



Surgic Pro2 App



OPERATION MANUAL

MADE IN JAPAN

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1 Introduction

This application (Surgic Pro2 App) can display and save operation data such as rotation speed and torque by connecting to Surgic Pro2 (hereinafter referred to as the control unit) via Bluetooth. Connecting the control unit to Osseo100+ (option) enables display and storage of the ISQ value displayed on Osseo100+.

The contents of this operation manual may differ depending on the terminal or the application version. We kindly ask for your understanding.

2 Precautions for Handling and Operation

- Read these safety cautions thoroughly before use and operate the product properly.
- These indicators are to allow you to use the product safely, prevent danger and harm to you and others. These are classified by degree of danger, damage and seriousness. All indicators concern safety, be sure to follow them.

Class	Degree of Risk
▲ CAUTION	Hazard that could result in light or moderate injury or damage to the device if the safety instructions are not correctly followed.
NOTICE	General product specification information highlighted to avoid product malfunction and performance reduction.

▲ CAUTION

- Close all other applications when using this application.
- Use a terminal with sufficient storage space (1GB or more). Insufficient storage space may cause the app to close unexpectedly, fail to communicate with Surgic Pro2 or be unable to save data.
- Read this Operation Manual before use to fully understand the functions of the application.

3 Connection to the Control Unit

3-1 Bluetooth connection

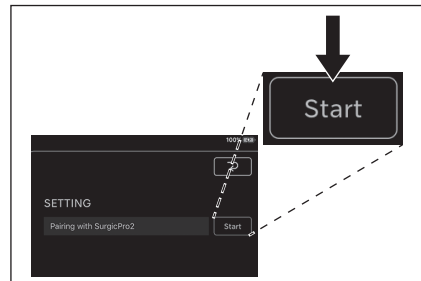
To use this application, you must pair the control unit with the iPad on which this application is installed. Pairing is required only for the first time. See “3-2 Pairing” for pairing method. After that, when the control unit is turned on while the application is running, the connection is performed automatically.

3-2 Pairing

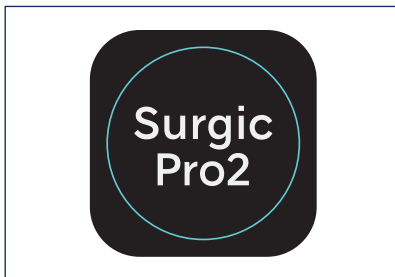
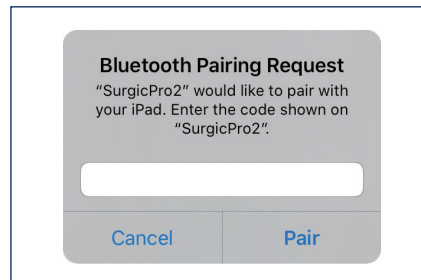


- 1 Turn on the main power switch of Surgic Pro2.
- 2 Press and hold the Setting key for 2 seconds or more to display “BLE SET”.
- 3 Press the Enter key.
- 4 Press the TORQUE key and select “PC”.
- 5 Press the Enter key.
- 6 Launch the App.

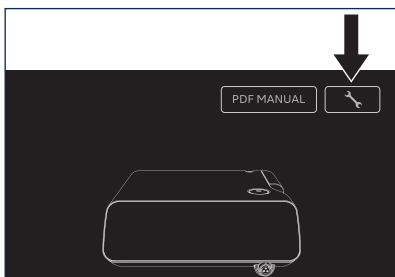
- 8 Touch “Start”.
Wait for a while until “Bluetooth Pairing Request” is displayed.



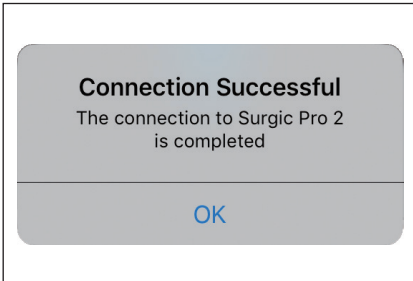
- 9 Enter the code “123456” and touch “Pair”.



