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.

FUKUDA DENSHI

This manual is for the VSS-50 Version 02.

⚠ CAUTION	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.

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.

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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 32/64bit
		Windows8.1 pro 32/64bit
(2) CPU	:	Comply with the recommended system requirements of OS
(3) Memory	:	Comply with the recommended system requirements of OS
(4) Resolution	:	1024 x 768 dot 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 reader / writer
(7) USB port	:	Required to use Software Protector (CodeMeter)
(8) LAN	:	Required for on-line registration of inspection data.
(9) CD-ROM Drive	:	Required for installing the VSS-50, VSS-3

When connecting other systems to VSS-50, a higher performance operating 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

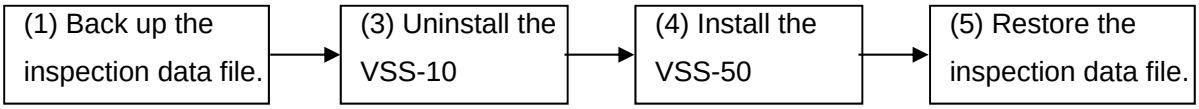
2.1. General Description for Installation

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.



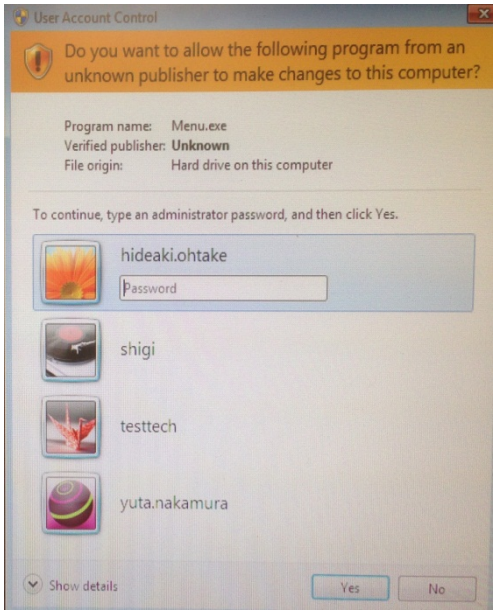
(1) Back up the inspection data file and setup file currently stored in the PC.
(Refer to “3.4 Backup of Inspection Data” p.50)
(2) Log on to the computer as explained in “2.2. Log On as Administrator” (p.3).
(3) Uninstall VSS-10 (VSS-1, VSS-2, VSS-3). (Refer to “3.1. Changing the Software from VSS-10”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

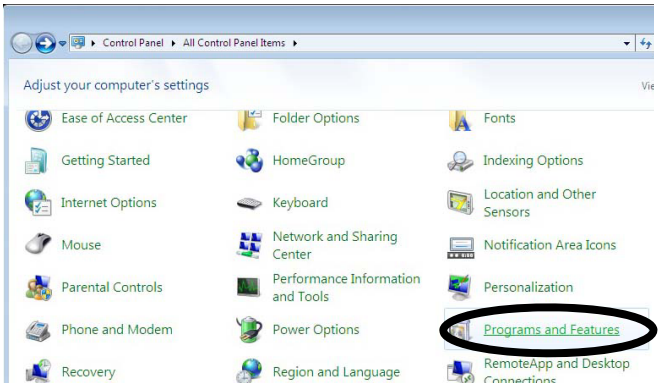
If VSS-10 or VSS-1 is already installed, it is necessary to uninstall it before installing the VSS-50.

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

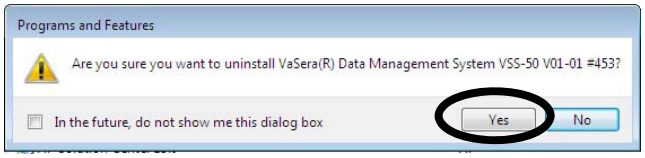
Follow the procedure below to uninstall the VSS-10.



(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.

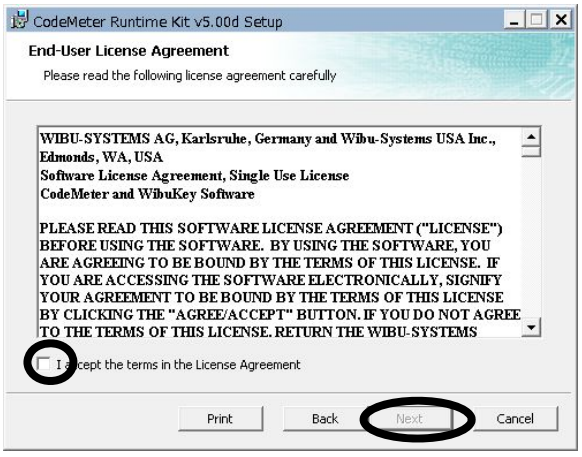
Follow the procedure below to install the CodeMeter Runtime Kit.

(1) Set the CD-ROM with the install software to the CD-ROM drive, right-click “menu.exe”, and run as administrator.

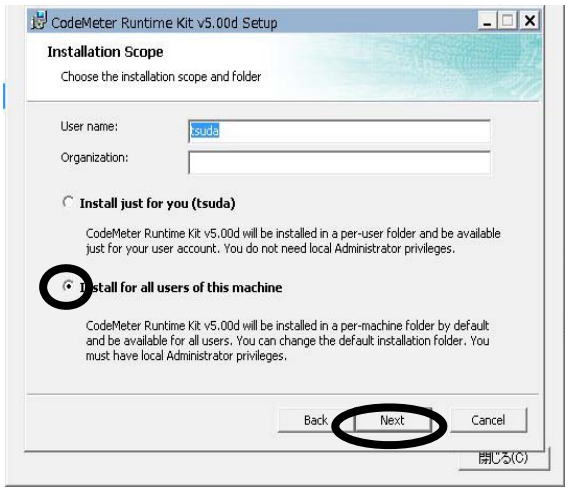
(2) Select “CodeMeter Runtime Kit Ver.5.00d”.

(3) Click the key with ○ as shown below.

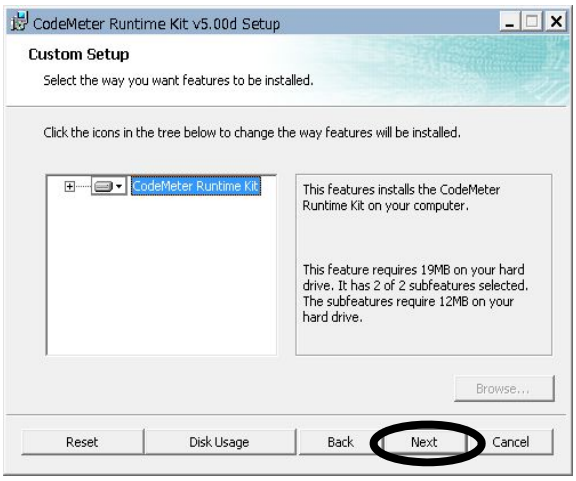
License Agreement



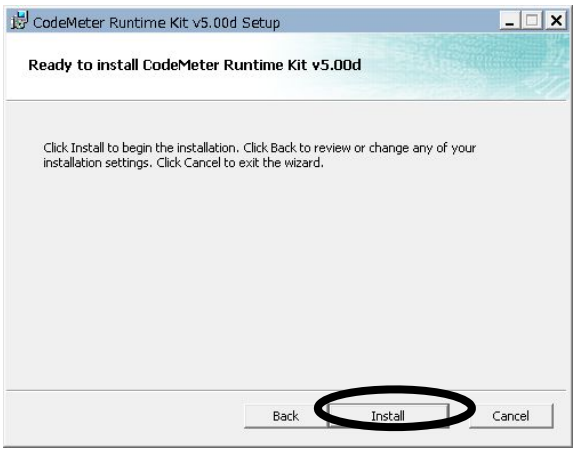
Installation Scope

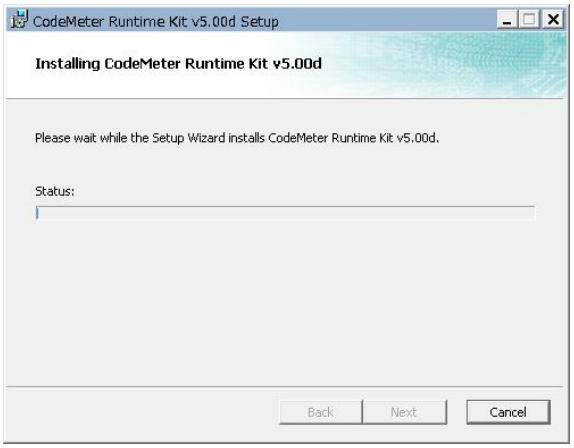


Destination Folder Setup



Begin Installation





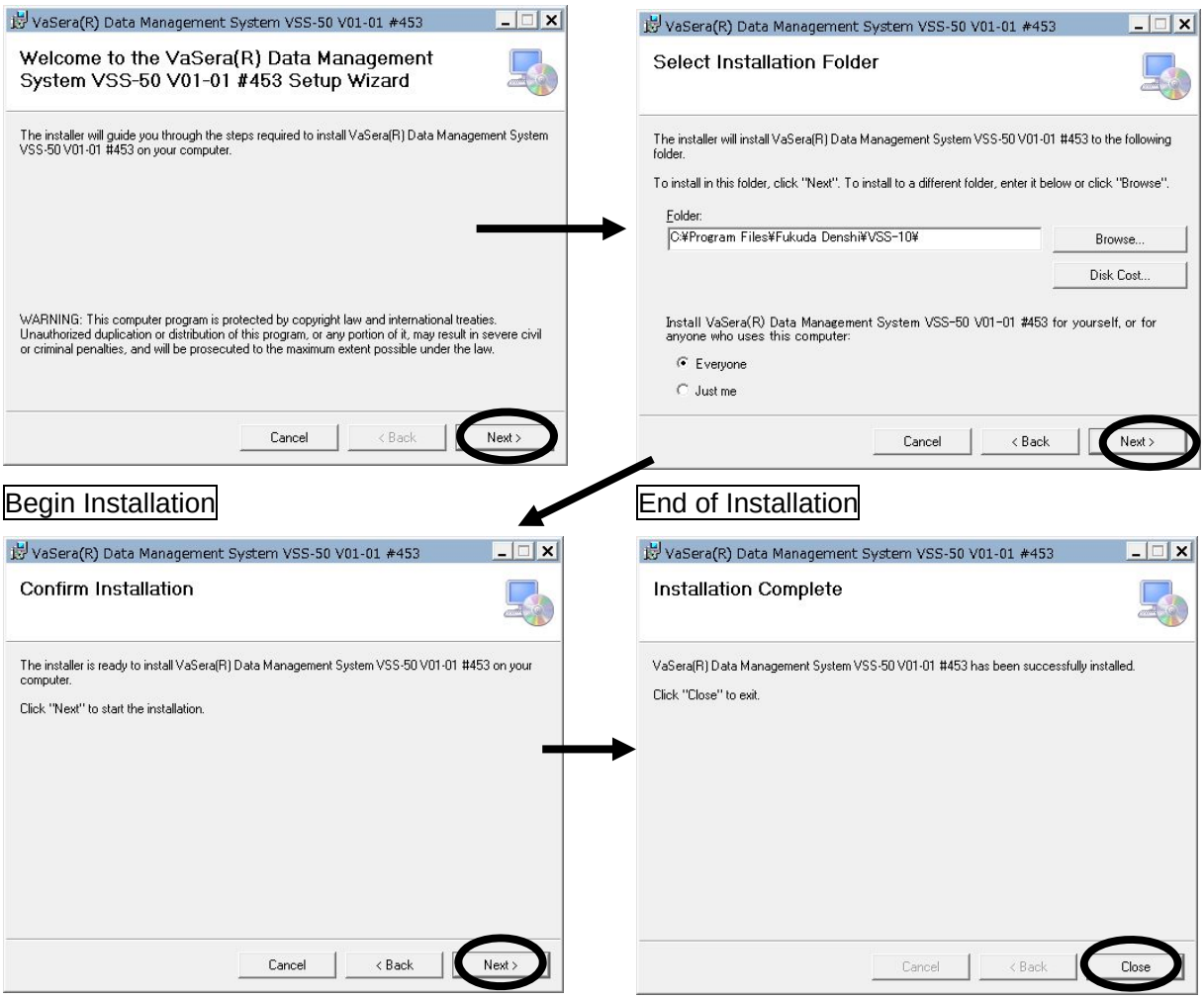
End of Installation

2. Install the VSS-50 software.

(1) Insert the install CD into the CD-ROM drive, right-click “menu.exe”, and run as administrator.

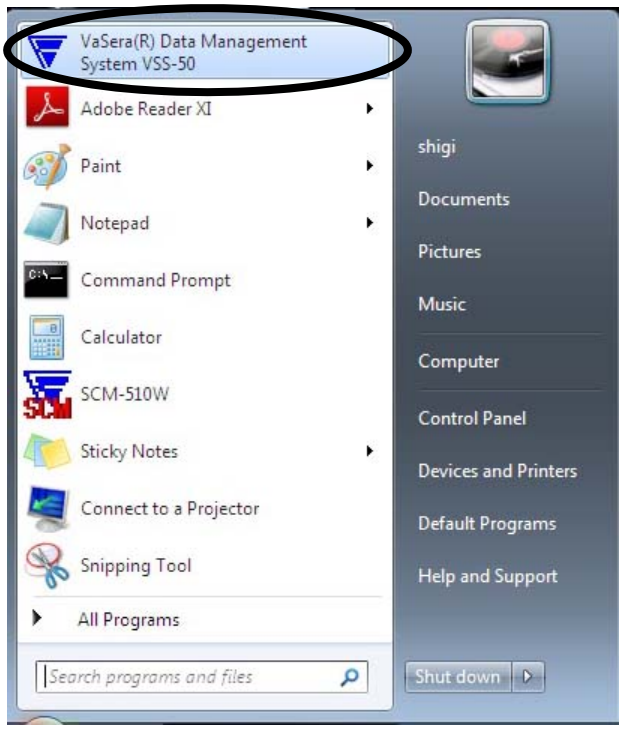
(2) Select “VSS-50 VaSera Data Management System”.

(3) Click the keys indicated by ⬭ as shown below.



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.

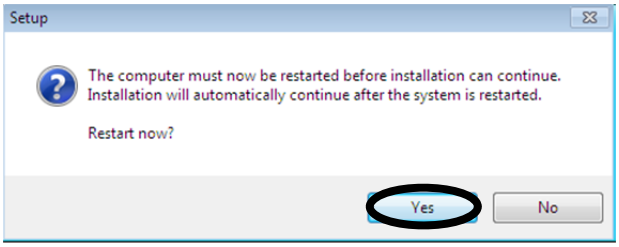
4. Install the PDF Writer (Universal Document Converter).

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

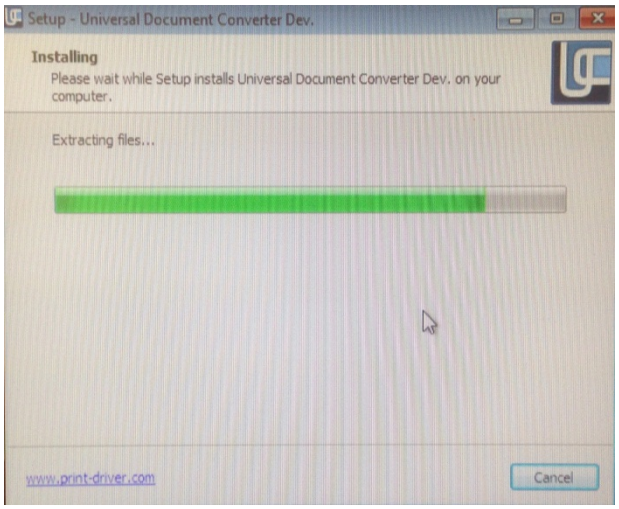
(1) Insert the install CD into the CD-ROM drive, right-click “menu.exe”, and run as administrator.

(2) Select “PDF Writer (Universal Document Converter) Ver6.5”.

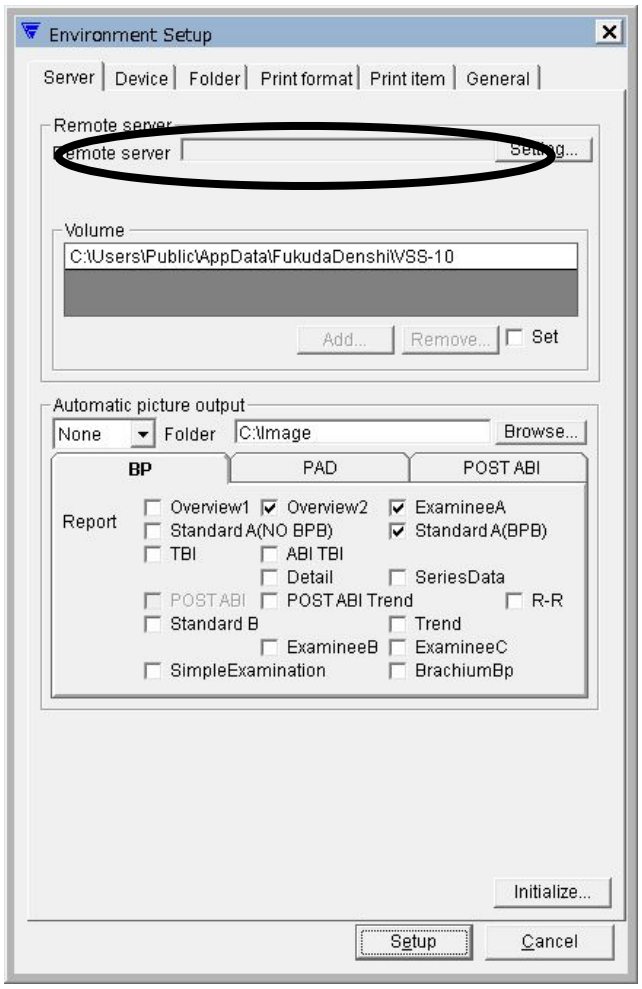
(3) Click the keys indicated by ⬭ as shown below.



After restarting the PC, installation will automatically start.



3.2.1. Environment Setup (Single PC Operation)



(1) Start the VSS-50 program and open the Environment Setup window by clicking “Set environment” on the “Maintenance” menu.

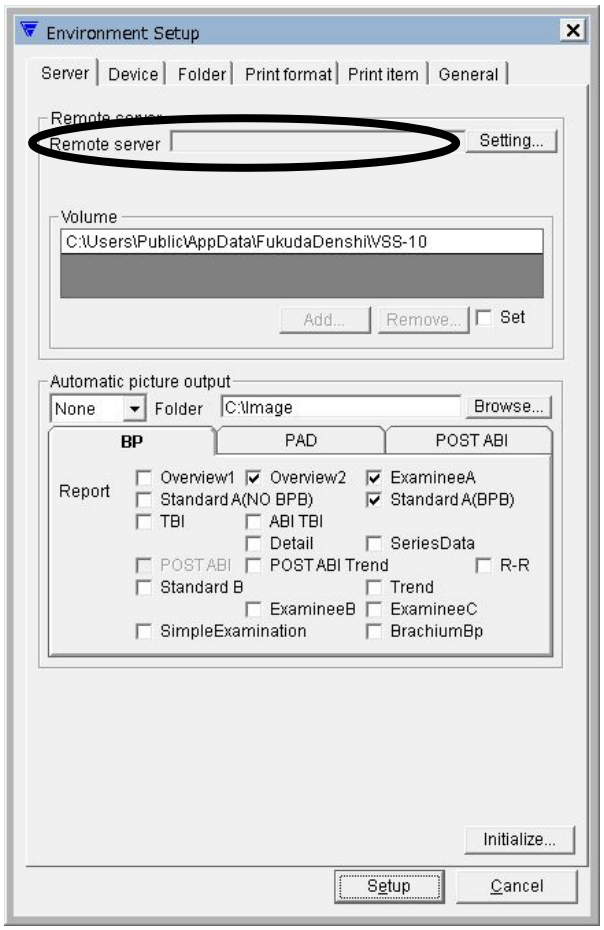
(2) If operating the VSS-50 on single computer, the “Remote server” section should be left blank.

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)



Server PC

(1) Start the VSS-50 program and open the Environment Setup window by clicking “Set environment” on the “Maintenance” menu (see below).

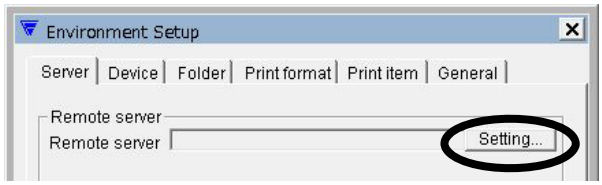
(2) If operating the VSS-50 as Server, leave the “Remote server” section blank.

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.

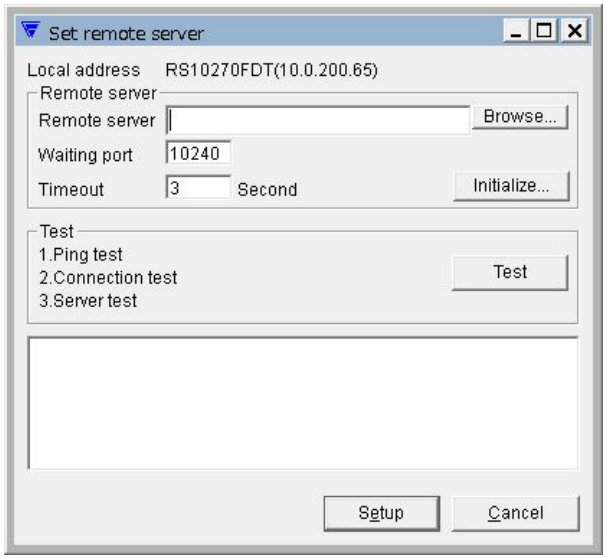
Client PC

(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.



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

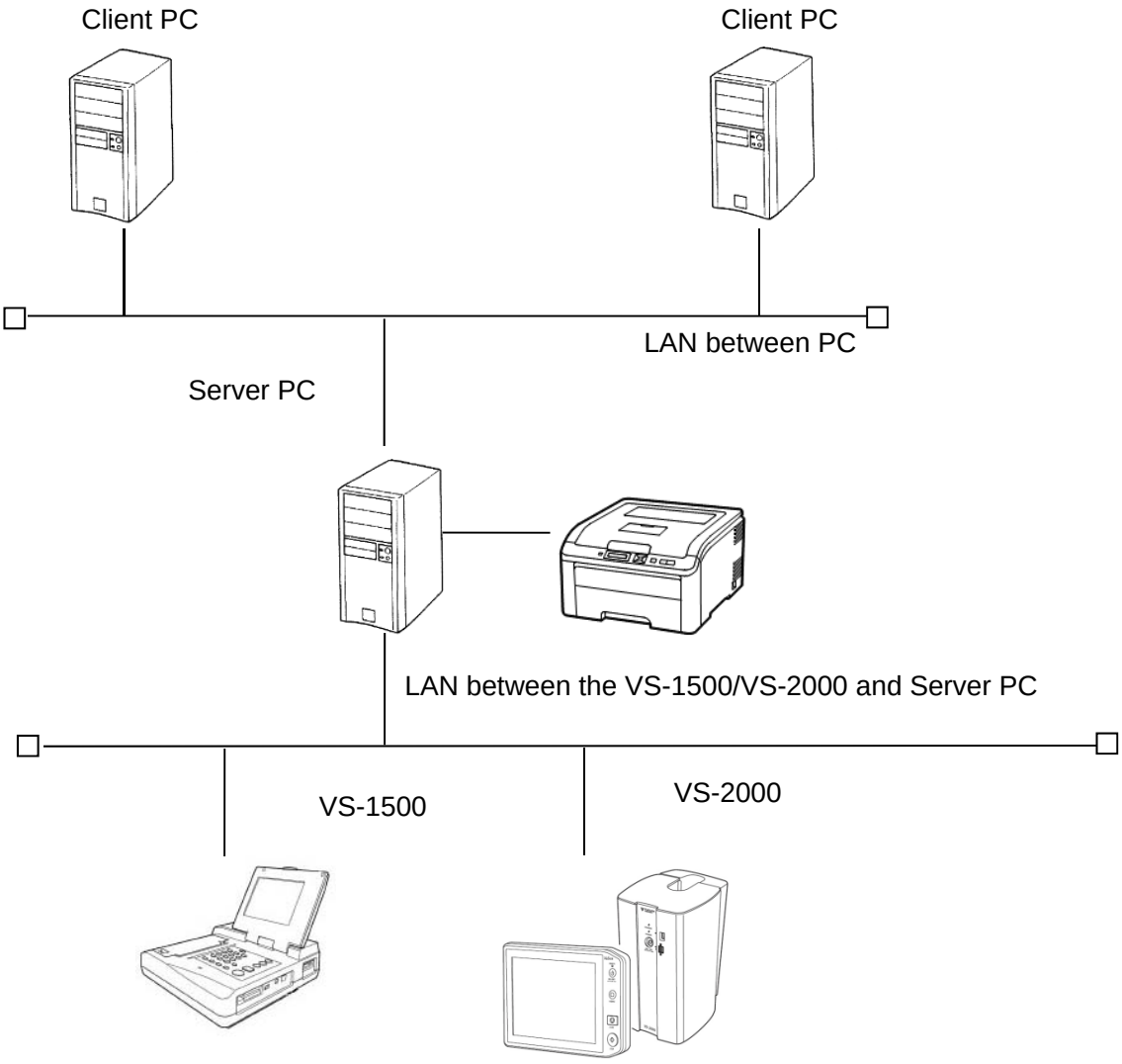


For other details of Environment Setup, refer to “3.3.16 Environment Setup” (p.42).

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

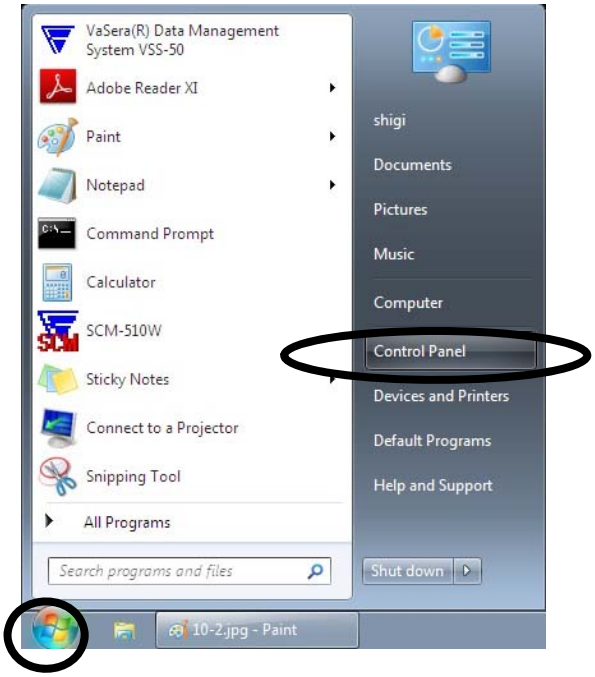
In this section, VSS-50 network connection procedure is explained using the example of Windows 7 TCP/IP setting.

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.



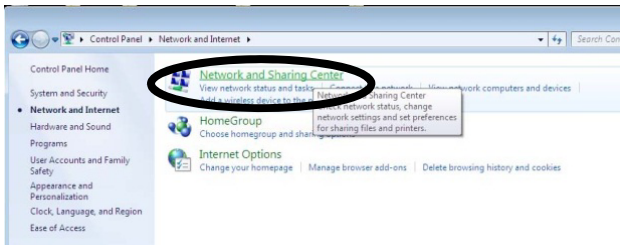
(1) Click “Start” on the taskbar.

(2) Click “Control Panel.

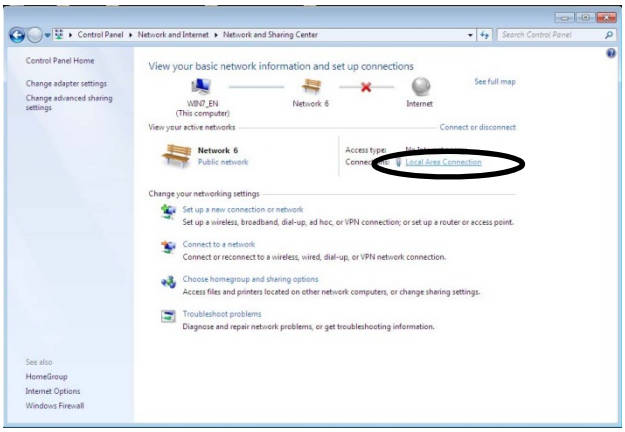
3. Local Area Connection

(1) The “Control Panel” window will be displayed.

