CONTACT

Window Program

User Manual

Jawon medical

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INSTALLATION

1. System environment required for installation and operation

- 1) In order to run the software smoothly, the computer environment specified below is required.
- ① CPU: Pentium 4, 1000MHz or above
 In case of Vista O/S, Pentium 4, 2000MHZ or above
- ② MEMORY: 1 G or more

In case of Vista O/S, more than 2 GB is recommended

- 3 Monitor resolution: 1024 X 768 (more than 16 bit color is recommended)
- (4) Supported O/S: Windows XP SP3, VISTA, Windows 7, Windows 8, 8.1 (64 bit compatible)
- 5 USB port for communication (USB2.0/3.0)
- 2) Requirements for installing the software
 - 1) A computer to be connected with the BCA device
 - 2 Software installation CD
 - Installation CD provided depending on BCA devices
 - 3 Equipment needed for communication
 - USB cable
 - % Note

Note



The BCA used for the manual is X-CONTACT 357S. Images and contents are subject to change depending on specification of BCA

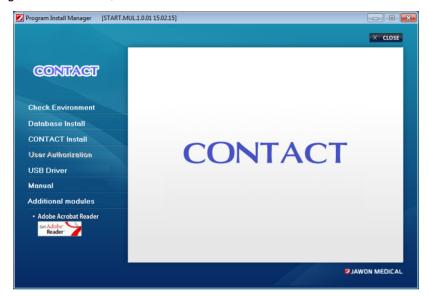
2. Installing CONTACT software

1) Operating the software

Load provided CD into PC's CD driver.

Open CD driver by clicking "My computer" icon on PC desktop screen.

On running "start.exe" in CD, list of items to be installed will be run.



2) Oder of installing the software

After checking if PC to install the software is server or client, please install the software as follows below according to the corresponding PC

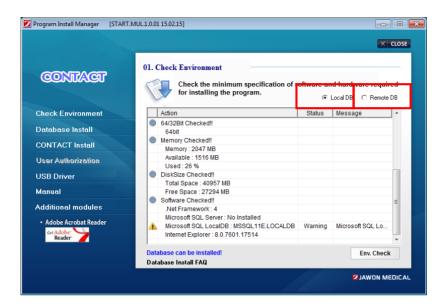
- ① Procedures for software installation on server PC
 - In the case of the PC unit or 2 or more units in which the software will be used which are used as server (data storage).
 - "installation environment inspection"
 - Installing "Native client" & "database engine installion"
 - Installing "CONTACT"
- 2 Procedure for installing client PC software

In case 2 more PCs are to use the CONTACT software as client

- "installation environment inspection" (Select RemoteDB)
- Installing "Native client"
- Installing "CONTACT"

3) Installing database engine

① On the left side menu click "installation environment inspection". As shown below, least specifications for software and hardware needed for installation environment are shown on the right and inspected.



- i) Local DB: Select this in the case only 1 PC unit will use the software. Installing is easy and fast. (It is available for O/S above Windows 7)
- ii) Remote DB: Select this in case PCs to use the software are more than 2 units.

Server in item 2 – please refer to client installation procedure.

Click on "environment inspection" button on lower side of display

In case of specifications suitable for installation, "installing database on current PC is possible" is displayed on left lower side as shown on the picture above.

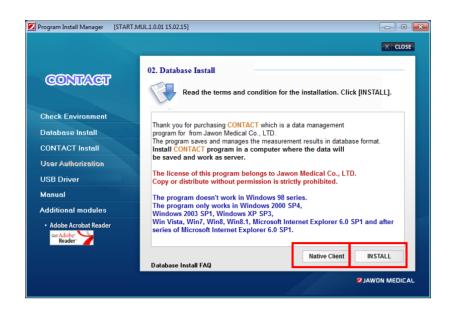
Notice



Unless environment inspection for installation is done,

"Database engine" can't be installed.

② On clicking on "database engine installation" on the menu on the left, details of installation are shown on the right side as shown on the picture below

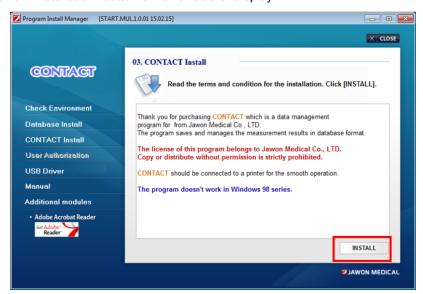


- i) Native client : install Native Client by clicking Native Client button
- ii) Installation: install database engine by clicking installation buttonOn clicking on "database installation FAQ", solutions on probable errors that could occur during database installion can be viewed.

4) Installing CONTACT

① On clicking on "CONTACT installation", terms for installation are shown on the right side as shown on the picture below

Please click on "installation" button on lower side of display



5) User verification

Notice

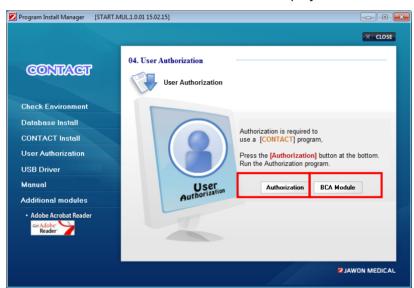
Menu for user verification can be activated only for users who purchased additional module on CONTACT software.



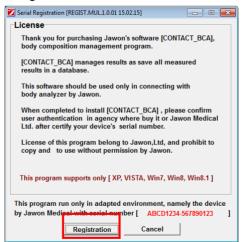
Calorie guide, diet guide, exercise guide can be available by installing additional module.