- 7 Touch the Setting icon.



- 10 When “Connection Successful” is displayed on the application, pairing is completed.



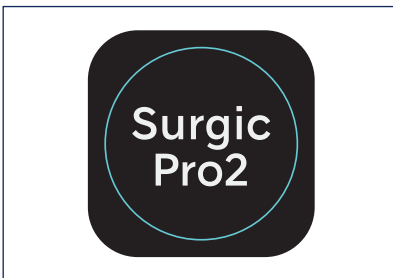
NOTICE

- When the terminal and control unit are paired for the second time or later, the entry of the pairing key may not be required. Even in this case, the pairing will be completed without any problems.

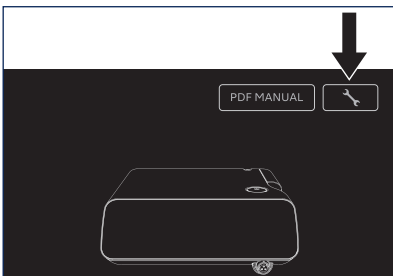
3-3 Re-pairing

When you pair a terminal to a second control unit, or when you pair a terminal to a control unit again after deleting the pairing information by the Link Function of the control unit, perform the re-pairing of the control unit and the terminal.

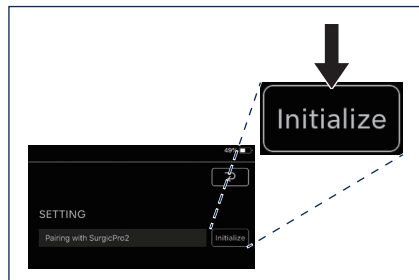
- 1 Launch the App.



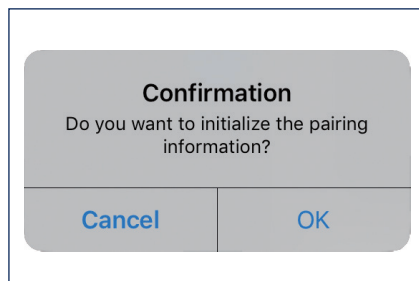
- 2 Touch the Setting icon.



- 3 Touch “Initialize”.



- 4 Touch “OK”.

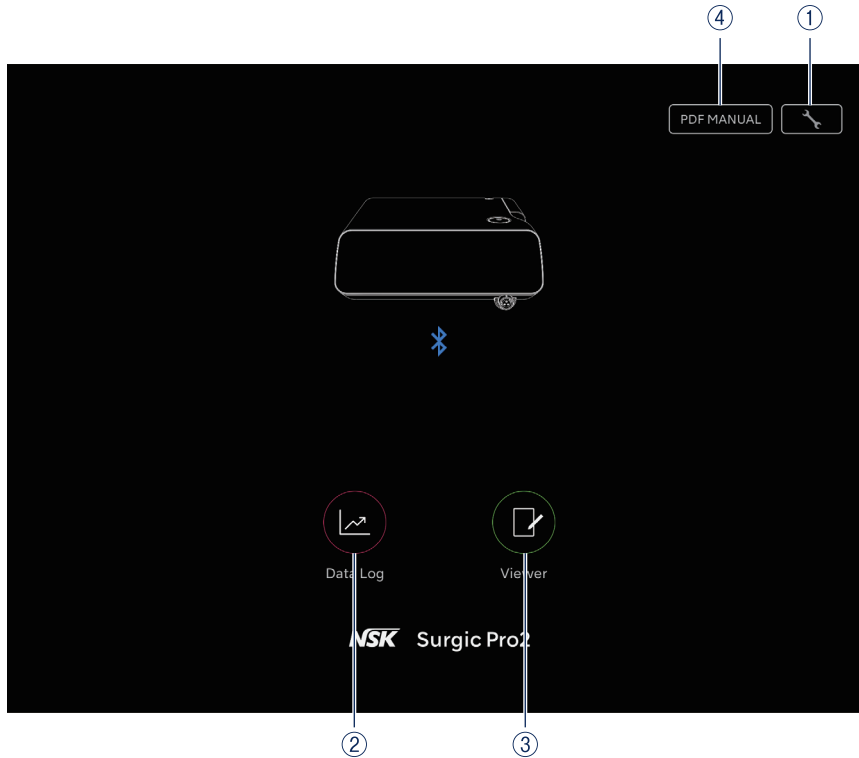






- 5 Perform pairing again according to “3-2 Pairing”.