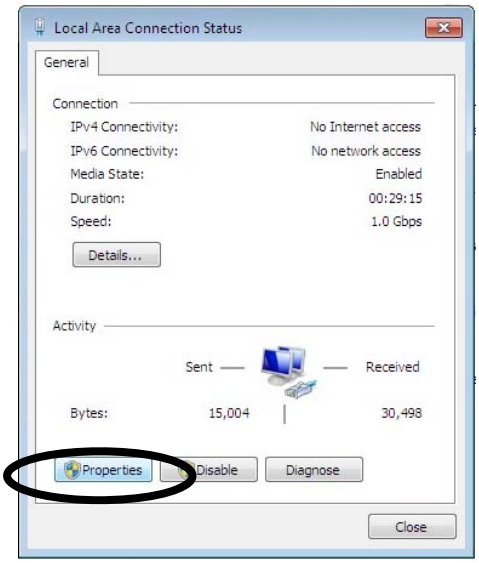
(2) Click “Network and Internet” in the Control panel.



(3) Click “Network and Sharing Center”.



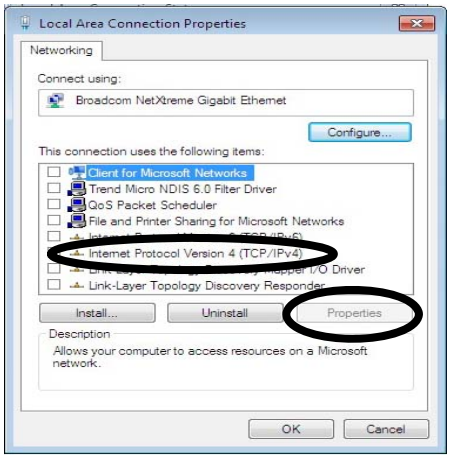
(4) Click “Local Area Connection”.



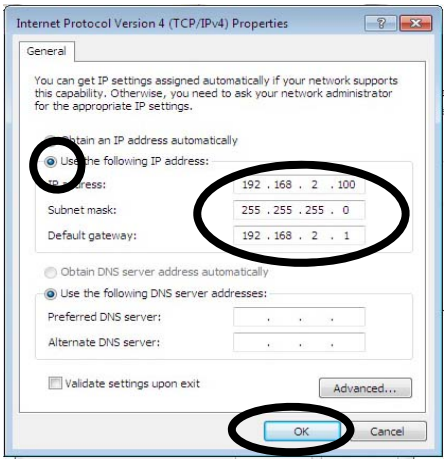
(5) “Local Area Connection Status” window is displayed.

(6) Click “Properties” button.

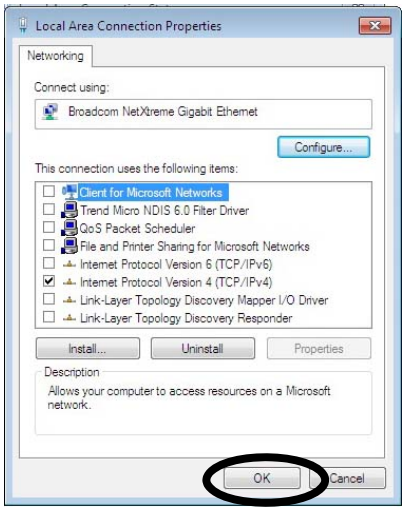
4. TCP/IP Setup



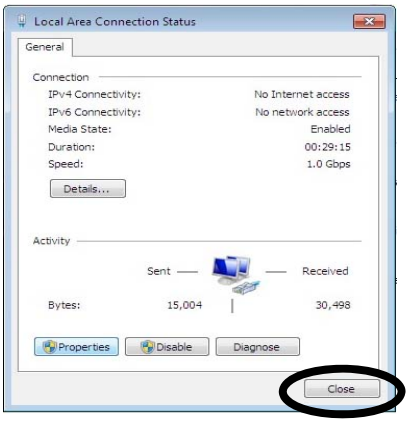
(1) Select “Internet Protocol Version 4 (TCP/IPv4U).
(2) Click “Properties” button.



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

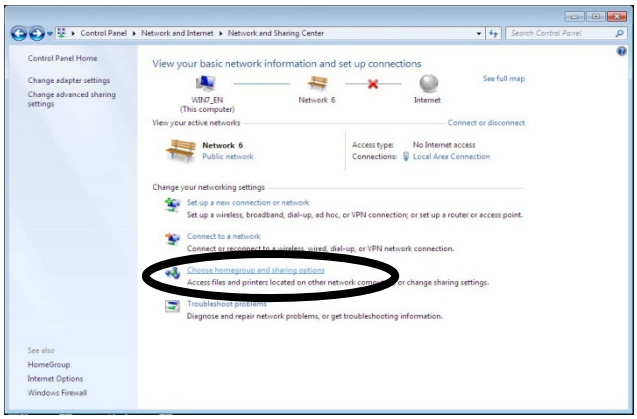


(6) Click “OK”.

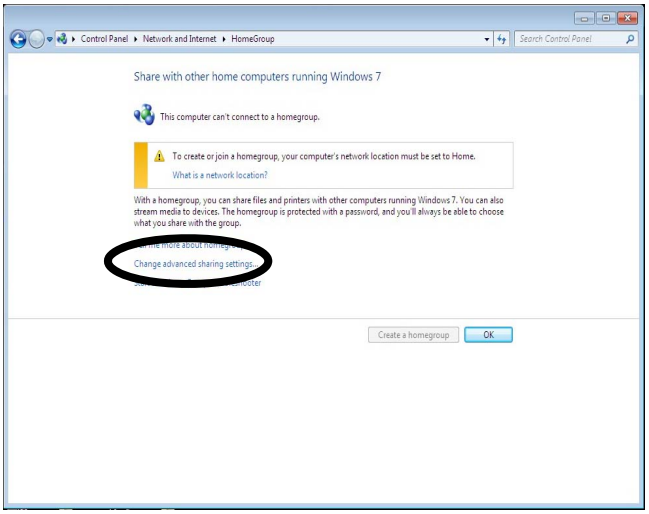


(7) Click “Close”

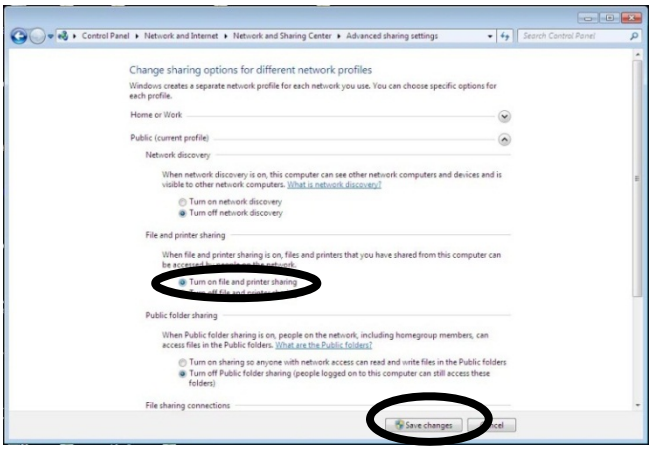
5. File and printer sharing



(1) Click “homegroup and sharing options”.



(2) Click “Change advanced sharing settings”.



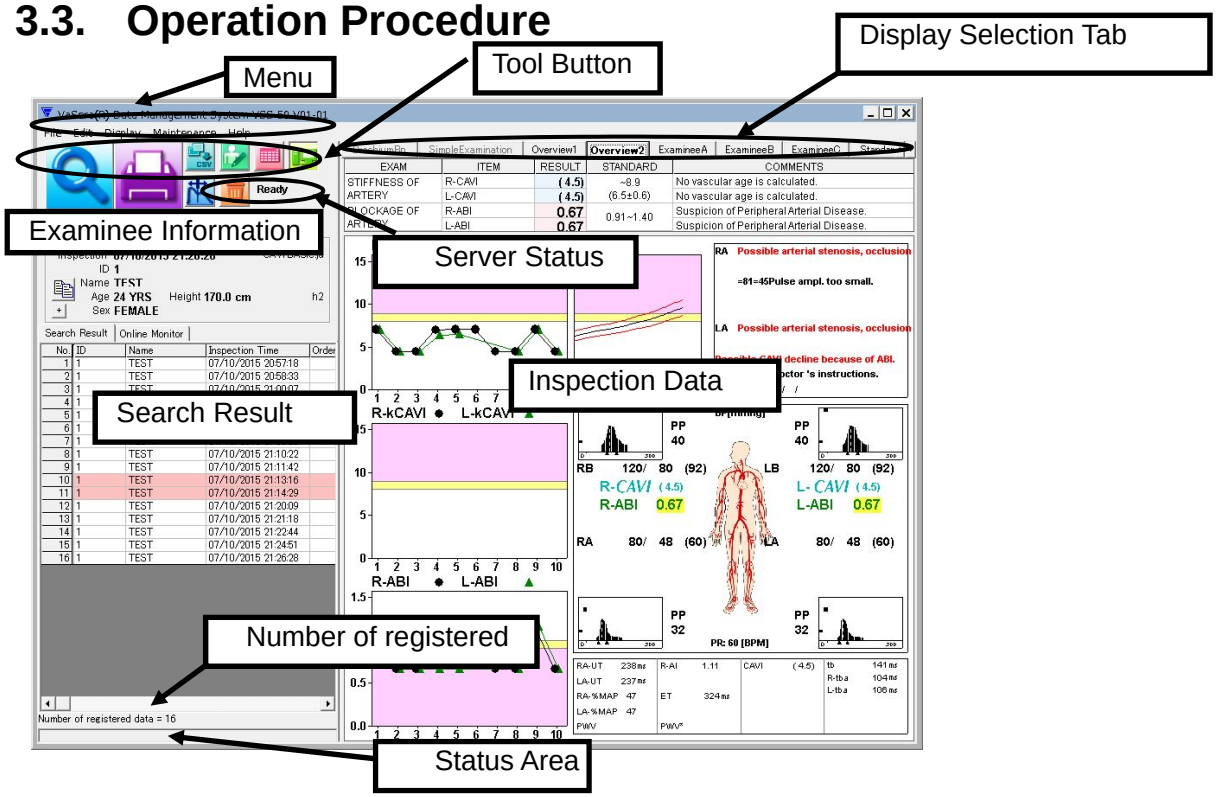
(3) Click “Turn on file and printer sharing”.

(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”.

3.3. Operation Procedure



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”.

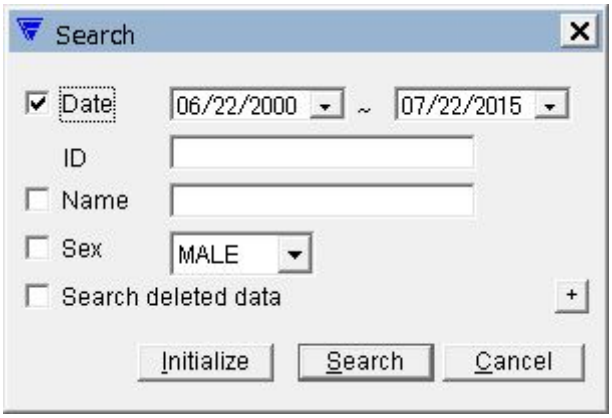
If “Ready” is displayed in the “Server Status” area, it indicates that the Environment Setup has been properly performed and VSS-50 is properly operating. If the PC is operating as Server, it is ready to register the inspection data from the VS-2000

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.

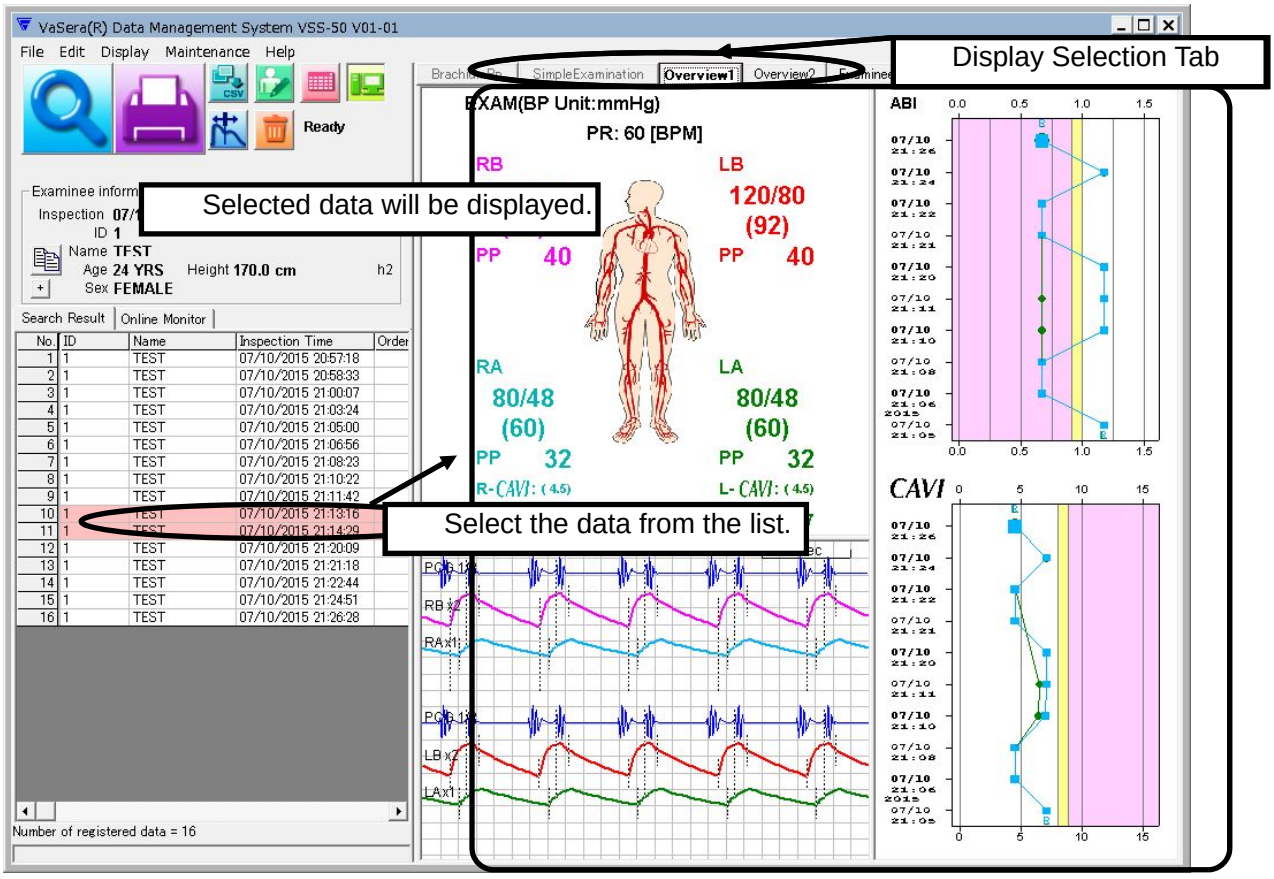


(1) Set the search condition.
Put a check mark for the item to include in the search condition, and set each condition. Click on the + button to add ABI and CAVI to search conditions.

(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.

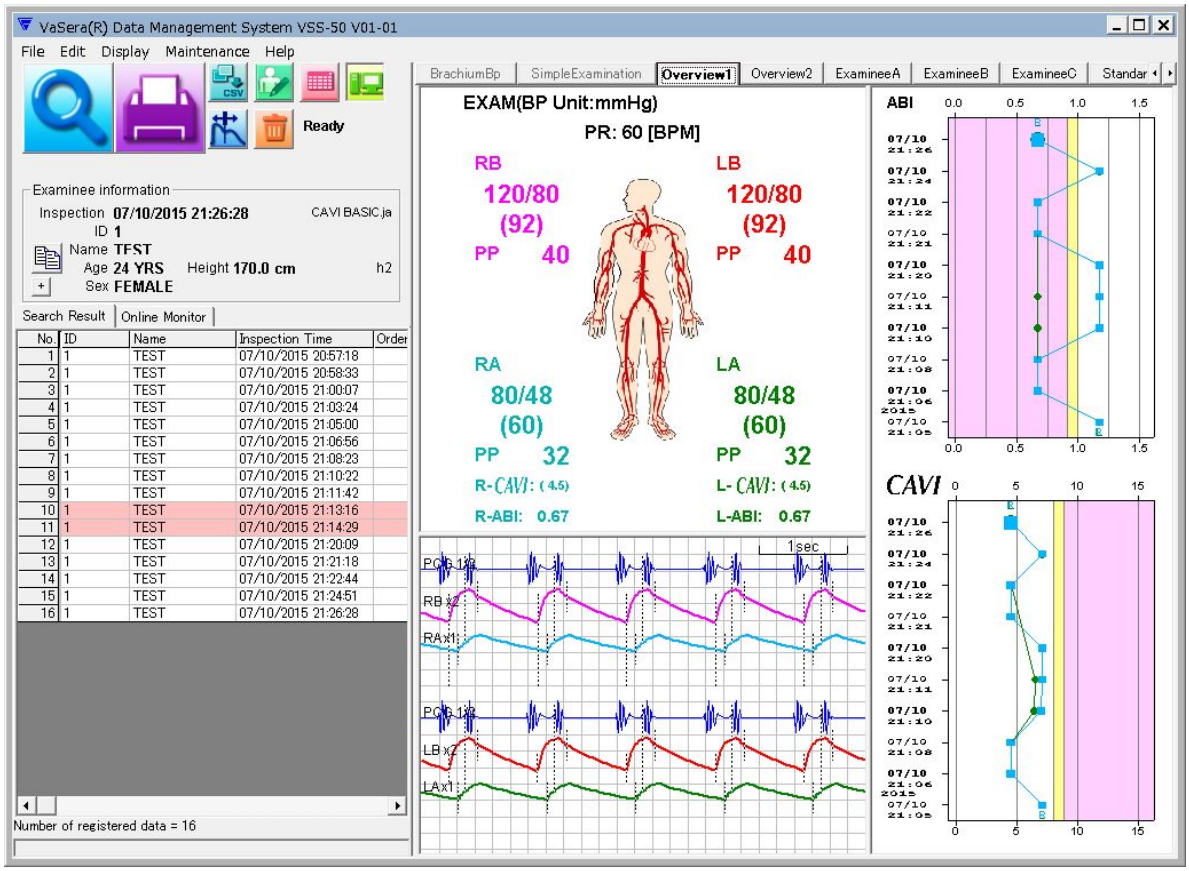
(4) To initialize the search condition, click “Initialize”. To stop the search process, click “Cancel (X)”.



(5) Select the data from the search result list

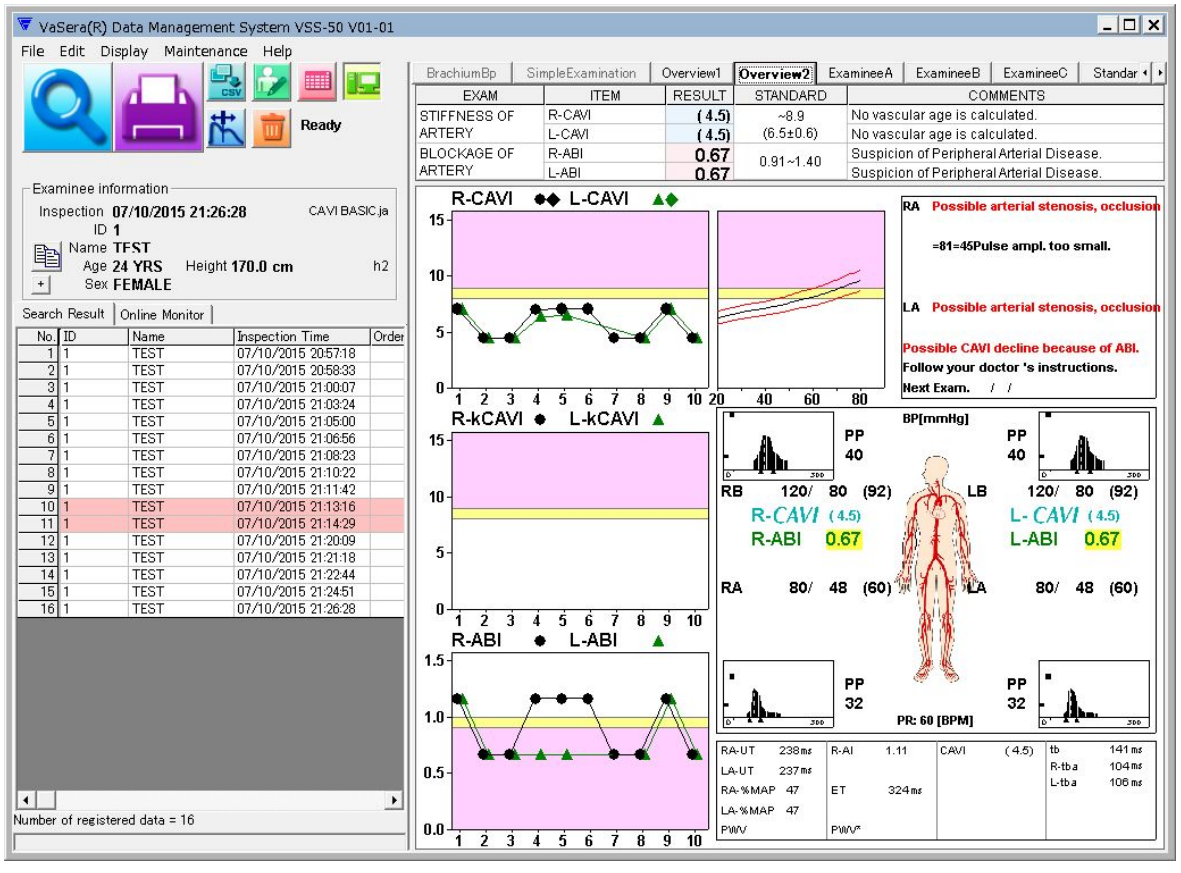
(6) The selected data will be displayed in the inspection data area at the right side of the window. The contents to be displayed can be selected using the display type tab.

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

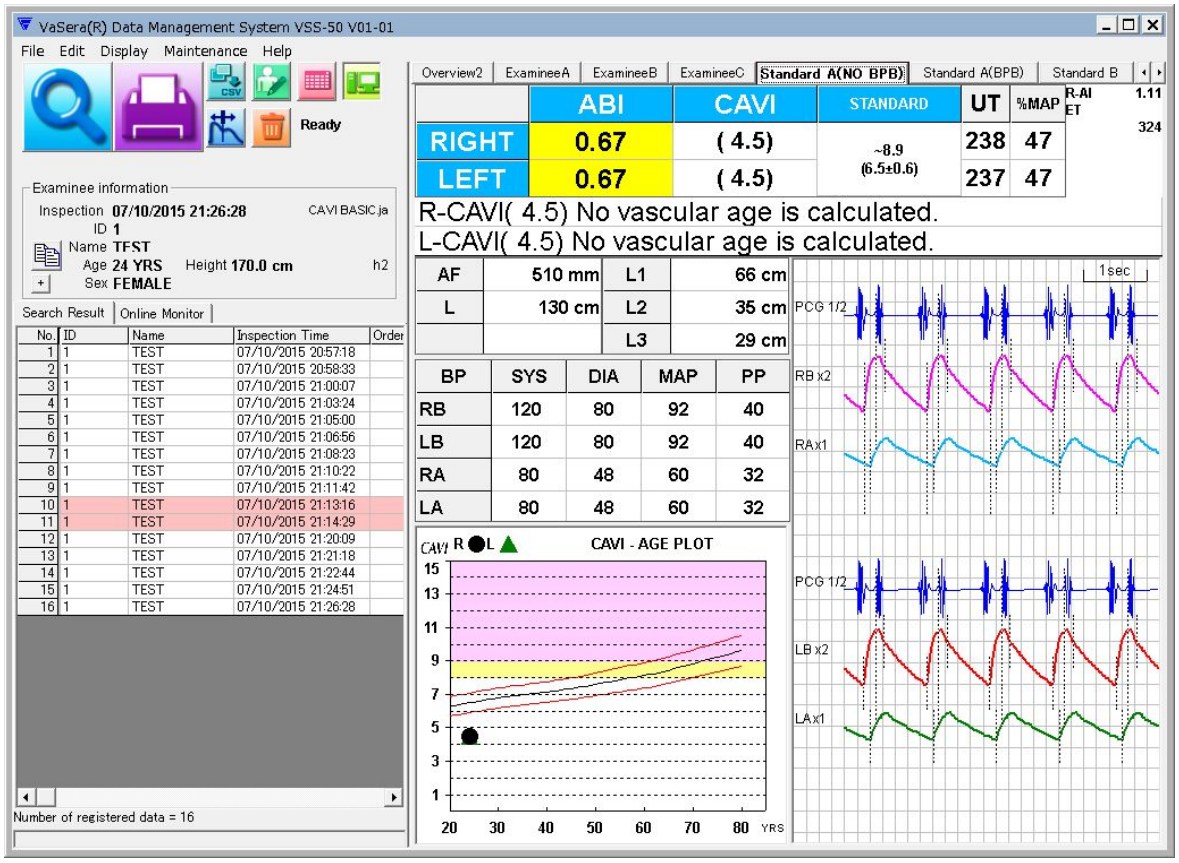


Selecting the “Overview 2” tab will show the overview of the examination result.

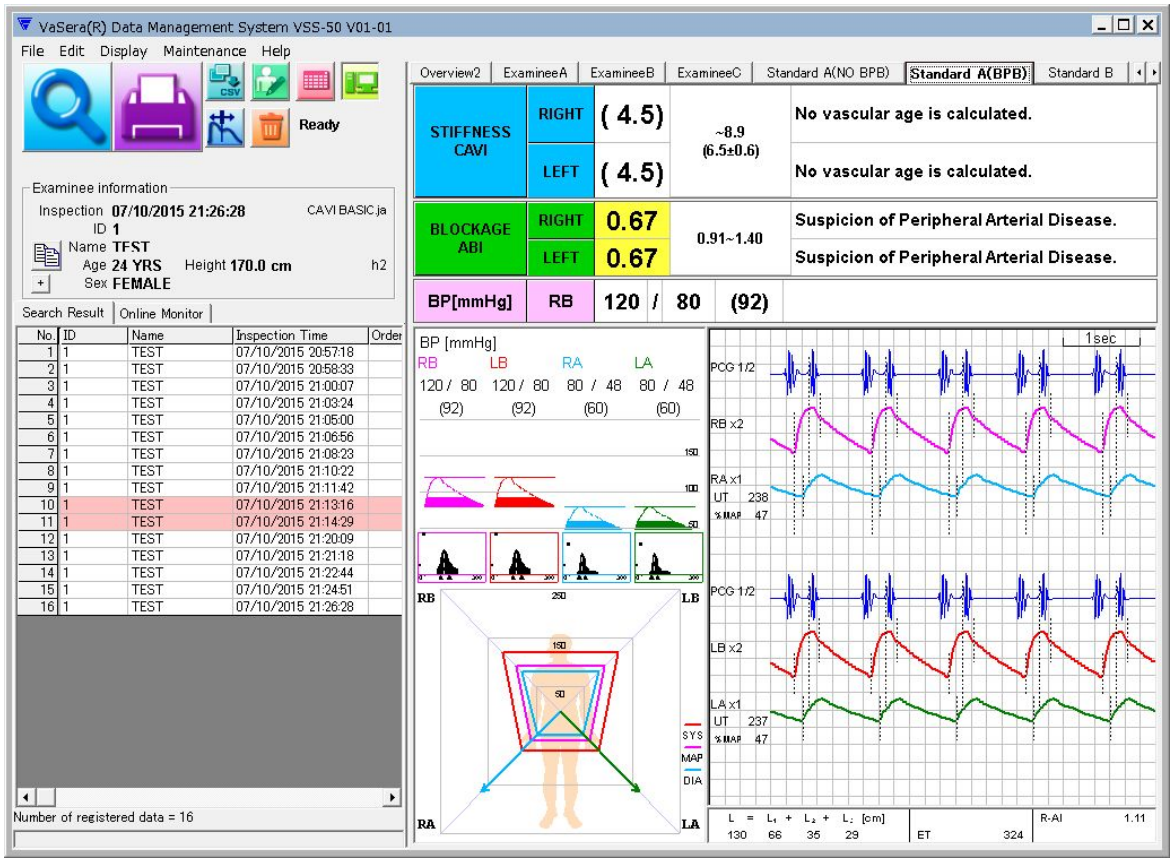
The items to be displayed can be selected under “Maintenance” > “Set environment” > “General” > “View tab”.



