Unconnected	: Not connected to database server.
Re-initializing	: The Server setup has been changed, and is under operation to
	operate with a new setup.
Restoring	: In process of restoring the database. (Refer to "3.4.2. Restoration Procedure" p.51)
Error	: Error has occurred to Server operation.
Search Result	: Inspection data list is displayed.
Search Result	: Searched data list is displayed.
Online Monitor	: On-line registered data after starting the VSS-50 is displayed.
Inspection Data	: The selected inspection data on the list is displayed.
No. of registered data	: The number of registered data is displayed.
Status Area	: The operation status of VSS-50 is displayed.

3.3.1 Searching and Displaying the Registered Data

Click the "Search" button to display the window to set the search condition.

 Search Date 	06/22/2000 • ~ 07/22/2015 •
i	
ID	
🗆 Name	
🗆 Sex	MALE -
🗖 Search	deleted data +
	Initialize Search Cancel

- (1) Set the search condition.
 Put a check mark for the item to include in the search condition, and set each condition. Click on the + button to add ABI and CAVI to search conditions.
- (2) Click "Search" to start the search process.
 Use the "*" as a wild card. During the search process, "Searching database..."
 will be displayed in the status area.
- (3) The searched data will be displayed in the search result area.
- (4) To initialize the search condition, click"Initialize". To stop the search process, click "Cancel (X)".

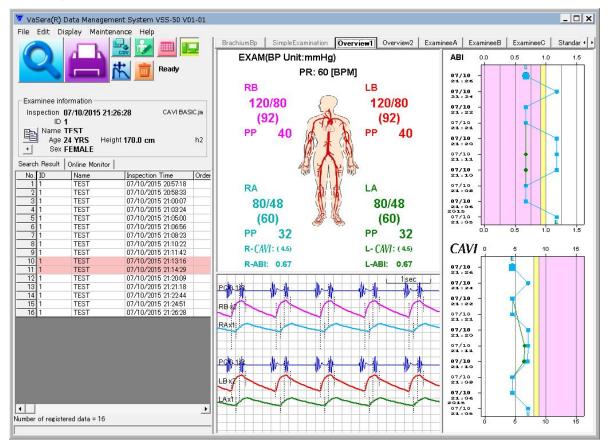


(5) Select the data from the search result list

(6) The selected data will be displayed in the inspection data area at the right side of the window.

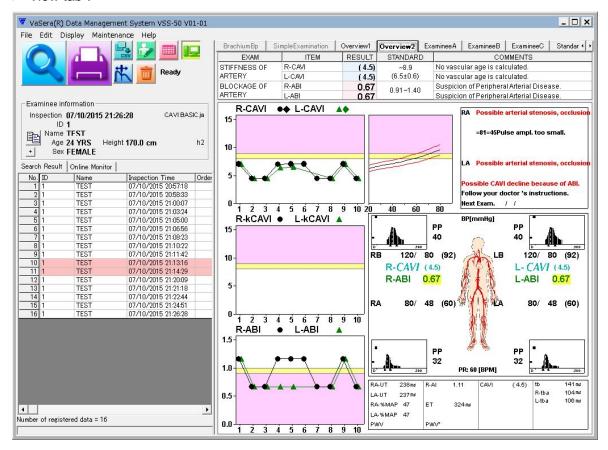
The contents to be displayed can be selected using the display type tab.

Selecting the "Overview 1" tab will show the overview of the examination result.



Selecting the "Overview 2" tab will show the overview of the examination result.

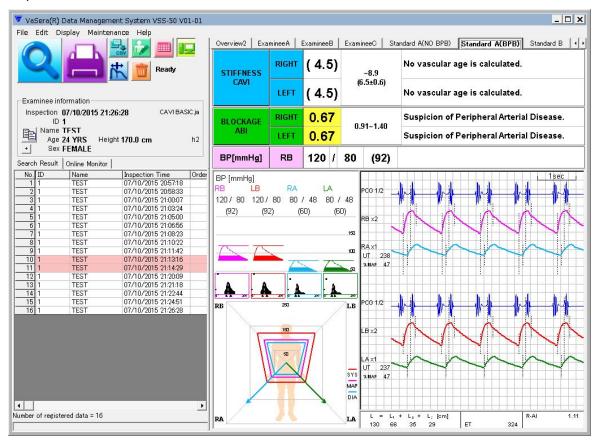
The items to be displayed can be selected under "Maintenance" > "Set environment" > "General" > "View tab".



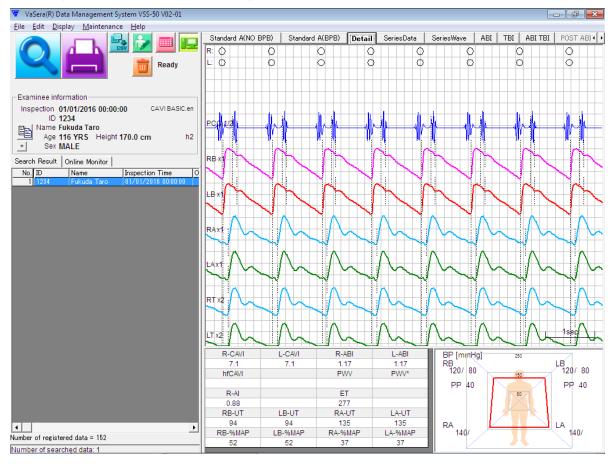
Selecting "Standard A (No BPB)" will show the same display as the VS-2000 "Standard (No BPB)" Report.

▼ VaSera(R) Data Management System VSS-50 V01-01										- 🗆 ×
File Edit Display Maintenance Help										
	Overview2	Examinee A	A Examined			1 1 1 100	BPB) Stand		n) L cu	andard B
	Overview2	Examineer			nineeo stai	ndard A(NU	BPB) Stand	-		the second s
			ABI		CAVI	ST	TANDARD	UT	%MAP	ET
Ready	RIG	HT	0.67		(4.5)		~8.9	238	47	324
Examinee information	LEF	т	0.67		(4.5)		6.5±0.6)	237	47	
Inspection 07/10/2015 21:26:28 CAVI BASIC ja	P CAN	VI(4.5)	Novo	coulo	r ago i	e color	lated			
ID 1										
	L-CAV	/I(4.5)	No va:	scula	r age is	s calcu	lated.			
Name TEST Age 24 YRS Height 170.0 cm h2										1 1sec 1
+ Sex FEMALE	AF	510	mm L1	÷	66 cm					TSEL
Search Result Online Monitor	L	130	cm L2		35 cm	PCG 1/2_	ri drip	_		
No. ID Name Inspection Time Order			L3		29 cm					
1 1 TEST 07/10/2015 20:57:18		,					nn			A A
2 1 TEST 07/10/2015 20:58:33	BP	SYS	DIA	MAP	PP	RB x2	IN IN			N IN
3 1 TEST 07/10/2015 21:00:07					-				NI	NIN
4 1 TEST 07/10/2015 21:03:24 5 1 TEST 07/10/2015 21:05:00	RB	120	80	92	40			V	N	- N
6 1 TEST 07/10/2015 21:05:00				0220-0						
7 1 TEST 07/10/2015 21:00:30	LB	120	80	92	40	RAx1	\wedge			$ \land \land$
8 1 TEST 07/10/2015 21:0:22	RA	80	48	60	32			~3		~
9 1 TEST 07/10/2015 21:11:42	RA	80	48	60	32					
10 1 TEST 07/10/2015 21:13:16	LA	80	48	60	32					
11 1 TEST 07/10/2015 21:14:29	E.A.	00	-0		V2					
12 1 TEST 07/10/2015 21:20:09	CAVI R 🔴		CAVL. 4	GE PLOT	г					
13 1 TEST 07/10/2015 21:21:18			CAN - A							
14 1 TEST 07/10/2015 21:22:44	15					PCG 1/2				
15 1 TEST 07/10/2015 21:24:51	13					1001/2_1		M		
16 1 TEST 07/10/2015 21:26:28										
	11 +						n n	À		N N
						LB x2	(X IX			λ / λ
	9						\mathbb{N}	\mathbf{N}	NI	XIN
						X		V.	V	N.
	1									
						LAx1	NIN	11		NN
								V	7	V
	3									
	j									
•	1									
Number of registered data = 16				<u> </u>						
	20	30 40	50 6	0 70	80 YRS					
1	0									

Selecting "Standard A (BPB)" will show the same display as the VS-2000 "Standard A (BPB)" Report.



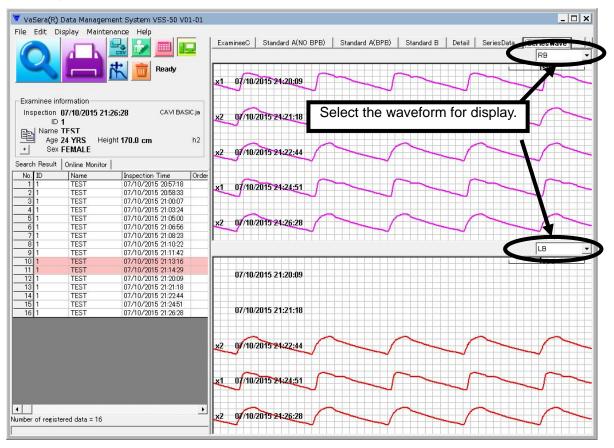
Selecting "Detail" will display the enlarged waveform.



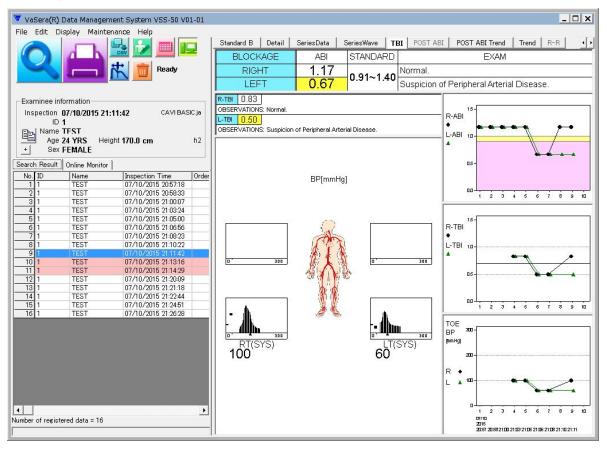
Selecting "SeriesData" will display the time-series data.

🔽 VaSera(R	:) Data Managemi	ent System VSS-50 V01	L-01													_	
File Edit	Display Mainten	ance Help															
			- 1	ExamineeB Exa	mineeC	Stand	dard A(NO BPE	B)	Standard	A(BPE	3) Sta	ndard B	De	tail S	eries	Data	S++
		😪 📝 📖 占						I		I			_	R-CAVI			
				Inspection Time 07/10/2015 21:05			LB 120/80(92)	4.40	RA 0/80(100)	140	LA / 80(100)		1.17	7.1	L-CAV	_	PVVV"
		丈 🦷 Ready		07/10/2015 21:05									0.67	(4.5)			
				07/10/2015 21:08	120/8		120/80(92) 120/80(92)		0/48(60) 0/48(60)		D/ 48(60) D/ 48(60)		0.67	(4.5)	(4.5		-
-				07/10/2015 21:08	120/8	- 1 1	120/80(92)		0/48(80) 0/80(100))/48(60))/48(60)		0.67	(4.5)	(6.4		-
- Examinee i	information			07/10/2015 21:10	120/8		120/80(92))/80(100))/80(100))/48(60))/48(60)			7.0	(6.5		
				07/10/2015 21:20	120/8		120/00(92))/80(100))/80(100)		JA 40(00)	1.17	0.07	7.1	(0.5	2	-
	07/10/2015 21:2	CAVIBASI	C.ja	07/10/2015 21:20	120/8				0/48(60)			0.67		(4.5)		-	-
and the second se	⊃1			07/10/2015 21:22	120/8		120/80(92)		0/48(00)	01	0/48(60)		0.67	(4.5)	(4.5	3	
329	e TFST			07/10/2015 21:22	120/8		120/80(92)		0/48(00)		/ 80(100)		1.17	(4.3)	(4.0		-
rg		ht 170.0 cm	h2	07/10/2015 21:24	120/8		120/80(92)		0/48(60)) 48(60)			(4.5)	(4.5		
+ Se	× FEMALE					0(32)	HRorPF VE									£	PEP/ET
Search Result	t Online Monitor			Inspection Time	hfCAVI	-									PEP		PEPJET
No. ID	Name	Inspection Time	Order	07/10/2015 21:05 07/10/2015 21:06		-	60 (PR) 60 (PR)	60.0 60.0		135 237	135		87 17	37	-	277 324	
1 1	TEST	07/10/2015 20:57:18	Order	07/10/2015 21:08				60.0		237	237		7	47	-	324	
2 1	TEST	07/10/2015 20:58:33	_	07/10/2015 21:08			60 (PR) 60 (PR)	60.0	20.8	134	237		16	47	-	278	
3 1	TEST	07/10/2015 21:00:07		07/10/2015 21:10		-	60 (PR)	60.0		134	237		07	47	-	277	
4 1	TEST	07/10/2015 21:03:24		07/10/2015 21:11			60 (PR)	60.0		135	231		87	47	-	277	
5 1	TEST	07/10/2015 21:05:00		07/10/2015 21:20			60 (PR)	60.0		237			7		-	324	
6 1	TEST	07/10/2015 21:06:56		07/10/2015 21:22			60 (PR)	60.0		237	237		7	47	-	324	
7 1	TEST	07/10/2015 21:08:23		07/10/2015 21:22				60.0	20.8	135	135		37	37	-	277	
8 1	TEST	07/10/2015 21:10:22		07/10/2015 21:24			60 (PR) 60 (PR)	60.0		238	237		7	47	-	324	
91	TEST	07/10/2015 21:11:42					60 (PR)	60.0	20.8	238	231	4	1	47		324	
10 1	TEST	07/10/2015 21:13:16		R-CAVI♦♦ L	.CAVI	٠	R-AE	BI 🔶	L-ABI			PV	VV* (F			[m/s]
11 1	TEST	07/10/2015 21:14:29		15 -			1.5-		10000100901			15-					
12 1 13 1	TEST	07/10/2015 21:20:09										C 24. C 24. D					
13 1	TEST	07/10/2015 21:21:18 07/10/2015 21:22:44		0.0						1	۸	3623					
15 1	TEST	07/10/2015 21:22:44		10 -			1.0		/	1		10-					
16 1	TEST	07/10/2015 21:26:28	-					1		1	_ \						
	11201	01710/2010 21-20-20		5-	and a	_	0.5-			100		5-					
							-										
				222								1.1					
				1 2 3 4	5 6 7	8 9	10 0.0	2 3	4 5 6	7	8 9 10		2	4 5	6	7 8	9 10
					•••	•••				1.12	• • •	- 61			1.0	6. 16	
					212.12 212.20 212.21	21:22	5F 56			11.11	21:22	1.05	91 T C			21:22	21:24
					21. 21.	12 12	ដ ដ	21:00	12 12	37.	21: 21:	1 1	E S		21:20	31. 21	21:
				2015			2015					2015					
				2			21					2(
4			•	12			100					122					
Number of regis	stered data = 16			91/20			07/L					11/10					
							5					5					
1.00			-														

Selecting "SeriesWave" will display the time-series waveform data.



