



PC Spirobank Software

Operation Manual



REV. 4.0

CHEST

CE 0123

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1. Introduction

- Spirobank software is designed to download the data from our spirometers, HI-105, HI-801, HI-101 and HI-701 using RS232C cable or USB cable(HI-105/HI-801 only). The downloaded data can be displayed, printed and saved into your PC.
- The HASP(USB dongle) enclosed this package is necessary to start the software.(See Chapter 2. Installation)
- The data of HI-801 option and HI-105 MCT is not available for this software.

Operating environment

OS

Microsoft Windows98SE, Me, 2000 XP and Vista

Processor

Celeron 1G Hz or higher (PC/AT compatible)

Memory

64MB of Memory (128MB or more for Windows XP recommended)

Graphic Resolution

1024 x 768 dots or higher

16 bit colors or more recommended

HDD

50MB + free space large enough to store the database files

Disk drive

CD-ROM or DVD-ROM

Backup storage device

It is desirable for data back up

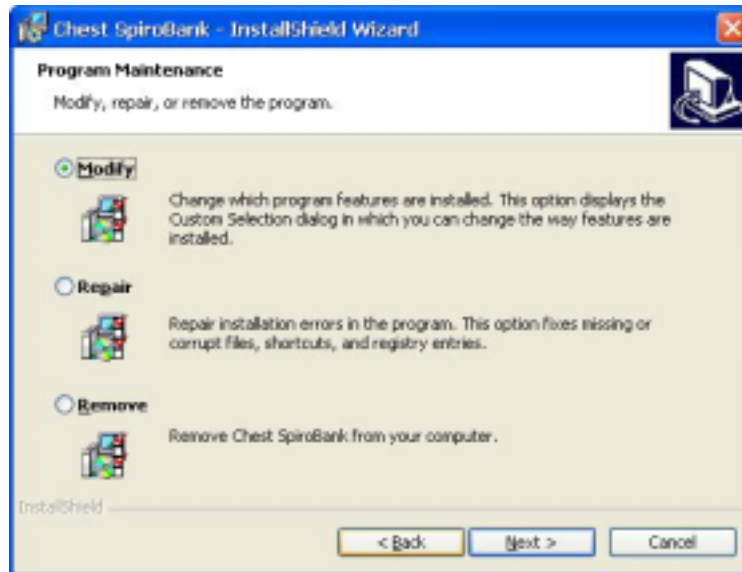
- Available Interfaces for Data transfer (Spirometer to PC)

Model	RS-232 C	USB	Compact Flash card
HI-105	OK(9-pin, Straight)	OK	N/A
HI-801	OK(9-pin, Straight)	OK	OK
HI-101	OK(9-pin, Straight)	N/A	N/A
HI-701	OK(9-pin, Crossed)	N/A	N/A

2. Installation

1. Install PC Spirobank Software

- 1) Set the CD-ROM in the CD drive .
- 2) Invoke the “Setup.exe” of “CSB” folder in the CD-ROM.
- 3) If you see the following screen during the process of installation, please choose “Remove” to uninstall the old version of Spirobank Software first.



After uninstallation, go back to Step 2.

2. Install HASP (USB dongle) driver

- 1) Invoke “hdd32.exe” OR “HASPUserSetup.exe” in the “HASP” folder.
- 2) After installation, insert the HASP to see if it works properly.
If there is a problem, uninstall the driver you choose first and try the other driver.
*It depends on a PC which driver works.
*If you still have a problem after try both files, copy all the files in the CD-ROM to your hard disk and try the same procedure from the copied files.

After the HASP driver installation, the whole installation procedure is done.
Invoke the program file of “Csb” in the START menu of Windows.

3. Install USB driver(for USB connection only)

USB driver is necessary to use USB cable for HI-105/HI-801.

- 1) Exit Spirobank software and power off the spirometer.
- 2) Connect the spirometer and your PC with USB cable.
- 3) Power on the spirometer. The new device is recognized and driver install wizard will start.
- 4) Follow the wizard, and choose the folder of “HI-105_USB_DRIVER” for HI-105 and

“HI-801_USB_DRIVER” for HI-801 for the installing location.
5) After completion of the install, close the wizard.

3. Conditions and Settings

Required OS: Microsoft Windows98SE, Me, 2000 XP or Vista*

*Necessary security setting is needed.