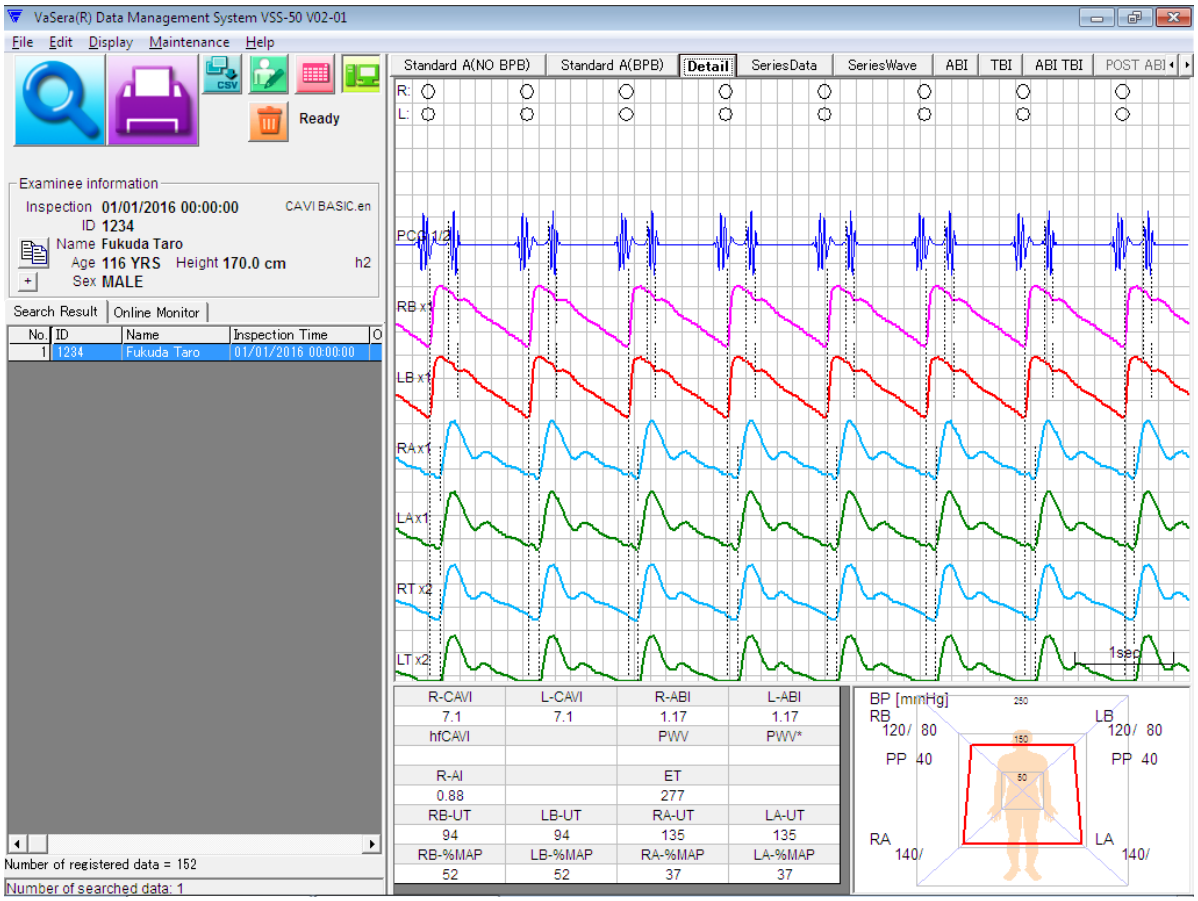
Selecting “Standard A (No BPB)” will show the same display as the VS-2000 “Standard (No BPB)” Report.



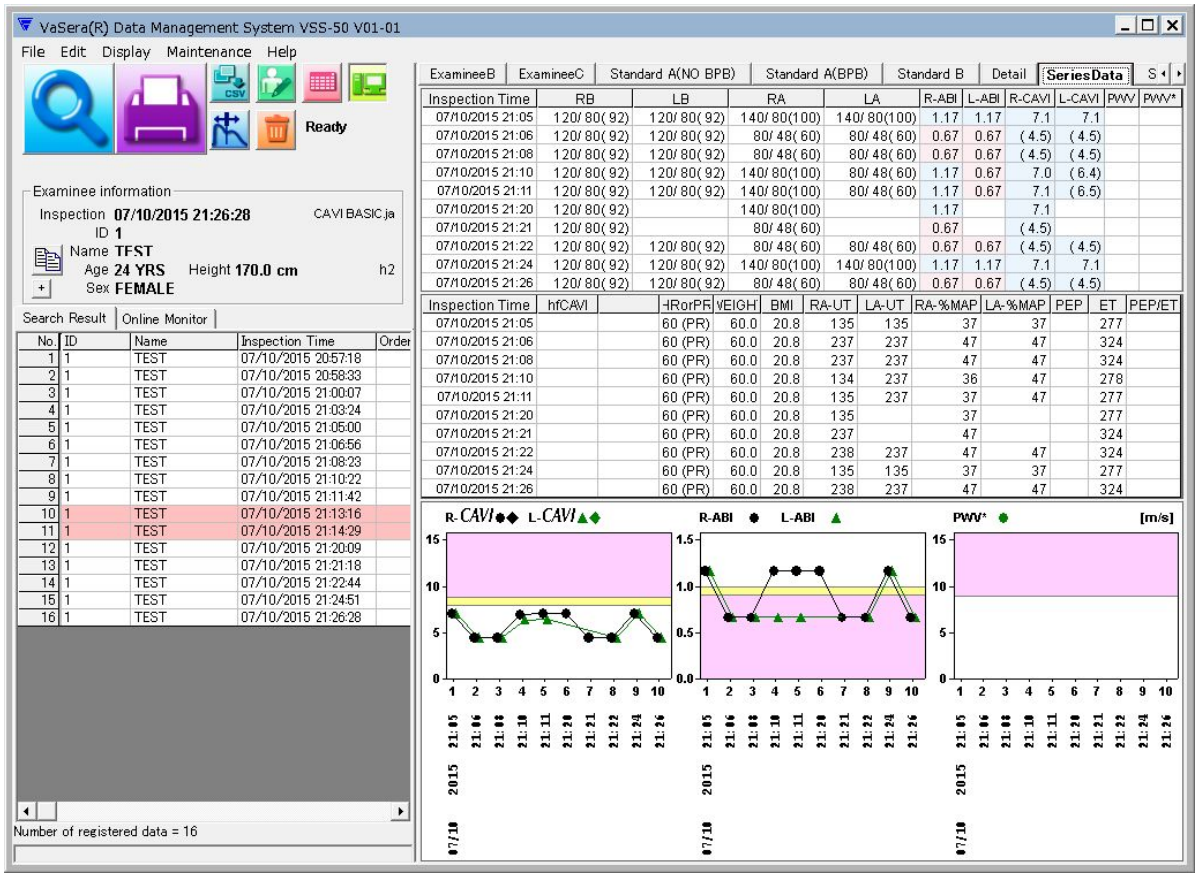
Selecting “Standard A (BPB)” will show the same display as the VS-2000 “Standard A (BPB)” Report.



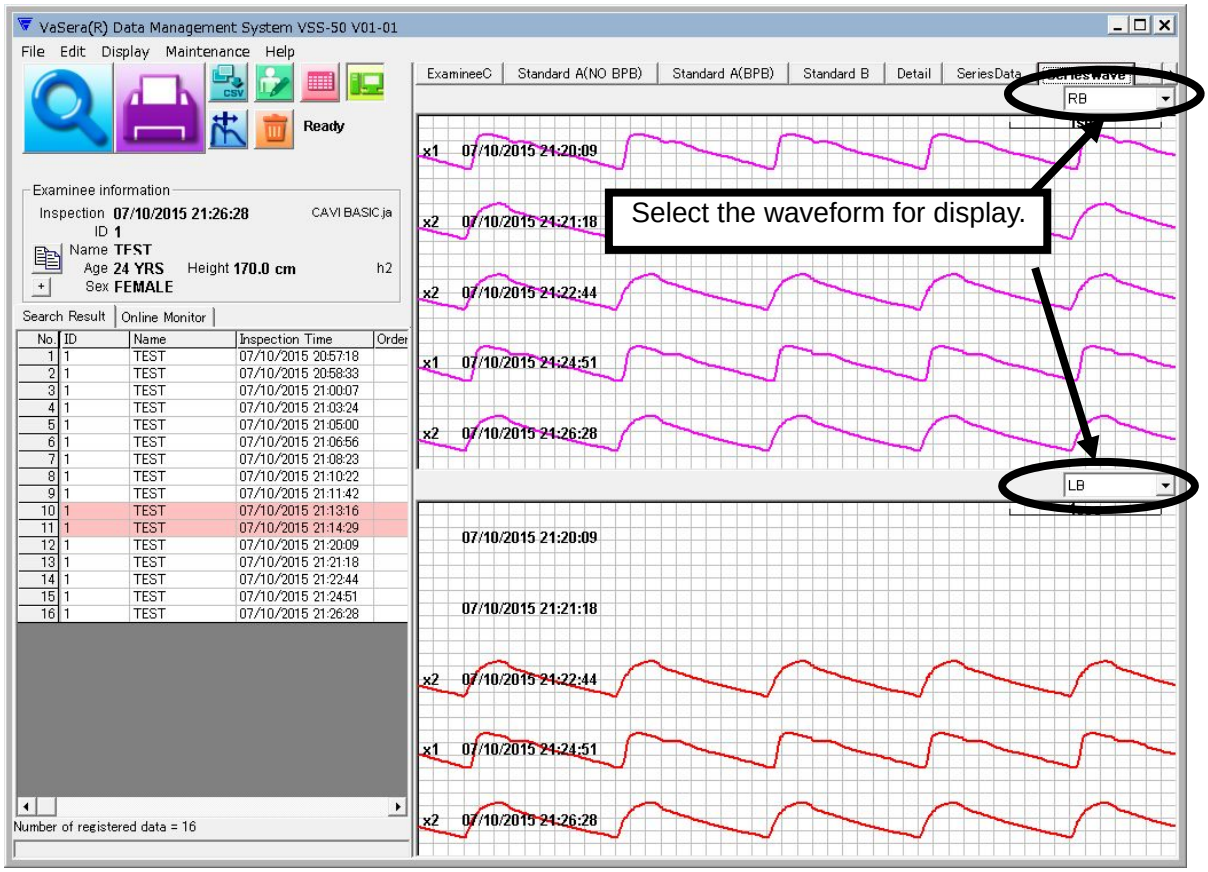
Selecting “Detail” will display the enlarged waveform.



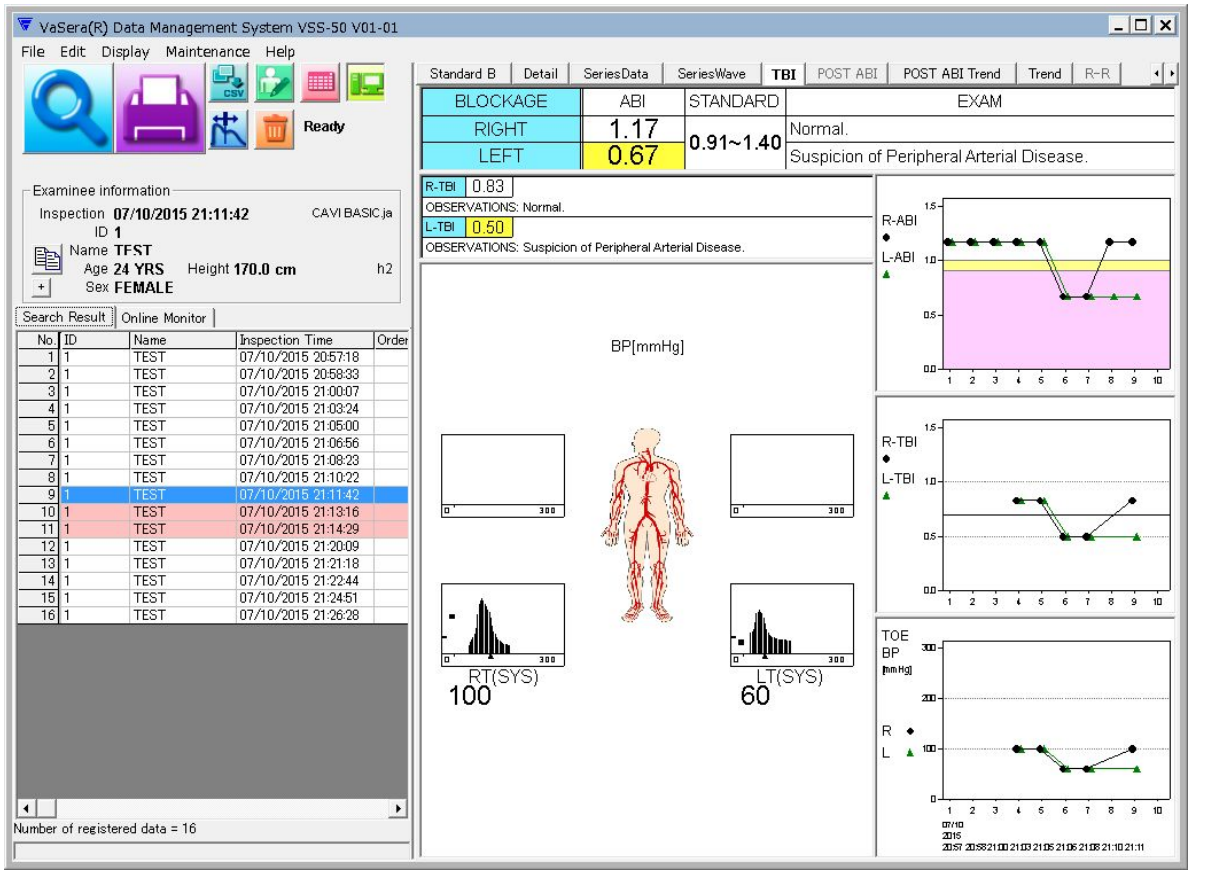
Selecting “SeriesData” will display the time-series data.



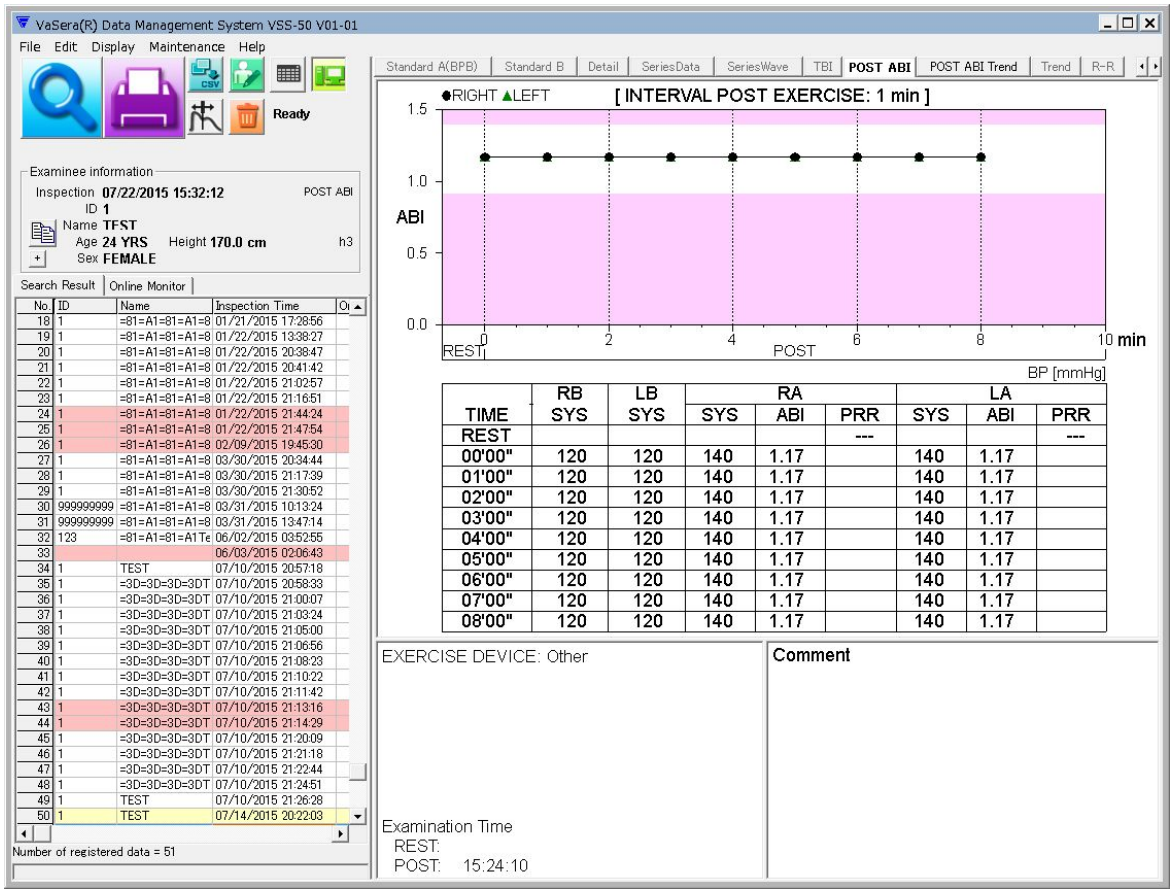
Selecting “SeriesWave” will display the time-series waveform data.



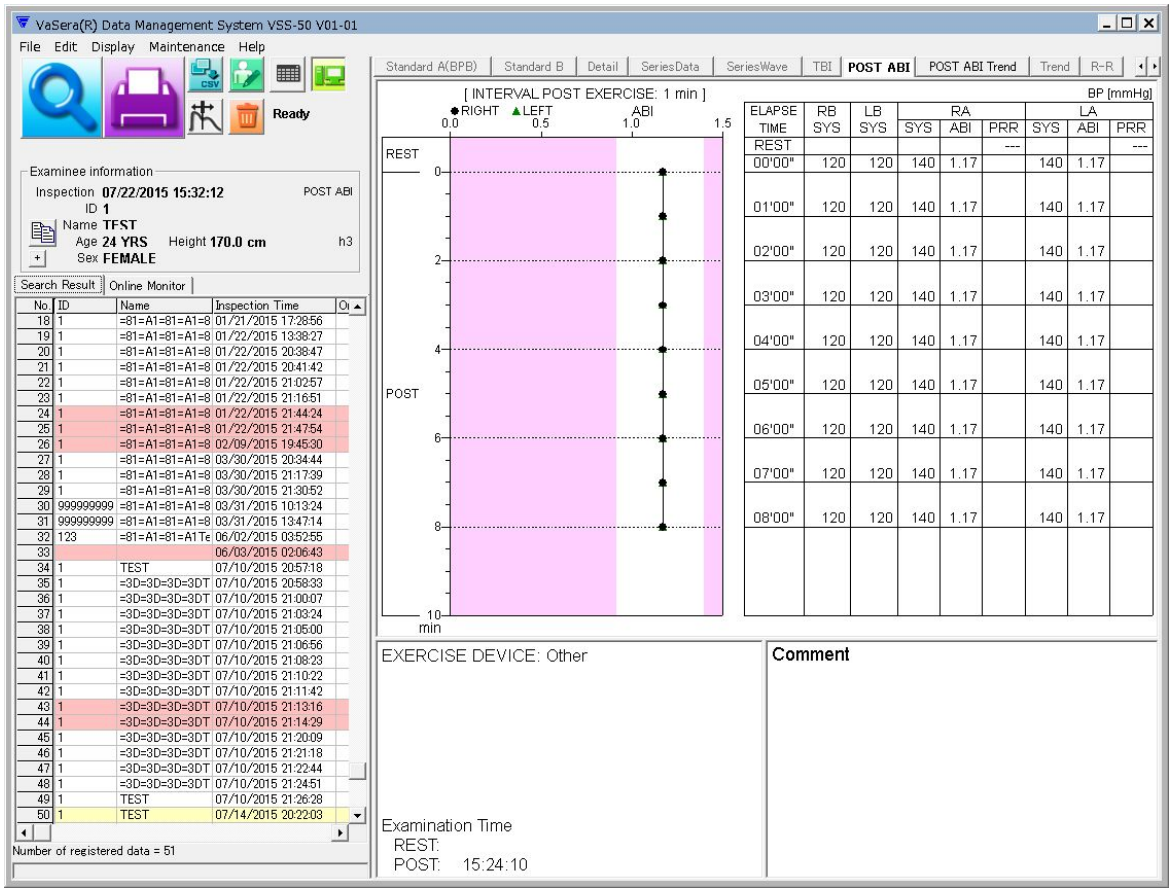
Selecting “TBI” will display the TBI examination result.



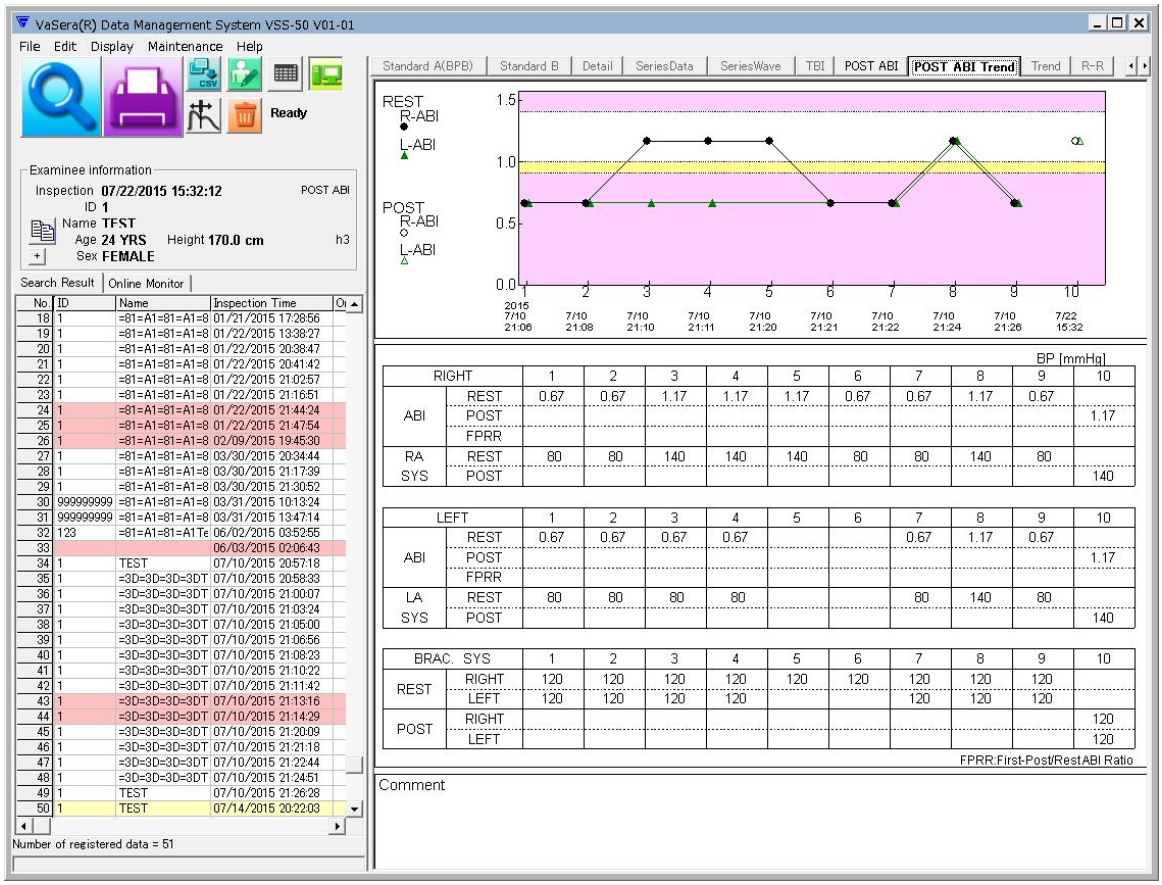
Selecting “POST ABI” will display the Post ABI. (Landscape format)



(Portrait Format of Post ABI)

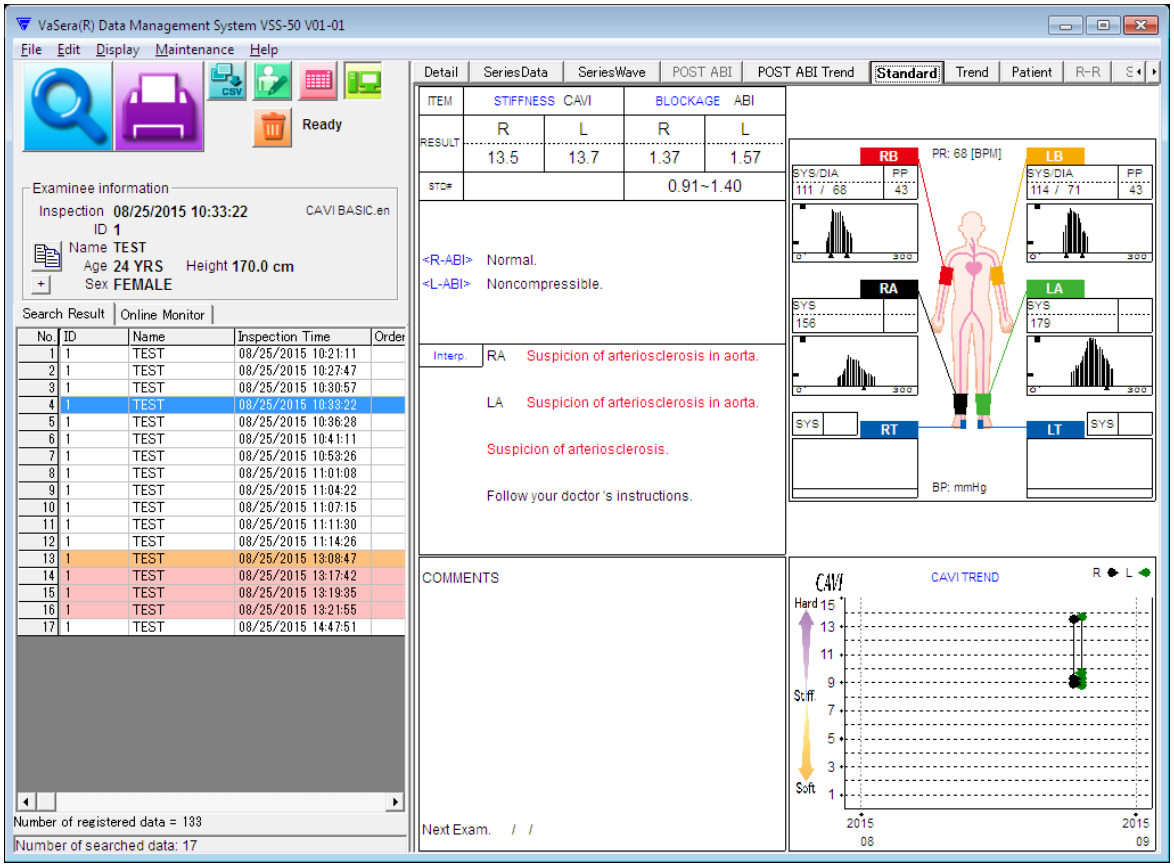


Selecting “POST ABI Trend” will display the “POST ABI Trend”.

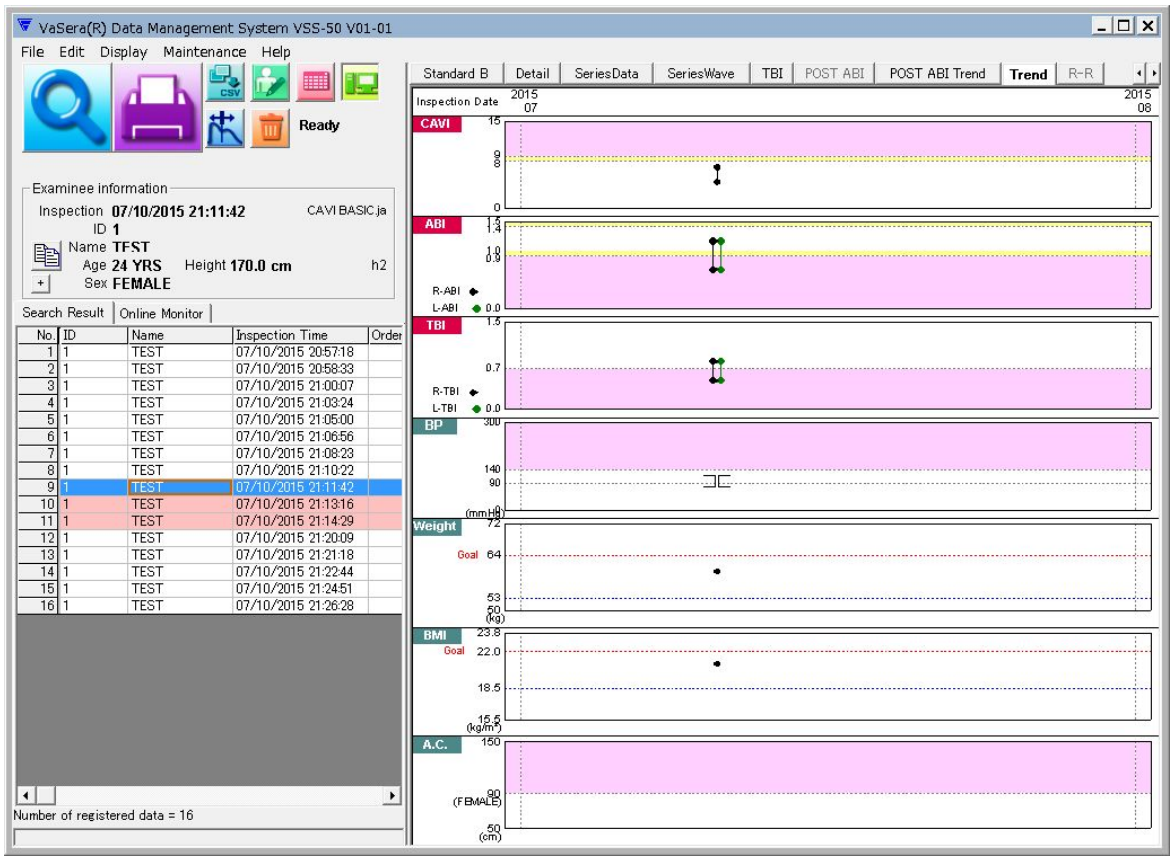


Selecting “Standard B” will show the same display as the VS-2000 “Standard B” Report.