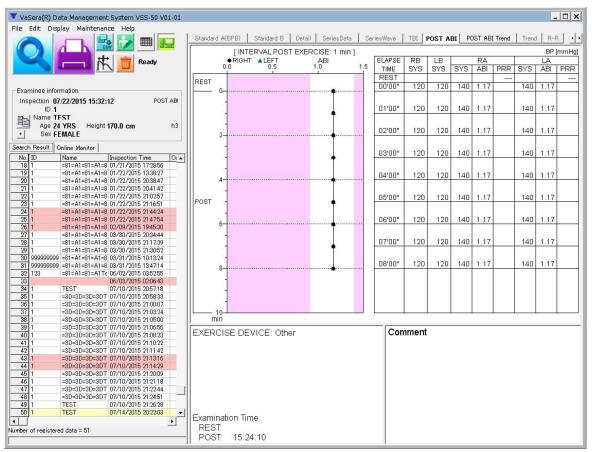
Selecting "TBI" will display the TBI examination result.



Selecting "POST ABI" will display the Post ABI. (Landscape format)

VaSera(R) Data Management System VSS-50 V01-01											
File Edit Display Maintenance Help											
	Standard A	(BPB) Stand	lard B Det			sWave TI	BI POST A	DAL DOCT	ABI Trend	Trend R-	<u>, 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1</u>
	Standard A	(BPB) Stand	ard B Det	ail SeriesD	ata Serie	eswave II	PUST A	BI PUST	ABITrend	Trend R-	R
		RIGHT ALE	FT	[INTER	VAL POS	T EXER	CISE: 1 r	nin 1			
Ready	1.5 т			1				1			1
		1					-				
							1				
Examinee information									-		
	1.0 -										
Inspection 07/22/2015 15:32:12 POST ABI											
D I Name TEST	ABI						1				
Name TFST Age 24 YRS Height 170.0 cm h3											
+ Sex FEMALE	0.5 -										
Search Result Online Monitor											
No. ID Name Inspection Time O(🔺		1									
18 1 =81=A1=81=A1=8 01/21/2015 17:28:56	0.0 -	<u> </u>		i			. <u>i</u> .				
19 1 =81=A1=81=A1=8 01/22/2015 13:38:27 20 1 =81=A1=81=A1=8 01/22/2015 20:38:47		RESTI		2	4	POST	6		8	1	0 min
20 1 =81=A1=81=A1=8 01/22/2015 20:38:47 21 1 =81=A1=81=A1=8 01/22/2015 20:41:42		REDI				FUST					
22 1 =81=A1=81=A1=8 01/22/2015 21:02:57										3P [mmHg]	
23 1 =81=A1=81=A1=8 01/22/2015 21:16:51			RB	LB		RA			LA		
24 1 =81=A1=81=A1=8 01/22/2015 21:44:24		TIME	SYS	SYS	SYS	ABI	PRR	SYS	ABI	PRR	
25 1 =81=A1=81=A1=8 01/22/2015 21:47:54		REST	8								
26 1 =81=A1=81=A1=8 02/09/2015 19:45:30		00'00"	120	120	140	1.17		140	1.17		
27 1 =81=A1=81=A1=8 03/30/2015 20:34:44 28 1 =81=A1=81=A1=8 03/30/2015 21:17:39		01'00"		120	140	1.17		140			
28 1 =81=A1=81 03/30/2015 21:17.39 29 1 =81=A1=81 03/30/2015 21:30:52			120						1.17		
30 999999999 =81=A1=81=A1=8 03/31/2015 10:13:24		02'00"	120	120	140	1.17		140	1.17		
31 999999999 =81=A1=81=A1=8 03/31/2015 13:47:14		03'00"	120	120	140	1.17		140	1.17		
32 123 =81=A1=81=A1Te 06/02/2015 03:52:55		04'00"	120	120	140	1.17		140	1.17		
33 06/03/2015 02:06:43		05'00"	120	120	140	1.17		140	1.17		
34 1 TEST 07/10/2015 20:57:18 35 1 =3D=3D=3DT 07/10/2015 20:58:33		06'00"	120	120	140	1.17		140	1.17		
35 1 =3D=3D=3DT 07/10/2015 2058:33 36 1 =3D=3D=3DT 07/10/2015 21:00:07		07'00"	120	120	140	1.17		140	1.17		
37 1 =3D=3D=3D=3DT 07/10/2015 21:03:24											
38 1 =3D=3D=3D=3DT 07/10/2015 21:05:00		08'00"	120	120	140	1.17		140	1.17		
39 1 =3D=3D=3D=3DT 07/10/2015 21:06:56						Comm	ant				
40 1 =3D=3D=3D=3DT 07/10/2015 21:08:23	EXERCI	SE DEVICE	. Other			Comm	lent				
41 1 =3D=3D=3D=3DT 07/10/2015 21:10:22											
42 1 =3D=3D=3DT 07/10/2015 21:11:42 43 1 =3D=3D=3DT 07/10/2015 21:13:16											
43 1 -30-30-30-301 07/10/2015 21:13:10 44 1 -3D=3D=3D=3DT 07/10/2015 21:14:29											
45 1 =3D=3D=3D=3DT 07/10/2015 21:20:09											
46 1 =3D=3D=3D=3DT 07/10/2015 21:21:18											
47 1 =3D=3D=3D=3DT 07/10/2015 21:22:44											
48 1 =3D=3D=3D=3DT 07/10/2015 21:24:51											
49 1 TEST 07/10/2015 21:26:28 50 1 TEST 07/14/2015 20:22:03 ▼											
50 1 TEST 07/14/2015 20:22:03 -	Examina	tion Time									
Number of registered data = 51	REST										
Number of registered data = 01	POST:	15:24:10									
	1 1001.	10.24.10									

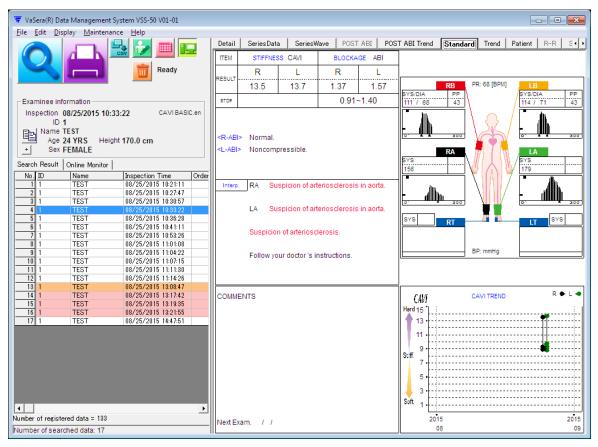
(Portrait Format of Post ABI)



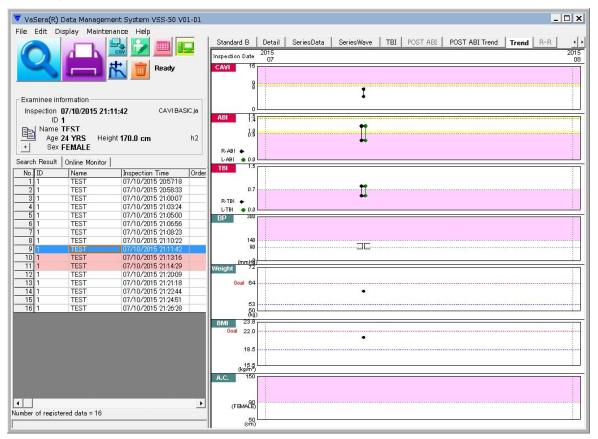
Selecting "POST ABI Trend" will display the "POST ABI Trend".

												_ 🗆 🗙
VaSera(R) Data Management System VSS-50 V01-01												
File Edit Display Maintenance Help						<i>i</i>					-	
	Standard A	BPB) Star	ndard B	Detail S	eriesData	SeriesWa	ive TBI	POST A	BI POST	ABI Tren	Trend	R-R · ·
		1										
tt m Ready	REST	1.5	-									
	R-ABI											2010/00/00
	L-ABI				•	•	•			*	1	20
	A	1.0										
Examinee information		1.0							fl			
Inspection 07/22/2015 15:32:12 POST ABI				1	2	14		2			2	
ID 1	POST		•		*			•			•	
Name TFST	R-ABI	0.5										
Age 24 TRS Height 170.0 Cm 113	L-ABI											
+ Sex FEMALE												
Search Result Online Monitor		0.0	1	4	-	1	<u>,</u>		4		d 1	
No. ID Name Inspection Time Or		201	1	2	3	4 :	5	6	1	0		-
18 1 =81=A1=81=A1=8 01/21/2015 17:28:56		7/1	0 7/1									2
19 1 =81=A1=81=A1=8 01/22/2015 13:38:27		21:	06 21:	08 21:	10 21:	:11 21:5	20 21:	21 21:	22 21	:24 21:	26 15:	32
20 1 =81=A1=81=A1=8 01/22/2015 20:38:47											BP (m	mHal
21 1 =81=A1=81=A1=8 01/22/2015 20:41:42		GHT	1	2	3	4	5	6	7	8	9	10
22 1 =81=A1=81=A1=8 01/22/2015 21:02:57 23 1 =81=A1=81=A1=8 01/22/2015 21:16:51		REST	0.67	0.67	1.17	1.17	1.17	0.67	0.67	1.17	0.67	10
24 1 =81=A1=81=A1=8 01/22/2015 21:10:01	0.20		0.67	0.67	1.17	1.17		0.67	0.67	1.17	U.b/	
25 1 =81=A1=81=A1=8 01/22/2015 21:47:54	ABI	POST										1.17
26 1 =81=A1=81=A1=8 02/09/2015 19:45:30		FPRR										
27 1 =81=A1=81=A1=8 03/30/2015 20:34:44	RA	REST	80	80	140	140	140	80	80	140	80	
28 1 =81=A1=81=A1=8 03/30/2015 21:17:39	SYS	POST										140
29 1 =81=A1=81=A1=8 03/30/2015 21:30:52	L					1		1				
30 999999999 =81=A1=81=A1=8 03/31/2015 10:13:24 31 999999999 =81=A1=81=A1=8 03/31/2015 13:47:14	1 m	CCT	1		2	4	r		7		0	10
31 999999999 =81=A1=81=A1=8 03/31/2015 13:47:14 32 123 =81=A1=81=A1T€ 06/02/2015 03:52:55	<u>ا</u>	EFT	· · · ·	2	3		5	6	10.0	8	9	10
33 06/03/2015 02:06:43	11	REST	0.67	0.67	0.67	0.67			0.67	1.17	0.67	
34 1 TEST 07/10/2015 20:57:18	ABI	POST										1.17
35 1 =3D=3D=3D=3DT 07/10/2015 20:58:33	11	FPRR										
36 1 =3D=3D=3D=3DT 07/10/2015 21:00:07	LA	REST	80	80	80	80			80	140	80	
37 1 =3D=3D=3D=3DT 07/10/2015 21:03:24	SYS	POST										140
38 1 =3D=3D=3D=3DT 07/10/2015 21:05:00 39 1 =3D=3D=3DT 07/10/2015 21:06:56					1	<u>la</u>			L	L.	I	
39 1 =3D=3D=3D=3DT 07/10/2015 21:06:56 40 1 =3D=3D=3D=3DT 07/10/2015 21:08:23	-	0.00			0		r.		-		0	40
40 1 =3D=3D=3D=3D=3D1 07/10/2015 21:08:23 41 1 =3D=3D=3D=3DT 07/10/2015 21:10:22	BRAI	C. SYS	1	2	3	4	5	6	7	8	9	10
42 1 =3D=3D=3D=3DT 07/10/2015 21:11:42	REST	RIGHT	120	120	120	120	120	120	120	120	120	
43 1 =3D=3D=3D=3DT 07/10/2015 21:13:16		LEFT	120	120	120	120			120	120	120	
44 1 =3D=3D=3D=3DT 07/10/2015 21:14:29	0.007	RIGHT		1		1		1				120
45 1 =3D=3D=3D=3DT 07/10/2015 21:20:09	POST	LEFT				1				1		120
46 1 =3D=3D=3D=3DT 07/10/2015 21:21:18	<u>.</u>			2		10. 2		20 E		EDDD-Ei	et.Poet/Po	stABI Ratio
47 1 =3D=3D=3D=3DT 07/10/2015 21:22:44 48 1 =3D=3D=3DT 07/10/2015 21:24:51										CERN.FI	SELOSNUG	andi Nauu
48 1 = 30-30-301 07/10/2013 21:24:01 49 1 TEST 07/10/2015 21:26:28	Comment											
50 1 TEST 07/14/2015 20:22:03 -												
Number of registered data = 51												

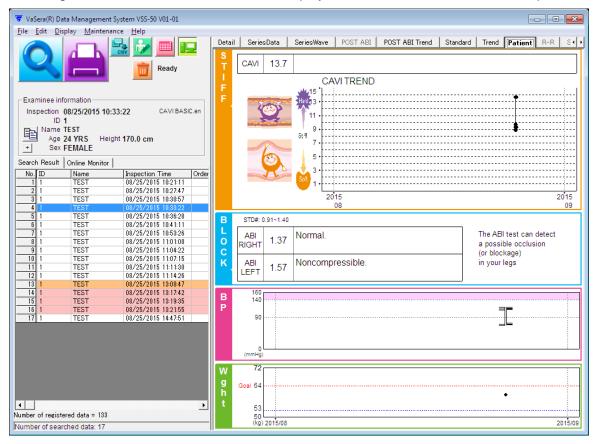
Selecting "Standard B" will show the same display as the VS-2000 "Standard B" Report. The items to be displayed can be selected under "Maintenance" > "Set environment" > "Print Item" > "Standard B".



Selecting "Trend" will show the same display as the VS-2000 "Trend" Report.