① On clicking on "User Authorization" on the menu on the left, terms for user verification are shown on the right side as the picture below appears

Please click on 'Authorization' button on lower side of display



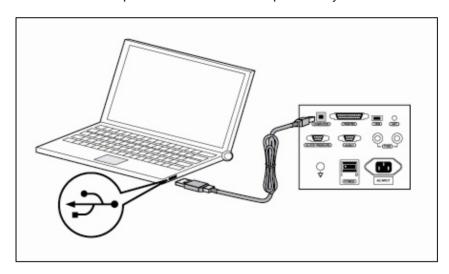
2 Please click on "Registration" button once the screen below appears.



3 Install additional module by clicking on BCA Module button

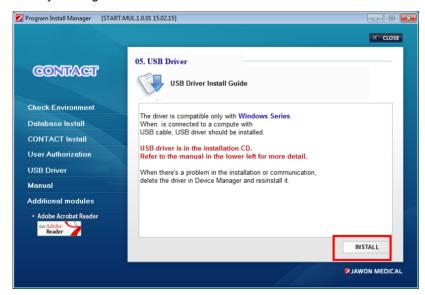
6) Installing USB driver

① Connect main unit to USB port of PC with USB cable provided by Jawon medical

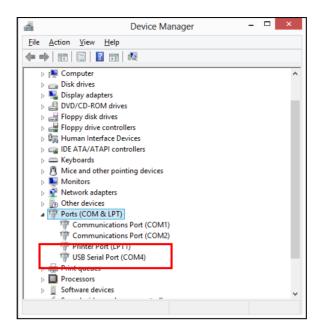


③ On clicking on "USB driver" on the menu on the left, instructions for USB driver installation appears on the right side as shown in the picture below.

Install USB driver by clicking on installation button

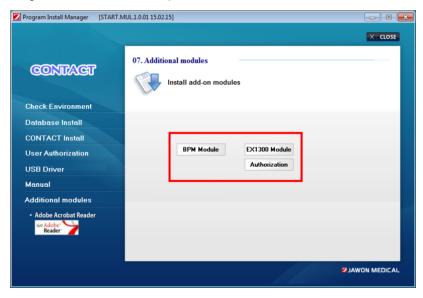


4 Once USB driver is installed normally, it can be confirmed on "device manager" menu as shown below.



7) Installing additional module

① On clicking on "additional module" on the menu on the left, instruction for additional module are shown on the right side as shown in the picture below



3 In case that additional module is purchased or provided as free option, the buttons as in the above picture are activated.

Install by clicking on each button.

Notice



The additional module is not provided for a basic BCA management program.

How to use the software

1) Operating the software

Run the software by double clicking on CONTACT icon on PC desktop.



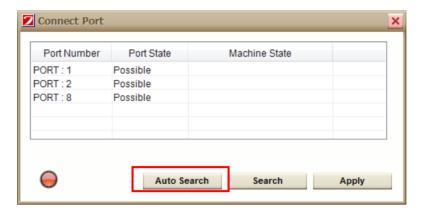
2) Loading screen appears and software is run.



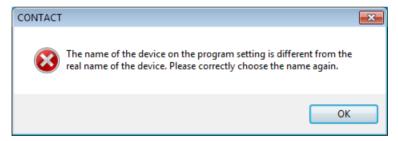
3) Select device model to be connected.

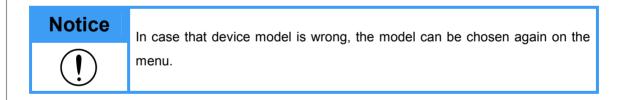


4) Window from which to choose port number to connect device pops up as below We recommend user to click on "Auto search" to search ports automatically In the case ports are not searched automatically, manually click "search" button and once ports are found, double click with the mouse on the port you would like to connect to for connection.



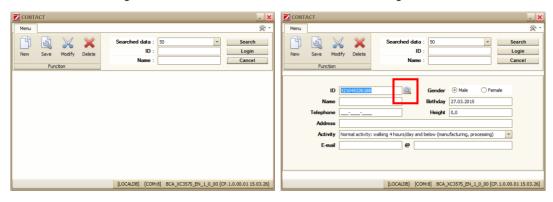
In case the device model connected is different from device model chosen on the software, warning message pops up like below.





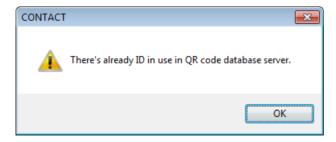
5) User registration

<Login 1> <Login 2>



- ① When you run the software, screen shown in figure <log in 1> pops up and an ID number is automatically generated in the ID window
- ② If the software is being run for the first time, the ID number given is 1. After that, each time the software is run and depending on user registration status, an ID number will be given in sequence.
- 3 After confirming number, if you move cursor on the ID input slot and press "Enter" on the keyboard or press "New" a window in which you can input user name, gender, birth date, age, contact number, height, address, e-mail pops up as shown on figure <log in 2>.
- 4 On completing input of user information, click "save" and user registration is finished.
- ⑤ To delete information on user registration screen or get back to <log in 1> screen, press "cancel". On pressing "cancel", <log in 1> screen pops up and registration is possible again.
- ⑥ ID search in the red square box can double search the ID being used in the QR code database server.

In case of ID being used on QR code database server, the following window appears.



In case that there is no existing ID being used on QR code database server, following window appears.