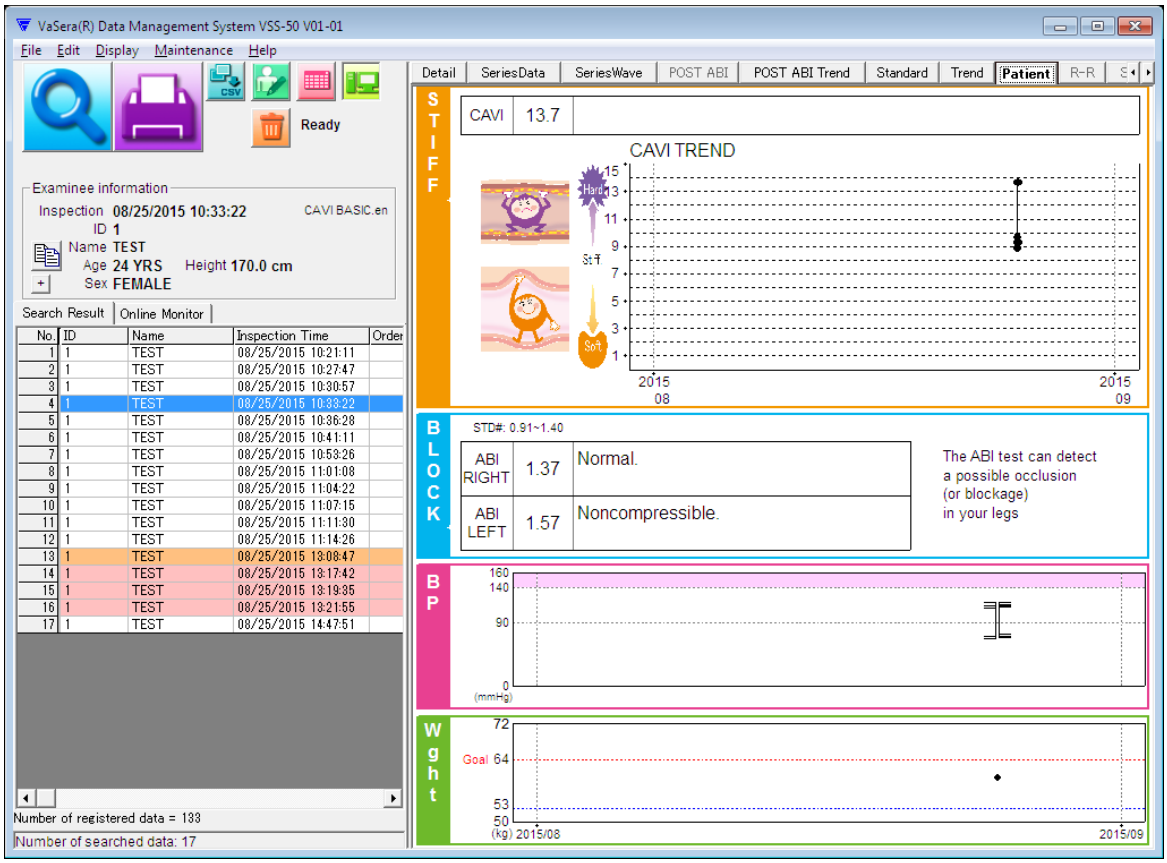
The items to be displayed can be selected under “Maintenance” > “Set environment” > “Print Item” > “Standard B”.



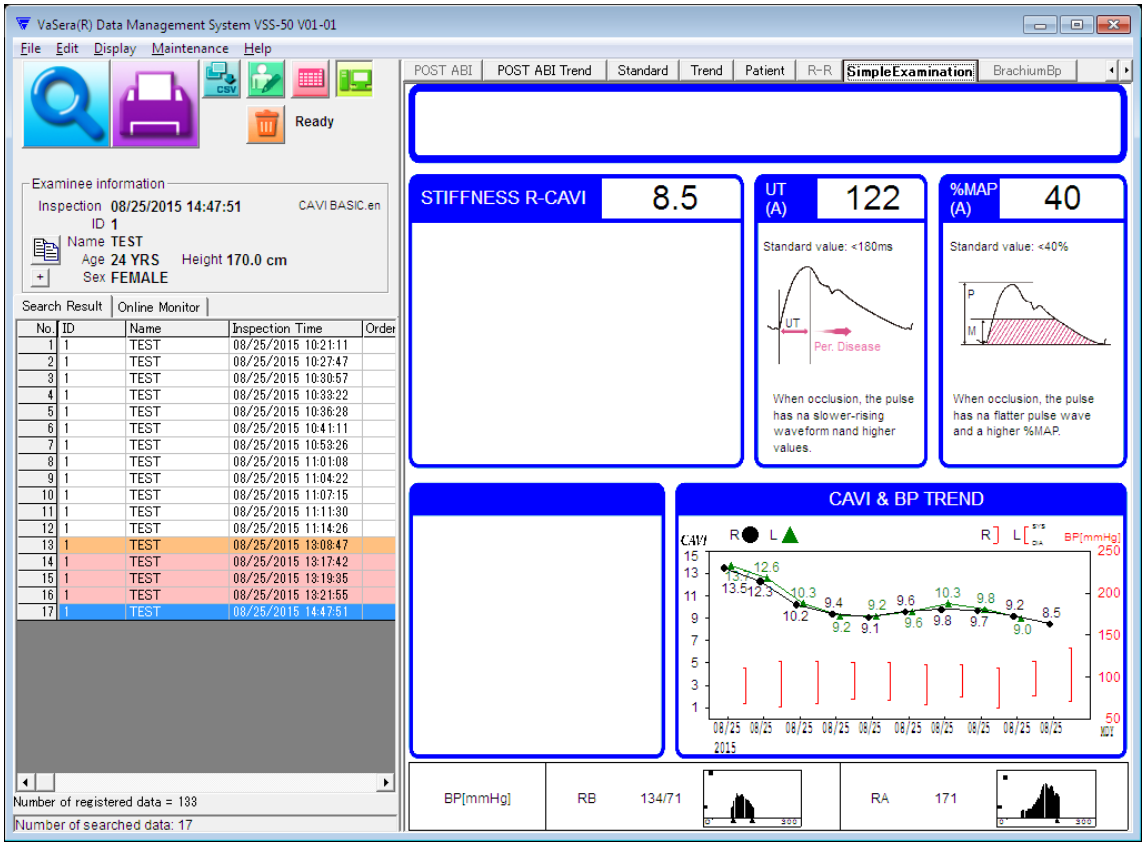
Selecting “Trend” will show the same display as the VS-2000 “Trend” Report.



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



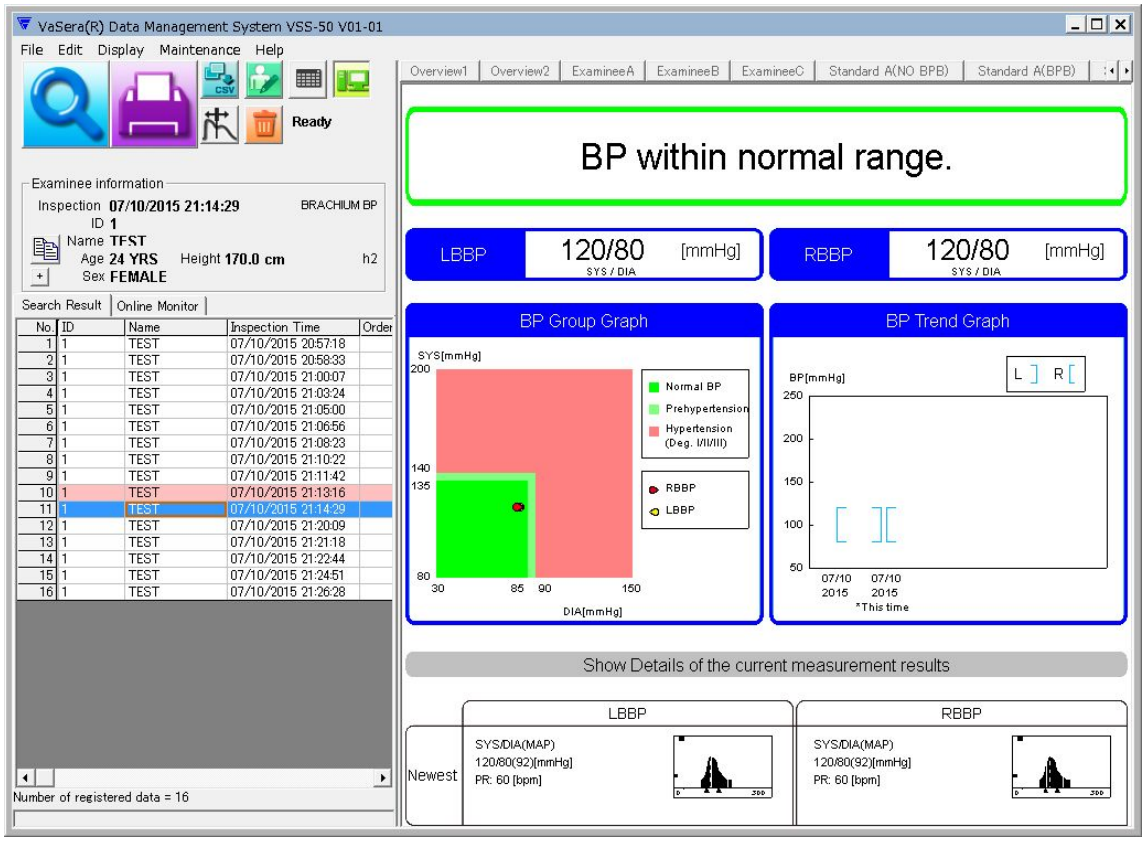
Selecting “Simple Examination” will show the same display as the VS-2000 “Simple Examination” Report.



Selecting “Brachium BP” will show the same display as the VS-2000 “Brachium BP” Report.

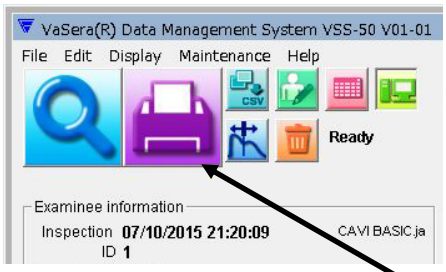
This tab will be effective only when brachium BP examination result is present on the VS-2000.

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).



(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)

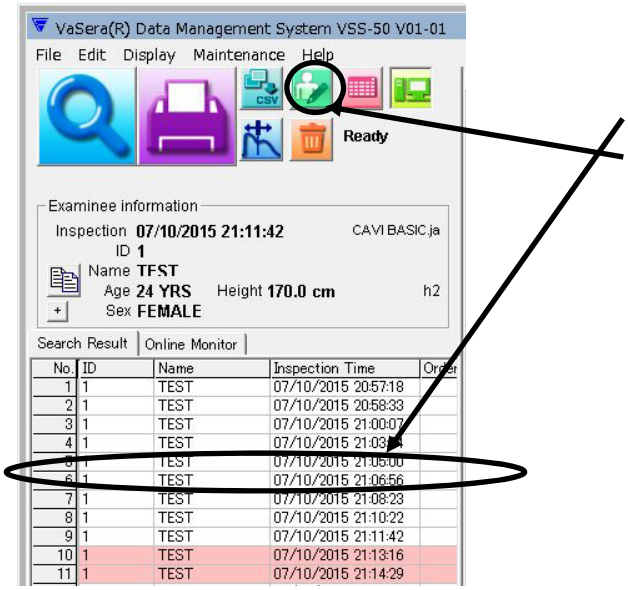
(3) Click “Print” icon.

The data will be printed with the selected display type.

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

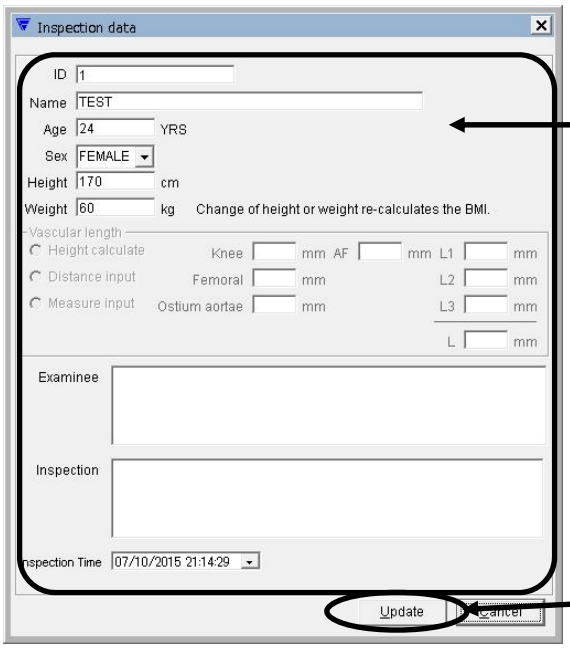
3.3.3 Correcting the Inspection Data

The examinee information of the inspection data can be corrected.



(1) Select the data to correct from the data list.

(2) Click the “Correct” icon.



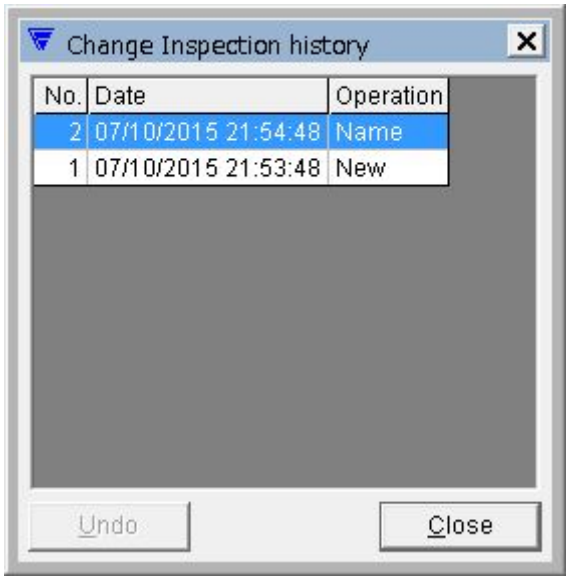
(3) Correct the data.

The entered comment in the “Examinee” and “Inspection” column can be printed on the report by setting “Comment” for “Print Item”.

(4) Check the corrected items, and click the “Update” button.

3.3.4 History of the Inspection Data

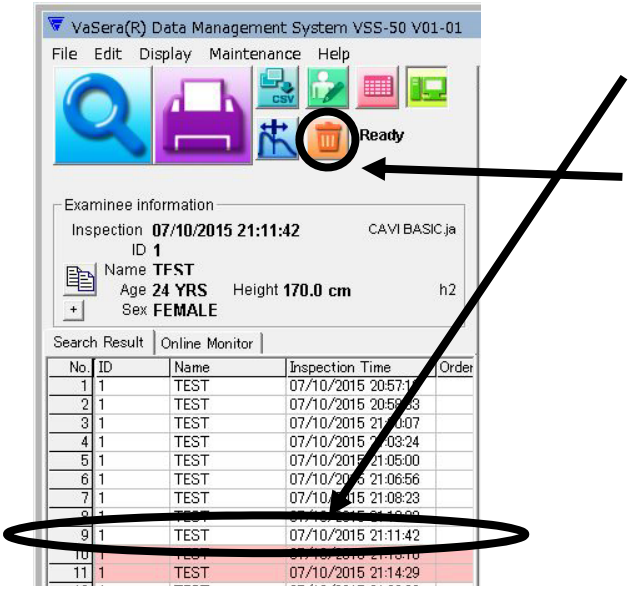
The correction history of inspection data is displayed.



Click “Change Inspection history” on the “Edit” menu.

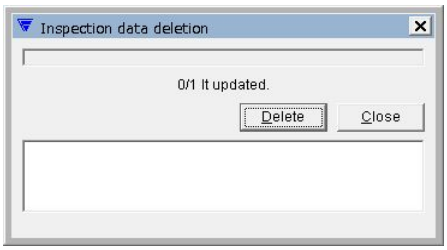
3.3.5 Deleting the Inspection Data

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



(1) Select the data to delete from the search data list.

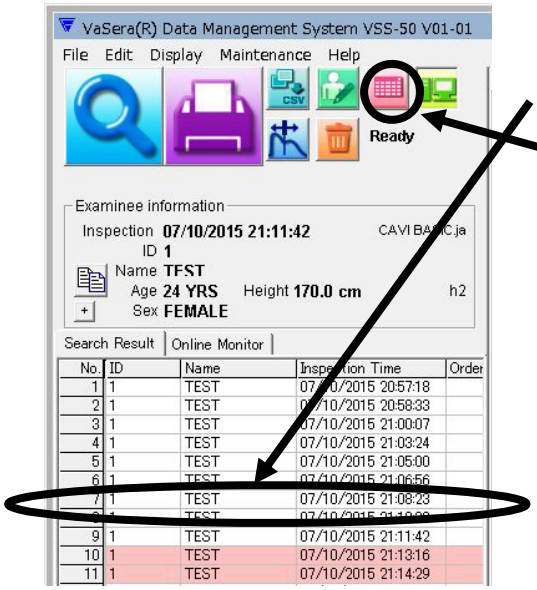
(2) Click “Delete” icon.



(3) The confirmation window to delete the registered data will appear. To delete the data, click “Delete”.
If not deleting the data, click “Close”.

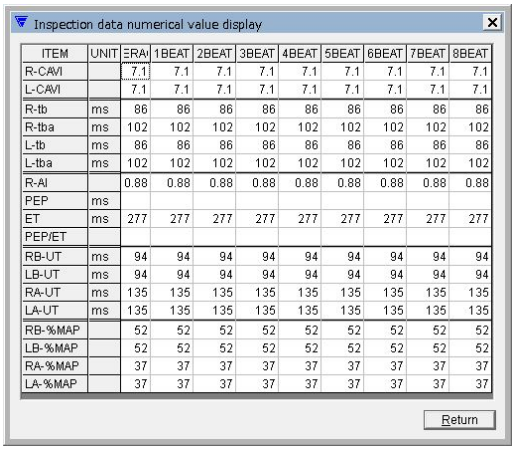
3.3.6 Displaying the Data for Each Pulse Beat

The measurement data for each pulse beat can be displayed.



(1) Select the data from the search data list.

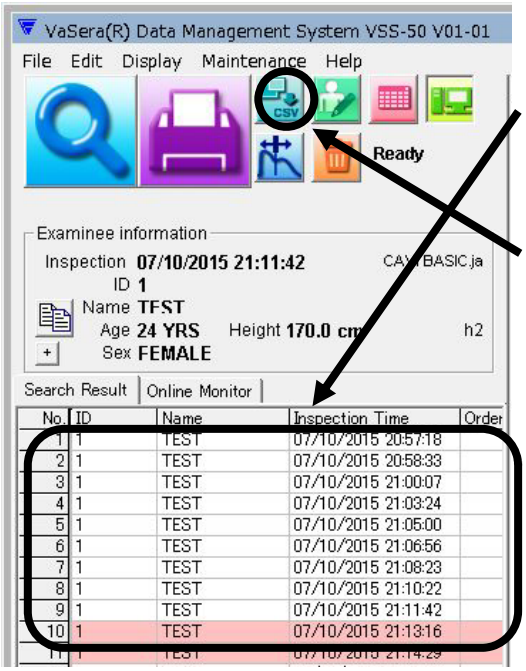
(2) Click “Numeric data” icon.



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

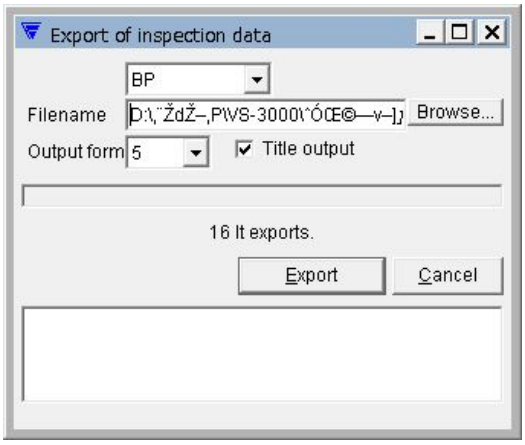
3.3.7 Inspection Data Output to the CSV File

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



(1) Search the data to be output will appear in the search result area.

(2) Click “Data Output” icon.

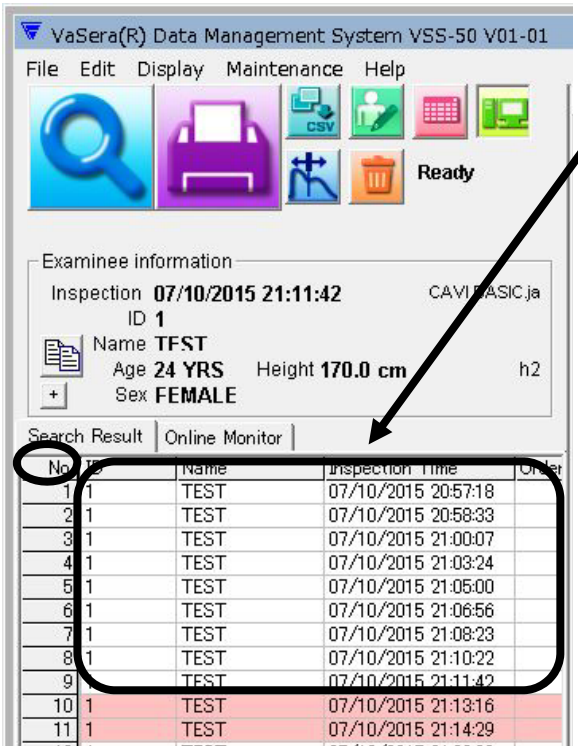


(3) Specify the location, and Filename to save the data.

(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.

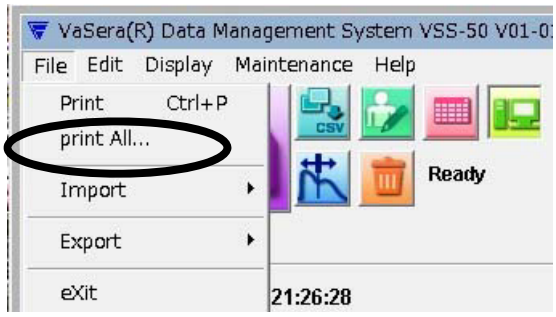


(1) Select the data to print, which will be displayed in the search result area.

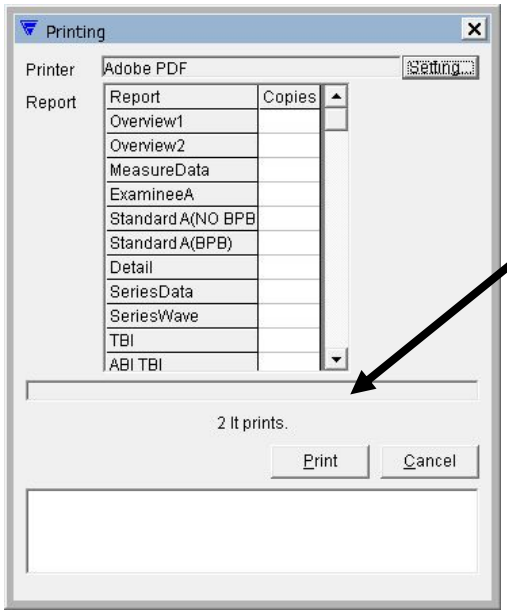
(2) Select the data to print.

(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.



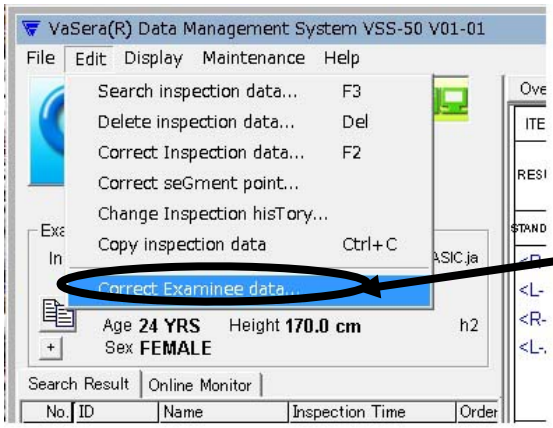
(5) After selecting the data, click “print All” on the “File” menu.



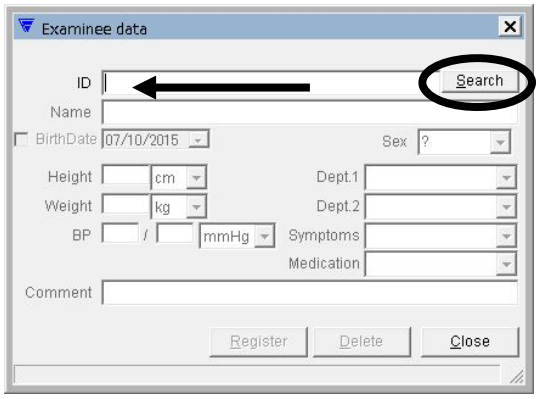
(6) The progress bar shows the progress status.

3.3.9 Correcting the Examinee Data

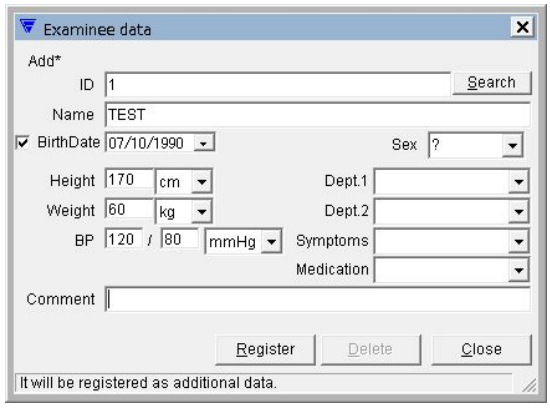
The examinee data which is used to “ID read” from the VS-2000 can be corrected or newly registered on this menu.



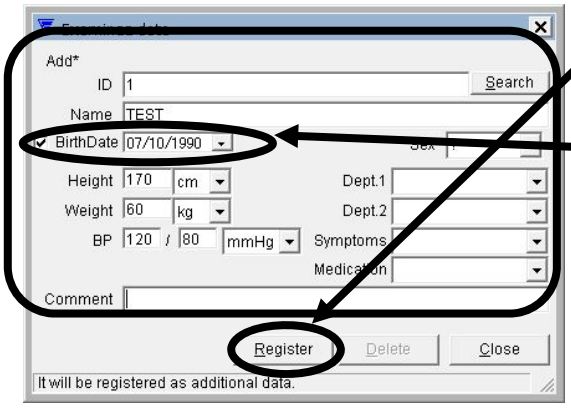
(1) Click “Correct examinee data” on “Edit” menu.



(2) Enter the examinee ID, and click Search”.



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

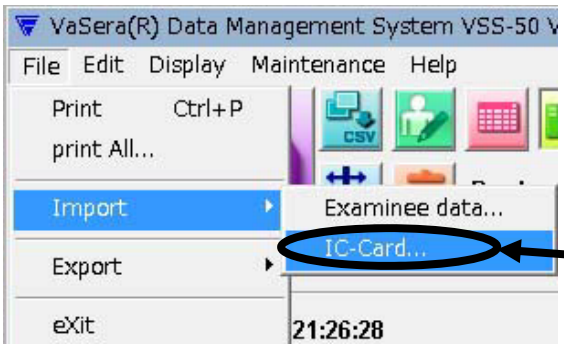


(4) If the ID is not registered, enter the examinee attribute, and click “Register”.

(5) Put a check mark to set the birth date.

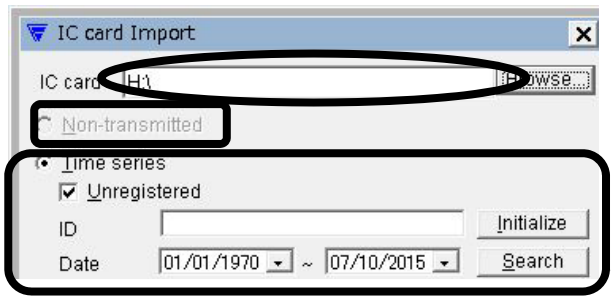
3.3.10 Off-line Registration

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”.