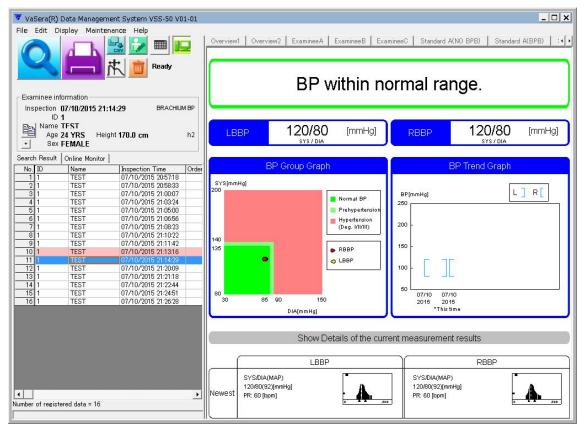
Selecting "Examinee C" will show the same display as the VS-2000 "Examinee C" Report.



Selecting "Simple Examination" will show the same display as the VS-2000 "Simple Examination" Report.

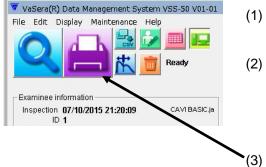
👿 VaSera(R) Data Management System VSS-50 V01-01	
<u>File Edit Display Maintenance Help</u>	
	POST ABI POST ABI Trend Standard Trend Patient R-R SimpleExamination BrachiumBp
Examinee information Inspection 08/25/2015 14:47:51 CAVIBASIC.en	STIFFNESS R-CAVI 8.5 UT (A) 122 %MAP (A) 40
Name TEST Age 24 YRS Height 170.0 cm Sex FEMALE	Standard value: <180ms Standard value: <40%
Search Result Online Monitor	
No. ID Name Inspection Time Order	
1 1 TEST 08/25/2015 10:21:11	Per. Disease
2 1 TEST 08/25/2015 10:27:47 3 1 TEST 08/25/2015 10:30:57	
3 1 TEST 08/25/2015 10:30:57 4 1 TEST 08/25/2015 10:33:22	
4 1 TEST 08/25/2015 10:33:22 5 1 TEST 08/25/2015 10:36:28	When occlusion, the pulse When occlusion, the pulse
6 1 TEST 08/25/2015 10:30:20	has na slower-rising has na flatter pulse wave
7 1 TEST 08/25/2015 10:53:26	waveform nand higher and a higher %MAP.
8 1 TEST 08/25/2015 11:01:08	values.
9 1 TEST 08/25/2015 11:04:22	
10 1 TEST 08/25/2015 11:07:15	CAVI & BP TREND
11 1 TEST 08/25/2015 11:11:30	GAVI & DF TREND
12 1 TEST 08/25/2015 11:14:26	CAV/ R● L▲ R] L[^{pris} BP(mmHg)
13 1 TEST 08/25/2015 13:08:47	CAW R♥ L▲ RJ LL _{as} BP[mmHg]
14 1 TEST 08/25/2015 13:17:42	15 12.6
15 1 TEST 08/25/2015 13:19:35	13 13 12.6
16 1 TEST 08/25/2015 13:21:55	11 1 13.512.3 10.3 04 00 96 10.3 98 00 200
17 1 TEST 08/25/2015 14:47:51	15 13 13 13 13 13 13 13 12 13 10 13 10 13 10 10 10 10 10 10 10 10 10 10
	, , , , , , , , , , , , , , , , , , ,
	3 1 J J J J J J <u>50</u> 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25 08/25
Number of registered data = 133	BP[mmHg] RB 134/71 RA 171
Number of searched data: 17	

Selecting "Brachium BP" will show the same display as the VS-2000 "Brachium BP" Report. This tab will be effective only when brachium BP examination result is present on the VS-2000. Selecting "Simple Examination" will show the same display as the VS-2000 "Simple Examination" Report.



3.3.2 Printing the Report

Select (display) the data to print using the procedure explained in "3.3.1 Searching and Displaying the Registered Data" (p.19).



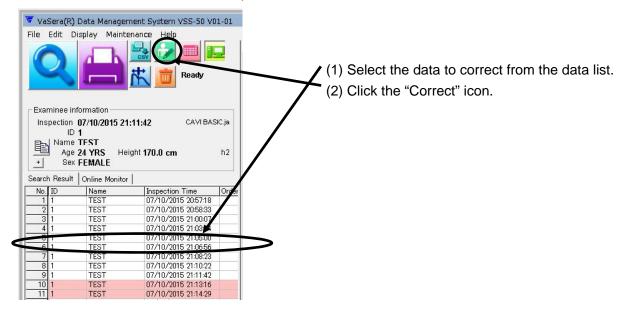
The data will be printed with the selected display type.

- (1) Select the display type to print using the display type tab.
- (2) Select the data to print from the data list. (Use "Ctrl" key or "Shift" key to select more than one data. To print multiple data, refer to "3.3.8 Printing Multiple Data" p.33)
 (3) Click "Print" icon.

NOTE The registered printer name should be within 30 characters. If exceeded, change the printer name on the printer property window under control panel.

3.3.3 Correcting the Inspection Data

The examinee information of the inspection data can be corrected.



Tinspection data	
Name TEST	
Age 24 YRS	 (3) Correct the data.
Sex FEMALE -	
Height 170 cm	
Weight 60 kg Change of height or weight re-calculates the BMI.	
Vascular length C Height calculate Knee mm AF mm L1 mm	
C Distance input Femoral mm L2 mm	
C Measure input Ostium aortae mm L3 mm	
L	
Examinee	
Inspection	The entered comment in the "Examinee" and "Inspection" column can be printed on the report by setting "Comment" for "Print Item".
nspection Time 07/10/2015 21:14:29 -	(4) Check the corrected items, and click the "Update" button.

3.3.4 History of the Inspection Data

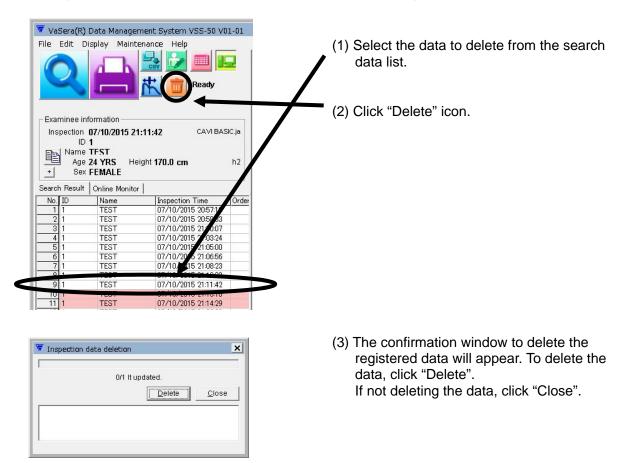
The correction history of inspection data is displayed.

🔽 ci	🔻 Change Inspection history		
No.	Date	Operation	1
2	07/10/2015 21:54:48	Name	
1	07/10/2015 21:53:48	New	
			I
			1
			I
_			
1	<u>J</u> ndo	<u>C</u> lose	1
		La constanti de	

Click "Change Inspection history" on the "Edit" menu.

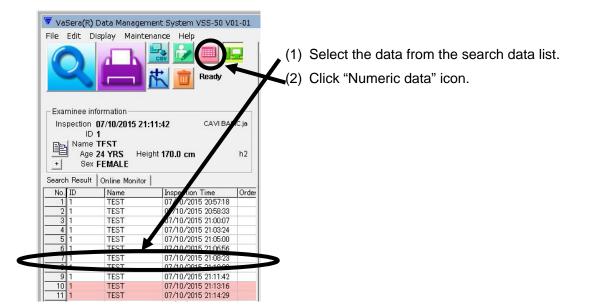
3.3.5 Deleting the Inspection Data

The registered inspection data can be deleted with the following procedure.



3.3.6 Displaying the Data for Each Pulse Beat

The measurement data for each pulse beat can be displayed.

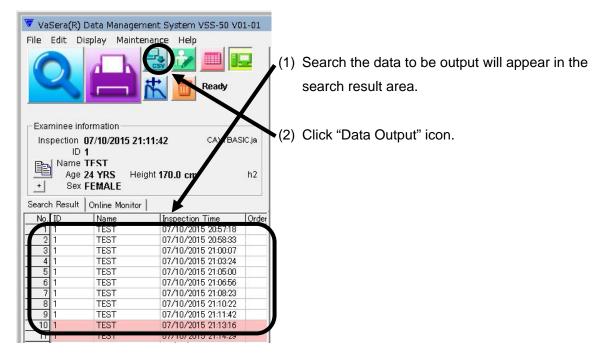


ITEM	UNIT	ERA	1BEAT	2BEAT	3BEAT	4BEAT	5BEAT	6BEAT	7BEAT	8BEAT
R-CAVI		7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
L-CAVI		7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
R-tb	ms	86	86	86	86	86	86	86	86	86
R-tba	ms	102	102	102	102	102	102	102	102	102
L-tb	ms	86	86	86	86	86	86	86	86	86
L-tba	ms	102	102	102	102	102	102	102	102	102
R-AI		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PEP	ms									
ET	ms	277	277	277	277	277	277	277	277	277
PEP/ET										
RB-UT	ms	94	94	94	94	94	94	94	94	94
LB-UT	ms	94	94	94	94	94	94	94	94	94
RA-UT	ms	135	135	135	135	135	135	135	135	135
LA-UT	ms	135	135	135	135	135	135	135	135	135
RB-%MAP		52	52	52	52	52	52	52	52	52
LB-%MAP		52	52	52	52	52	52	52	52	52
RA-%MAP		37	37	37	37	37	37	37	37	37
LA-%MAP		37	37	37	37	37	37	37	37	37

(3) The measurement data for each pulse beat will be displayed.

3.3.7 Inspection Data Output to the CSV File

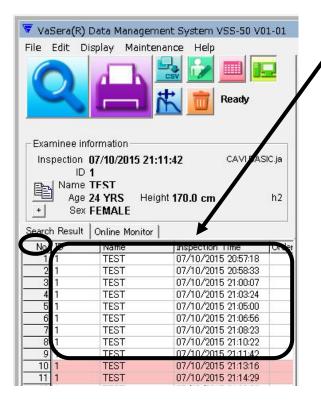
All the inspection data displayed in the search result list can be output to the CSV file format.

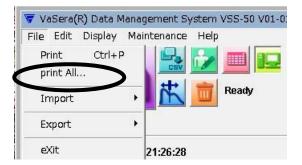


The section data	(3)	Specify the location, and Filename to save the data
BP Filename D:1,"ŽdŽ-,PtVS-3000\^ÓŒ©—v-]) Brows Output form 5 Title output	se	
16 It exports.	el (4)	Click "Export".

3.3.8 Printing Multiple Data

More than one file (data) displayed in the search result list can be printed at the same time.





Copies 🔺

2 It prints.

Print

X

Setting...

Cancel

Printing

Adobe PDF

Overview1 Overview2

MeasureData ExamineeA

Standard A(NO BPB Standard A(BPB) Detail SeriesData SeriesWave TBI ABI TBI

Report

Printer

Report

Г

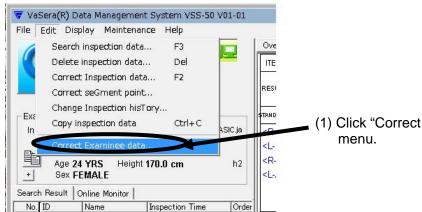
- (1) Select the data to print, which will be displayed in the search result area.
- (2) Select the data to print.
- (3) To print all the searched data on the list, click "No." on the list. The selected data will be highlighted.
- (4) To select multiple data from the search result list, click the data while pressing the [Ctrl] key. The selected data will be highlighted.

(5) After selecting the data, click "print All" on the "File" menu.

(6) The progress bar shows the progress status.

3.3.9 Correcting the Examinee Data

The examinee data which is used to "ID read" from the VS-2000 can be corrected or newly registered on this menu.



ID 📗	+		_	- (<u>S</u> earch
Name					
BirthDate 0	//10/2015	Ψ.		Sex ?	*
Height 🗌	cm	Ŧ	Dept.1		÷
Weight 🗌	kg	Ŧ	Dept.2		*
BP 🗌	1	mmHg 👻	Symptoms		-
			Medication		
Comment					

Add*					
ID	1				<u>S</u> earch
Name	TEST				
BirthDate	07/10/1990	•		Sex ?	•
Height	170 cm	•	Dept.1		-
Weight	60 kg	•	Dept.2		•
BP	120 / 80	mmHg 👻	Symptoms		×
			Medication		-
Comment					

Search

•

•

-

<u>C</u>lose

Dept.1

Dept.2

<u>D</u>elete

Symptom

Med

- (1) Click "Correct examinee data" on "Edit" menu.
- (2) Enter the examinee ID, and click Search".

(3) If the ID is already registered for other examinee, the data needs to be corrected.

- (4) If the ID is not registered, enter the examinee attribute, and click "Register".
- (5) Put a check mark to set the birth date.

Add^{*}

ID 1 Name TEST

Height 170

Weight 60

Comment 🛛

BirthDate 07/10/1990 -

BP 120 / 80

It will be registered as additional data

cm 💌

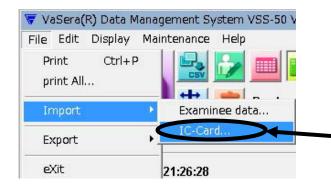
kg 💌

mmHg 💌

<u>R</u>egister

3.3.10 Off-line Registration

The data of the IC card can be registered off-line. The data that can be registered are non-transmitted data and time-series data of the VS-2000.



- (1) Insert the VS-2000 IC card to the IC card drive.
- (2) Select "File" > "Import" > "IC Card".

😽 IC card	Import	>
IC card	H)	it iwse
C Non-tra	nsmitted	
• <u>T</u> ime se		
✓ Unre	gistered	
ID]	Initialize
Date	01/01/1970 🗸 ~ 07/10/2015 🗸	<u>S</u> earch

🐺 IC card	Import	×
IC card	Нά	(Browse)
c Non-tra	nsmitted	
Image: Time set		
ID		Initialize
Date	01/01/1970 🗸 ~ 07/10/2015 🗸	<u>S</u> earch
Code co	onvert file	
,	70 It imports.	
	I <u>m</u> port	<u>C</u> lose
1970/01/01	22:08:23 ~ 2015/07/10 21:26:28	
1		

(3) The drive letter of an IC card is set up.