1. Connecting by RS232C cable

- Available cable

HI-105: 9-pin, Straight Cable

HI-801: 9-pin, Straight Cable(Connect to COM2 port!)

HI-101: 9-pin, Straight Cable

HI-701: 9-pin, Crossed Cable

1) Connect the spirometer and PC by the cable.

- Connect to COM2 port for HI-801. COM1 port is for external printer only.

2) Setting Data Communication

a. Press "Settings" in the main screen.

b. Choose the model(HI-105/HI-801/HI-101/HI-701) on the tab.



c. Set as follows

- Com Port: Com Port # of your PC.
- Baud Rate: Highest possible (depend upon your PC)
- Data Length: 8
- Stop Bit: 1
- Parity: Null

- Waveform data: Yes (or No if you do not need Waveform data)
- Version (only for HI-701): Int'l

3) Set the spirometer for communication. (See the operation manual of your model)

2. Copying from CF card

1) Connect CF card drive with your PC

2) Set CF drive referring to the drive's manual

- No setting is required for the spirometer or Spirobank Software.

3. Connecting by USB cable

1) Install USB driver.(See Chapter 2)

2) Setting Data Communication

a. Press "Settings" in the main screen.

b. Choose the model(HI-105/HI-801) on the tab.



c. Choose "USB" for Com.Port

d. Waveform data: Yes (or No if you do not need Waveform data)

3) Set the spirometer for communication. (See the operation manual of your model)

4. Data Transfer

1. By USB or RS232C cable

- 1) Complete connecting and setting referring to Chapter 3.
- 2) Click the model name in “Data Transfer”.



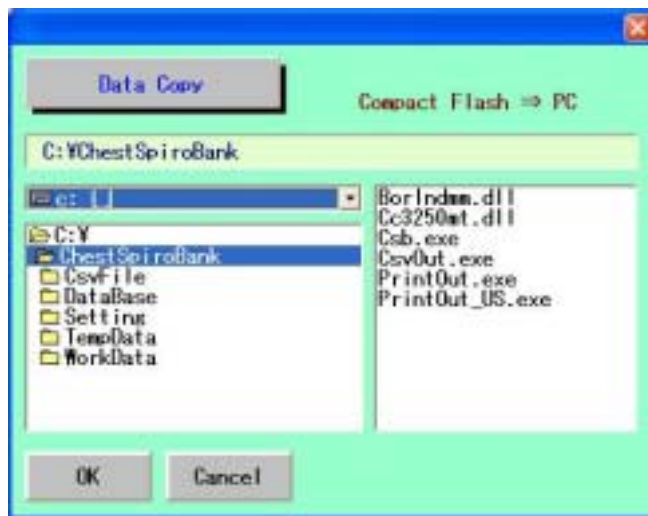
- 3) The following screen will appear, waiting for data transferred.



- 4) Send data from the spirometer.
(See the operation manual of your model)



2. By CF card(HI-801 only)



- 1) Choose the CF card drive.
- 2) Choose the "HI801DAT" folder in the card.
- 3) Click "OK" to copy all the data into Spirobank Software.

5. Database

1. Loading

Click “Patient Database” in the main menu screen.

The screenshot shows the 'PATIENT DATABASE' window. At the top, there are buttons for 'Search Data' and 'Delete Data'. Below the title bar, a status bar indicates 'Number of Data: 4'. The main area contains a table with the following data:

Date	ID Number	Patient Name	Sex	Age	SVCBD	FVCBD	MVBD	MV	BD	PT	Spirometer
05/29/2004	801	HI-801 SampleData	Male	35	*	*	*	*	*	*	HI-801 I
05/12/2004	101	HI-101 SampleData	Male	34	*	*	*	*	*	*	HI-101 I
05/31/2004	701	HI-701 SampleData	Male	35	*	*	*	*	*	*	HI-701 I
04/11/2008	1	111	Male	38	*	*	*	*	*	*	HI-801 I

At the bottom of the window, there are buttons for 'SVC', 'FVC', 'MVV', 'MV', 'Patient ID', 'DIAG. INTERP.', 'Print', 'CSV File', and 'Exit'.

a. [Search Data]

The screenshot shows the 'Search Condition' dialog box. It contains the following fields and controls:

- Test Date:** Three text boxes for day, month, and year, followed by a tilde (~) and 'M/D/Y'.
- ID Number:** A single text box.
- Name:** A single text box.
- Sex:** A dropdown menu.
- Age:** A single text box.
- Spirometer:** A dropdown menu.
- Buttons:** 'Search', 'Cancel', and 'Clear' at the bottom.