4 Home Screen

When this application is started, the Home screen is displayed. This screen allows pairing operation. Touch the Data Log icon to save the operation data. To check the recorded operation data, touch the Viewer icon.

4-1 Function list



No.	icon	Name	Function
①		Setting icon	Pairing operation
②		Data Log icon	Move to Data Log screen
③		Viewer icon	Move to Viewer screen
④		PDF MANUAL	Display the operation manual of this application in PDF format.

⚠ CAUTION

- If the Data Log icon is not displayed, the terminal and control unit are not connected. Check the connection status with control unit.

4-2 Data Log icon

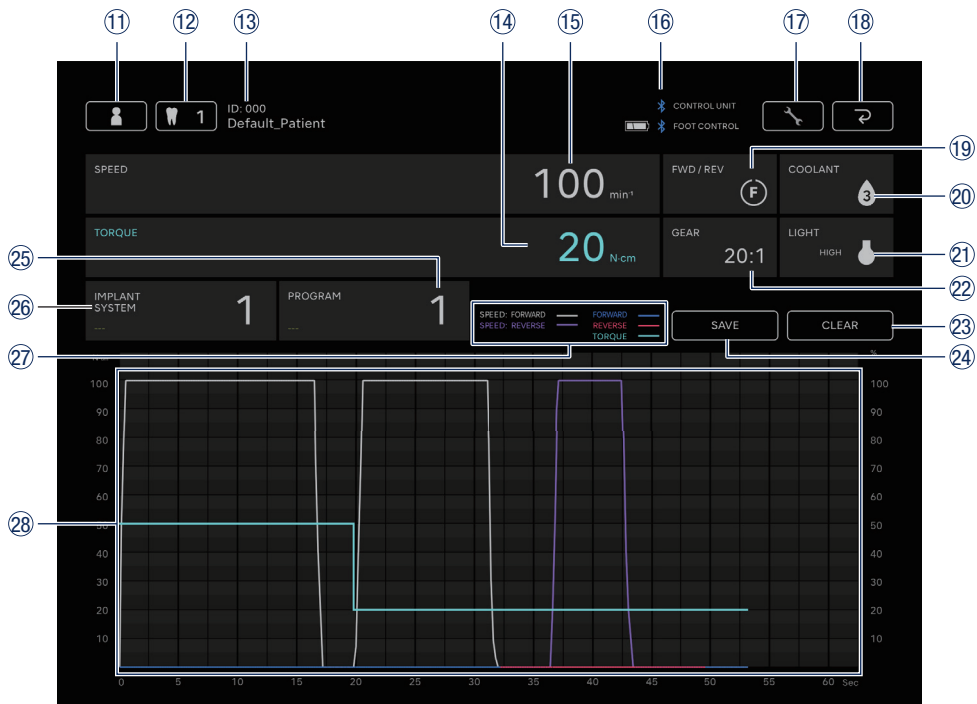
Touch the Data Log icon to go to the Data Log screen. See “5 Data Log Screen”.

5 Data Log Screen

Touch the Data Log icon on the Home screen to display the Data Log screen. On this screen, the values displayed on the control unit screen can be checked on the display of your terminal. When the motor is rotated, it automatically draws a graph of the rotation speed and torque.






In this screen, the displayed values can be saved as operation data. Calibration and error are displayed depending on the condition of the control unit.