[Registering non-transmitted data (Data of the PC "YES" of VS-2000)]

(4) When the IC card is acknowledged and the radio button "Non-transmitted" is checked, the import number will be displayed, and the "Import" button will become effective. Click "Import" to register the inspection data.

[Registering time-series data]

(5) Check the "Time-series "radio button and "Unregistered". Enter an ID, and set the "Date" for the inspection period. Then click "Search" button. The number of items that match the search condition will be shown, and the "Import" button will become enabled. Click "Import" button to register inspection data.

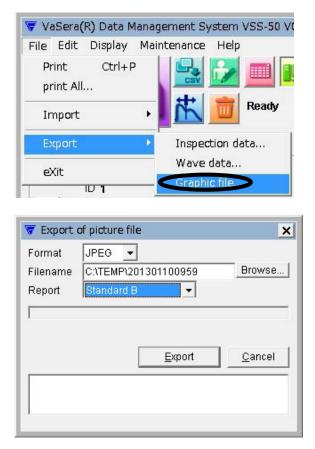
By putting a check mark for "Code convert file (C)", the files of symptoms, medicine, doctors that are set to write to the CF card on the VS-1500 can be read from the CF card to be used on the VSS-50.

(6) When removing the IC card from PC after off-line registration, follow the procedure explained in "4.5 Removing the IC Card" (p.56).

CAUTION: If the IC card is removed without following this procedure, the IC card data may be damaged.

3.3.11 Graphic File Output

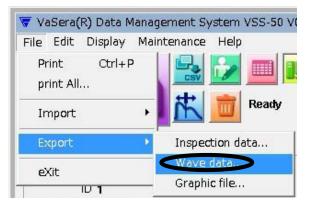
The print image of the inspection data can be saved (output) as JPEG/PDF file (graphic file).



- (1) Select the data to save, and select "File" > "Export" > "Graphic file".
- (2) Type the file name to save the data.
- (3) Select the type of the contents to be saved from the "Report" combo box.
 It can be selected from Overview 1, Overview 2, Examinee, Standard A, Standard A (BPB), TBI, ABI TBI, Detail, SeriesData, SeriesWave, Standard B, Trend.

3.3.12 Waveform Output to the CSV File

The waveform of the inspection data can be output to the CSV file.



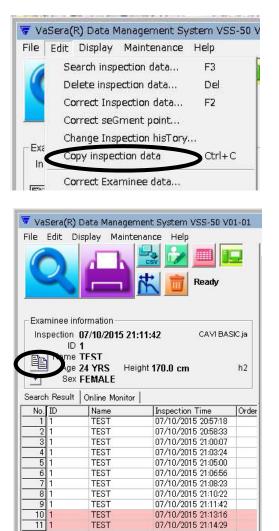
Filename	of waveform data D:\sample.csv		
	B	(port	<u>C</u> ancel

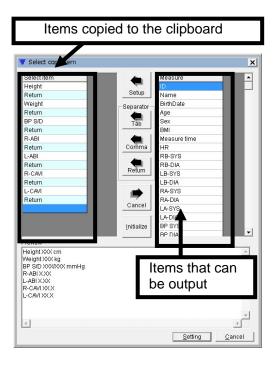
(1) Select the data to save, and select "File" > "Export" > "Wave data".

(2) Type the file name to save the data.

3.3.13 Copying the Inspection Data

Inspection data (information and measurement results by subjects) can be copied to the clipboard. The data can be copied from the menu or using the button.





(1) Select the inspection data, and select "Edit" > "Copy inspection data".

- (2) Select the inspection data and press the Copy icon shown in left.
- (3) The selected inspection data are copied to the clipboard.

The copied item can be selected under "Maintenance" > "Set environment" > "General" > "Select copy item".

Items in the left column are the options to be copied to the clipboard. Items in the right column are the options to be output. Select the items you want to change. Press the "Setup" or "Cancel" button to edit.

3.3.14 Initializing the IC Card

The IC card for the VS-2000 can be initialized. All inspection data will be deleted

CAUTION: Be aware that initializing the IC card will clear all inspection data in the IC card. The initialization of the IC card can be done for the IC card initialized on the VS-2000. This is to prevent from accidentally initializing the IC card not intended for the VS-2000.



- (1) On the "Maintenance" menu, click "Initialize IC Card".
- (2) When removing the IC card from the PC after the initializing process, follow the procedure explained in "4.5 Removing the IC Card" (p.56).

CAUTION : If the IC card is removed without following this procedure, the IC card data may be damaged.

3.3.15 Menu



3.3.15.1 File Menu

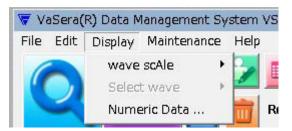
(1)	Print	:	Prints the data of	disp	played in the inspection data area. (Refer to p.28)
(2)	Print All	:	Prints multiple of	lata	a selected on the search result list (Refer to p.33)
(3)	Import	:	Examinee data	:	Registers the examinee information used to "ID
					read" from the VS-2000 from the CSV file.
					(Refer to p.34)
			IC Card	:	Registers the IC Card data off line.
					(Refer to p.35)
(4)	Export	:	Inspection data	:	Outputs all inspection data of the search result
					list to the CSV file.
			Wave data	:	Outputs one waveform data selected from the
					search result list to the CSV file (Refer to p.36)
			Graphic file	:	Stores (outputs) the selected data on the search
					result list in JPEG or PDF file. (Refer to p.36)
(5)	Exit	:	Exits the VSS-5	0 p	rogram.

3.3.15.2 Edit Menu

🐨 VaSera	a(R) Data Management System V	/SS-50 V01-01
File Edit	t Display Maintenance Help	
	Search inspection data	F3
	Delete inspection data	Del
	Correct Inspection data	F2
	Change Inspection hisTory	
Exa	Copy inspection data	Ctrl+C
In	Correct Examinee data	þ

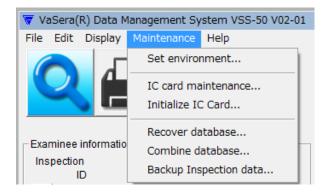
(1) Search inspection data The registered inspection data will be searched. (Refer to p.19) : The selected inspection data will be deleted. (Refer to p.30) (2) Delete inspection data : (3) Correct inspection data The examinee information of the selected data will be corrected. : (Refer to p.29) (4) Change inspection history: The correction history of inspection data is displayed. (Refer to p.30) The selected inspection data will be copied to clipboard. (5) Copy inspection data : (Refer to p.37) (6) Correct Examinee data Corrects or registers the examinee data used for "ID read" from : the VS-2000. (Refer to p.34)

3.3.15.3 Display Menu



- Wave Scale : Sets the waveform scale displayed in the inspection data area. The scale can be set for each waveform. The scale selections are Auto, 1/16, 1/8, 1/4, 1/2. 1, 2, 4, 8, 16.
- (2) Select wave : Selects the display for the precise mode measurement of R/L-PWV.
- (3) Numeric Data : Each pulse beat data for the data displayed on the inspection data area will be displayed. (Refer to p.31)

3.3.15.4 Maintenance Menu



Set environment : Sets the VSS-50 operation environment. (Refer to p.42)
 IC card maintenance : Starts the IC Card Maintenance Software. (Refer to p.52)
 Initialize IC card : Initializes the IC card for the VS-2000. (Refer to p.38)
 Recover database : Recovers the VSS-50 database when damaged by an unforeseen accident. (Refer to p.55)
 Combine database : Combines the database.
 Backup Inspection data : Takes the backup of inspection data.

3.3.15.5 Help Menu



(1) Version Information : Displays the VSS-50 version number.

3.3.16 Environment Setup



The VSS-50 operating environment can be set.

3.3.16.1 "Server" Setup

- Volume C:\Use)Data\Fi	ukudaDens	hi\VSS-1	0	Setting
			Add	Rer	nove	☐ Set
Automat None	ic picture outp Folder		ige			Browse
	BP		PAD	γ	POS	T ABI
Report	☐ Standa ☐ TBI ☐ POSTA ☐ Standa	ABI D ard B	Overview2 BPB) ABI TBI Detail POST ABI T ExamineeB ation	♥ Sta ■ Ser rend ■ Tre ■ Exa	ndard A riesData	(BPB) a 「 R-R

(1) Remote server
 : Set the VSS-50 Server PC. If this item is left blank, VSS-50 will operate as Server. To operate VSS-50 as Client, enter the Server PC name here. (Refer to p.11.)

Set the following items if operating VSS-50 as Server.

(2) Volume : Specify the folder on the Server PC to save the inspection data.
(3) Automatic Graphic Output : Set a folder to automatically output the graphic file. If a check mark is put for "Output", the graphic file will be output to the specified folder at on-line registration. Set each item for "BP", "PAD", and "POST ABI".
(4) Initialize : Click to initializes the "Server" setup.
(5) Setup : Click to store the set items and exit the Environment Setup.
(6) Cancel : Click to cancel the set items and exit the Environment Setup.

3.3.16.2 Remote Server Setup

😽 Set remot	e server		_ 🗆 🗙
Local address		270FDT(10.0.200.65)	
1 Remote serv	/er		Browse
2 Vaiting port	1024	0	
3 Timeout	3	Second	Initialize
1			
		5 Se	tup 6 <u>C</u> ancel

Set the following item if operating your PC as Client

- (1) Remote server : Set the VSS-50 Server PC.
- (2) Waiting Port : Set the port number to connect to the VSS-50 Server PC.
- (3) Timeout : Set the time duration to cancel the request, in case where there is no response from the Server PC to the Client PC request.
- (4) Test : A communication test is performed to a Remote server from a client.
- (5) Setup : Click to store the set items and exit the Environment Setup.
- (6) Cancel : Click to cancel the set items and exit the Environment Setup.

3.3.16.3 "Device" Setup

~	F Environment Setup
	Server Device Folder Print format Print item General
1	VaSera(R) Communication Waiting port 8192 3 rd Setting 3 rd Setting
	4 Initialize
	5 Setup 6 Cancel

- (1) Waiting Port : Set the port number to communicate with the Sphygmomanometer and Sphygmograph. Set the same number set on the Sphygmomanometer and Sphygmograph. For off-line operation, remove the check mark for "Communication".
- (2) Printer : Set the default printer.
- (3) IC Card : Set the drive for Sphygmomanometer and Sphygmograph IC card.
- (4) Initialize : Click to initialize the "Device" setup.
- (5) Setup : Click to store the set items and exit the Environment Setup.
- (6) Cancel : Click to cancel the set items and exit the Environment Setup.

3.3.16.4 "Folder" Setup

	😽 Environment Setup	×
	Server Device Folder Print format Print item General	
	_ Import	
	CATEMP Browse	
	_ Export	
2	D:\; ŽdŽ-,PWS-3000*ÓŒ©—v-]fNfŒ[f€kk	
	3 utput form 5 4 Title output	
6	C:\TEMP Browse	
5		
	6 Initializ	ze
	7 S <u>e</u> tup 8 Canc	el

(1) Import Folder : Set the default path to be used to input examinee data from the CSV file.

(2) Inspection Data File Folder: Set the default path to be used to output inspection data to the CSV file.

(3) Output Form		:	Set the data output form to be output to the CSV file.
	Form 1	:	Not include parameters added from VS-1000 V02-01
	Form 2	:	Include parameters added from VS-1000 V02-01
	Form 3	:	Include parameters added from VS-1000 V05-01 (CAVI ₁ ,
			L-CAVI ₁ , CAVI ₂ , CAVI ₃ , toe blood pressure)
	Form 4	:	Include parameters added from VS-1000 V07-01 (R-CAVI,
			L-CAVI, R-kCAVI, L-kCAVI)
	Form 5	:	Include parameters added from VS-1000 V09-02
	Form 6	:	Include measurement value reliability information on CAVI
	Form 7	:	Include parameters added from VS-2000
	Form XI	:	For future use
(4) Title Output		:	Select whether to include title line to the CSV file data output.
(5) Manual Graphi	c File Folde	ər	: Set the default path to be used for graphic output (manual).
(6) Initialize		:	Click to initialize the "Folder" setup.
(7) Setup		:	Click to store the set items and exit the Environment Setup.
(8) Cancel		:	Click to cancel the set items and exit the Environment Setup.

3.3.16.5 "Print Format" Setup

(1) Print automatically	: Set whether to automatically print the data at on-line registration.
	Putting a check mark will automatically print the data.
(2) Number of copies	: Set the number of copies to print at on-line registration.
	The number of printing copies can be set for each report type.
	Set "0" if not printing. Set each item for "BP", "PAD", and "POST ABI".
(3) Waveform Pt	: Set the waveform thickness.
(4) Margin	: Set the margin for print and output in JPEG/PDF.
(5) Initialize	: Click to initialize the "Print Format" setup.
(6) Setup	: Click to store the set items and exit the Environment Setup.
(7) Cancel	: Click to cancel the set items and exit the Environment Setup.

3.3.16.6 "Print Item" Setup

🐨 Environment Setup	(1) ID :
Server Device Folder Print format Print item General	Set the ID charac (Ex.) ID, examine
1 ID ID 6 COMMENTS 2 Order Order Comments 3 ✓ Age ✓ Symptom I✓ Medication 7 PB I✓ Height I✓ Weight ✓ BMI I✓ Center	(2) Order Number : Put a check marl Set the order nur printed. (Ex.) ord etc.
4 Left 8 Wave scale C Unified scale Center 6 Auto scale Right Share 8	(3) Header : Set the items to I information area. will be printed.
5 Graph Portrait C Exam result C Comment	(4) Footer : Set the character area. "Left", "Cer set characters to footer area respe Adjust the numbe avoid overlapping Approximately 70 on the footer are
10 Initialize	Left (Ex.) : Fu Center (Ex.) : 2-3 To
11 Setup 12 Cancel	Right (Ex.): 03

cters to be printed. e ID, etc.

- k if using order number. mber characters to be er number, inspection ID,
- pe printed on the examinee The item with check mark

s to be printed in the footer ter", "Right" will print the the left, center, right of the ectively. er of input characters to g each other.) characters can be printed a.

- kuda Clinic
- 35-8 Hongo, Bunkyo-ku, kyo

-3815-2121

(5) POST-ABI

(6) Observations

- : The layout of POST-ABI graph is set up.
- : Put a check mark if printing "Next Inspection Date", "Examinee's comment", "Data comment".
- : Set the output layout for BPB ("Arrow", "Gravity center").
- : Waveform sensitivity is set up.
- : The setting of TBI.
- : Click to initialize the "Print Item" setup.
- : Click to store the set items and exit the Environment Setup.
- : Click to cancel the set items and exit the Environment Setup.