6) Log in

- 1) In case that user knows ID number
 - ① After inputting user's ID number, press "search" button.
 - ② In case of registered ID, user's name and information corresponding to ID appears.
 - 3 Log in by pressing "log in" button
- 2) In case that user doesn't know ID number

Log in by using "search"

- 1) Choose "search condition" Searching can be done with name and ID number
- ② Write parts of the text you intend to search for in the search box ex) searching for a name that includings the word "kim"
- Choose "name" on search condition
- After inputting "kim" on search box, press "search" button.
- All text sentences including "kim" are searched.
- After clicking on intended customer, press "log in" button

(Seach can be done by inputting full name as well)

- ex) Searching for ID number that includes "3"
- Choose "ID number" on search condition.
- After inputting "3" on search box, press "search" button.
- ID numbers that include "3" are searched
- After clicking on intended customer, press "log in" button.

(User can search by inputting ID number)

- ③ After choosing search condition, once "search" is pressed, data will be drawn up according to corresponding conditions.
- After choosing "name", once "search" is pressed, data will be drawn up in alphabetical order.
- After choosing "ID number", once "search" is pressed, data will be drawn up in order of ID number.
- After clicking on corresponding customer, press "log in" button.
- ⑤ Once "log in" button is clicked, the program goes to the home screen.

For a registered user, on clicking on "log in" button or double clicking on user information, history of measured data can be viewed by moving to user's recent "section" page.

7) Correction

- 1) In case that user knows ID number
 - ① After inputting ID number, press "enter" on keyboard.
 - 2 User's name and information corresponding to ID appears.
 - ③ After correcting user information, once "correction" button on upper side of screen is pressed, a confirmation window "do you want to save corrected information?" pops up.

If correcting is desired, press "Yes"

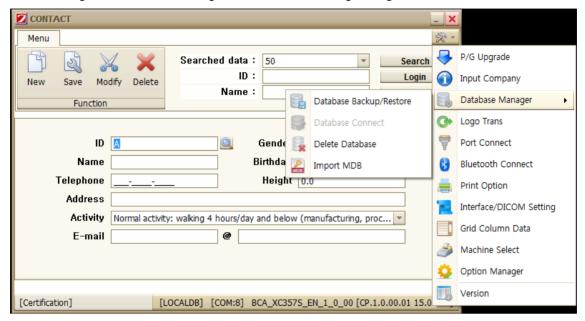
- 2) In case that user doesn't know ID number
 - 1) Search users and click on the intended customer
 - ② When ID number in log in window appears, move mouse and place cursor on ID box, then press "Enter" on keyboard or press "correction" button. User information will be corrected and a confirmation window "do you want to save corrected data?" pops up. If you want to correct, Press "Yes"

8) Deletion

- 1) Click on intended customer by searching users
- ② Once "deletion" button on upper side of screen is pressed, confirmation window "do you want to delete selected user information?" pops up. If you want to delete, press "Yes"

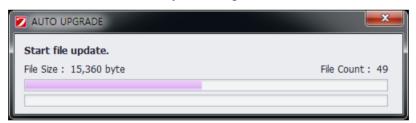
Software menu

Once clicking on menu button on log in window, the following settings menu can be viewed.



1) Software upgrade

1) The latest version can be downloaded by accessing the CONTACT download server.



- ② However, to use this feature, you must have an active Internet connection.
- 2) Database backup/restore

Feature for backing up or restoring CONTACT data

Data base back up/restore is available only on server.

- (1) Data base back up
 - ① Check the files to back up and press "data back up".
 - ② Navigate to the folder that contains the file to back up when "search folder" window comes up and press "confirm".
 - ③ Press "Yes" when the confirmation window "do you want to back up files into designated folder" pops up.
 - ④ "Database back up successfull" window pops up. Press "confirm".

(2) Database restore

- ① Press "search file" and "search folder" window appears. Navigate to the folder that has the files to be restored and press "confirm".
- 2 List of files to be restored appears on screen
- ③ After checking files to be restored on file list on the screen, press "restore all".
- 4 Once "do you want to restore selected files" window pops up, press "Yes"
- ⑤ When "Data base restoration succeeded. Restart the software" window pops up, press

"confirm". Then data base restore is finished.

3) Deleting data base

1) This is the feature to use when deleting the whole database

Press "confirm" when "do you want to delete data base" window pops up.

2 "Deleting data base successful" window appears and the software exits.

"Restart the software" window appears.

3 Once the software is restarted, it's retored to intial state.

Notice



If data base is deleted, restoration can't be done.

Please be sure to back up before deleting.

4) Connecting data base

Change connection target by inputting IP address or name of server computer in which data is saved.



Notice

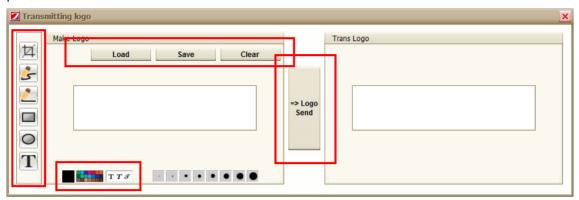


Database connection menu is activated only when Remote DB is selected during software install.

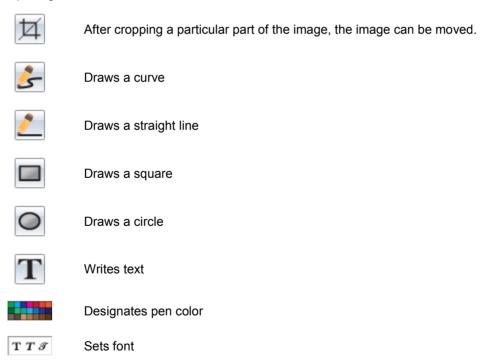
It's inactivated in local DB

5) Logo transmission

When printing result sheet, logos of companies, clinics, fitness centers that use BCA can be printed on result sheets.