Input the condition and click “Search”.

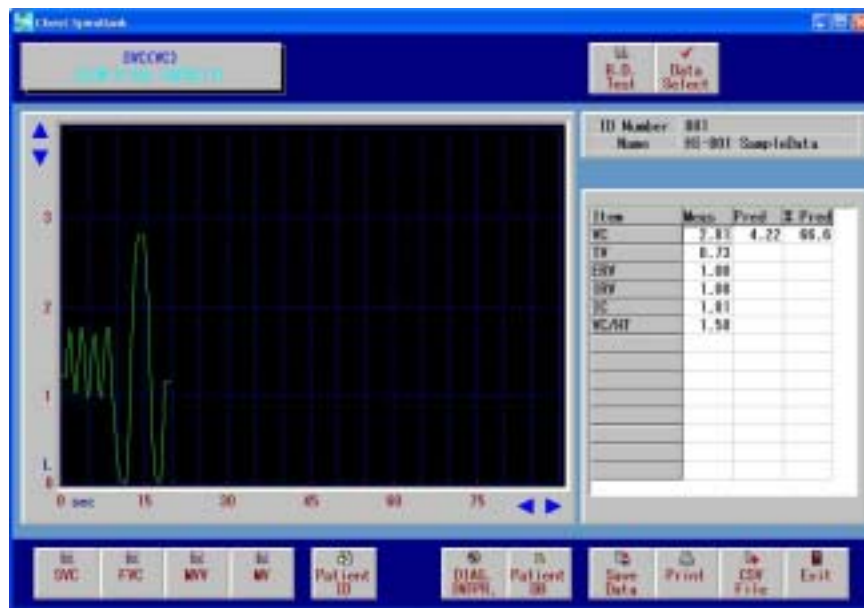
b. [Delete Data]



Delete the selected data. Click OK.

* The deleted data cannot be recovered.

c. [SVC]/[FVC]/[MVV]/[MV]



The measurement screen will appear.

[B.D. Test]: B.D. measurement data will appear.

[Data Select]: You can select measurement data if more than one data is available.

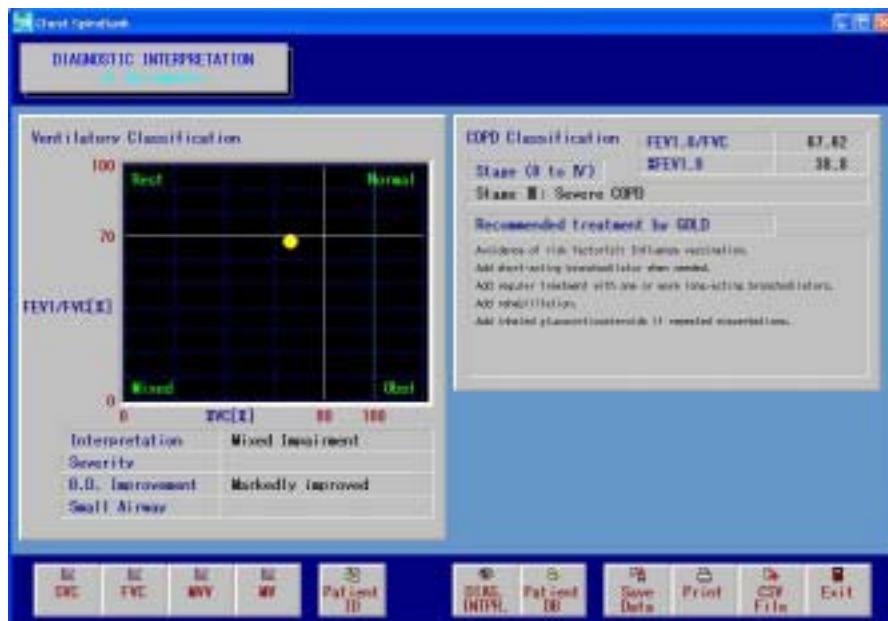
[Patient DB]: Go back to loading screen.