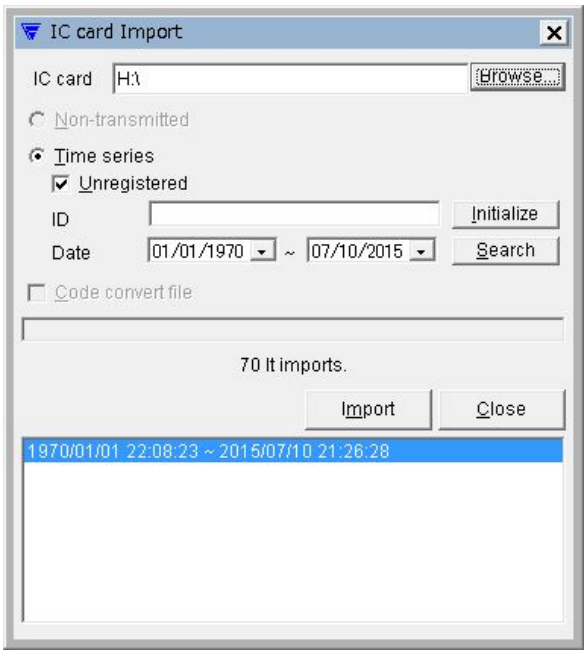


(3) The drive letter of an IC card is set up.

[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]



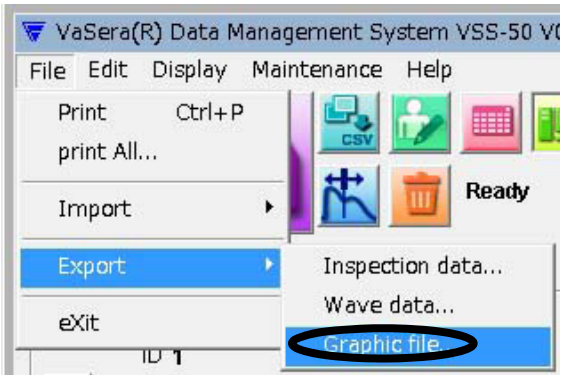
(5) Check the “Time-series “radio button and “Unregistered”. Enter an ID, and set the “Date” for the inspection period. Then click “Search” button. The number of items that match the search condition will be shown, and the “Import” button will become enabled. Click “Import” button to register inspection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

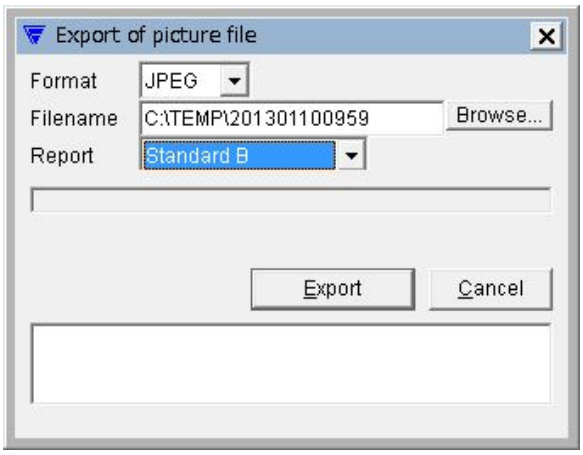
3.3.11 Graphic File Output

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”.

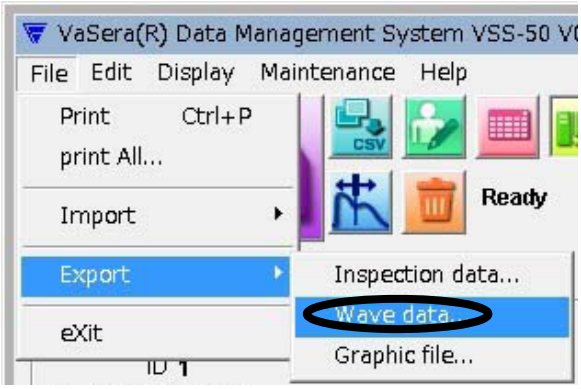
(2) Type the file name to save the data.



(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.

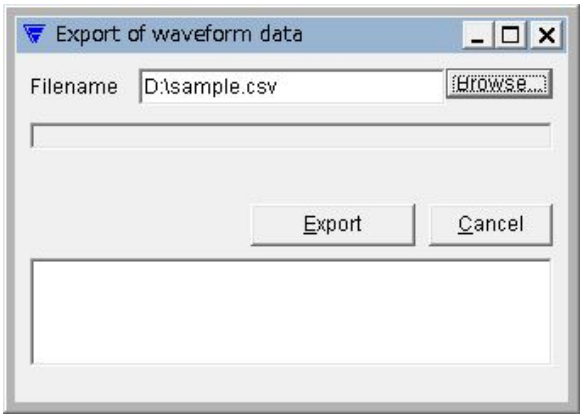
3.3.12 Waveform Output to the CSV File

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



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

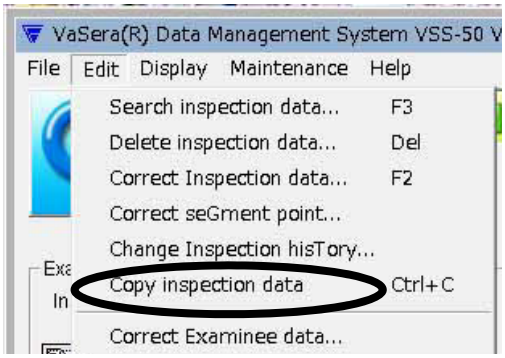
(2) Type the file name to save the data.



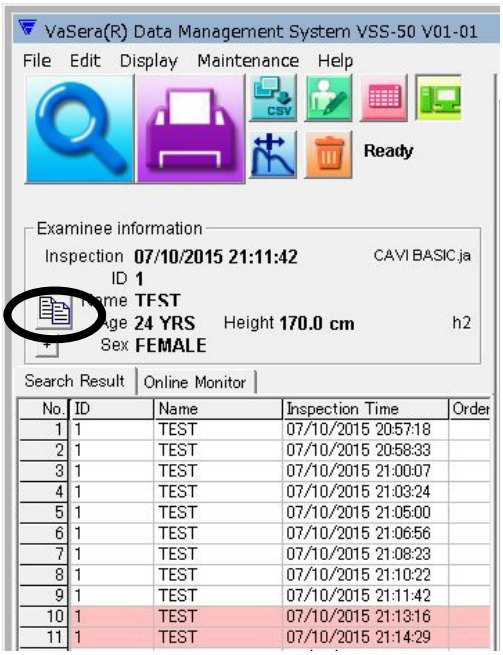
3.3.13 Copying the Inspection Data

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.



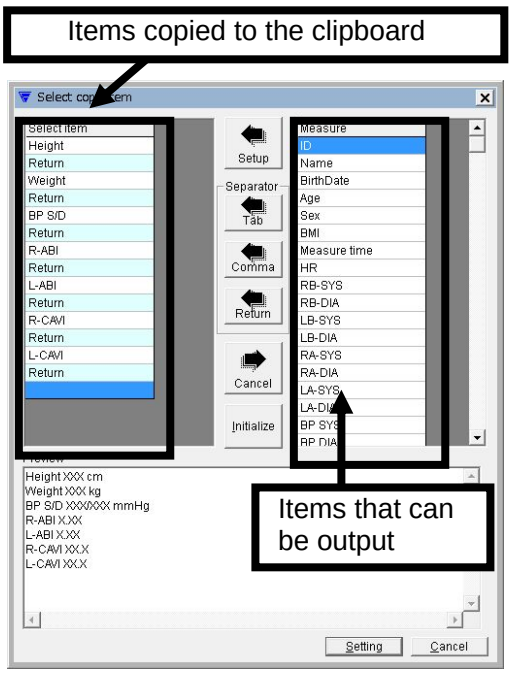
(1) Select the inspection data, and select “Edit” > “Copy inspection data”.



(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

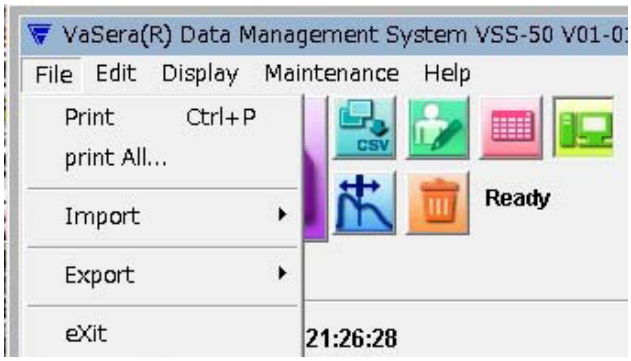
CAUTION: Be aware that initializing the IC card will clear all inspection data in the IC card. The initialization of the IC card can be done for the IC card initialized on the VS-2000. This is to prevent from accidentally initializing the IC card not intended for the VS-2000.

(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 displayed in the inspection data area. (Refer to p.28)

(2) Print All : Prints multiple data 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)

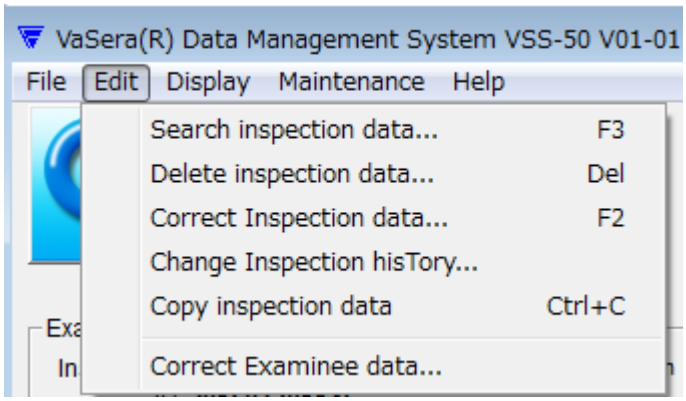
(4) Export : Inspection data : Outputs all inspection data of the search result list to the CSV file.

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-50 program.

3.3.15.2 Edit Menu



(1) Search inspection data : The registered inspection data will be searched. (Refer to p.19)

(2) Delete inspection data : The selected inspection data will be deleted. (Refer to p.30)

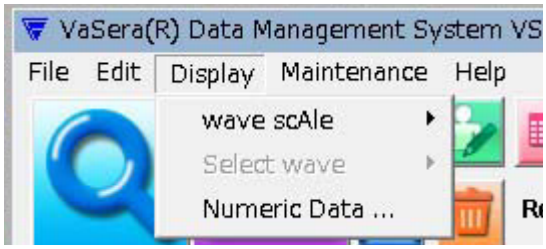
(3) Correct inspection data : The examinee information of the selected data will be corrected. (Refer to p.29)

(4) Change inspection history: The correction history of inspection data is displayed. (Refer to p.30)

(5) Copy inspection data : The selected inspection data will be copied to clipboard. (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

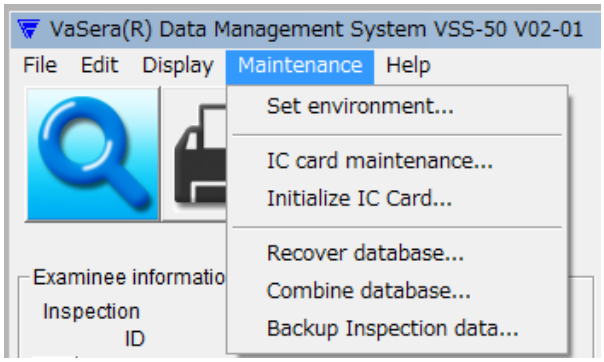


(1) Wave Scale : Sets the waveform scale displayed in the inspection data area. The scale can be set for each waveform. The scale selections are Auto, 1/16, 1/8, 1/4, 1/2. 1, 2, 4, 8, 16.

(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



(1) Set environment : Sets the VSS-50 operation environment. (Refer to p.42)

(2) IC card maintenance : Starts the IC Card Maintenance Software. (Refer to p.52)

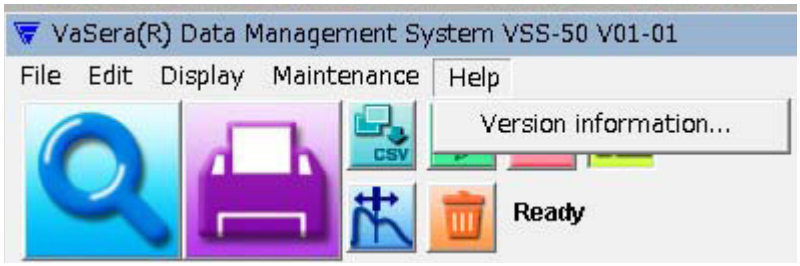
(3) Initialize IC card : Initializes the IC card for the VS-2000. (Refer to p.38)

(4) Recover database : Recovers the VSS-50 database when damaged by an unforeseen accident. (Refer to p.55)

(5) Combine database : Combines the database.

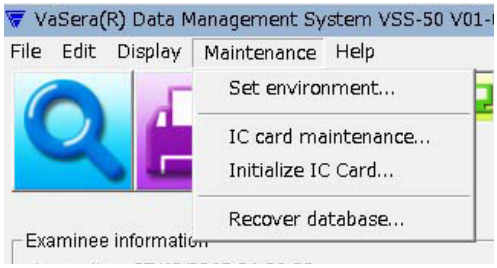
(6) Backup Inspection data : Takes the backup of inspection data.

3.3.15.5 Help Menu



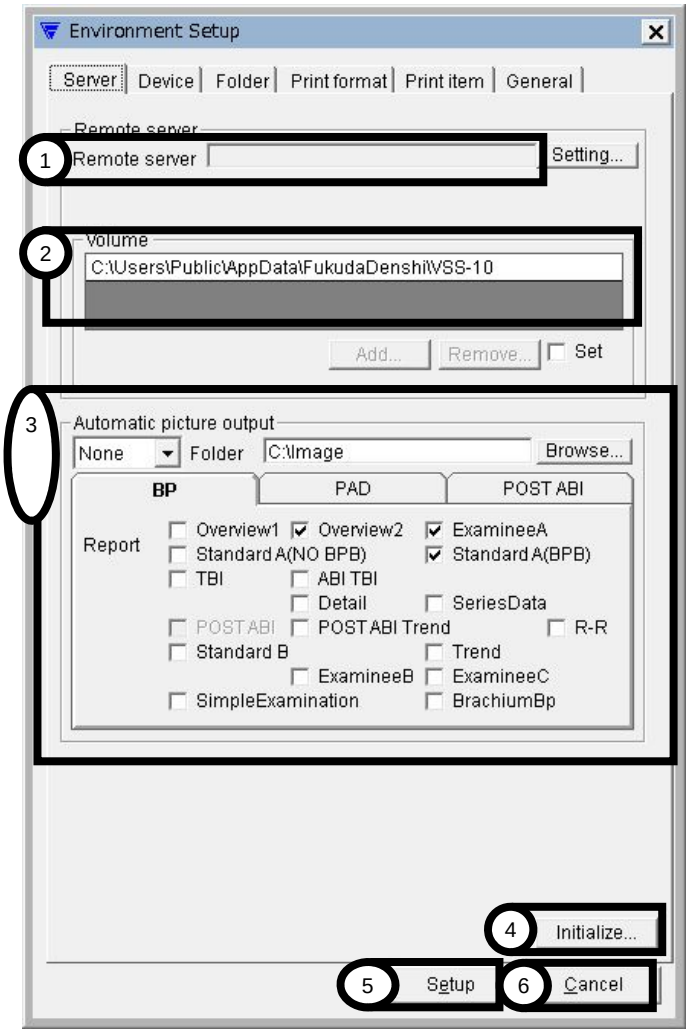
(1) Version Information : Displays the VSS-50 version number.

3.3.16 Environment Setup



The VSS-50 operating environment can be set.

3.3.16.1 “Server” Setup



(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.

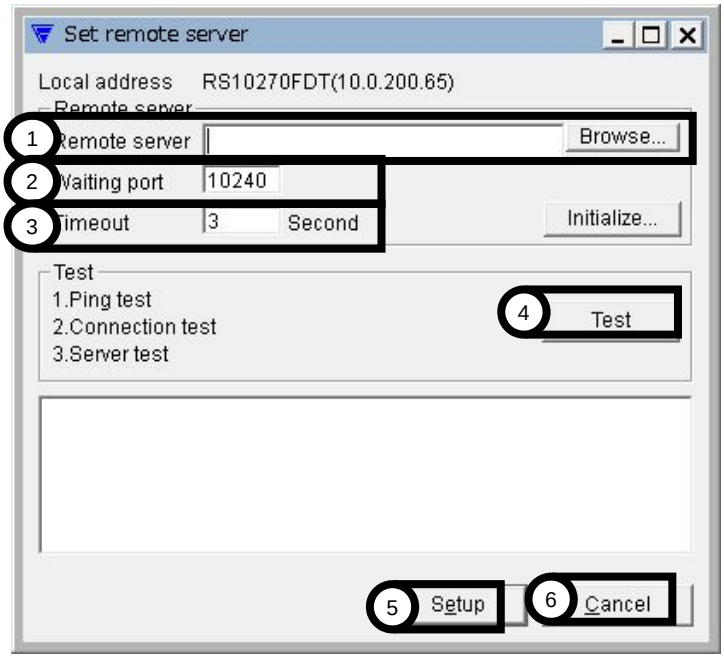
(3) Automatic Graphic Output : Set a folder to automatically output the graphic file. If a check mark is put for “Output”, the graphic file will be output to the specified folder at on-line registration. Set each item for “BP”, “PAD”, and “POST ABI”.

(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 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.

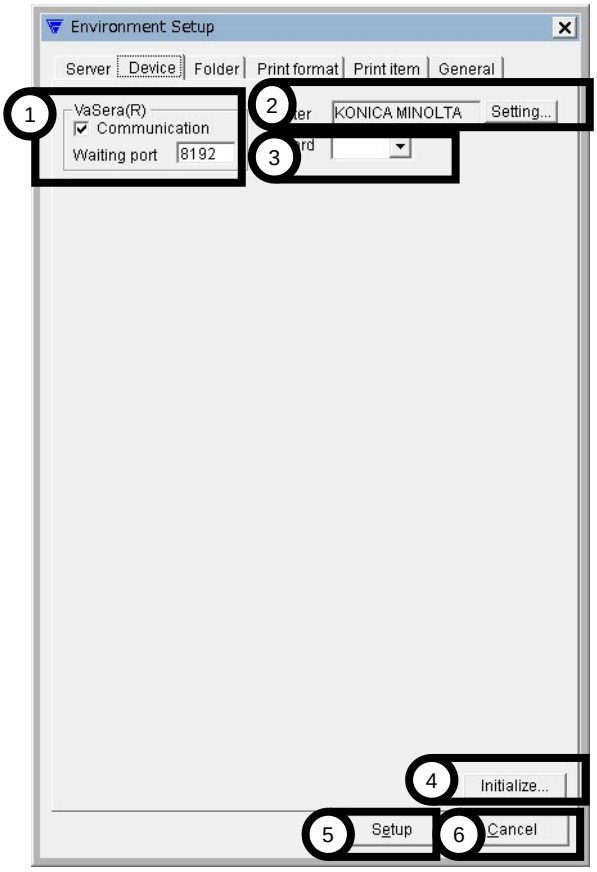
(3) Timeout : Set the time duration to cancel the request, in case where there is no response from the Server PC to the Client PC request.

(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



(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.

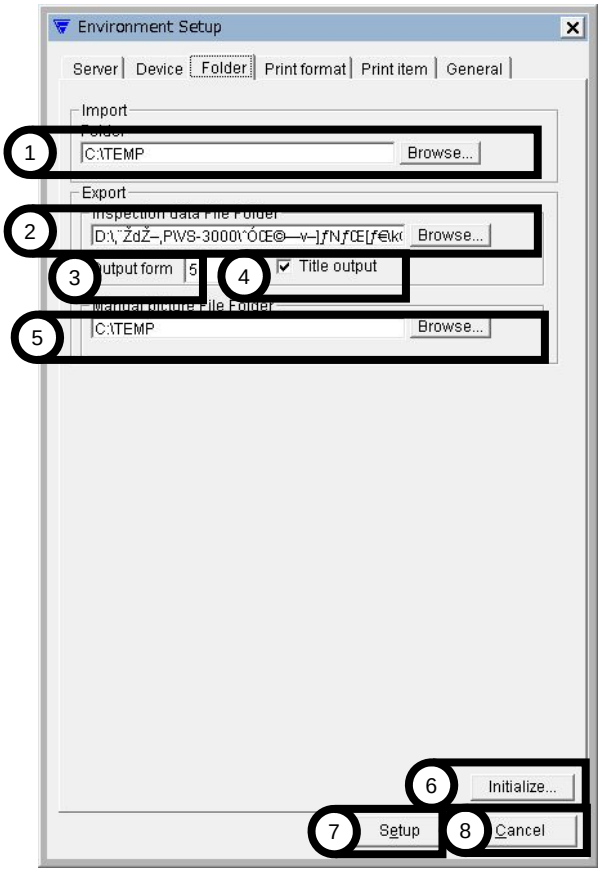
(3) IC Card : Set the drive for Sphygmomanometer and Sphygmograph IC card.

(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



(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.

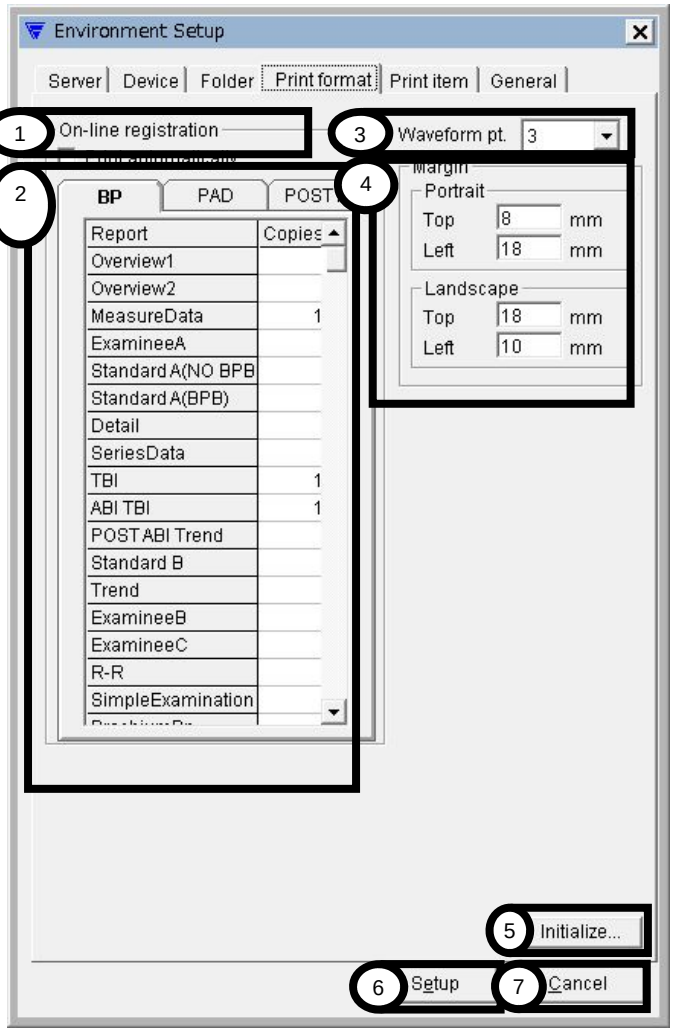
(5) Manual Graphic File Folder : Set the default path to be used for graphic output (manual).

(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.

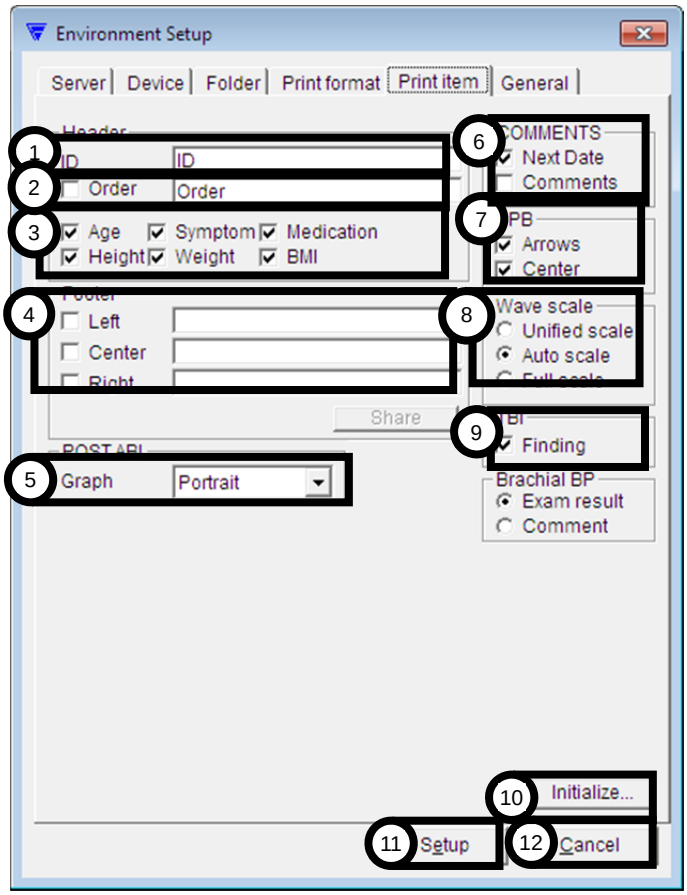
(4) Margin : Set the margin for print and output in JPEG/PDF.

(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



(1) ID :
Set the ID characters to be printed.
(Ex.) ID, examinee ID, etc.

(2) Order Number :
Put a check mark if using order number.
Set the order number characters to be printed. (Ex.) order number, inspection ID, etc.

(3) Header :
Set the items to be printed on the examinee information area. The item with check mark will be printed.

(4) Footer :
Set the characters to be printed in the footer area. “Left”, “Center”, “Right” will print the set characters to the left, center, right of the footer area respectively.
Adjust the number of input characters to avoid overlapping each other.
Approximately 70 characters can be printed on the footer area.

Left (Ex.) : Fukuda Clinic

Center (Ex.) : 2-35-8 Hongo, Bunkyo-ku, Tokyo

Right (Ex.) : 03-3815-2121

(5) POST-ABI : The layout of POST-ABI graph is set up.

(6) Observations : Put a check mark if printing “Next Inspection Date”, “Examinee’s comment”, “Data comment”.

(7) BPB : Set the output layout for BPB (“Arrow”, “Gravity center”).

(8) Wave scale : Waveform sensitivity is set up.

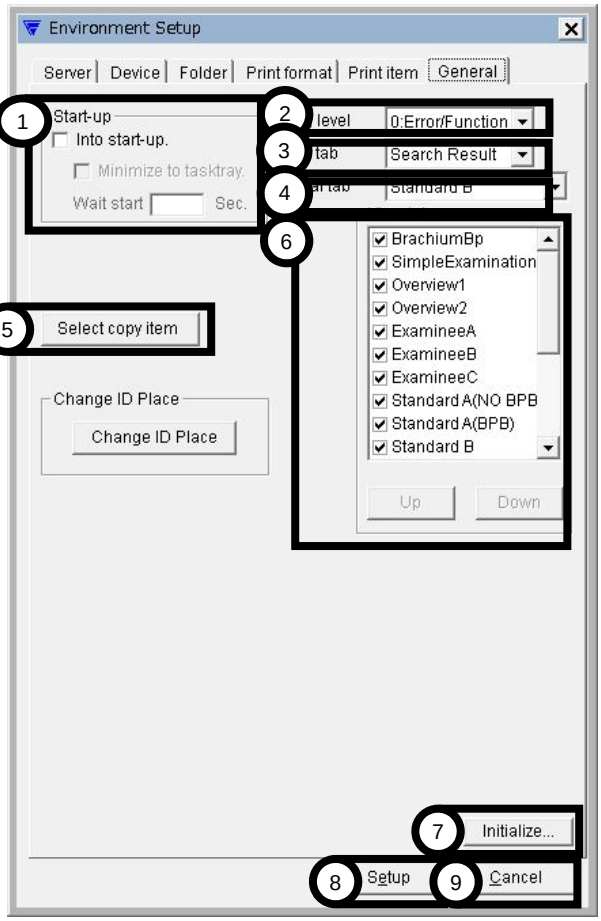
(9) TBI : The setting of TBI.

(10) Initialize : Click to initialize the “Print Item” setup.

(11) Setup : Click to store the set items and exit the Environment Setup.

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

3.3.16.7 “General” Setup



(1) Start-up	:	Check to automatically start VSS-50, when Windows starts.
(2) Log Level	:	Set the log level to output to the file
(3) List Tab	:	Set the list type to be initially displayed at startup.
(4) Initial Display Tab	:	Set the display type to be initially displayed at startup
(5) Select copy item	:	Select the items you want to copy to the clipboard. (Refer to p.37)
(6) View Tab	:	Select the tabs to be displayed and the displayed order.
(7) Initialize	:	Click to initialize the “General” setup.
(8) Setup	:	Click to store the set items and exit the Environment Setup
(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”.