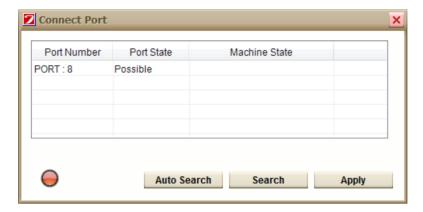


- ① Load button: loading saved images (in case that there is any logo file saved previously)
- ② Save button: logo created must be saved as image by pressing "save" button
- ③ Reset button: resets all of the current images to a white screen.
- 4 Inputting tool



⑤ Transmit button: saved logos transmitted and printed on CONTACT software result sheets.

6) Connecting port



- ① Automatic search: automatically searches port connected to device

 Once it's connected automatically to device, connected port is saved and window for port connection is closed.
- ② Search: searches ports that are activated on PC
 Once port search is finished, port number is found like in above picture
 Check if the port the user wants to connect to is connected normally by double clicking the port
 In case that device is connected, "device connection status" is "CONNECTION OK"
 In case that device is not connected, "device connection status" is "CONNECTION FAILED"
- 3 Application: saving selected port and connecting selected port



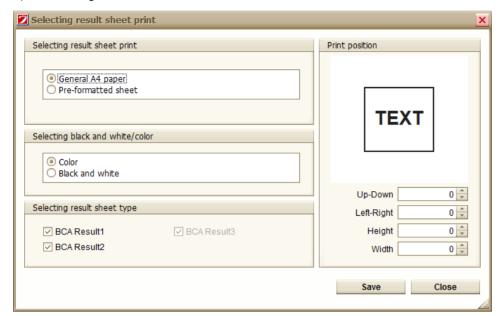
Port search can be done by automatic search

In case that auto search can't be done or multiple ports are used, designate port number manually by clicking on search button.

7) Connecting Bluetooth

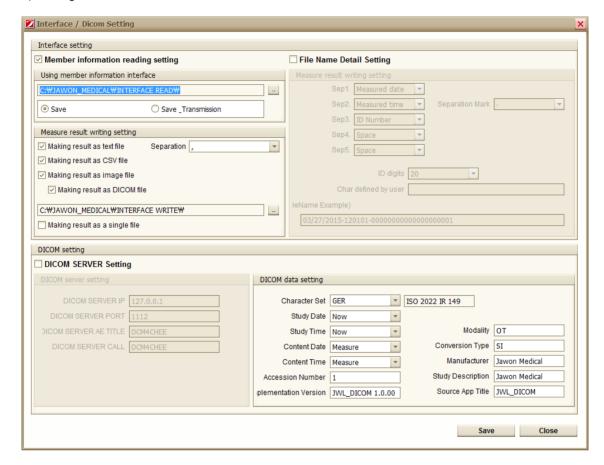
The menu used for connecting Bluetooth by FB100AS terminal. Please refer to "Bluetooth connection"

8) Print setting



- ① Selecting result sheet types: selecting A4 sheet or dedicated result sheet
- ② Selecting mono/color print: selecting color print or black and white print
- ③ Selecting result sheet print: body composition 1, body composition 2, body composition 3
- 4 Print position: adjusting print position
- 5 Up/down spacing: designating up/down spacing
- 6 Left/right spacing: designating left/right spacing
- ① Up/down size: designating height size of result sheet
- 8 Left/right size: designating width size of result sheet

9) Setting interface/DICOM



A) For interface member transmission use

Once member file is created on a particular route folder (picture 2 below), member saving and member transmission is automatically possible.

1. Interface member setting



- ① Once TXT file that member information is written in accordance with interface layout format is created or copied on folder designated on ②, member information files are read automatically by CONTACT software.
- ② Designate folder's route that creates or copies member information. Once 「...」 is clicked,

- the route can be changed.
- ③ In case that text files are created or copied on folder designated on ②, run only user information save.
- 4 In case that text files are created or copied on folder designated on ②, run user information save and member transmission.

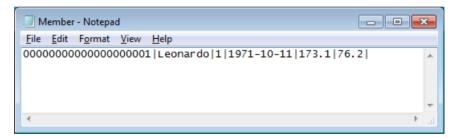
Item	Compulsory or not	Details
Member ID	Member ID being used in clinics and hospitals (20	
number		characters)
Member name	*	Member's name
Gender	*	Male 1 / Female: 2
Birth date	*	Ex) in case of 5 th , Aug, 1975, => it is provided in the format 1975-08-05
Height	*	Ex) in case that height is 153.2, => it is provided in the format 153.2
Weight		Ex) in case that weight is 76.5, it is provided in the format 76.5
Index of activity		Default value "2" ==> normal activity 0: stable status: lying down or no motion (Resting, Recuperation) 1: casual activity: walking time below 2 hours (Office worker) 2: ordinary activity: walking time below 4 hours (Factory worker) 3: heavy activity: walking time over 4 hours (Construction worker , Farmer) 4: extreme activity: whole body muscle user (Athlete, Miner)
Telephone		Ex) 010-1234-5678
e-mail address		Ex) admin@jawon.com
address		Rep. of Korea

File name of measured results

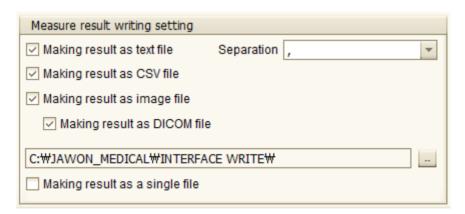
File name of Do not input the whole address, only name of file.

* Because created files are .TXT & .JPG, input only file names without the extension

Ex) member.txt file



B) Interface file creation settings



- Once BCA measurement is finished, measured results are created on folder designated on
 in TXT file format.
- Once BCA measurement is finished, measured results are created on folder designated on
 in JPG file format.
- ③ Once BCA measurement is finished, measured results are created on folder designated on
 ④ in CSV file format.