5-1 Data Log screen



No.	icon	Name	Function
⑪		Dentist/patient information change icon	Register, select, edit, and delete dentist/patient information.
⑫		Tooth number selection icon	Select tooth to be treated.
⑬	-	Selected patient information	Check selected patient information (ID and Name).
⑭	-	TORQUE display	Check the torque displayed on the control unit.
⑮	-	SPEED display	Check the rotation speed displayed on the control unit.
⑯	-	Bluetooth connection status display	Check connection status to the control unit. Check connection status to the foot control and battery level. : Connected No display: Not connected
⑰		Setting icon	Select the showing/hiding of graph drawing. Select the orientation of PDF files.

Data Log Screen

No.	icon	Name	Function
⑱		Return icon	Move to the Home screen.
⑲	-	FWD/REV display	Check the rotation direction displayed on the control unit.  : Forward rotation  : Reverse rotation
⑳	-	COOLANT display	Check the coolant solution flow level displayed on the control unit.
㉑	-	LIGHT display	Check the light level displayed on the control unit.
㉒	-	GEAR display	Check the gear ratio displayed on the control unit.
㉓		CLEAR icon	Delete unsaved operation data.
㉔		SAVE icon	Store operation data in CSV or PDF format.
㉕	-	PROGRAM display	Check the program displayed on the control unit Set any program name.
㉖	-	IMPLANT SYSTEM display	Check the implant system displayed on the control unit. Set any implant system name.
㉗	-	Explanatory notes	SPEED: FORWARD: The ratio of the actual rotation speed to the maximum rotation speed set by the control unit when forward rotation is selected. SPEED: REVERSE: The ratio of the actual rotation speed to the maximum rotation speed set by the control unit when reverse rotation is selected. FORWARD: Actual torque when forward rotation is selected. REVERSE: Actual torque when reverse rotation is selected. TORQUE: Torque upper limit set by the control unit.
㉘	-	Graph area	Display as a graph based on the rotation speed and torque displayed on the control unit.

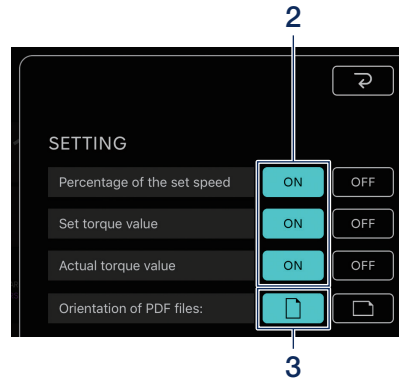
5-2 Torque and rotation speed showing/hiding selection

① Touch the Setting icon.

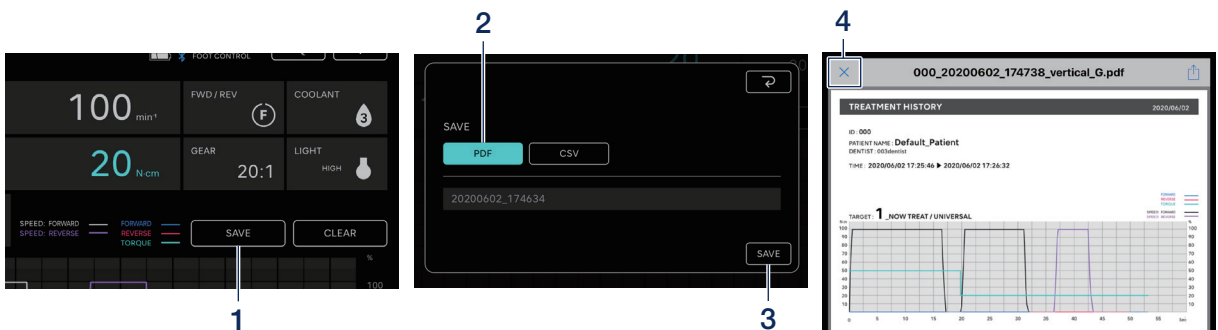


② Touch “ON” and “OFF” to select whether to show or hide the graph drawing.

③ Select the orientation of the PDF files to be saved.



5-3 Storing operation data



① Touch “SAVE”.

② Select the format to save and check the file name. You can choose between two formats: PDF format and CSV format. File names are automatically determined based on the patient ID and date. See “8 Storage of Treatment Data”.

③ Touch “SAVE” to save operation data and display the saved file.