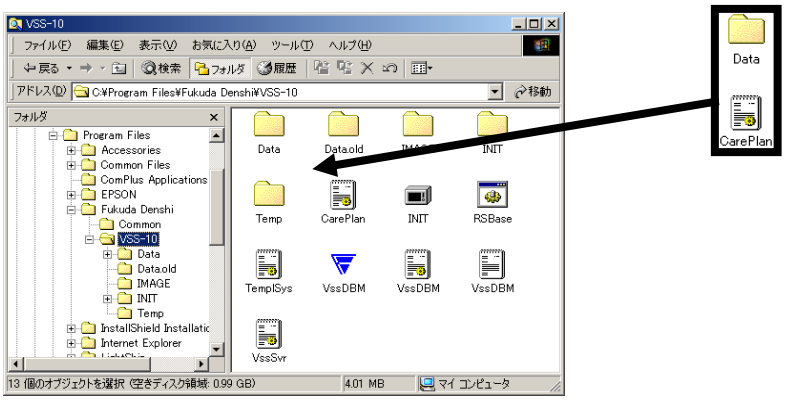
Back up the Data folder and CarePlan.ini file in this folder to external memory device.

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.

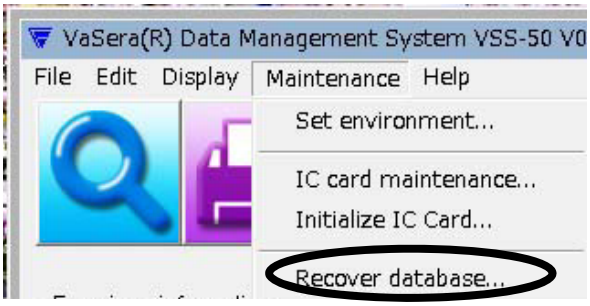
1. **Install the VSS-50 with the procedure explained in “3.2. Installation Procedure” (p.5).**
2. **If the “Data” folder exists in the folder which the VSS-50 is installed, change that folder name to “Data.old”.**
3. **Copy the backed up “Data” folder and CarePlan.ini file to the folder which the VSS-10 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.**

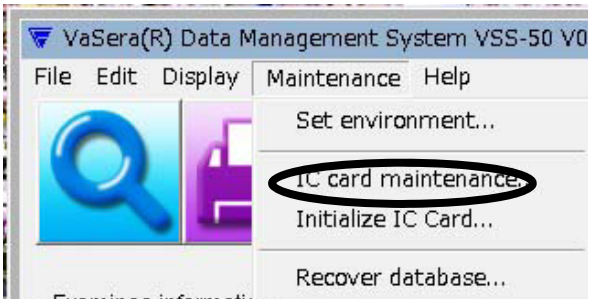
4. IC Card Maintenance Software

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.

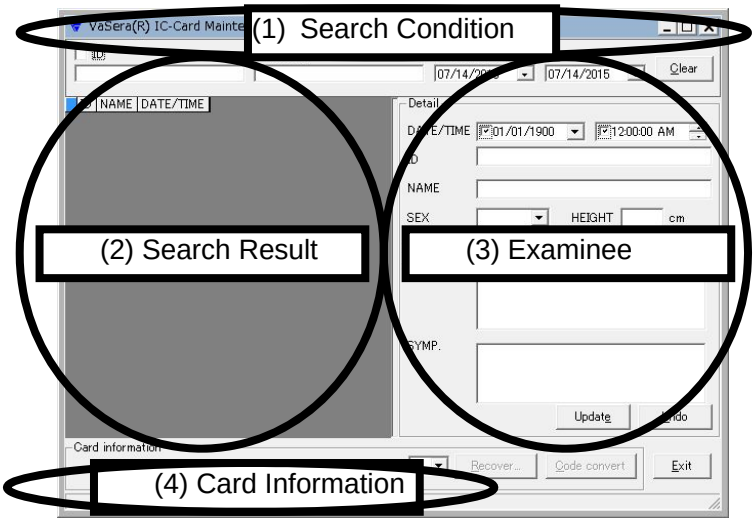
(2) Recovers the IC card management data when any inconsistency occurs.

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.

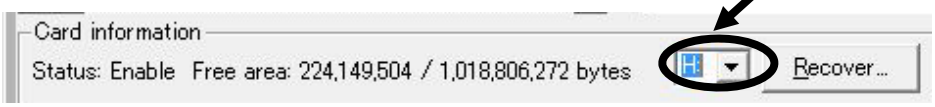
(2) Search Result : Displays the searched result.

(3) Examinee Information : Displays the examinee information for the selected data.

(4) Card Information : Displays the card capacity.

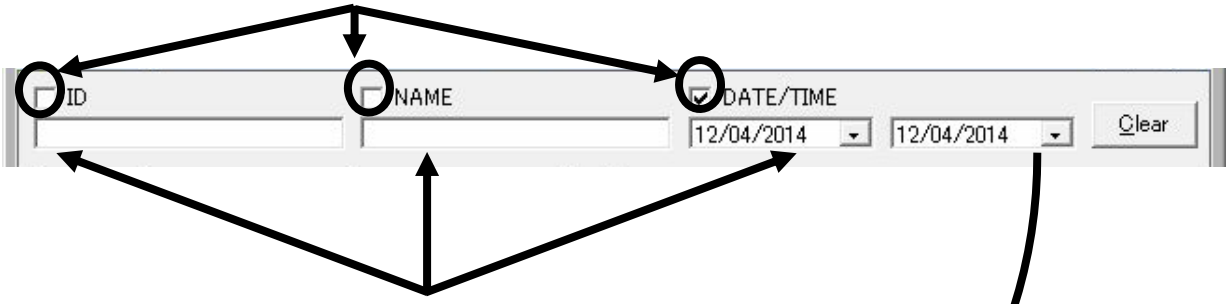
Insert the IC card to the PC, and select the IC card drive in “Card Information” display area. When the IC card is identified, the card information will be output to the “Card Information” display area.

Select the IC card drive.



4.2. Searching the IC Card Data

The search condition with check mark is effective.



(1) Check the desired area and input the search condition. “AND” search will be conducted.

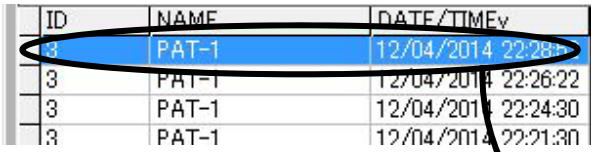
ID	NAME	DATE/TIMEv
3	PAT-1	12/04/2014 22:28:52
3	PAT-1	12/04/2014 22:26:22
3	PAT-1	12/04/2014 22:24:30
3	PAT-1	12/04/2014 22:21:30
5	PAT-3	12/04/2014 21:24:48
5	PAT-3	12/04/2014 21:22:42
5	PAT-3	12/04/2014 21:20:26
6	PAT-4	12/04/2014 21:16:23
6	PAT-4	12/04/2014 21:12:50
6	PAT-4	12/04/2014 21:09:18
4	PAT-2	12/04/2014 21:04:49
4	PAT-2	12/04/2014 21:02:45
4	PAT-2	12/04/2014 20:59:41
4	PAT-2	12/04/2014 20:55:37
6	PAT-4	12/04/2014 20:50:01
6	PAT-4	12/04/2014 20:47:24
6	PAT-4	12/04/2014 20:45:12
6	PAT-4	12/04/2014 20:42:49
3	PAT-1	12/04/2014 20:37:49
3	PAT-1	12/04/2014 20:32:52
3	PAT-1	12/04/2014 20:30:34

(Ex.) Search Result

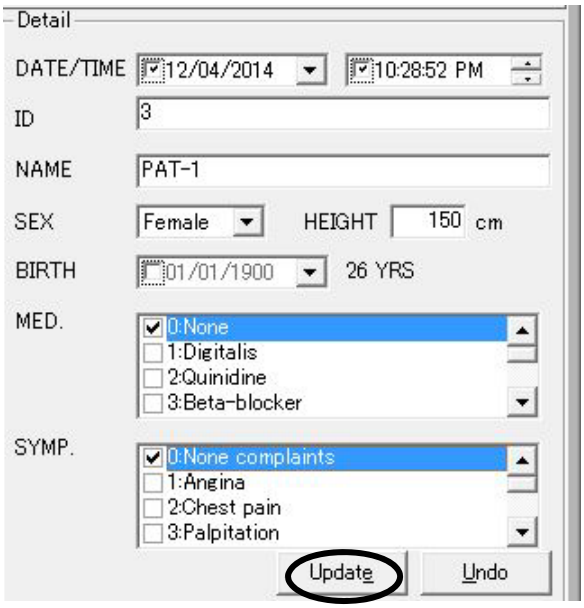
4.3 Correcting the IC Card Data

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

(1) Select the data to correct.



(2) Correct the data.



(3) Check and click "Update".

The item to be corrected:

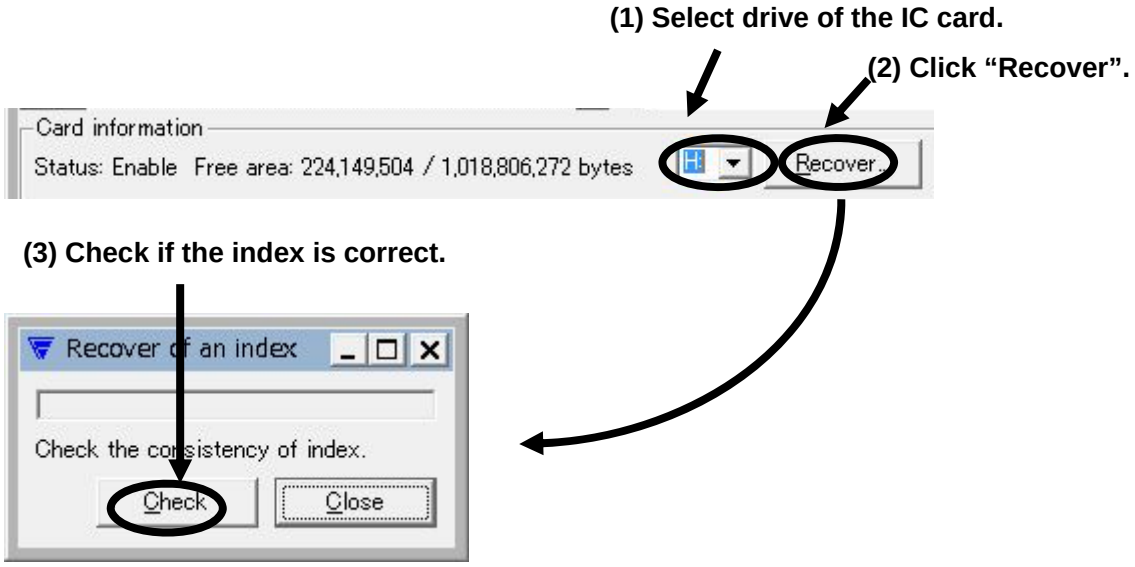
(1) Inspection Date
(2) ID
(3) Name
(4) Sex
(5) Height
(6) Date of Birth
(7) Medication
(8) Symptom

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

4.4 Recovering the IC Card Data

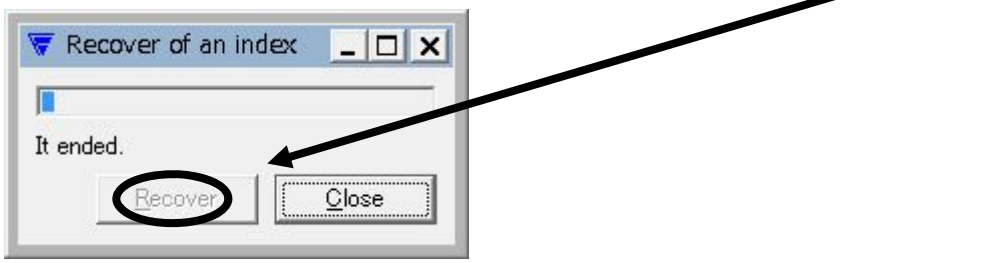
The damaged management data (index) of the IC card can be recovered.

CAUTION: The damaged “Inspection data” cannot be recovered.



(4) The message, “Inspection completed” will be displayed, if the index is correct. Click “Close” and exit the menu.

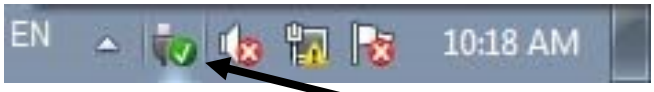
(5) If the index is damaged, “Recover” button will be displayed. Click “Recover” and recover the index.



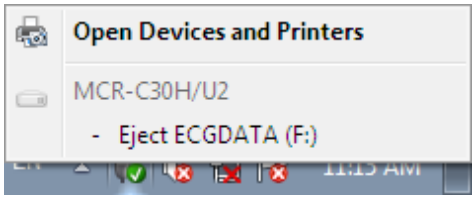
4.5 Removing the IC Card

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

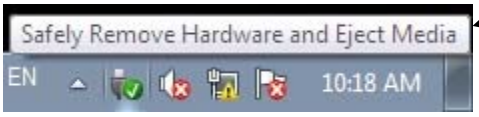
CAUTION: Improper removal of IC card may damage the IC card data.



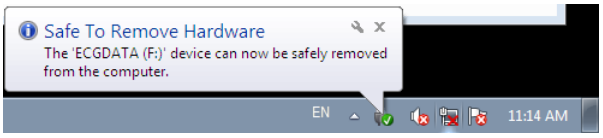
(1) Left click this icon.



(2) A pop-up message, “Safely Remove Hardware and Eject Media” will be displayed.



(3) Click the pop-up window.



(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 ($CAVI_1$, L-$CAVI_1$, $CAVI_2$, $CAVI_3$, 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.

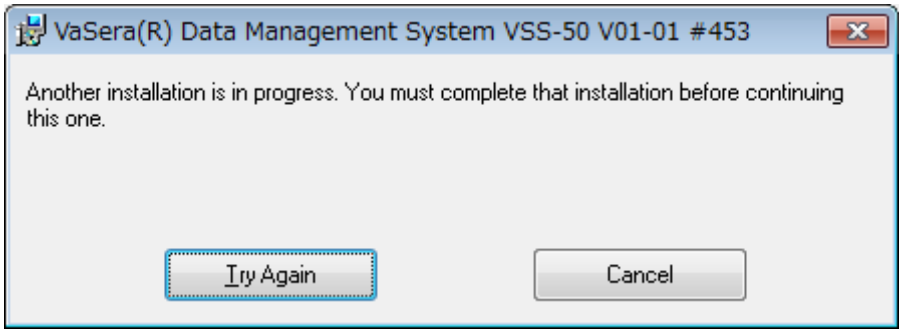
【7U / UV01-01～U】

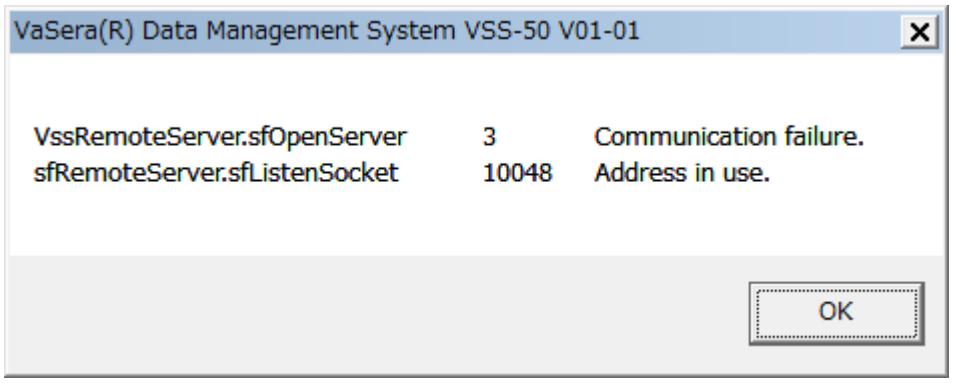
- Indicates the VSS-50 version from V01-01.
- Windows7

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.



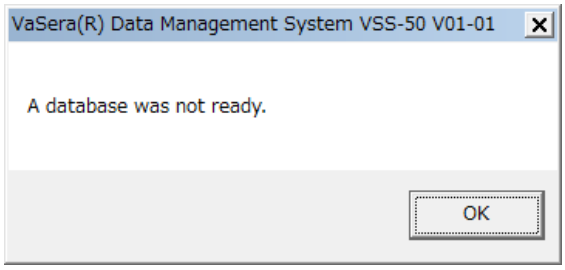


[Solution] More than one VSS-50 installer is running. Shut down the unnecessary installers.

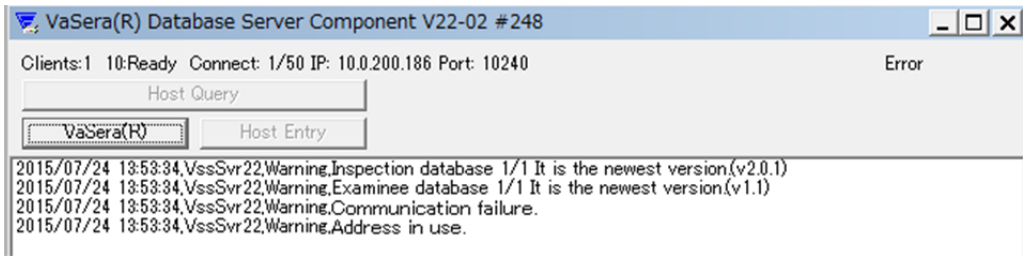
6.2. Troubles during Startup

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.

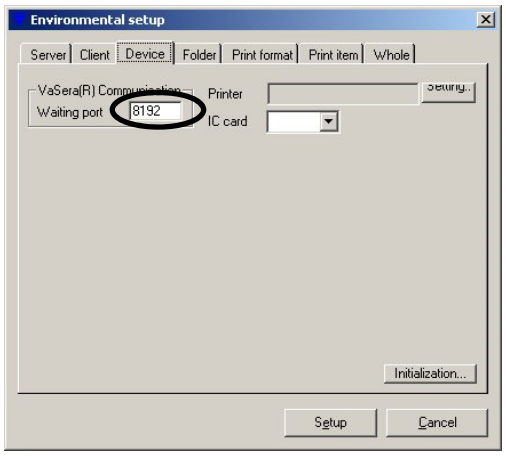


If “Address in use” is displayed on the Data Base Server Component window, the set port number is already used for other application.

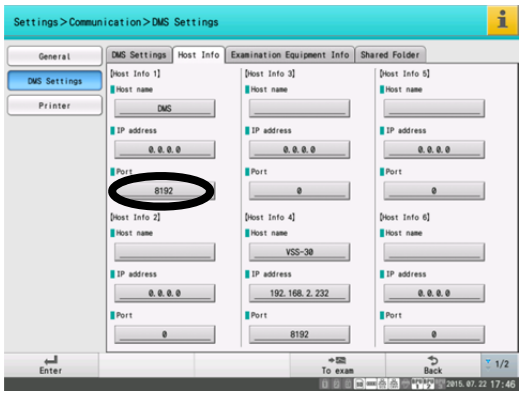
[Solution] Change the “Waiting Port” value on the VSS-50 Device setup display. (“Maintenance” > “Set environment” > “Device”)

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”.



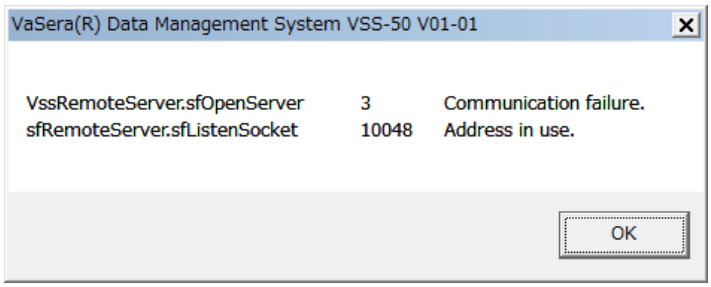
When “Waiting Port” of VSS-50 is changed, change also the port number of VS-2000 to the same value.



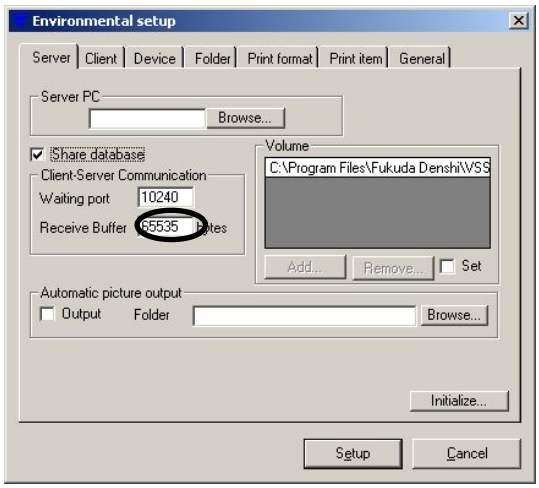
VS-2000 network setup: Change the port number from “8192” (default) to “8193”. When port number of VS-2000 is changed, change also the “Waiting Port” of VSS-50.

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.

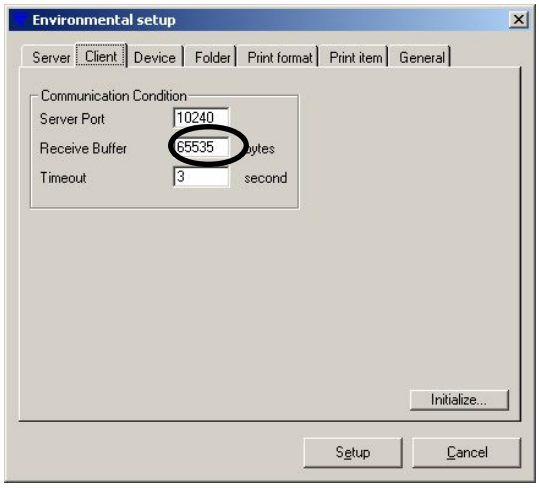


[Solution] Change the “Waiting Port” value on the VSS-50 Server setup display (“Maintenance” > “Set environment” > “Server”). If operating the VSS-50 on more than one PC, change the “Server Port” on the Client setup display (“Maintenance” > “Set environment” > “Client”). For procedure to check the port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



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


Environmental setup
Server
Client
Device
Folder
Print format
Print item
General
Communication Condition
Server Port
10240
Receive Buffer
65535
ytes
Timeout
3
second
Initialize...
Setup
Cancel

Client 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  Local Address          Foreign Address        State
  TCP    0.0.0.0:135            0.0.0.0:0              LISTENING
  TCP    0.0.0.0:445            0.0.0.0:0              LISTENING
  TCP    0.0.0.0:1025           0.0.0.0:0              LISTENING
  TCP    0.0.0.0:1027           0.0.0.0:0              LISTENING
  TCP    0.0.0.0:8192           0.0.0.0:0              LISTENING
  TCP    0.0.0.0:10240          0.0.0.0:0              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]

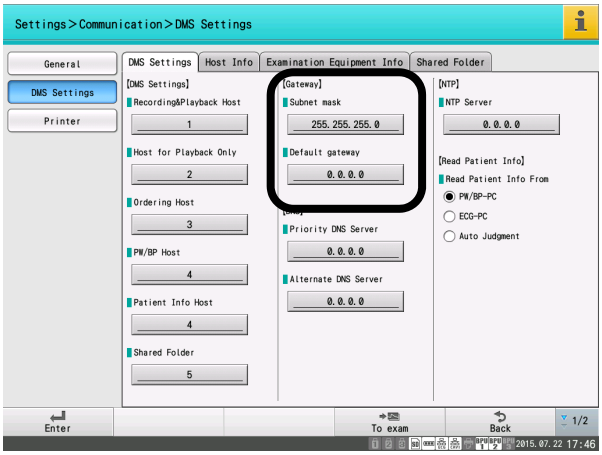
[Check 1] Check the IP address of the PC which the VS-2000 VSS-50 is installed.

Check if the IP address set on the PC corresponds with the IP address set on the VS-2000 (“Settings” > “Communication” > “DMS Settings”).

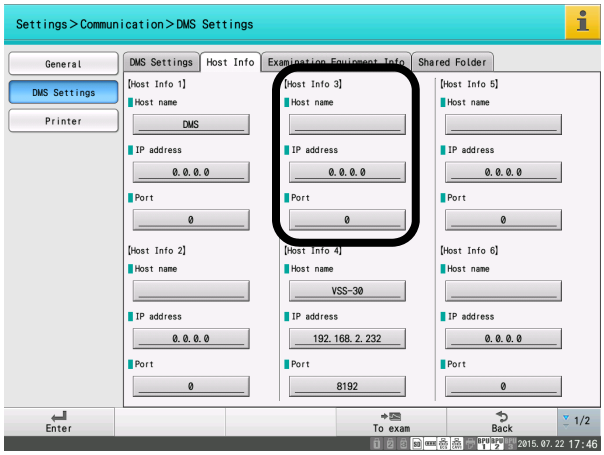
If not, select “Use the following IP address” and enter the correct IP address and subnet mask. “Default gateway”, “Preferred DNS server”, “Alternate DNS server” can be left blank.