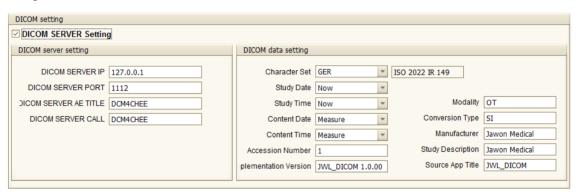
- Designate the route to the folder where measured result files are created. Once 「...」 is clicked, route can be changed
- © Creates measured member's results into a file on a full day-1 file basis. (But, only TXT and CSV file format are supported.)
- Ex) ALL MEASURE DATA -20070831.CSV, ALL MEASURE DATA -20070831.TXT

Notice



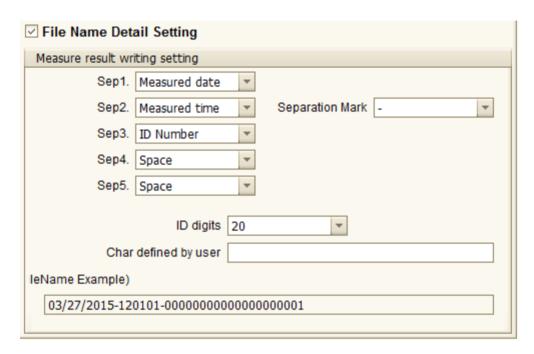
Measured result items are different depending on device models Regarding result items for each model, please refer to interface.pdf

⑥ Result files can be created as Dicom files on checking the "Create a result as Dicom files" dialogue

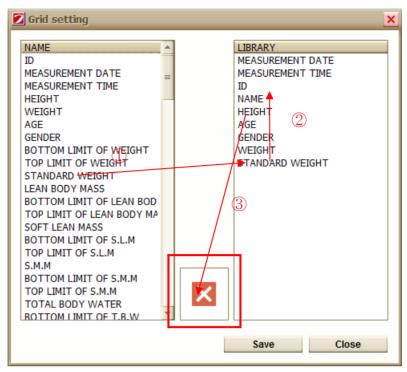


Options that can be applied when Dicom files are created can be selected in the above picture.

- ① DICOM server setting Check if the user sends DICOM files to the server.
- C) Detailed setting of results filename



- ① In case of [Basic Settings], the file name created at [measured result file write Settings] is created so as to meet basic format that "CONTACT" program provides. In the case of [User Setting], file name that is created at user's wish can be set on changing the entries of ②.
- ② The file name of the file which is created at [measured result file write setting] can be set.
- 3 Set the digits of the results file name user settings ID number (factory setting: The default ID digits)
- 4 Set the main characters in the user-defined characters of the resulting filename user setting
- 5 Display the example of file name created by selected items of 2.
- ⑤ The separator that is created by [measured result file write setting] between items in a TXT file can be set.
- 10) Grid setting

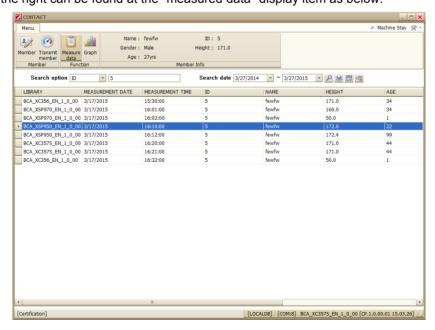


① Drag the item at the left side and release the mouse to the right of the screen so that the item is added.

The order can be changed by dragging the items to the right.

② Please drag the item that you want to delete to the right to the "X" mark and the item will be deleted.

Items on the right can be found at the "measured data" display item as below.



11) Selecting device

The model of Body composition analyzer can be selected.

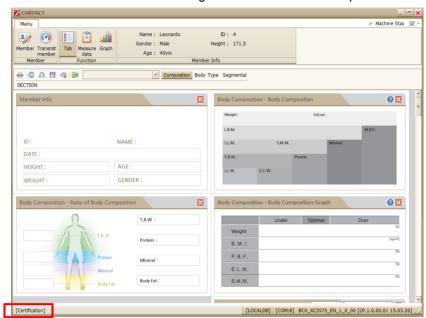


12) Environment settings



- 1) Language Setting: The language of the form can be set.
- ② Unit setting: The unit of measured data can be set.

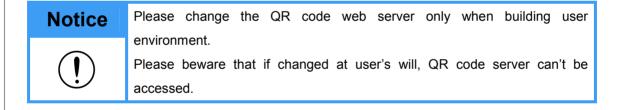
 (Certain models in which settings can be changed are available separately.)
- ③ Age setting: For Koreans, age can be selected between Korean age and international age.
- 4 Skin Setting: The design skin of the form can be changed.



Click "SKIN" menu on the bottom left to change the skin when user setup user's skin.

5 QR code web server

The address of the QR code can be changed when QR code is created.

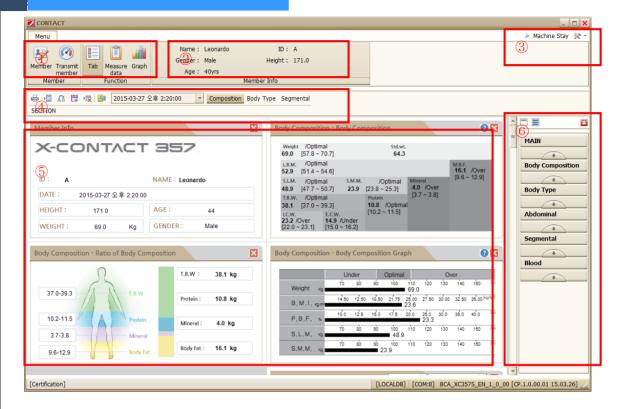


13) Program information

A window that displays the version of the software appears as follows.