- (7) BPB
- (8) Wave scale
- (9) TBI
- (10) Initialize
- (11) Setup
- (12) Cancel

	level 0:Error/Function 👻
☐ Into start-up. ☐ Minimize to tasktray.	tab Search Result 💌
	n ran lipitatio e
6	BrachiumBp
Ť	 SimpleExamination Overview1
1	✓ Overview2
Select copy item	ExamineeA
	ExamineeD
Change ID Place	Standard A(NO BPB
Change ID Place	Standard A(BPB)
	Up Down

(1) Start-up : Check to automatically start VSS-50, when Windows starts.

:

:

:

:

- (2) Log Level
- (3) List Tab
- : Set the list type to be initially displayed at startup.

Set the log level to output to the file

- (4) Initial Display Tab
- (5) Select copy item
- (6) View Tab
- : Click to initialize the "General" setup.
- (7) Initialize(8) Setup
- : Click to store the set items and exit the Environment Setup

Select the tabs to be displayed and the displayed order.

Set the display type to be initially displayed at startup

Select the items you want to copy to the clipboard. (Refer to p.37)

(9) Cancel : Click to cancel the set items and exit the Environment Setup.

3.4 Backup of Inspection Data

To avoid accidental loss of inspection data, it is recommended to back up the data (create copy data) periodically.

The automatic backup function is not available for the VSS-50. Back up the data manually to the external memory device (magnetic optical disc, CD-R, CD-RW, etc.).

3.4.1. Backup Procedure [Windows7, 8]

If you install VSS-50 on Windows7, 8, the inspection data will be stored in

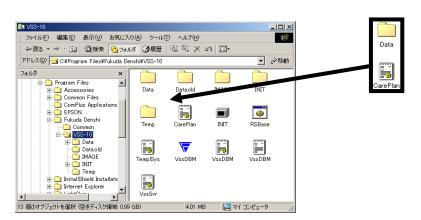
"C:¥Users¥Public¥AppData¥FukudaDenshi¥VSS-10".

Back up the Data folder and CarePlan.ini file in this folder to external memory device.

3.4.2. Restoration Procedure

When a hard disk failure occurs or if the saved inspection data is damaged, restore the backed up data with the following procedure.

- 1. Install the VSS-50 with the procedure explained in "3.2. Installation Procedure" (p.5).
- 2. If the "Data" folder exists in the folder which the VSS-50 is installed, change that folder name to "Data.old".
- 3. Copy the backed up "Data" folder and CarePlan.ini file to the folder which the VSS-10 is installed.
- CAUTION : If a folder is copied from the write-protected media (ex. CD-R) to a hard disk, the write-protect attribute will be also copied. Remove the write-protect attribute from all files in the Data folder. Otherwise, the VSS-50 will not be able to perform registration, correction procedure.



Copy the backed up "Data" folder to the folder which the VSS-50 is installed.

4. Start the VSS-50.



- 5. On the "Maintenance" menu, click "Recover database".
- 6. Click "Start" and recover the database.

CAUTION : Before restoring the database, turn off the power of the Sphygmomanometer and Sphygmograph to prevent inspection data to be transmitted.

4. IC Card Maintenance Software

The measurement data of the VS-2000 can be recorded on the IC card, and can be used as time-series data. The IC Card Maintenance Software is capable of the following operation.

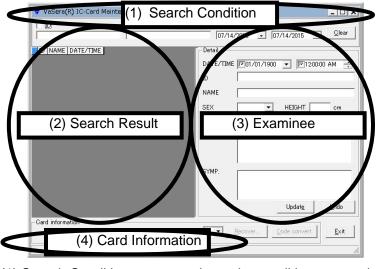
- (1) Corrects (modifies) the examinee information of the inspection data.
- (2) Recovers the IC card management data when any inconsistency occurs.

4.1. Startup and Explanation of the Display



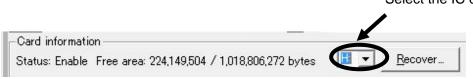
On the "Maintenance" menu, click "IC card maintenance"

IC Card Maintenance



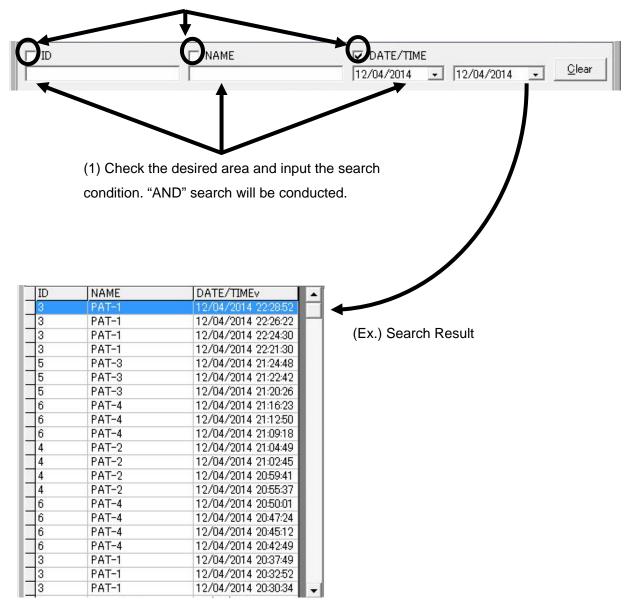
- (1) Search Condition : Input the condition to search the data in the IC card.
- (2) Search Result : Displays the searched result.
- (3) Examinee Information : Displays the examinee information for the selected data.
- (4) Card Information : Displays the card capacity.

Insert the IC card to the PC, and select the IC card drive in "Card Information" display area. When the IC card is identified, the card information will be output to the "Card Information" display area. Select the IC card drive.



4.2. Searching the IC Card Data

The search condition with check mark is effective.



4.3 Correcting the IC Card Data

From the search result area, select the inspection data to correct.

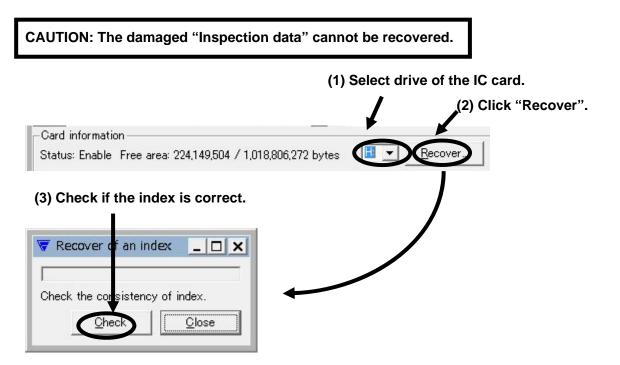
NAME DATE/TIMEV ID (2) Correct the data. PAT-1 2/04/2014 -Detail-3 12/04/2014 22:26:22 РАТЕГ PAT-1 12/04/201 22:24:30 3 DATE/TIME 12/04/2014 10:28:52 PM -+ PAT-1 12/04/2014 22:21:30 3 ID PAT-1 NAME 150 cm SEX Female HEIGHT -The item to be corrected: BIRTH 01/01/1900 ▼ 26 YRS (1) Inspection Date MED. 4 * 1:Digitalis (2) ID 2:Quinidine 3:Beta-blocker (3) Name SYMP. (4) Sex 4 0:None.com * 1:Angina (5) Height 2:Chest pain 3:Palpitation -(6) Date of Birth Updat<u>e</u> Undo (7) Medication (8) Symptom (3) Check and click "Update".

(1) Select the data to correct.

With the Inspection Date or Date of Birth change, age will be automatically recalculated.

4.4 Recovering the IC Card Data

The damaged management data (index) of the IC card can be recovered.



- (4) The message, "Inspection completed" will be displayed, if the index is correct. Click "Close" and exit the menu.
- (5) If the index is damaged, "Recover" button will be displayed. Click "Recover" and recover the index.



4.5 Removing the IC Card

To remove the IC card from the PC, follow the procedure below.

CAUTION: Improper removal of IC card may dan	nage the IC card data.
EN 🔺 🥡 🏚 📆 🍡 10:18 AM	
(1) Left click this	icon.
B Open Devices and Printers	
 MCR-C30H/U2 Eject ECGDATA (F:) 	
	(2) A pop-up message, "Safely Remove Hardware and Eject Media" will be displayed.
Safely Remove Hardware and Eject Media	
	(3) Click the pop-up window.
 Safe To Remove Hardware The 'ECGDATA (F:)' device can now be safely removed from the computer. EN EN EN EN EN EN EN EN EN 	(4) When "Safe to Remove Hardware" is displayed, remove the IC card from the PC.

5. VSS-3 CSV Format Output Software

All inspection data of the IC card can be output to the CSV file using the VSS-3 CSV Format Output Software.

5.1. VSS-3 Uninstallation Procedure

The uninstallation procedure of the VSS-3 is the same as that of VSS-50. Refer to p.4.

5.2. VSS-3 Installation Procedure

The installation procedure of the VSS-3 is the same as that of VSS-50. Refer to p.5.

5.3. Starting the Program

Open the "command prompt", transfer the current directory to the directory where the VSS-3 is installed, and execute the following command.

VssCSV [Option] <IC Card Drive> <CSV File Name>

Option: -v [1 | 2 | 3 | 4 | 5 | 6]

1: Not include parameters added from VS-1000 V02-01

2: Include parameters added from VS-1000 V02-01

3: Include parameters added from VS-1000 V05-01 (CAVI₁, L-CAVI₁, CAVI₂, CAVI₃, toe blood pressure)

4: Include parameters added from VS-1000 V07-01 (R-CAVI, L-CAVI, R-kCAVI, L-kCAVI)

5: Include parameters added from VS-1000 V09-02

6: Include measurement value reliability information on CAVI

7: Include parameters added from VS-2000

The following example shows the case when the VSS-3 is installed in "C:¥Program Files¥Fukuda Denshi¥VSS-50-CSV"

Microsoft (R) Windows Copyright (C) 2009 Microsoft Corporation. All rights reserved.

C:¥Program Files¥Fukuda Denshi¥VSS-50-CSV> VssCSV –v2 E: C:¥Temp¥Mesure.csv

"E:" is the IC card drive. ""C:¥Temp¥Measure.csv" is the CSV output file name.

In this example, all inspection data of the IC card inserted in the "E." drive will be output to "C:¥Temp¥Measure.csv"

6. Troubleshooting

First, check the version of Windows OS and VSS-50. The solution for each case will differ depending on the version of the OS and VSS-50.

CAUTION: Check the version of VS-2000 and VSS-50.

If the VS-2000 is upgraded, the VSS-50 needs to be also upgraded. If the registration is performed from the new version of VS-2000 to the old version of VSS-50, the inspection data cannot be displayed / printed on the VSS-50.

Notation

The following is an example of the notation and its meaning used in this section.

6.1. Troubles during Installation

6.1.1. "Another installation is in progress..." is displayed. [Windows7/ From V01-01]

[Case] The following message is displayed during installation procedure.

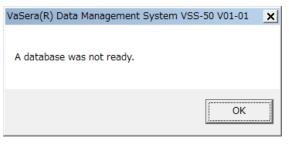
😼 VaSera(R) Data Management Syst	tem VSS-5	i0 V01-01 #453 🛛 💌	
Another installation is in progress. You must c this one.	omplete that	installation before continuing	
Iry Again		Cancel	
VaSera(R) Data Management System	VSS-50 V	/01-01	<
VssRemoteServer.sfOpenServer sfRemoteServer.sfListenSocket	3 10048	Communication failure. Address in use.	
		ОК	

[Solution] More than one VSS-50 installer is running. Shut down the unnecessary installers.

6.2. Troubles during Startup

6.2.1. "A database was not ready." is displayed. [Windows7/ From V01-01]

[Case] The following message is displayed.



Click the "Database Server Component ..." in the task tray.

😴 VaSera(R) Database Server Component V22-02 #248	_ 🗆 🗙
Clients:1 10:Ready Connect 1/50 IP: 10.0.200.186 Port: 10240	Error
Host Query	
Host Entry	
2015/07/24 13:53:34,VssSvr22,Warning,Inspection database 1/1 It is the newest version.(v2.0.1) 2015/07/24 13:53:34,VssSvr22,Warning,Examinee database 1/1 It is the newest version.(v1.1) 2015/07/24 13:53:34,VssSvr22,Warning,Communication failure. 2015/07/24 13:53:34,VssSvr22,Warning,Address in use.	

If "Address in use" is displayed on the Data Base Server Component window, the set port number is already used for other application.

[Solution] Change the "Waiting Port" value on the VSS-50 Device setup display. ("Maintenance" > "Set environment" > "Device")

For procedure to check the port number of your PC, refer to "6.2.3 Communication Status of the PC ".

Ex.) VSS-50 setup: Change the "Waiting Port" value from "8192" (default) to "8193".

Environmental setup		x
Server Client Device Folder Print format	Print item	Whole)
Waiting port 8192 IC card	•	
		Initialization
	S <u>e</u> tup	<u>Cancel</u>

When "Waiting Port" of VSS-50 is changed, change also the port number of VS-2000 to the same value.



VS-2000 network setup: Change the port number from "8192" (default) to "8193". When port number of VS-2000 is changed, change also the "Waiting Port" of VSS-50.

6.2.2 "VssRemoteServer.sfOpen...Communication failure..." is displayed. [Windows7/ From V01-01]

[Case] "VssRemoteServer.sfOpenServer... Communication failure

FrmRemoteServer.sfListenSocket... Address in use" or

"VssRemoteServer2.sfOpenServer... Communication failure

FrmRemoteServer.sfListenSocket... Address in use" is displayed.

VaSera(R) Data Management Systen	n VSS-50 V	01-01	×
VssRemoteServer.sfOpenServer sfRemoteServer.sfListenSocket	3 10048	Communication failure. Address in use.	
		ОК	

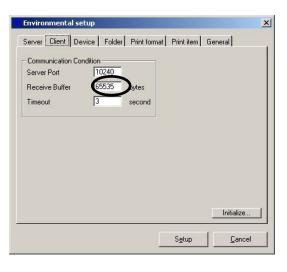
[Solution] Change the "Waiting Port" value on the VSS-50 Server setup display ("Maintenance" > "Set environment" > "Server"). If operating the VSS-50 on more than one PC, change the "Server Port" on the Client setup display ("Maintenance" > "Set environment" > "Client"). For procedure to check the port no. of your PC, refer to "6.2.3 Communication Status of the PC ".