VS-2000 Setup

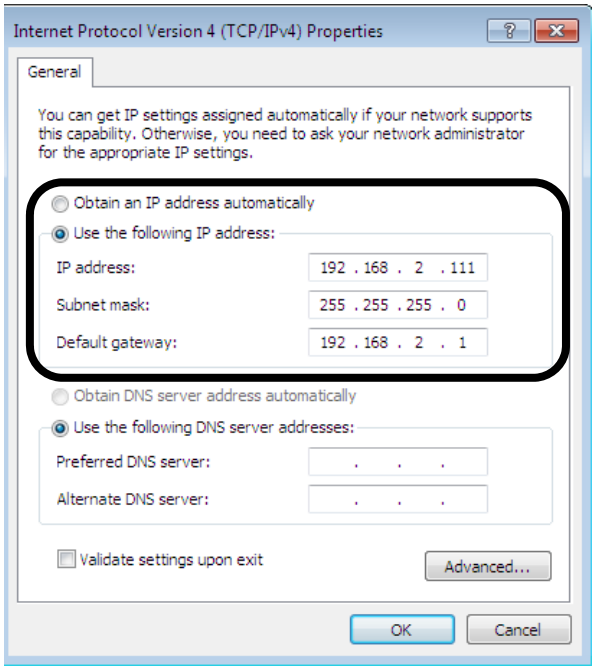
[DMS Setup]



[Host information]