[Save Data]: Overwrite the data.

d. [Patient ID](or double click the entry)

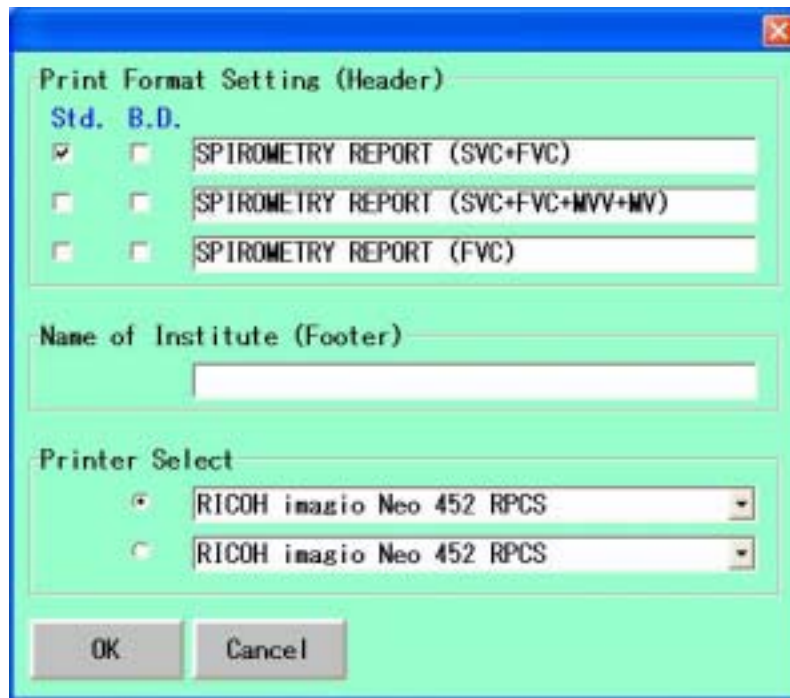
Patient ID screen will appear. You can modify the data(click “Save Data” after modifying.)
 * Predicted value will not be re-calculated due to the change.

e. [DIAG. INTPR.]



Diagnosis screen will appear.

f. [Print]



The dialog box is titled "Print Format Setting (Header)". It contains three sections:

- Std. B.D.**: A table with three rows for selecting report formats. The first row is selected with a checked checkbox.

Std.	B.D.
<input checked="" type="checkbox"/>	SPIROMETRY REPORT (SVC+FVC)
<input type="checkbox"/>	SPIROMETRY REPORT (SVC+FVC+MVV+MV)
<input type="checkbox"/>	SPIROMETRY REPORT (FVC)
- Name of Institute (Footer)**: A text input field.
- Printer Select**: Two radio buttons, both of which are selected, pointing to dropdown menus that both display "RICOH imagio Neo 452 RPCS".

At the bottom are "OK" and "Cancel" buttons.

Set the print result and perform printing.

1) Print Format Setting(Header): You can change the header name in the printed result.

2) Name of Institute(Footer): You can insert an institute name in the footer.

3) Select the printer.

And click Print or OK.