Function Configuration



- 1 Function button
- 2 Member's Information Display
- 3 Device status information display
- 4 Function button for each screen
- ⑤ Results screen
- 6 Section navigation

1) Member

Click "member" button to display the Member Login screen window.



2) Member transmission

It is a function to transmit user's information logged-in to BCA.

- On pressing "Member transmission" button, the user's information such as height, gender and age that is stored with the logged-in ID is sent to BCA.
- When the transmission is complete, a ringing sound effect like "ttiri Ring" will be heard from the main body of BCA.
- Once the beep is generated, the user can conveniently measure body composition without inputting height, gender, age after weighing.
- In case that member transmission is not readily transmitted, an error message window will pop up saying "Member transmission failed." Then, make sure the communication setting has been done and the device has been connected properly to the computer.
- The measurement result stored in the device will be transferred to the program only if measured through the member transmission.
- 3) Member Search (Consecutive measurement)

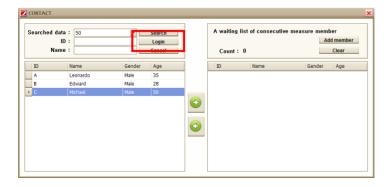
(The button is only activated on the screen of measuring data.)

1 Member login

It is possible to log-in as other members.

If you click the "Serch" button after inputting the serch term in the blank of ID or Name, the member list would be appeared.

After clicking with mouse on the member you want, you could log-in with the member if you click on "Log-in" button or double-click "Member list".



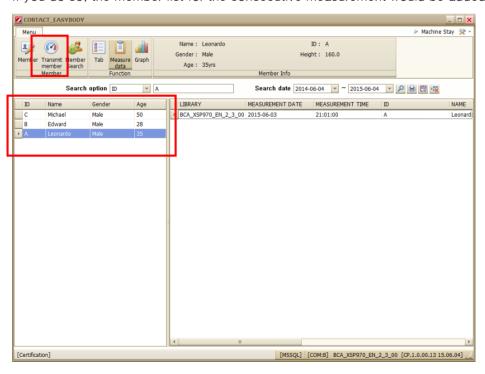
A waiting list of consecutive measure member Searched data: 50 Search ID: A Login Name : Leonardo Cancel Count: 3 Clear Name Gender Name Gender Michael Male 50 Edward Male 28 Edward Male 28 Michael Male 50

2 Consecutive Measurement

In the event that you want the consecutive measurement, you could add the user from the member list on the left side to "A waiting list of the consecutive measuring member" on the right side.

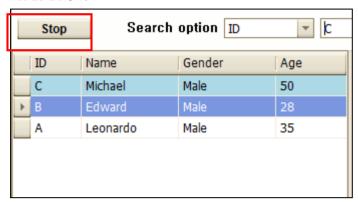
Pleae click button in case of adding the member list and click button in case of deleting the member list.

When the member list you need is completed to add, please click "Add member" button. If you do so, the member list for the consecutive measurement would be added as blow.



Start to measure in regular sequence after clicking the transmit member button.

The member who completed to measure would be marked with skyblue color in member list as below.



If you want to stop the consecutive measurement, please click

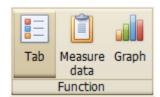
Stop

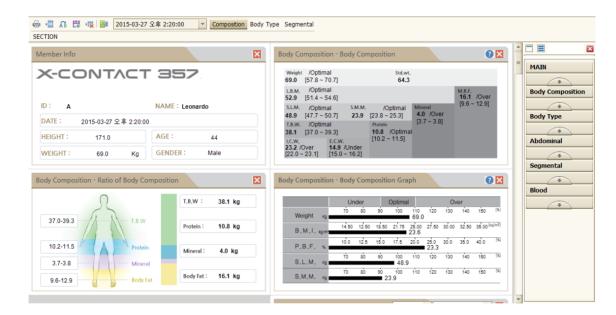
Notice



In case of using the consecutive measurement, "Measuring data" screen can not be moved to another screen.

3) Tab

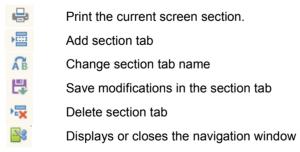




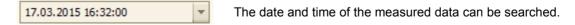
Display the measured data on the measured data display screen in sections, as shown in the figure above.

Sections can be added and deleted from each screen by a user.

Section function button



② Searching mearsured data



③ Tab

Body

Composition : The tab is provided as basic function. It can not be deleted.

Analysis

Body Type : The tab is provided as basic function. It can not be deleted.

Segmental

Result

: The tab is provided as basic function. It can not be deleted.

Notice

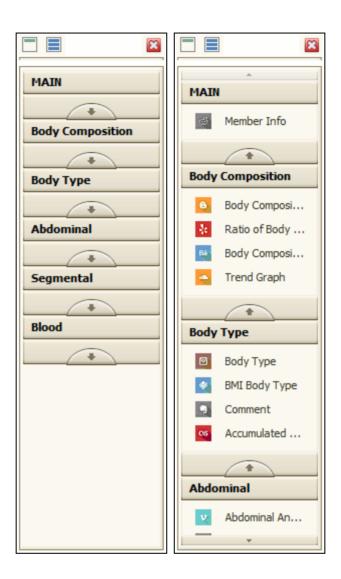


Three tabs are provided as basic function. Users can add up to eight at will.

4 Section navigation

<lmg 1>

<lmg 2>



- Group the navigation section items as shown in Figure 1.
- Expand the navigation section items as shown in Figure 2
- 3 Example of creating section



Add a tab on the main page by clicking button.