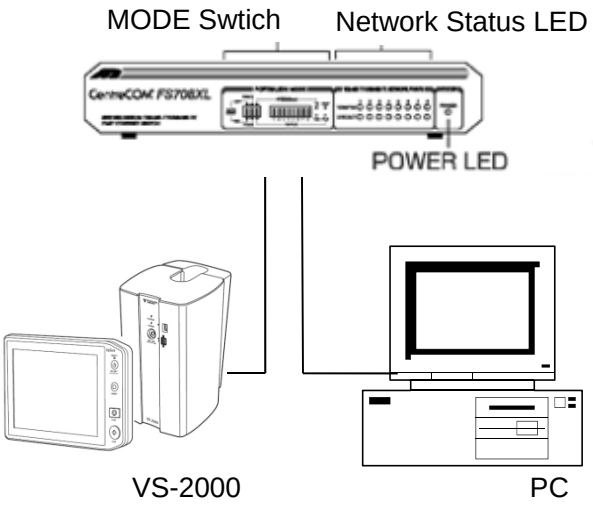


IP Address, Subnet Mask Setup of the PC



[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
```

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

Ethernet adapter Local Area Connection

        Connection-specific DNS Suffix  . :
        IP Address. . . . . . . . . . . . : 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".

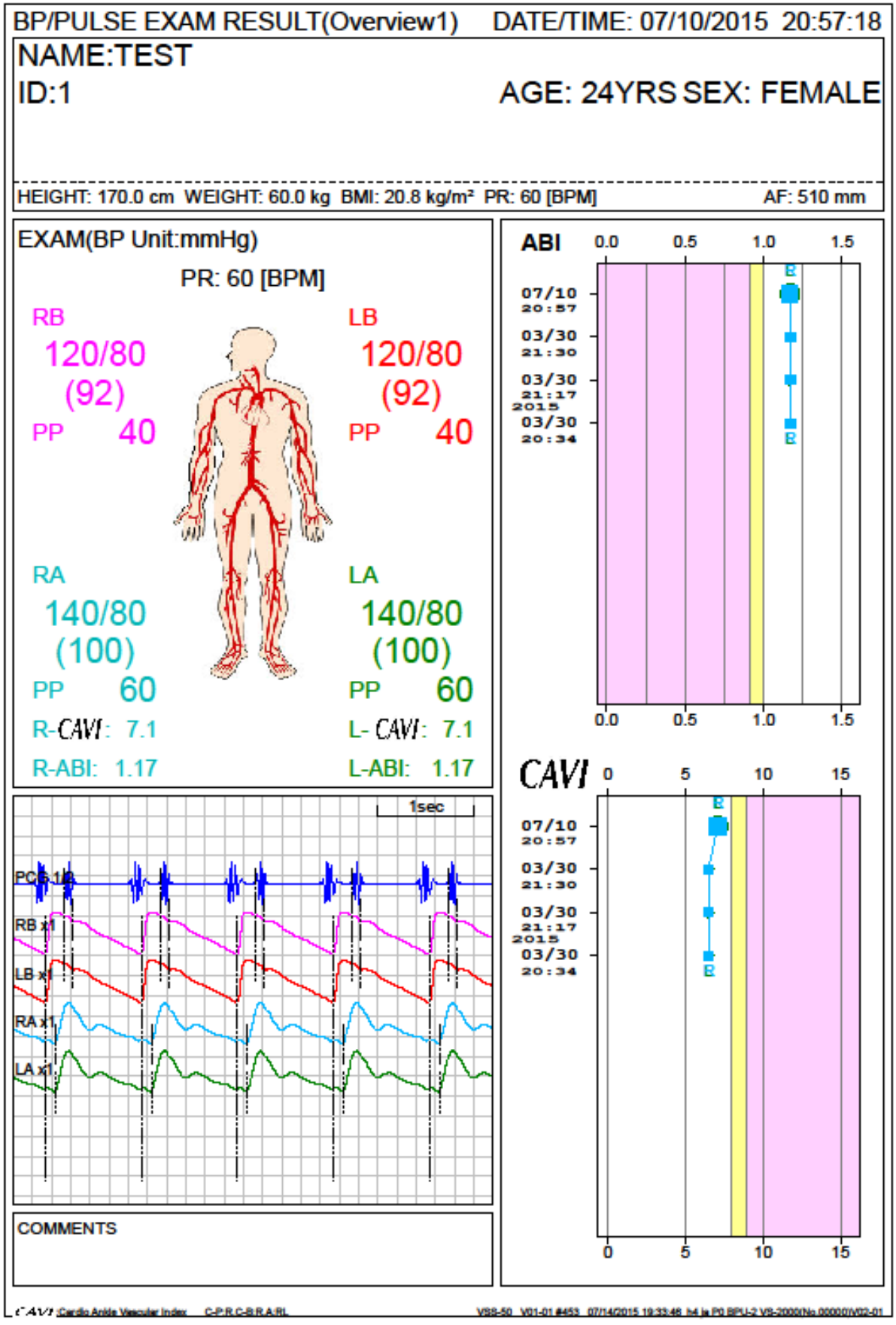
6.4.4 When a report is printed, the header part is missing, or the report does not fit in one page. [Windows7/ From V01-01]

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

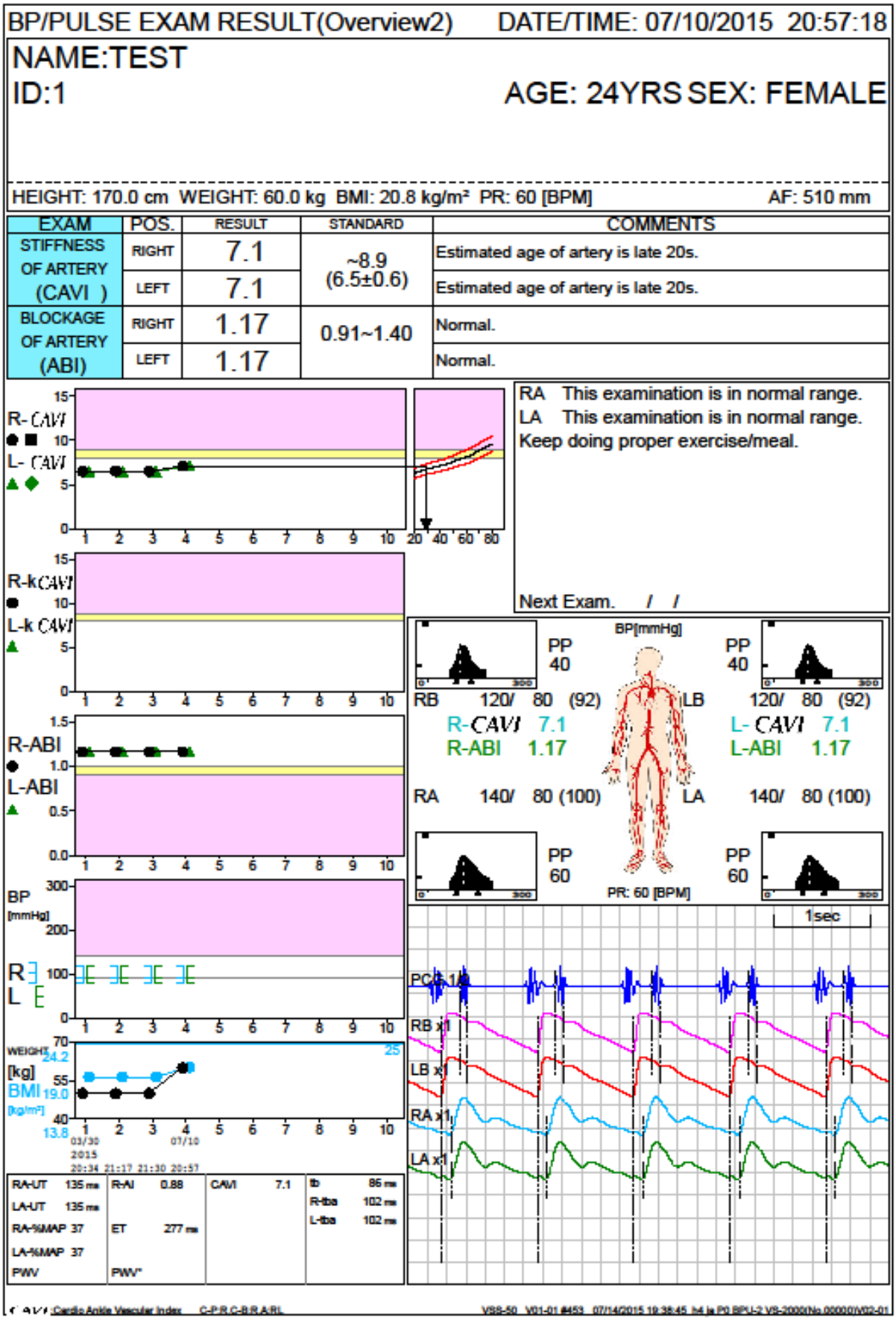
[Solution] Refer to "3.3.16.5 "Print Format" Setup" (p.47), and adjust the margin.
If a title or measurement date on the header part is not printed, increase the value of the margin.
If the report does not fit in one page, decrease the value of the margin.

7. Sample Report

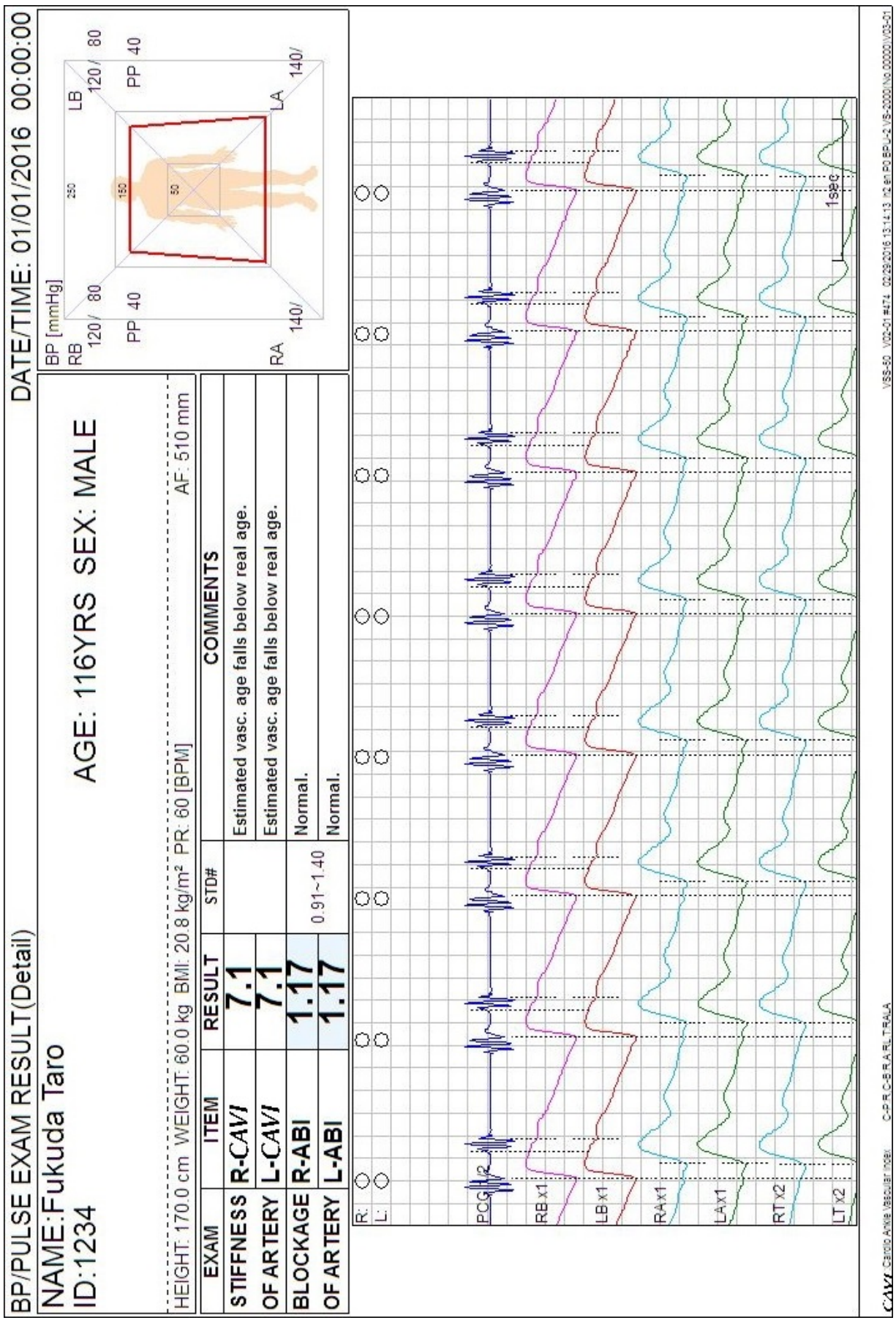
7.1. Overview 1 Report



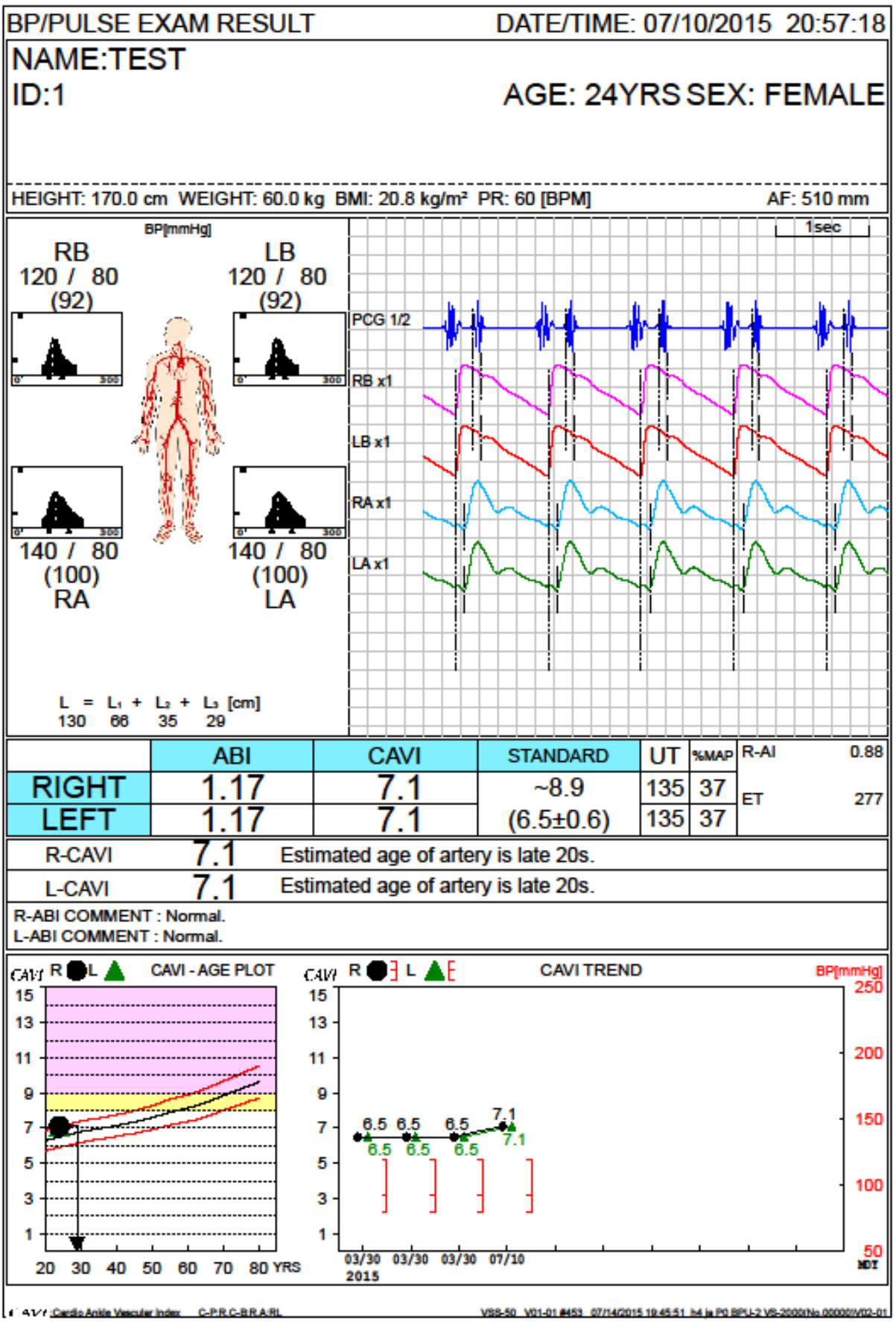
7.2. Overview 2 Report



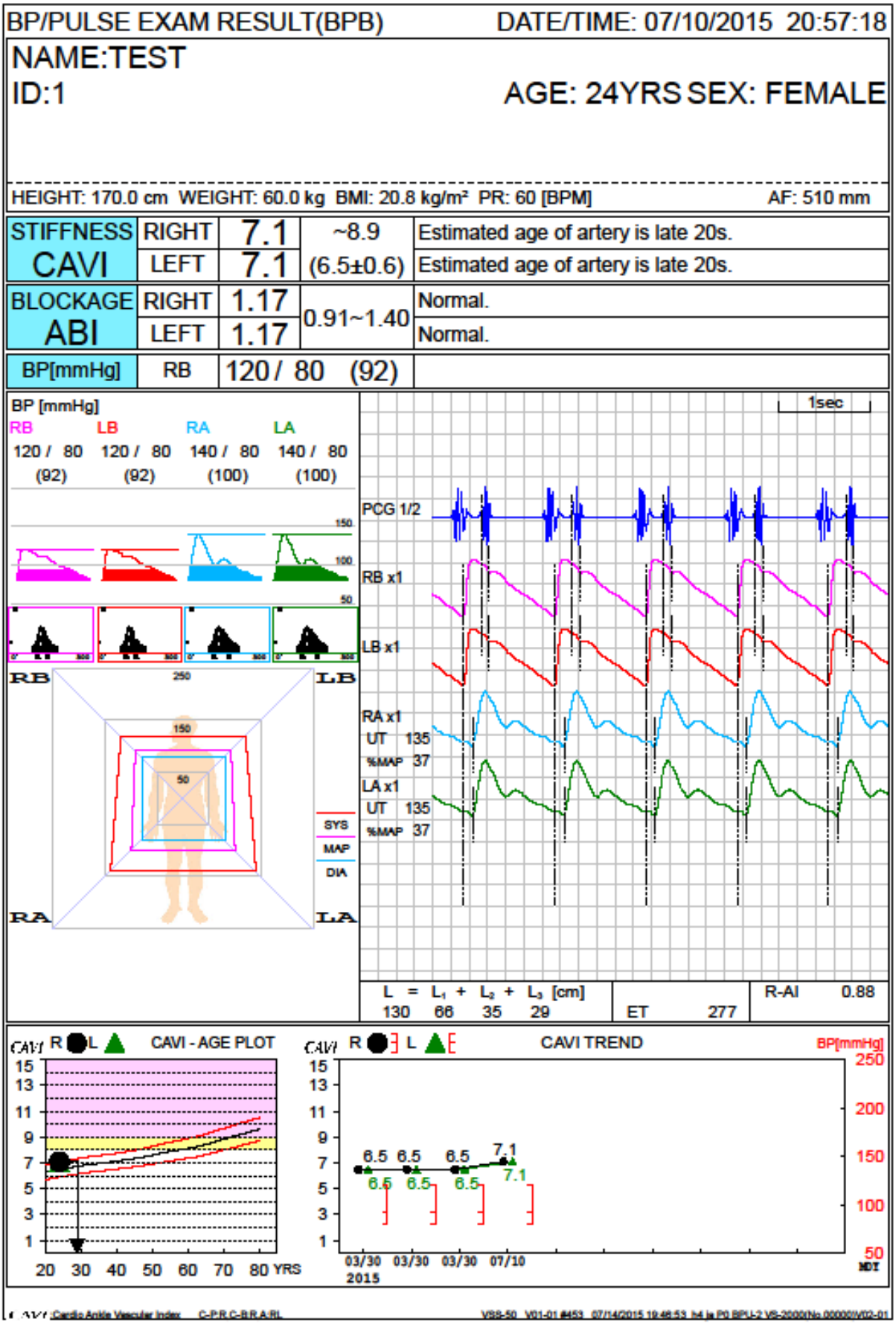
7.3 Detail Report



7.4 Standard A Report (Without BPB)



7.5 Standard A Report (With BPB)



7.6 Time Series Report

BP/PULSE EXAM RESULT(SeriesData) DATE/TIME: 07/10/2015 20:57:18

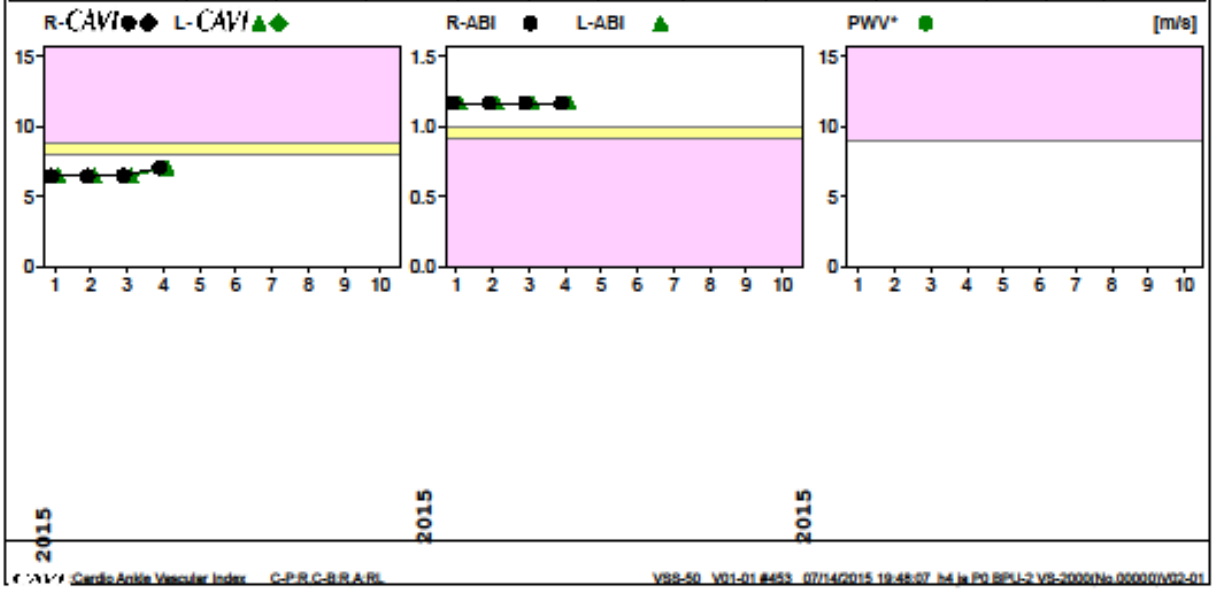
NAME:TEST

ID:1 AGE: 24YRS SEX: FEMALE

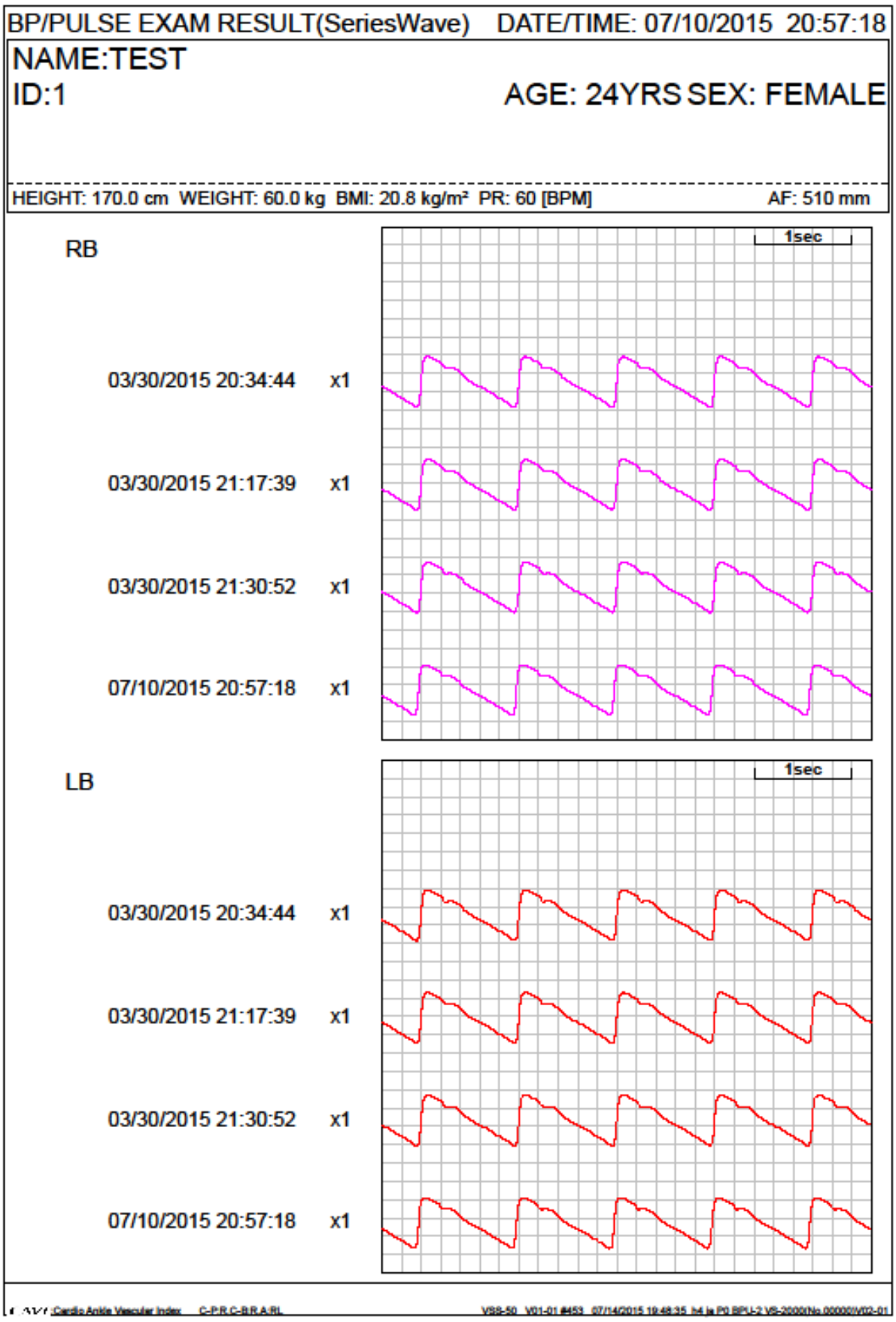
HEIGHT: 170.0 cm WEIGHT: 60.0 kg BMI: 20.8 kg/m² PR: 60 [BPM] AF: 510 mm

Inspection Time	RB	LB	RA	LA	R-ABI	L-ABI	R-CAVI	L-CAVI	PWV	PWV*
03/30/2015 20:34	120/ 80(92)	120/ 80(92)	140/ 80(100)	140/ 80(100)	1.17	1.17	6.5	6.5		
03/30/2015 21:17	120/ 80(92)	120/ 80(92)	140/ 80(100)	140/ 80(100)	1.17	1.17	6.5	6.5		
03/30/2015 21:30	120/ 80(92)	120/ 80(92)	140/ 80(100)	140/ 80(100)	1.17	1.17	6.5	6.5		
07/10/2015 20:57	120/ 80(92)	120/ 80(92)	140/ 80(100)	140/ 80(100)	1.17	1.17	7.1	7.1		

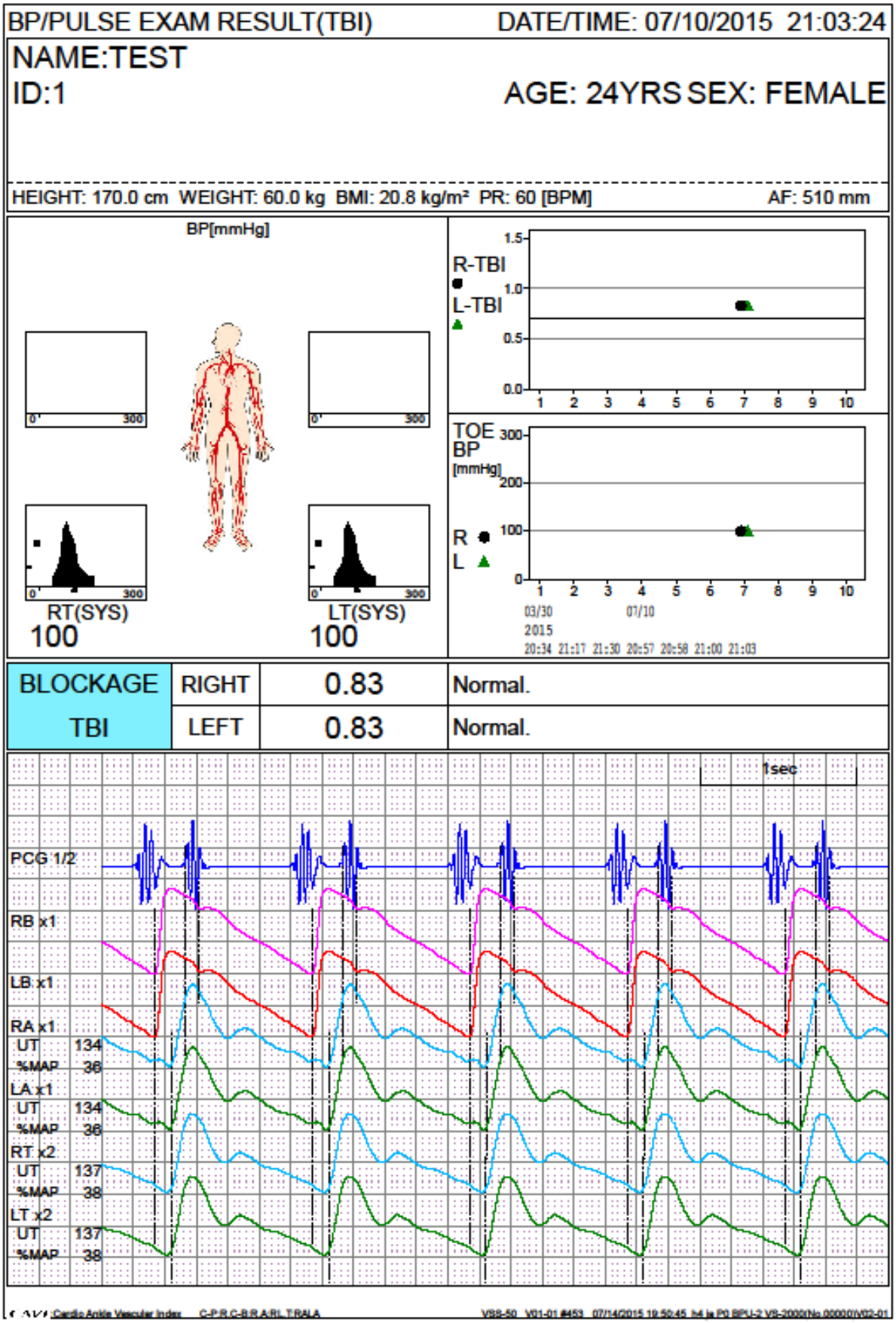
Inspection Time	hf CAVI		HR or PR	WEIGHT	BMI	RA-UT	LA-UT	RA-%MAP	LA-%MAP	PEP	ET	PEP/ET
03/30/2015 20:34			60	50.0	19.5	135	135	37	37	116	277	0.42
03/30/2015 21:17			60	50.0	19.5	135	135	37	37	116	277	0.42
03/30/2015 21:30			60	50.0	19.5	135	135	37	37	116	277	0.42
07/10/2015 20:57			60 (PR)	60.0	20.8	135	135	37	37		277	



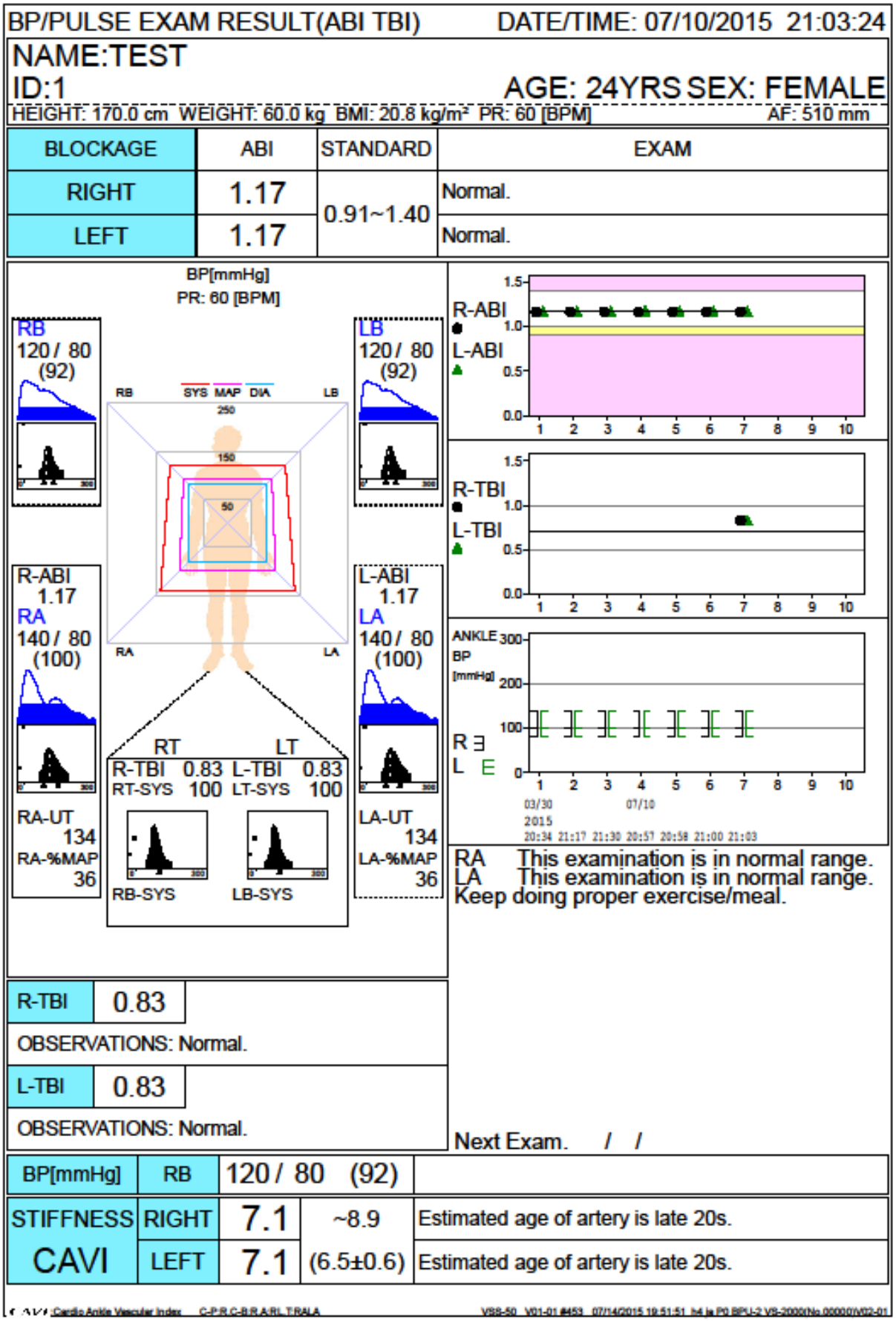
7.7 Time-Series Report (Waveform)



7.8 TBI Report



7.9 ABI/TBI Report

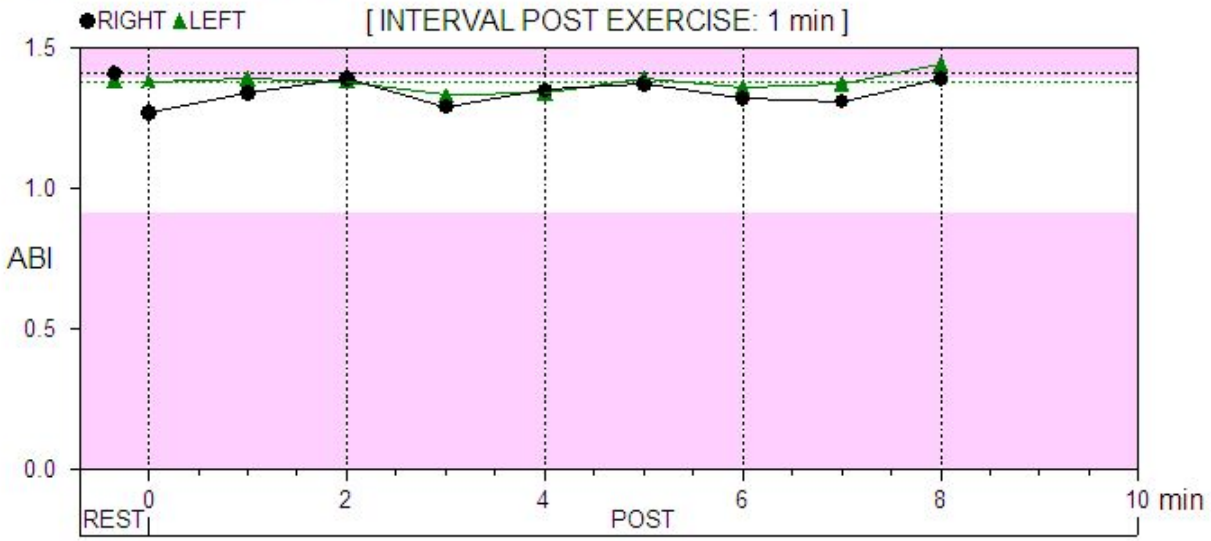


7.10 Post-ABI Report (Landscape)

BP/PULSE EXAM RESULT(POST ABI) DATE/TIME: 08/25/2015 13:08:47

NAME:TEST
ID:1 AGE: 24YRS SEX: FEMALE

HEIGHT: 170.0 cm WEIGHT: 60.0 kg BMI: 20.8 kg/m²



BP [mmHg]

ELAPSE TIME	RB SYS	LB SYS	RA			LA		
			SYS	ABI	PRR	SYS	ABI	PRR
REST	115	119	165	1.41	---	162	1.38	---
00'00"	121	116	151	1.27	0.90	164	1.38	1.00
01'00"	116	116	155	1.34	0.95	161	1.39	1.01
02'00"	110	114	156	1.39	0.99	155	1.38	1.00
03'00"	118	119	153	1.29	0.91	158	1.33	0.96
04'00"	111	116	153	1.35	0.96	152	1.34	0.97
05'00"	116	111	155	1.37	0.97	158	1.39	1.01
06'00"	112	113	148	1.32	0.94	153	1.36	0.99
07'00"	117	116	153	1.31	0.93	160	1.37	0.99
08'00"	104	113	151	1.39	0.99	156	1.44	1.04

EXERCISE DEVICE: Other

Examination Time
REST: 12:59:42
POST: 13:00:46

Comment

VSS-50 V01-01 #456 08/25/2015 14:34:00 h3 BPU-2 VS-3000(No.99999)V03-02

7.11 Post-ABI Report (Portrait)

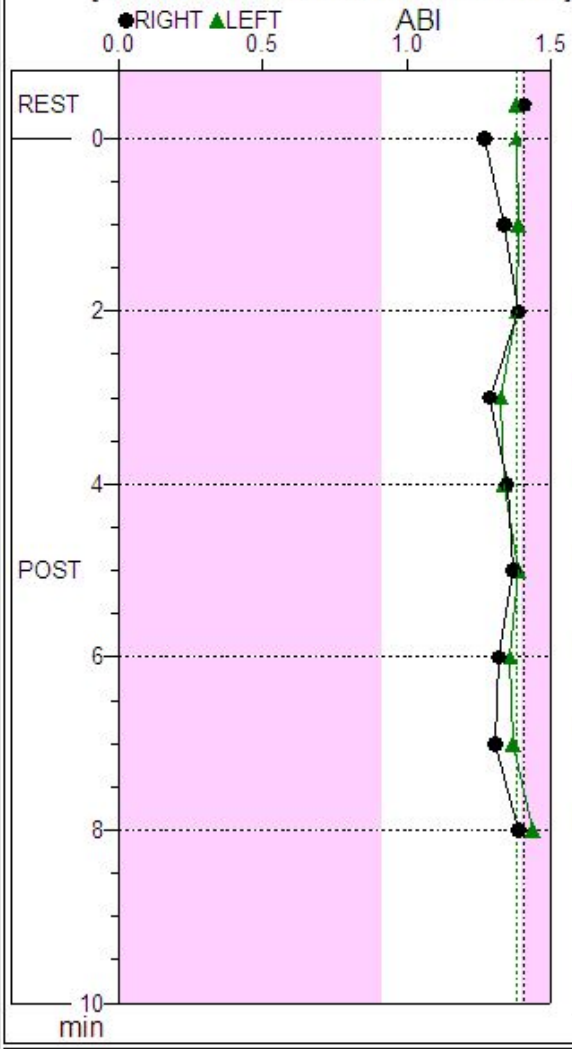
BP/PULSE EXAM RESULT(POST ABI) DATE/TIME: 08/25/2015 13:08:47

NAME:TEST

ID:1 AGE: 24YRS SEX: FEMALE

HEIGHT: 170.0 cm WEIGHT: 60.0 kg BMI: 20.8 kg/m²

[INTERVAL POST EXERCISE: 1 min]



BP [mmHg]

ELAPSE TIME	RB SYS	LB SYS	RA SYS	RA ABI	RA PRR	LA SYS	LA ABI	LA PRR
REST	115	119	165	1.41	---	162	1.38	---
00'00"	121	116	151	1.27	0.90	164	1.38	1.00
01'00"	116	116	155	1.34	0.95	161	1.39	1.01
02'00"	110	114	156	1.39	0.99	155	1.38	1.00
03'00"	118	119	153	1.29	0.91	158	1.33	0.96
04'00"	111	116	153	1.35	0.96	152	1.34	0.97
05'00"	116	111	155	1.37	0.97	158	1.39	1.01
06'00"	112	113	148	1.32	0.94	153	1.36	0.99
07'00"	117	116	153	1.31	0.93	160	1.37	0.99
08'00"	104	113	151	1.39	0.99	156	1.44	1.04

EXERCISE DEVICE: Other

Examination Time
REST: 12:59:42
POST: 13:00:46

Comment

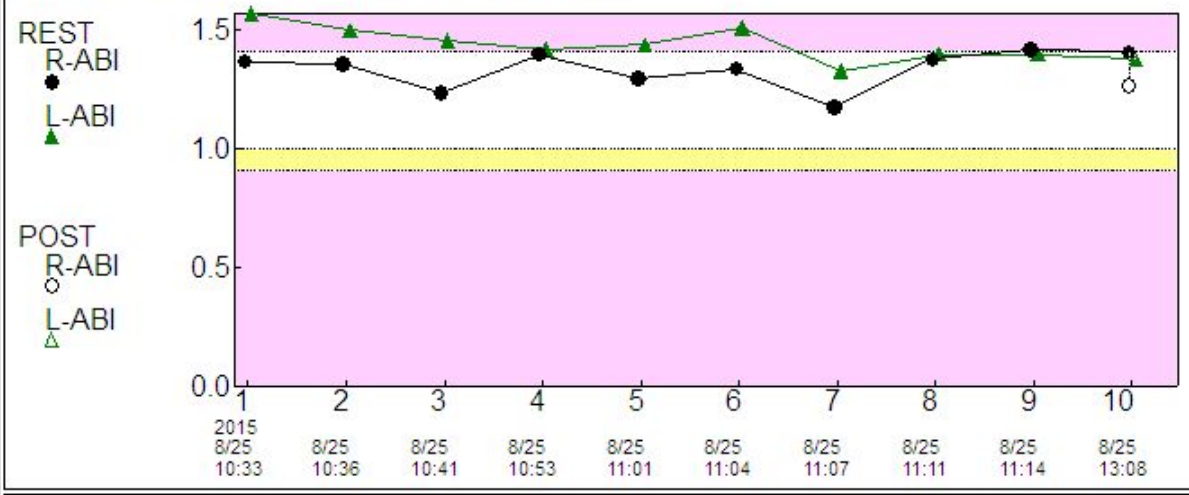
VSS-50 V01-01 #456 08/25/2015 14:35:27 [n3 BPU-2 VS-3000(No.99999)V03-02

7.12 Post-ABI Trend Report

POST ABI TREND DATE/TIME: 08/25/2015 13:08:47

NAME:TEST
ID:1 AGE: 24YRS SEX: FEMALE

HEIGHT: 170.0 cm WEIGHT: 60.0 kg BMI: 20.8 kg/m²



BP [mmHg]

RIGHT		1	2	3	4	5	6	7	8	9	10
ABI	REST	1.37	1.36	1.24	1.40	1.30	1.34	1.18	1.38	1.42	1.41
	POST										1.27
	FPRR										0.90
RA SYS	REST	156	161	159	164	152	158	156	167	167	165
	POST										151

LEFT		1	2	3	4	5	6	7	8	9	10
ABI	REST	1.57	1.50	1.46	1.42	1.44	1.51	1.33	1.40	1.40	1.38
	POST										1.38
	FPRR										1.00
LA SYS	REST	179	177	187	166	169	178	176	169	165	162
	POST										164

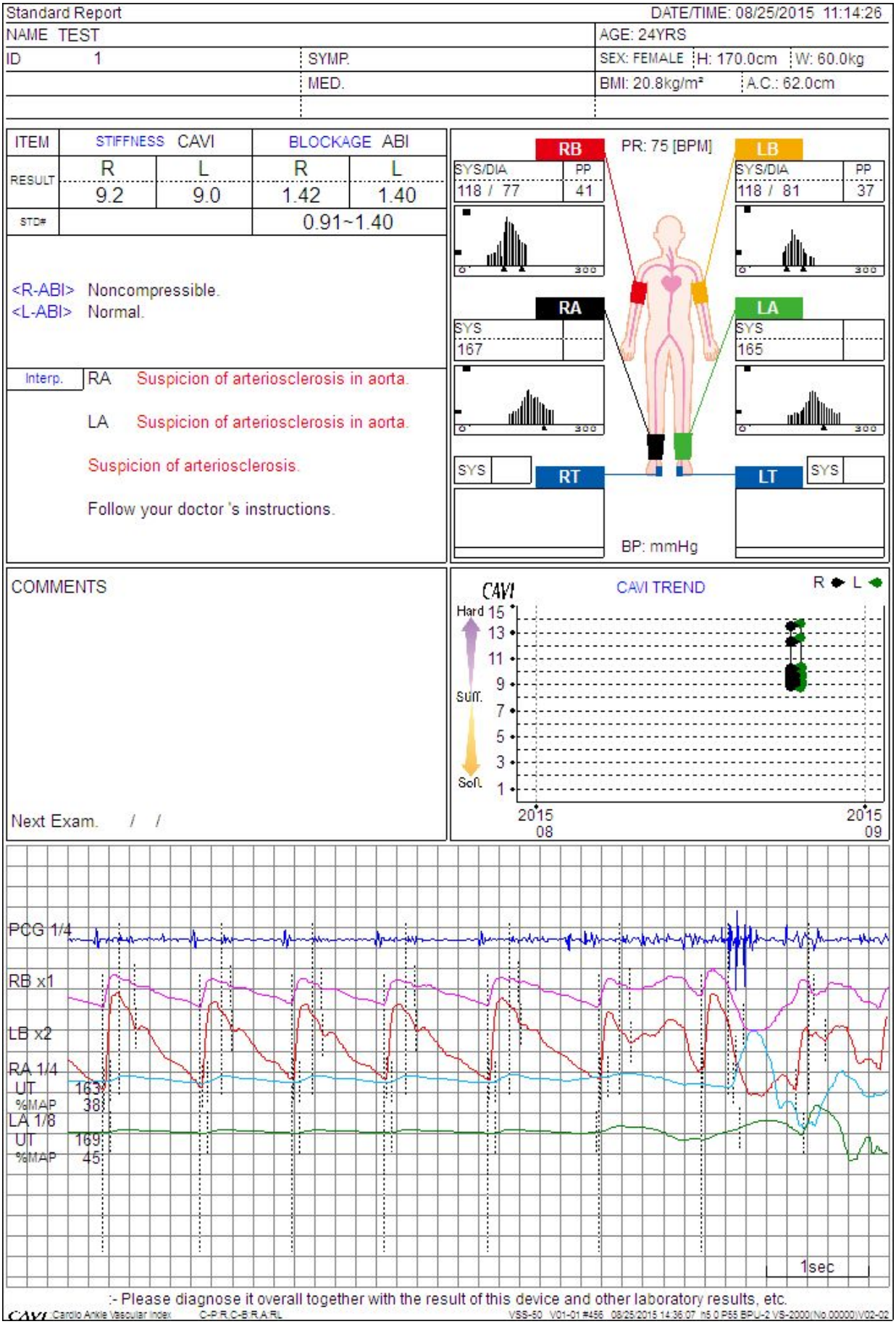
BRAC. SYS		1	2	3	4	5	6	7	8	9	10
REST	RIGHT	111	118	119	117	117	115	115	111	118	115
	LEFT	114	117	128	113	110	118	132	121	118	119
POST	RIGHT										121
	LEFT										116

FPRR:First-Post/Rest ABI Ratio

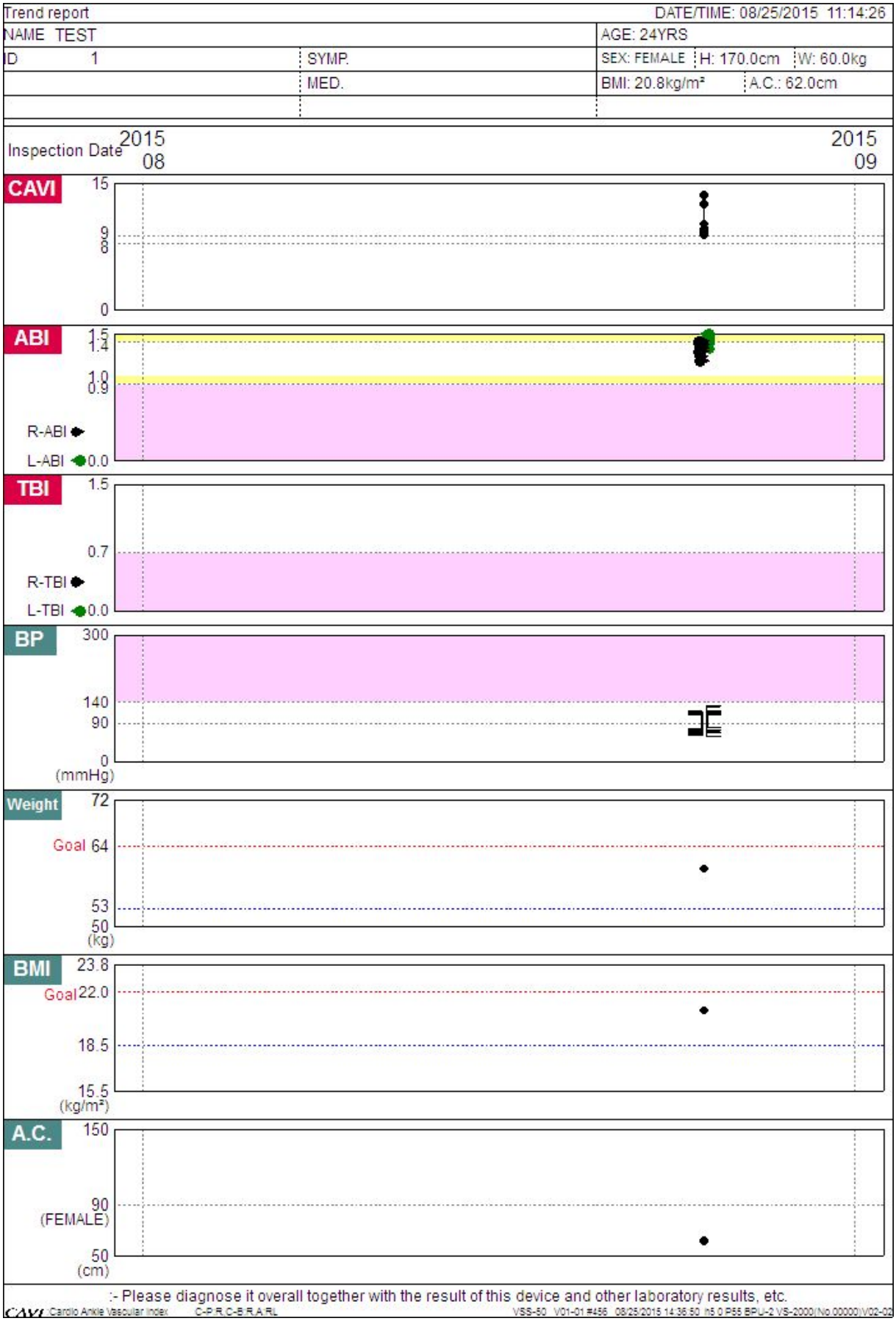
Comment

CAVI Cardio Ankle Vascular Index 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

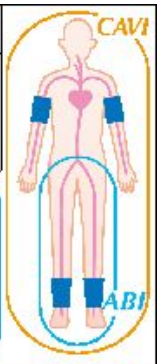


7.15 Examinee C Report

Report for Patient
NAME TEST
ID 1
AGE 24YRS
DATE/TIME: 08/25/2015 11:14:26
SEX FEMALE
H 170.0 cm
W 60.0 kg
A.C. 62.0 cm
BMI 20.8 kg/m²
RB-BP 118 / 77 mmHg
Next Exam.
/
/

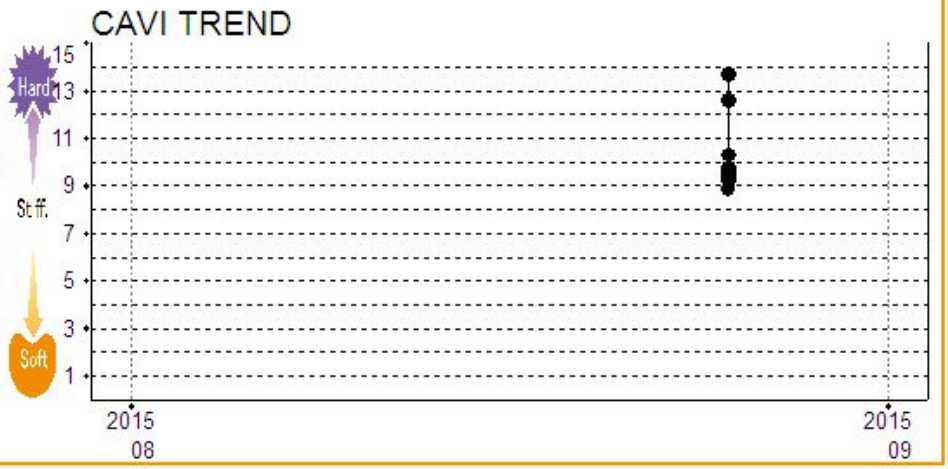
FUKUDA DENSHI

Memo



STIFF

CAVI	9.2	



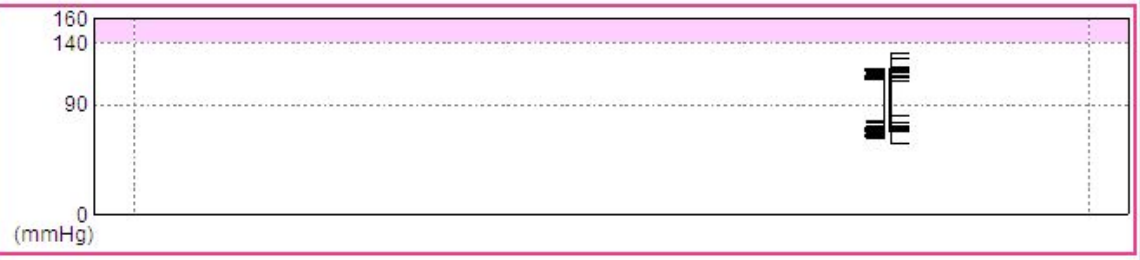
BLOCK

STD#: 0.91~1.40

ABI RIGHT	1.42	Noncompressible.
ABI LEFT	1.40	Normal.

The ABI test can detect a possible occlusion (or blockage) in your legs

BP

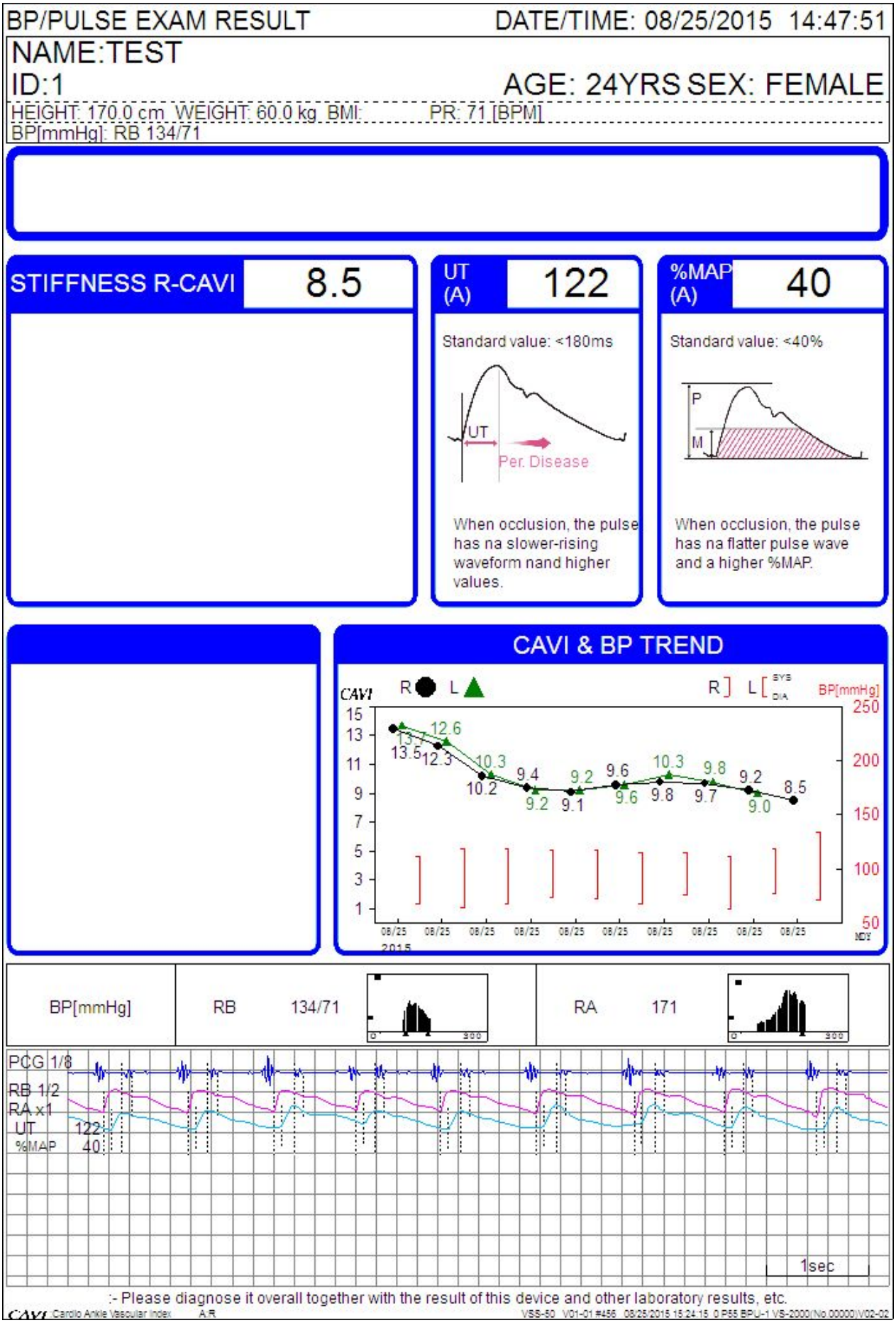


Wght

:- Please diagnose it overall together with the result of this device and other laboratory results, etc.

CAVI Cardio Ankle Vascular Index C-P R C-B R A RL VSS-50 V01-01 #456 08/25/2015 14:37:33 h5 0 P55 BPU-2 VS-2000(No.00000)V02-02

7.16 Simple Examination Report



7.17 Brachium BP Report

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