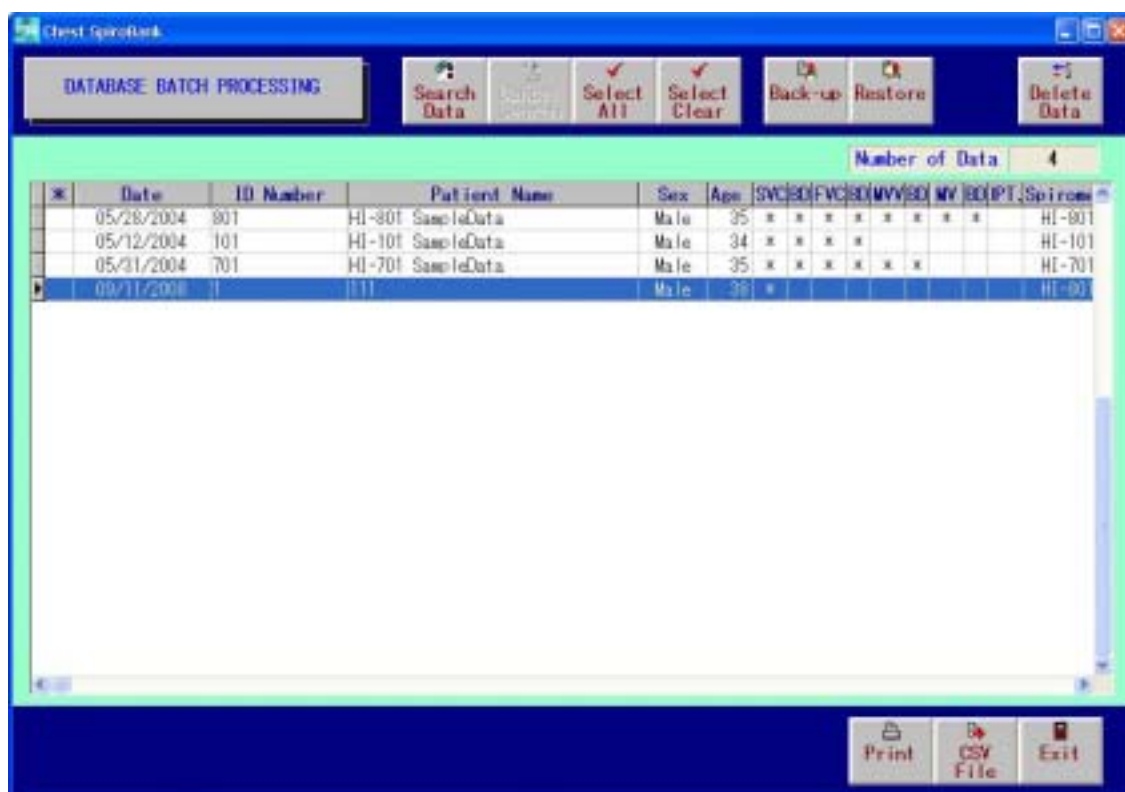
g. [CSV File]



Create a CSV file.

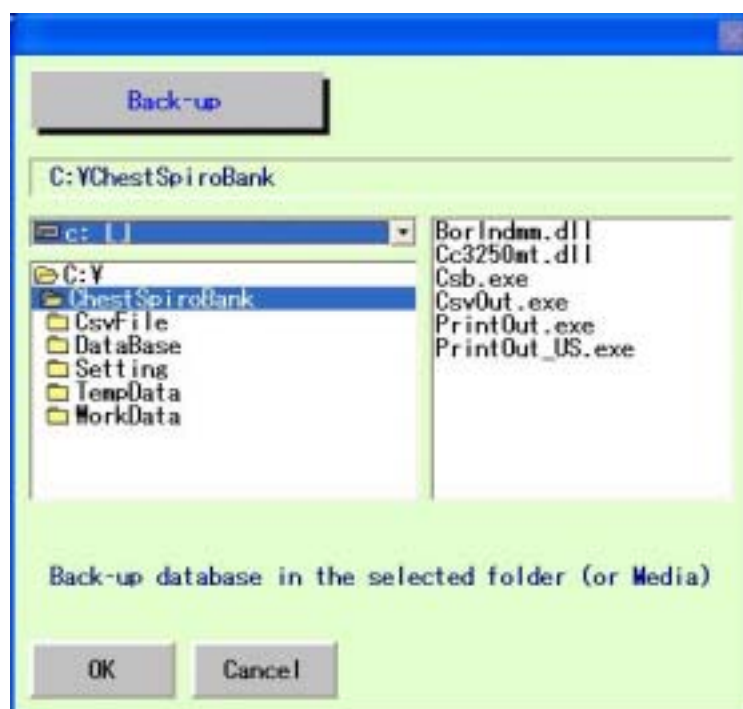
2. Batch Processing

Click “Patient Database Batch Processing” in the main menu screen.