Name the tab "Abdominal / growth" and click the "Save" button.

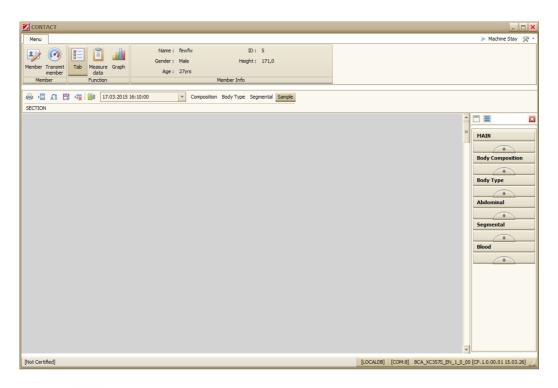


"Abdominal / Growth" section has been added on the section tab item.



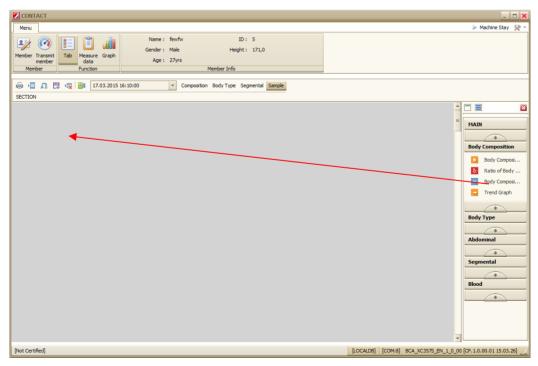
Click "Abdominal / Growth" tab

The initial screen is placed in an empty state as shown in the figure below.

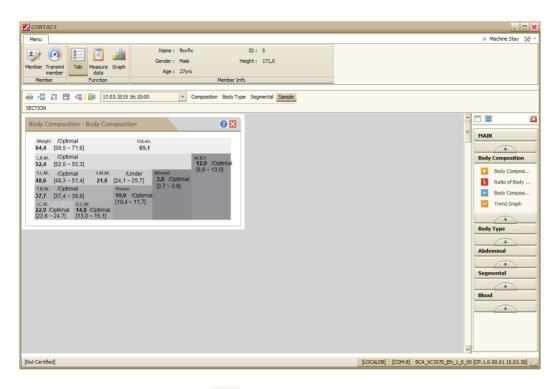


Click the button of the navigation to expand the navigation section.

As shown in the figure below, drag the section that you want to add with your mouse and drop the mouse to the space you want to place it.



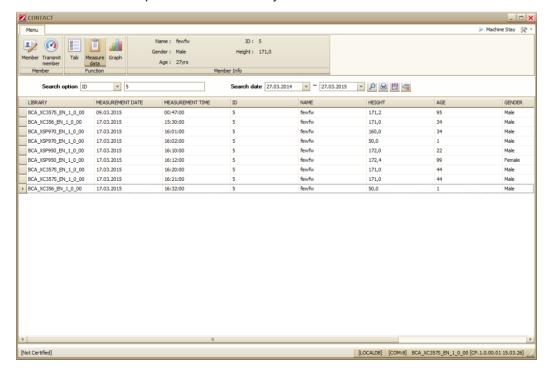
A section item has been added as shown in the figure below.

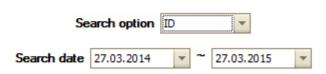


Save a section tab by clicking the button.

4) Measured data

Measured data can help user check the history of the measured data of the users.





Search user's measured data using ID or name.

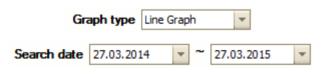
The data of desired date can be searched.

- Search the data by condition search.
- Preview the selected item results as result sheets.
- Save the measured data in the grid to Excel or text files.
- Deletes the data in selected items.

5) Graph

The accumulated data can be viewed in a graph.





Data can be displayed as a line graph or a bar graph.

The data of desired date can be searched.

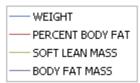
Search the data by condition search.

Save the graph as an image file.

If you check the items of search conditions, they can be displayed as a nested graph.

Search option	✓ WEIGHT	✓ PERCENT BODY FAT	SOFT LEAN MASS	✓ BODY FAT MASS
	LEAN BODY MASS	TOTAL BODY WATER	BASAL METABOLIC RATE	WAIST TO HIP RATIO

Classification of the graph can be checked by color and right legend.



Notice

You can see the graph of the desired range by holding down "SHIFT" key on your keyboard and dragging the mouse in the desired area to zoom in on the graph as you want.



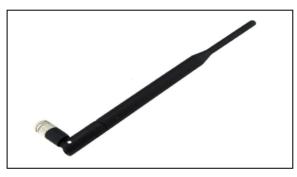
If you want to return to the beginning, click the right mouse button to return to the beginning.

How to connect to Buletooth

- 1) How to connect to Bluetooth device
 - ① Check the contents and connect the Bluetooth device to your PC.



FB100AS



Antena



USB Power Cable

Connect the Bluetooth device (FB100AS) and Antena.

Connect the Bluetooth device (FB100AS) and USB Power Cable.

Connect the Bluetooth device to the Serial port on the PC.

Connect the USB Power Cable into the USB port on your PC.

(See the diagram below)



In case of PC that does not have a serial port, connect it by USB To Serial cable.



5 Turn on the power switch on the left side of the Bluetooth device.



When you turn on the device switch, the Power LED will turn red.



6 Check the connection status of buletooth on the device

Notice

Make sure that bluetooth module in the device is installed well.