Server PC	Browse
Share database Client-Server Communica Waiting pot Receive Buffer	Dites
Automatic picture output	Add Remove Set
	Initialize

Ex.) VSS-50 Setup: Change the "Waiting Port" value from "10240" (default) to "20480".

When operating VSS-50 on more than one computer, change the "Server Port" value on the Client PC from "10240" (default) to "20480".

Server PC



6.2.3 Communication Status of the PC [Windows7/ From V01-01]

- [Case] "A database has not been prepared", "VssRemoteServer.sfOpenServer...Communication failure" is displayed. When this failure occurs, the port number set on the VSS-50 is already used on other application.
- [Check] Check the port number used on the PC.

1) Shut down the VSS-50 program.

2) Execute command prompt.

[Windows7] "Start Menu" > "All Programs" > "Accessory" > "Command Prompt" 3) Execute the following underlined command. (netstat -an -p tcp)

netstat -an -p tcp						
Active Connections						
Proto TCP TCP TCP TCP TCP TCP	Local Address 0.0.0.0:135 0.0.0.0:445 0.0.0.0:1025 0.0.0.0:1027 0.0.0.0:8192 0.0.0.0:10240	Foreign Address 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0	State LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING			
TCP	192.168.0.3:139	0.0.0.0:0	LISTENING			

If "8192", "10240" is displayed as shown above, other application is already using the same port number as VSS-50.

The default port number of VSS-50 is "8192" and "10240".

"8192" is used for the communication between VSS-50 and VS-2000.

"10240" is used between the VSS-50 Server and the VSS-50 Client when VSS-50 is operated on more than one PC.

[Solution] If the port number is already used on other application, change the port number by referring the procedure on "6.2.2 "VssRemoteServer.sfOpen...Communication failure..." is displayed. ", "6.2.3 Communication Status of the PC ".

6.3 Troubles during VS-2000 Connection

6.3.1 During the on-line registration, the PC icon on the VS-2000 flashes, and "PC LINK ERROR" is displayed. [Windows7/ From V01-01]

[Check 1] Check the IP address of the PC which the VS-2000 VSS-50 is installed.

Check if the IP address set on the PC corresponds with the IP address set on the VS-2000

("Settings" > "Communication" > "DMS Settings").

If not, select "Use the following IP address" and enter the correct IP address and subnet

mask. "Default gateway", "Preferred DNS server", "Alternate DNS server" can be left blank.

VS-2000 Setup

[DMS Setup]

[Host information]

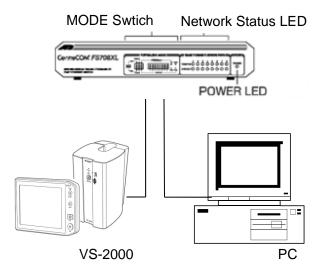
Settings>Communication>DMS Settings				Settings>Communication>DMS Settings				
General DMS Settings Printer	DMS Settings Host Info DMS Settings] Recording&Playback Host 1 Recording&Playback Only 2 Bordering Host 4 Patient Info Host 5 5	(Gateray) Subnet nask 255, 255, 255, 0 Default gateray 0, 0, 0, 0 Priority DIS Server 0, 0, 0, 0 Atternate DIS Server 0, 0, 0, 0 Atternate DIS Server	red Folder [frrp] NTP Server 	General DMS Settings Printer	DMS Settings Host Info [Host Info 1] Host name	Exertination Environment Tafa [Host Info 3] Hist name 	Shared Folder (fost Info 5) Fost name Pedfress Port (Host Info 6) Host name Port Port Port	
Enter		⇒⊠ To exam	う Back 2015.07.22 17:4	Enter	_	To exam	<mark>→ Back</mark> ₹ 1/2 Back ₹ 1/2 Back ₹ 1/2	

IP Address, Subnet Mask Setup of the PC

Internet Protocol Version 4 (TCP/IPv4) Properties						
General						
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.						
Obtain an IP address automatically						
• Use the following IP address:						
IP address:	192 . 168 . 2 . 111					
Subnet mask:	255 . 255 . 255 . 0					
Default gateway:	192 . 168 . 2 . 1					
Obtain DNS server address automatically						
Use the following DNS server addresses:						
Preferred DNS server:						
Alternate DNS server:						
Validate settings upon exit	Advanced					
	OK Cancel					

[Check 2] Check if the LINK LED on the HUB is lit.

CentreCom FS708XL



- 1) Connect the VS-2000 and HUB, PC and HUB, and turn ON the power,
- 2) Verify the LINK LED for the VS-2000 and PC connection is lit.
 - LINK LED on the HUB is lit: The LAN cable is physically connected. Proceed to "Check (3)" on the next page.

LINK LED on the HUB is not lit: The LAN cable is physically not connected.

The following cause can be considered.

- (1) The LAN cable type is not correct. Use the straight LAN cable when connecting the device and the HUB.
- (2) The power of the device is not turned ON. The LINK LED will not light unless the power is turned ON and the electricity is conducted to the LAN cable.
- (3) The LAN cable is unplugged. Securely plug in the LAN cable.
- (4) The HUB port is non-operational. Plug in the LAN cable to other port.
- (5) The LAN connector on the device is non-operational. If the failure is on the VS-2000, replace the VS-2000. If the failure is on the PC, replace the network interface card.

[Check 3] Check if the communication test from the VS-2000 to PC succeeds.

1) Execute command prompt.

[Windows7] "Start Menu" > "All Programs" > "Accessory" > "Command Prompt" 2) Execute the following underlined command (ping 192.168.0.1).

ping 192.168.0.1
Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time=10ms TTL=30
Reply from 192.168.0.1: bytes=32 time<10ms TTL=30
Reply from 192.168.0.1: bytes=32 time<10ms TTL=30
Reply from 192.168.0.1: bytes=32 time<10ms TTL=30
Ping statistics for 192.168.0.1:
 Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
 Minimum = 0ms, Maximum = 10ms, Average = 2ms</pre>

The above display will appear when the VS-2000 IP address is set to 192.168.0.1. (Refer to p.64) If the IP address other than 192.168.0.1 is set, execute "ping [set IP address]" If "Reply from 192.168.0.1: bytes=32 time=10ms TTL=30" is displayed as shown above, the communication is normal.

If "Request timed out." or "Destination host unreachable." is displayed, there is a communication failure.

If "Transmit failed, error code 65" is displayed, a firewall software is installed in the PC. Adjust the firewall setup to the appropriate security settings.

[Solution] 1. If the communication fails for both VS-2000 to PC, and PC to VS-2000, the IP address setting on the VS-2000 or PC is not correct. Follow the procedure on [Check 5] to check the IP address setup.

2. If the communication from the PC to VS-2000 is normal, but the communication from the VS-2000 to PC fails, the firewall software installed in the PC is blocking the communication. Adjust the firewall setup to allow the VS-2000 to connect to the PC.

[Check 4] If the IP address is not correct, set the correct IP address and restart the PC.

After restarting the system, check if the communication test between the VS-2000 and PC succeeds using the procedure on [Check (3)] and [Check (4)].

1) Execute command prompt.

[Windows7] "Start Menu" > "All Programs" > "Accessory" > "Command Prompt" 2) Execute the following underlined command. Check that the IP address is correct.

ipconfig							
Windows IP Configuration	Windows IP Configuration						
Ethernet adapter Local Area Con	nection						
Connection-specific DN	S Suffix .: .: 192.168.0.3						
Subnet Mask	: 255.255.255.0						
Default Gateway	:						

[Solution] If the IP address is not correct, set the correct IP address and restart the PC. After restarting the system, check if the communication test between the VS-2000 and PC succeeds using the procedure on [Check 3] and [Check 4]

[Check 5] To verify that the VS-2000 and VSS-50 is properly communicating, read the inspection data of the VSS-50 from the VS-2000.

1) After communication test for the VS-2000 and VSS-50 succeeds, activate the VSS-50.

2) Verify that the VSS-50 is properly activated.

3) On the VS-2000, search the data under "Menu" > "File/Communication" > "File List" >

"Media" > "DMS", and verify that the searched data is displayed.

6.4 Troubles during Operation

6.4.1 The VSS-50 data cannot be displayed on the Client PC. [Windows7/ From V01-01]

- [Case] The Client PC cannot display the inspection data stored on the Server PC, and the following message is displayed on the status bar.
 "An inspection file cannot be read."
- [Solution] Add the Client PC user's logon name and password to the Server PC. After adding, check that the Client PC is able to access the share folder of the Server PC.

6.4.2 The share folder is automatically created on the VSS-50. [From Windows 7 V01-01]

CAUTION: The VSS-50 operates as a Server/Client system which read/writes the data through the share folder. Do not change the share folder status which is automatically created by the VSS-50. Otherwise, the VSS-50 cannot be started.

6.4.3 "There is no non-transmitted data." is displayed, and off-line registration cannot be performed [Windows7/ From V01-01]

[Case] When "File" > "Import" > "IC Card" is selected on the VSS-50, "There is no non-transmitted data." is displayed, and off-line registration cannot be performed.

[Solution] 1. Check the settings of the VS-2000 under "Setting" > "File" > "General".

Auto Save: ON (If the setting is made for each inspection data, make sure that "Auto Save" is ON for each inspection.)

Save Media: External media or DMS

2. After the measurement, do not turn off the power of VS-2000, or remove the IC card from VS-2000 until the message "DATA SENDING" changes to "PC COMMUNICATION ERROR".

6.4.4 When a report is printed, the header part is missing, or the report does not fit in one page. [Windows7/ From V01-01]

[Case] When a report is printed from the VSS-50, the header part is missing, or the report does not fit in one page.

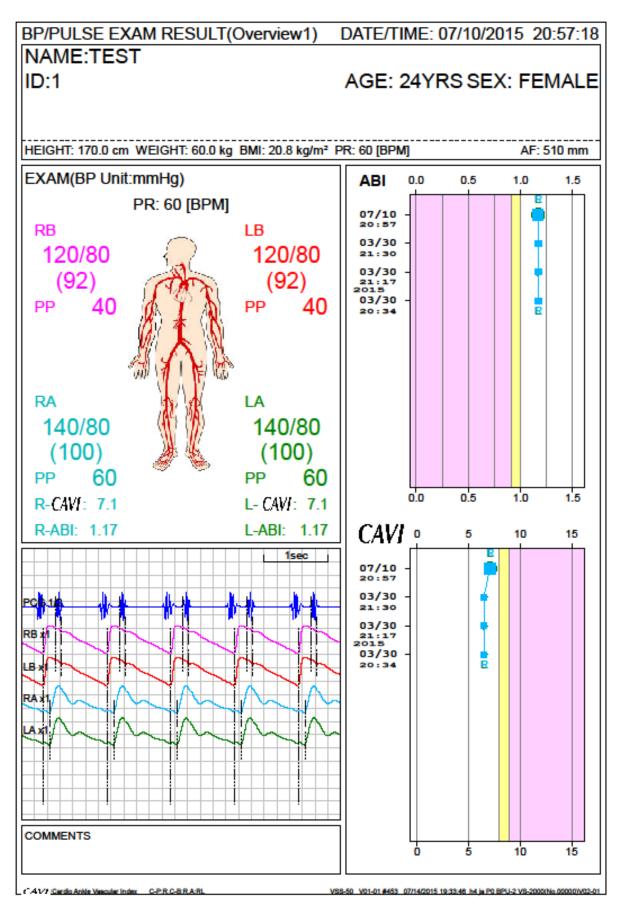
[Solution] Refer to "3.3.16.5 "Print Format" Setup" (p.47), and adjust the margin.

If a title or measurement date on the header part is not printed, increase the value of the margin.

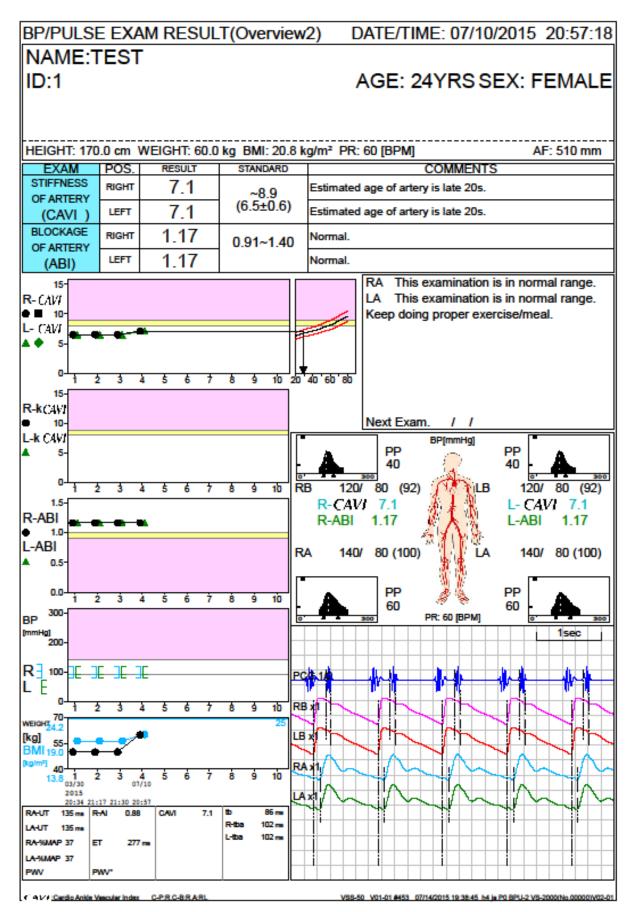
If the report does not fit in one page, decrease the value of the margin.