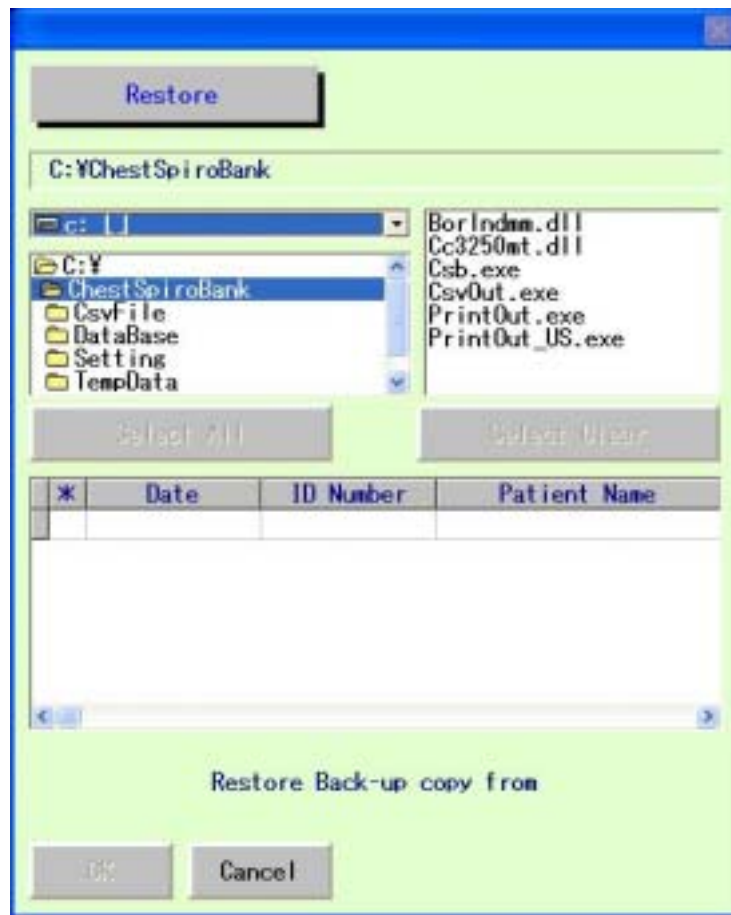
You may select more than one data, or click “Select All”. Selected data will be marked by “*”.

a. [Back-up]



Select the location and click “OK”.

b. [Restore]



Select the file you want to restore from.(the file of “BackupDataIndex.DB”)

6. Other Settings

1. Configuration

Configuration dialog box showing settings for Automatic Data Transaction, Print Format Confirmation, and CSV File Setting.

- Automatic Data Transaction:
 - ☐ Print
 - ☐ CSV File Creation
- Print Format Confirmation:
 - ☒ Yes
 - ☐ No
 - Print Format Selection
- CSV File Setting:
 - ☒ CSV File Creation

a. Automatic Data Transaction

Print: By checking, printing will automatically be performed after data loading.

CSV File Creation: By checking, creation will automatically be performed after data loading.

b. Print Format Confirmation

Selecting “Yes”, each time of printing Format Selection screen will appear.

You can set the format here.

c. CSV File Setting

CSV Output Data Setting dialog box showing fields to be included in the CSV output.

Patient ID	IMTPR	GVC	FVC 1	FVC 2	FVC 3	MVV	MV
<input checked="" type="checkbox"/> Test Date	<input type="checkbox"/> Smoking Status						
<input checked="" type="checkbox"/> ID Number	<input type="checkbox"/> Smoke Type						
<input checked="" type="checkbox"/> Name	<input type="checkbox"/> Years Smoked						
<input checked="" type="checkbox"/> Sex	<input type="checkbox"/> Q'ty / Day						
<input type="checkbox"/> Race	<input type="checkbox"/> BI (cigs/yr)						
<input type="checkbox"/> Race Adjustments (X)	<input type="checkbox"/> Temp.						
<input type="checkbox"/> Birthdate	<input type="checkbox"/> Humidity						
<input checked="" type="checkbox"/> Age	<input type="checkbox"/> Atm Press.						
<input checked="" type="checkbox"/> Height	<input type="checkbox"/> Spirometer						
<input type="checkbox"/> Weight							
<input type="checkbox"/> Predicted Formula							
<input type="checkbox"/> SpiO2							

Save CSV file to:
C:\chest\seirobank\CSVFile\CSVb.csv

You can set the condition of CSV file creation here.

2. Units

HI105 | HI-801 | HI-701 | HI-101 | Configuration | **Units** | ID Setting

Unit Settings

Height	<input checked="" type="radio"/> cm	<input type="radio"/> inch
Weight	<input checked="" type="radio"/> kg	<input type="radio"/> lbs
Temperature	<input checked="" type="radio"/> C	<input type="radio"/> F
Air Pressure	<input checked="" type="radio"/> mmHg	<input type="radio"/> hPa

OK Cancel

Choose the units you want to use.