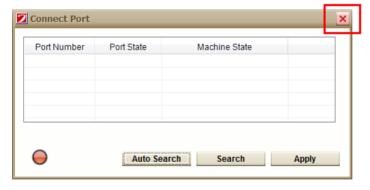


Ensure that bluetooth mode of the device is activated.

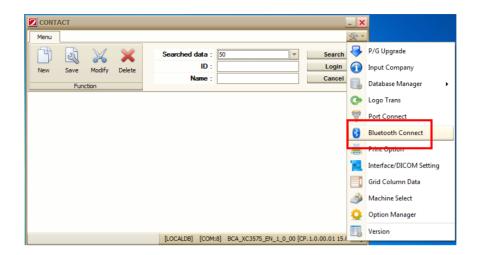
Please refer to the device manual regarding device issues

4 Run 'CONTACT' software.

Click the Close button in the upper right corner of the port connection window if it appears on the first run.



⑤ Click "Menu" -> click "Bluetooth Connection" when login window appears.



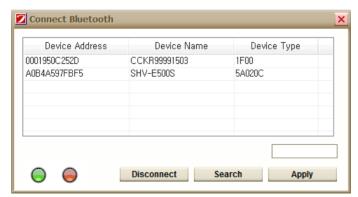
⑥ Search device for connection by clicking on "Search" button (It will take about 1-2 minutes.)



"Disconnect" button is used only if the Bluetooth LED is green.

Turn the bluetooth device switch OFF and then ON in the same way as "Disconnect" button.

The bluetooth devices will pop up as shown below once the bluetooth device is detected.
Please double-click the left mouse button on the desired device for connectivity.



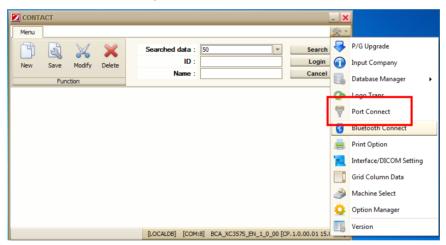
The connection is normal if all of the two LED lights are green at the bottom left corner.

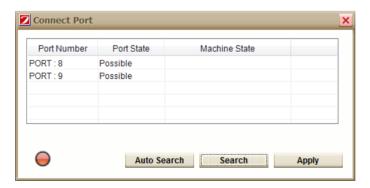
The window will close automatically.

The device's LED has a yellow-green light on the left and red light on the right as shown below. (It should be on continuously without blinking.)



After setting-up as above, connect to port as you would a normal USB cable connection, search and connect the port





After double-clicking on selected port, connection is completed.

2) How to connect Bluetooth on laptop

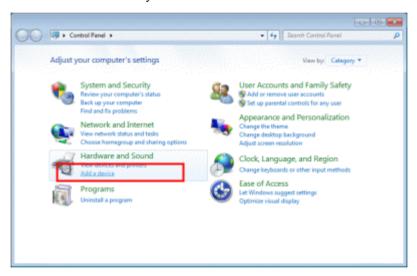
Notice

Laptop connection method may differ depending on the specification of laptop Bluetooth.



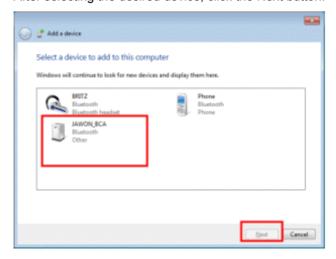
The connection to device could fail depending on the Bluetooth specifications.

- ① Switch on the device and check the Bluetooth connection status.
- 2 Run the Control Panel on your PC.



Click "Add a device" as shown above.

After selecting the desired device, click the Next button.



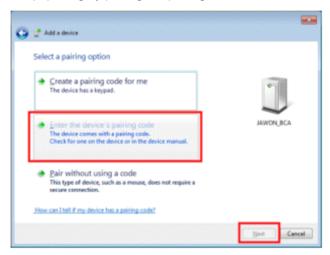
Notice



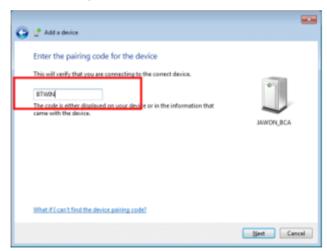
Bluetooth device name is the 12-digit code that is managed Jawon. $\label{eq:code}$

e.g.) It is the code type eg "CAKR00011501".

③ Attempt pairing by putting the pairing code.



④ Enter the pairing code "BTWIN" in the text box and click the Next button.

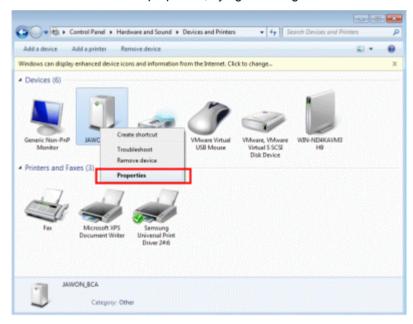


5 When the connection is complete, the screen appears as below.

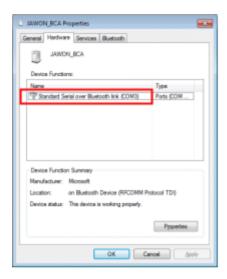


6 How to check the serial port number.

Run the Bluetooth device properties, by right-clicking on the mouse.

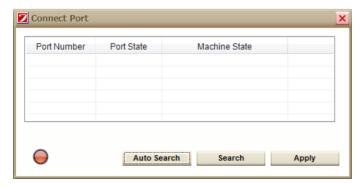


7 You can see the COM number on the device name part of the Hardware tab.



⑤ After setting-up as above, connect to port as you would a normal USB cable connection, search and connect the port





After double-clicking on selected port, connection is completed.