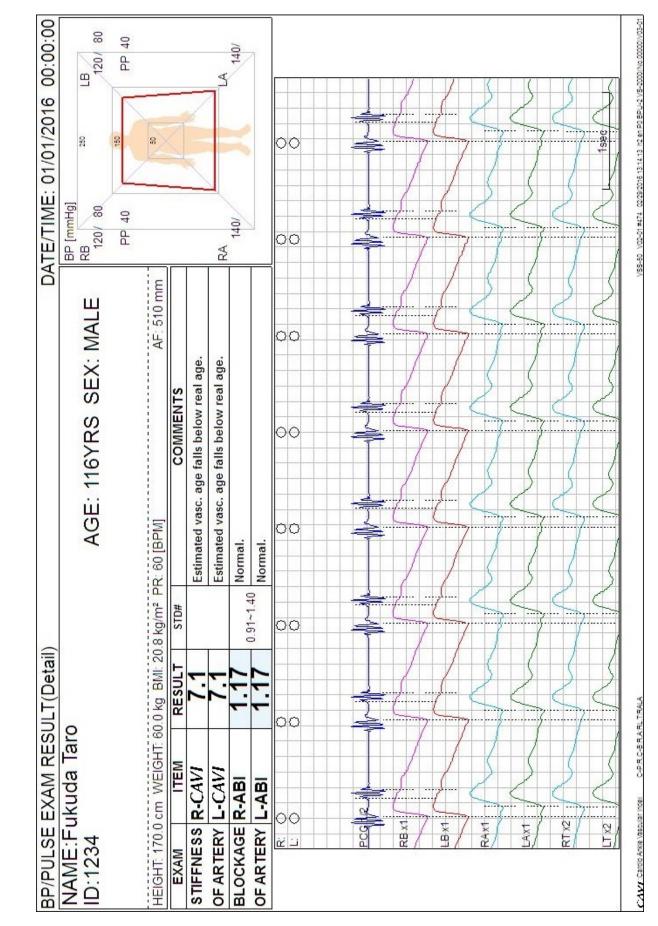
7. Sample Report

7.1. Overview 1 Report



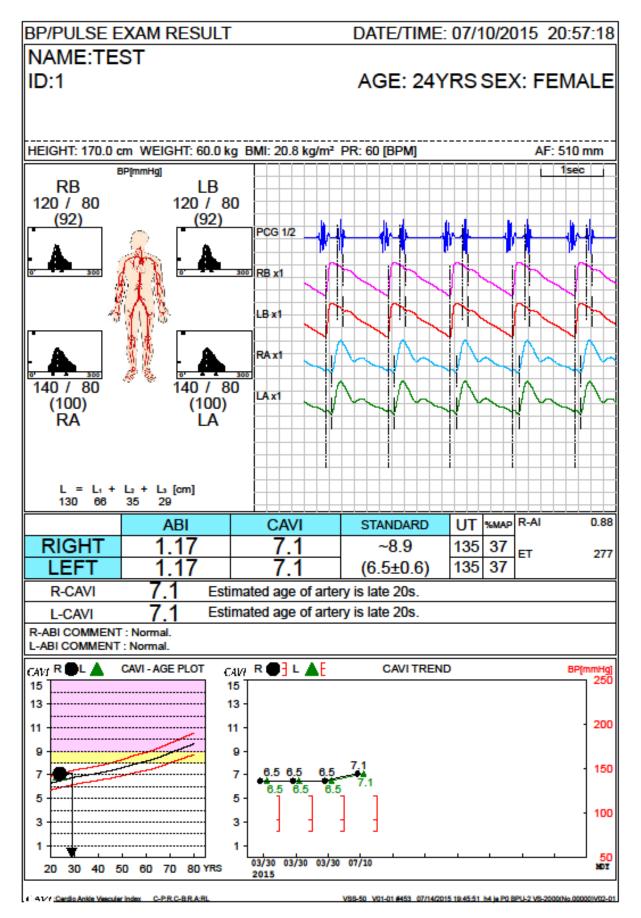
7.2. Overview 2 Report



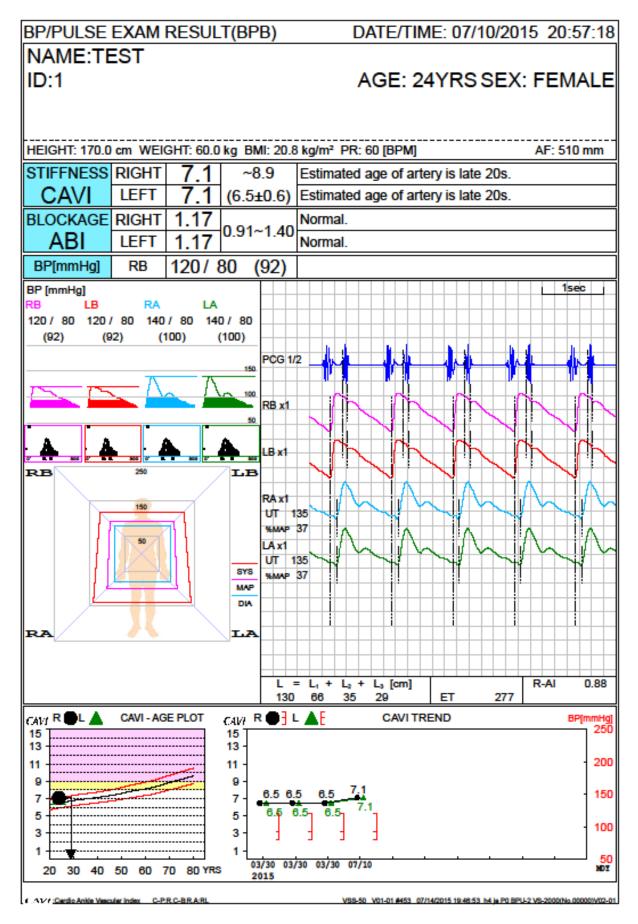


7.3 Detail Report

7.4 Standard A Report (Without BPB)



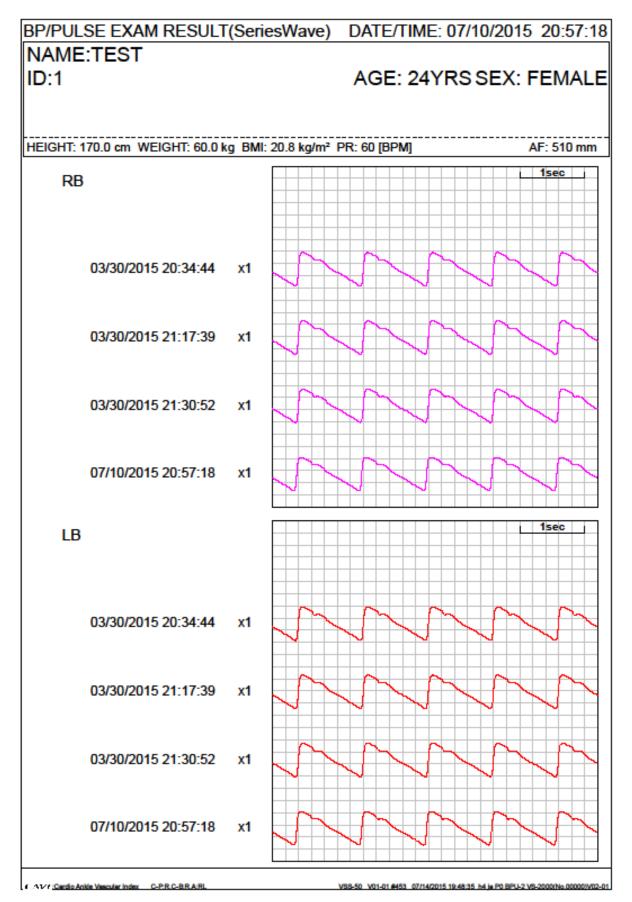
7.5 Standard A Report (With BPB)



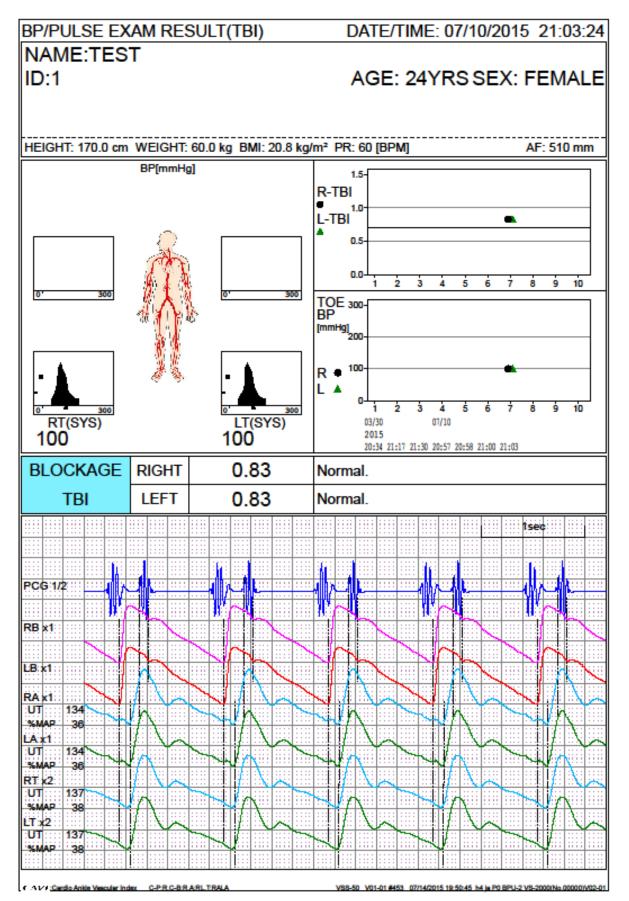
7.6 Time Series Report

BP/PULSE	BP/PULSE EXAM RESULT(SeriesData) DATE/TIME: 07/10/2015 20:57:18):57:18					
NAME:TE	ST													
ID:1								Δ	GE	24Y	RSS	FX	FFI	MALE
10.1								<u> </u>		211		<u> </u>	. –	
	HEIGHT: 170.0 cm WEIGHT: 60.0 kg BMI: 20.8 kg/m² PR: 60 [BPM] AF: 510 mm Inspection Time RB LB RA LA R-ABI L-ABI R-C4V/ L-C4V/ PWV PWV*													
Inspection Time	RB			LB	RA	-	LA		R-ABI					PWV*
03/30/2015 20:34	120/80(92)		120/ 80(92) 120/ 80(92)		140/ 80(100)				1.17		6.5		-	
03/30/2015 21:17	120/80(80(92)	140/ 80(100) 140/ 80(100)		140/80(100)		1.17	1.17	6.5 6.5	6.5 6.5		
07/10/2015 20:57	120/ 80(80(92)	-	-	140/80(100)		1.17		7.1	7.1		
01110/2013 20.31	1201 00(12.01	00(32)	140/ 80(100)		140/00(100)		1.17 7.1		1.			
								-					+	
						+		-					+	+
						+							+	
Inspection Time	hf CAVI			HR or PF	RWEIGHT	BMI	RA-UT	L	A-UT F	A-%MAP	LA-%M	AP PE	P ET	PEP/ET
03/30/2015 20:34				60	50.0	19.5	135		135	37		37 11	6 277	0.42
03/30/2015 21:17				60	50.0	19.5	135		135	37		37 11	6 277	0.42
03/30/2015 21:30				60	50.0	19.5	135		135	37		37 11	6 277	0.42
07/10/2015 20:57				60 (PR)	60.0	20.8	135		135	37		37	277	
													_	
								\vdash				_	_	
								╞				_	_	
			_					╞				_		
R-CAVI⊕⊕ L	CMIL						A.D.L. A							
15-	CAMA	-		1.5-	R-ABI		ABI 🔺			PV	w• •			[m/s]
10-	10													
5- 0.5- 5-														
1234	3 0 /	ø	9		1 2 3	. 4	/		891	0 1	2 3		• /	8 9 10
				5						ŝ				
015	2015													
N	day baday of		C-BRAS	RL			VSS	-50	V01-01 #45	3 07/14/2015	19:48:07 14	in PO BPU	2 1/8,2000	No.00000/V02-01

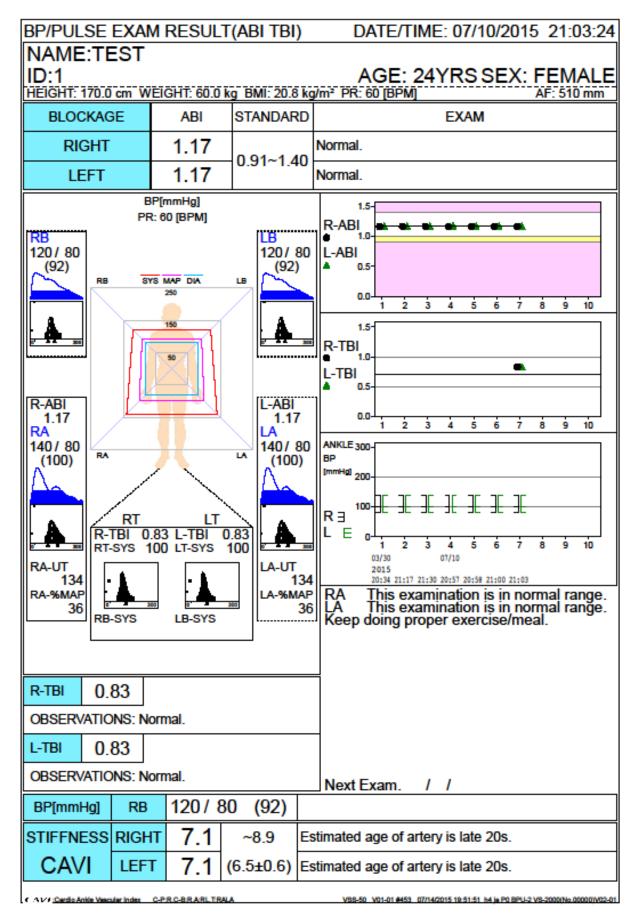
7.7 Time-Series Report (Waveform)