3. ID Setting

HI105 | HI-801 | HI-701 | HI-101 | Configuration | Units | **ID Setting**

Patient ID Input Setting

Date Format	<input type="radio"/> Y/M/D	<input checked="" type="radio"/> M/D/Y	<input type="radio"/> D/M/Y
Race	<input type="radio"/> No	<input checked="" type="radio"/> Yes	
Birth Date	<input type="radio"/> No	<input checked="" type="radio"/> Yes	
Predicted Formula	<input type="radio"/> No	<input checked="" type="radio"/> Yes	
SpO2	<input type="radio"/> No	<input checked="" type="radio"/> Yes	

OK Cancel

Choose the preferable items you want to use in Patient ID screen.

7. Contact Information



EC-Representative:

Medical Device Safety Service GmbH
Schiffgraben 41
D-30175 Hannover, Germany

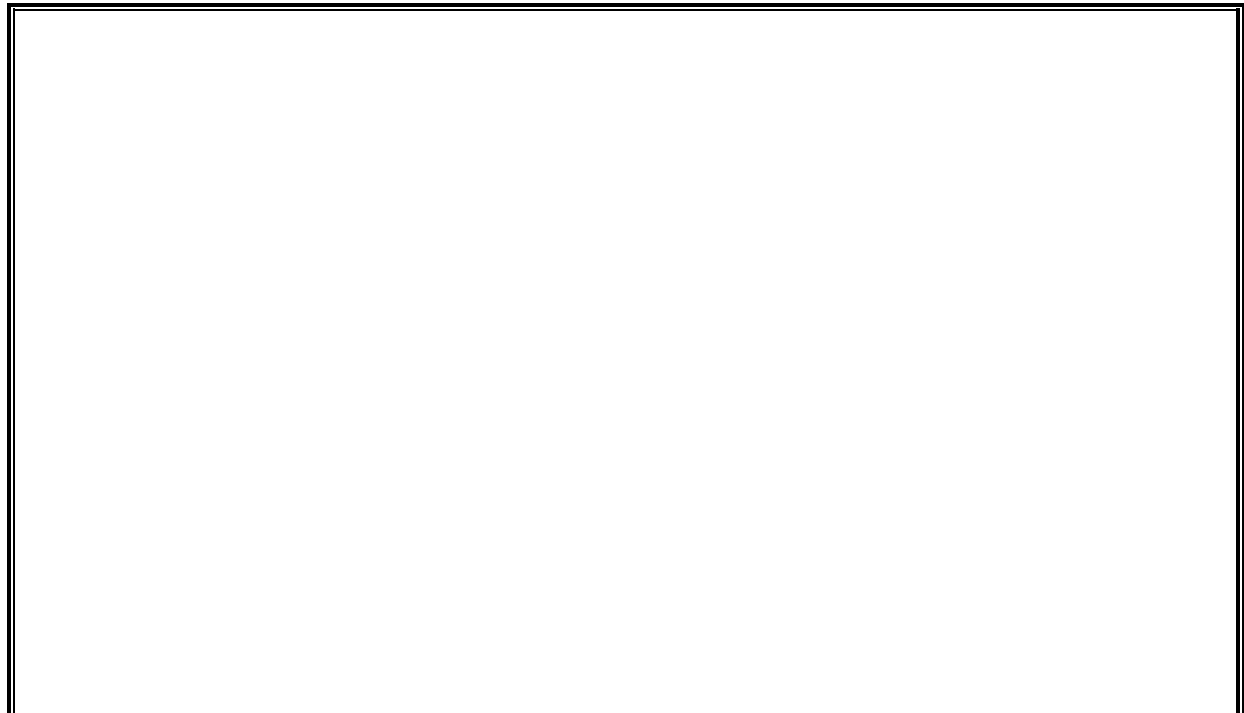


Manufacturer:

CHEST M.I., Inc.
3-6-10 Hongo, Bunkyo-ku,
Tokyo, 113-0033, Japan

Tel: +81-3-5804-5031 (M-F 9 to 5 in Japan time, in Japanese language only)
Fax: +81-3-3812-7220 (24hrs. English, Chinese, and Japanese are acceptable)

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