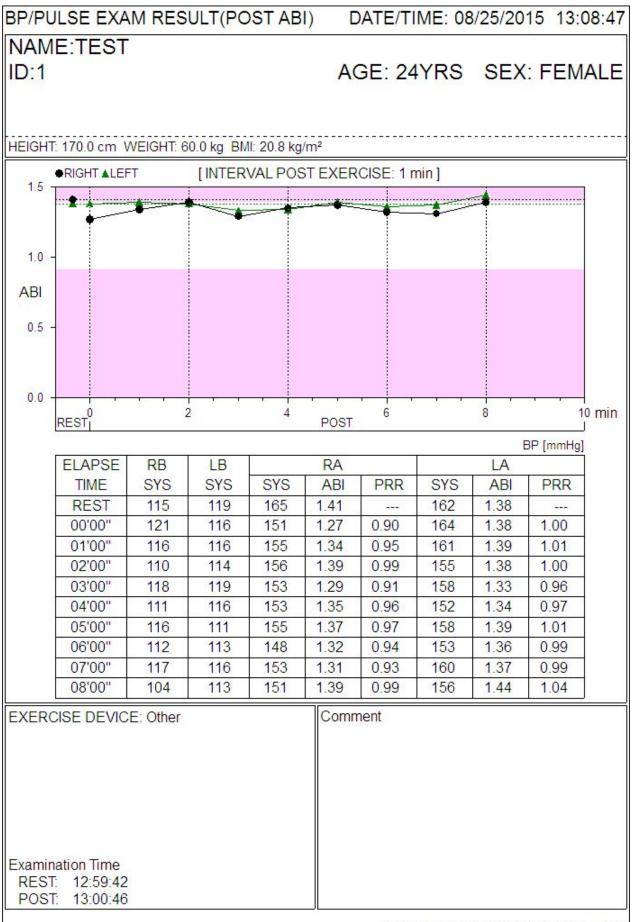
7.8 TBI Report



7.9 ABI/TBI Report

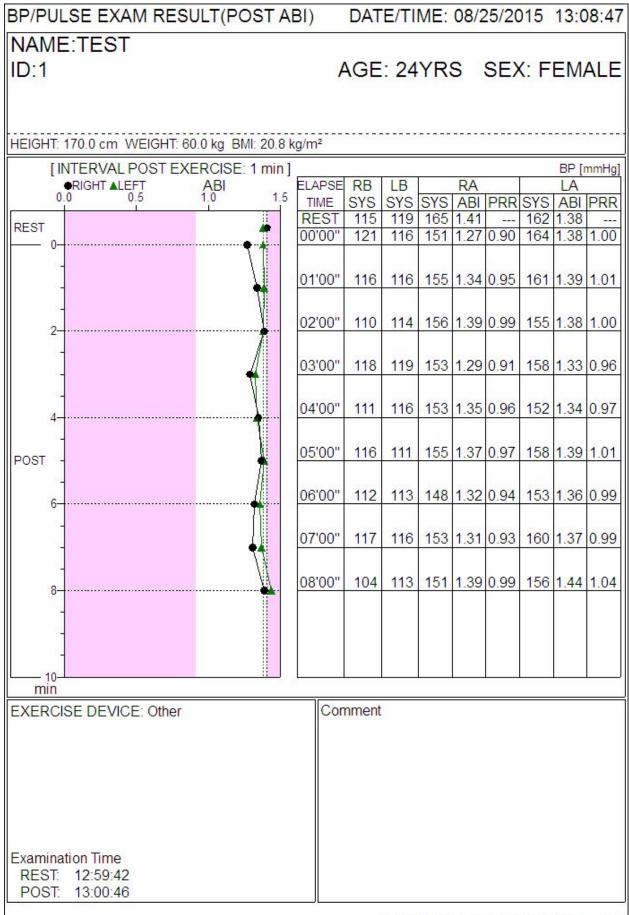


7.10 Post-ABI Report (Landscape)



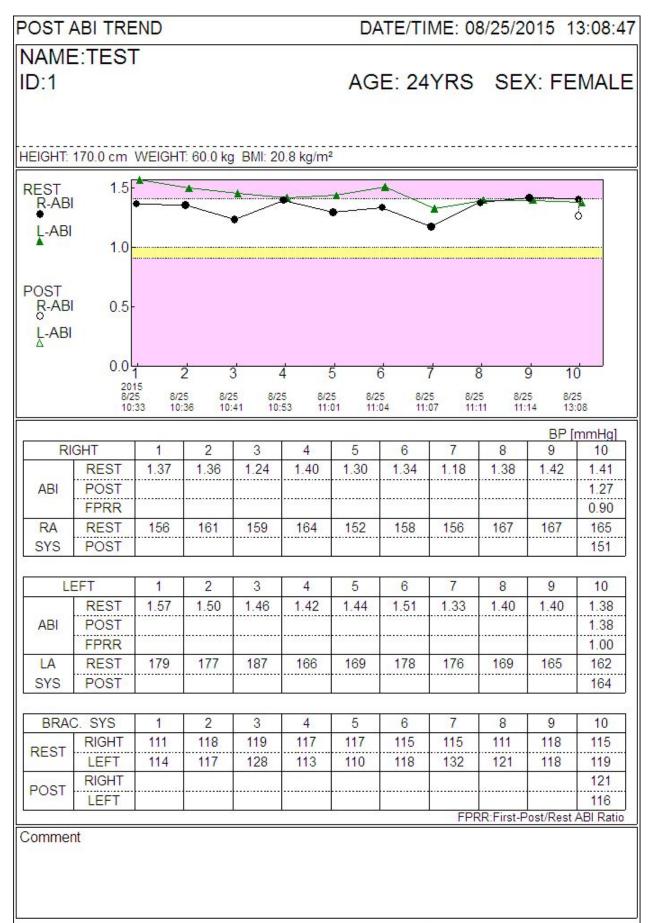
VSS-50 V01-01 #456 08/25/2015 14:34:00 h3 BPU-2 VS-3000(Nb.99999)V03-02

7.11 Post-ABI Report (Portrait)



VSS-50 V01-01 #455 08/25/2015 14:35:27 h3 BPU-2 VS-3000(No.99999)V03-02

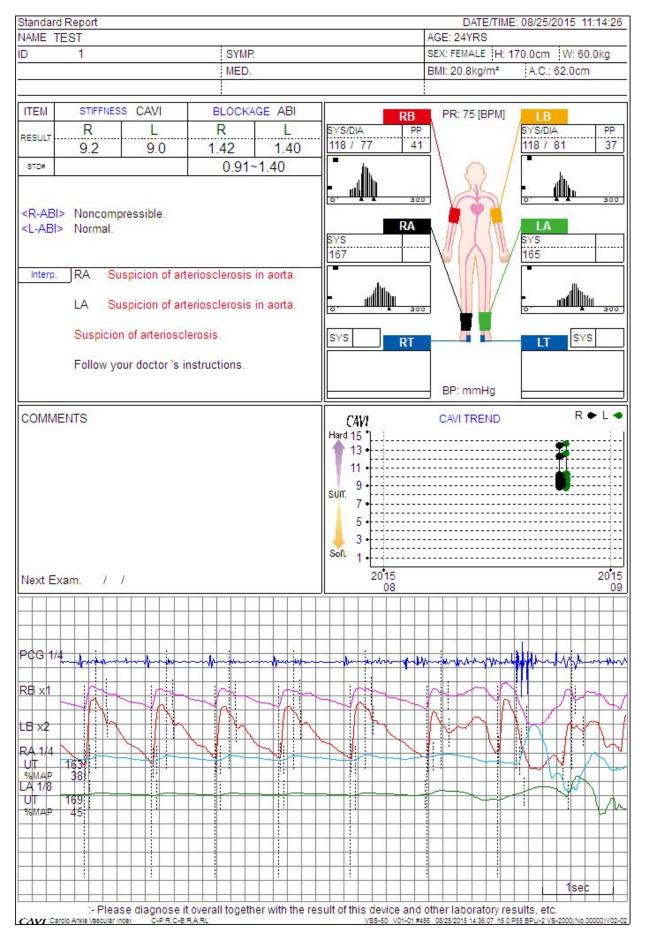
7.12 Post-ABI Trend Report



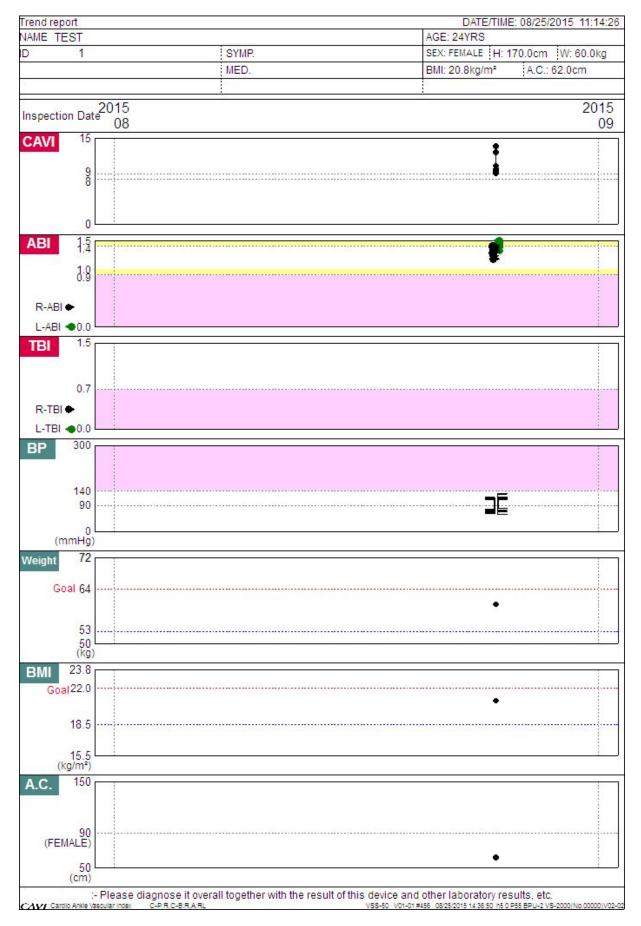
CAVE:Cardio Ankle Vascular Inde

VSS-50 V01-01 #456 08/25/2015 14:34:41 h3 BPU-2 VS-3000(No.99999)V03-02

7.13 Standard Report



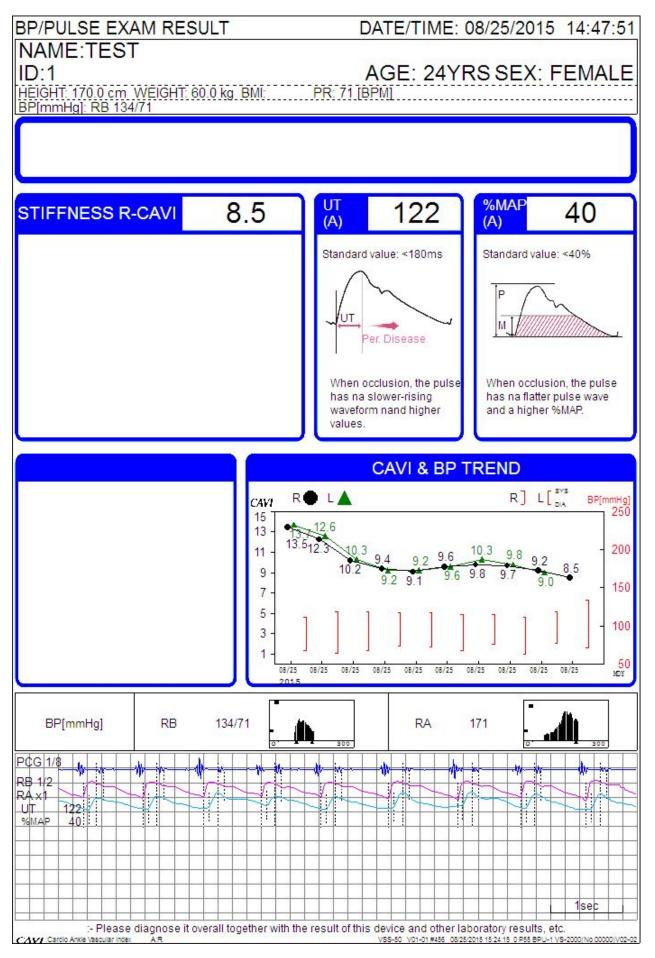
7.14 Trend Report



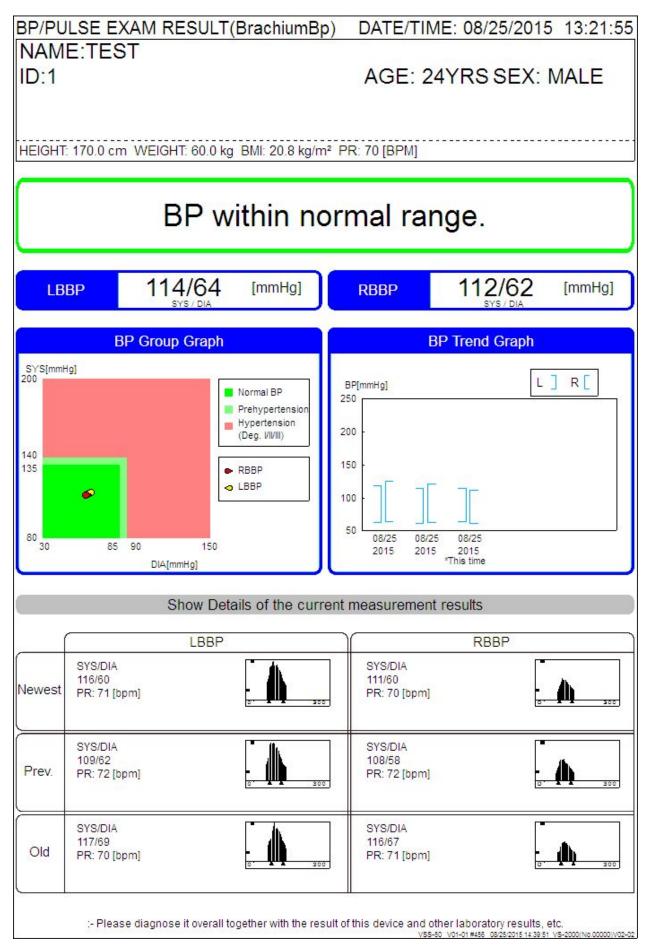
7.15 Examinee C Report

NAME			DATE/TIME: 08/25/2015 11:14	Next Exam.			
ID AGE BMI	1 24yrs 20.8	H 170.0 cm kg/m² RB-t	SEX FEMA W 60.0 kg A.C. 62.0 BP 118 / 77 mm	cm / 🕺 🌹			
6	FUKUD DENSHI	Memo					
S T -	CAVI 9.2						
F		CAVI TREN		2015			
B L O C	STD#: 0.91~1.40	Noncompressible.		The ABI test can detect a possible occlusion			
ĸ	ABI LEFT 1.40	Normal.		(or blockage) in your legs			
B P	160 140 90						
107	0						
W g h t	72 Goal 64 53			•			
	43 (kg)2015/08			2015/09			
CAVI	:- Please dia Cardio Ankle Vascular Index	gnose it overall together with C-PRC-BRARL	the result of this device and oth VSS-50 V01-01 #456 (er laboratory results, etc. 825/2015 14:37:33:h5:0.P55 BPU-2:VS-2000(No.00000)/V02-0			

7.16 Simple Examination Report



7.17 Brachium BP Report



Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other company and product names used in this manual are trademarks or registered trademarks of respective companies.

FUKUDA DENSHI CO., LTD.

3-39-4 Hongo, Bunkyo-ku, Tokyo, Japan Tel: +81-3-5684-1455 Fax: +81-3-3814-1222 http://www.fukuda.com

Printed in Japan 4L011351B 201603