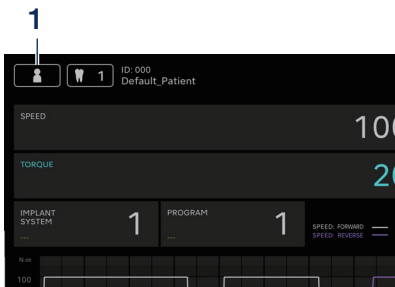
④ Touch the “×” icon to return to the Data Log screen.

NOTICE

- When the size of the data to be saved becomes large (40 pages or more in PDF), the data of CSV or PDF is split and saved.

5-4 Change in dentist/patient information

- 1 Touch the dentist/patient information change icon to open the dentist/patient information change dialog.

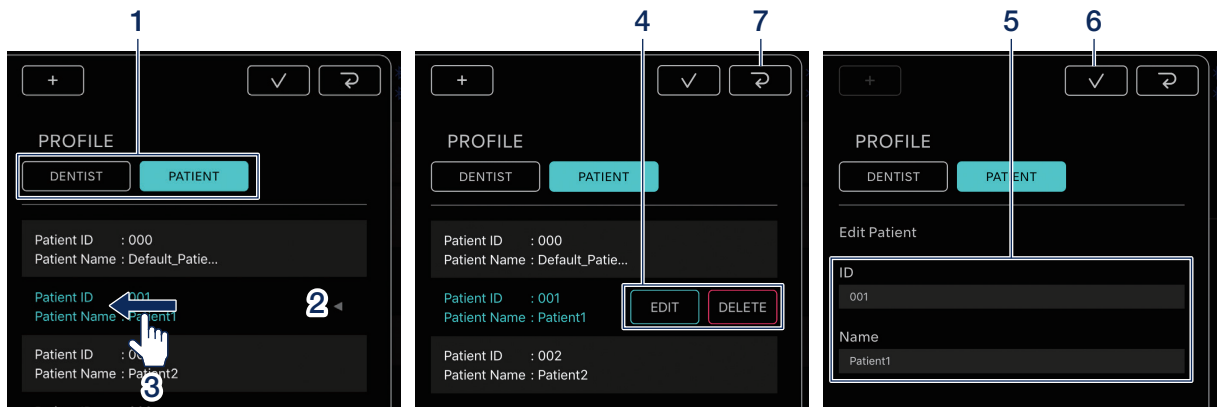


5-4-1 Registration of new dentist/patient information



- 1 Touch "DENTIST" or "PATIENT".
- 2 Touch the "+" icon to display the patient or dentist information registration dialog.
- 3 Enter the ID and name.
- 4 Touch the "✓" icon.
- 5 Touch the "↶" icon to return to the Data Log screen.

5-4-2 Editing and deleting dentist/patient information



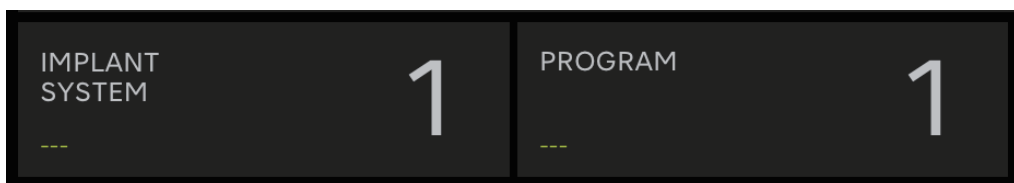
- ① Touch "PATIENT" or "DENTIST".
- ② Touch the dentist or patient you want to edit or delete.
- ③ Flick left.
- ④ Touch "EDIT" or "DELETE".
 EDIT: Edit the registered dentist or patient information
 DELETE: Delete registered dentist or patient information
- ⑤ If "EDIT", modify the dentist or patient information.
- ⑥ Touch the "✓" icon.
- ⑦ Touch the "↶" icon to return to the Data Log screen.

NOTICE

- You cannot edit or delete dentist/patient information that is entered by default (ID:000).
- You cannot delete the dentist/patient information once the data has been saved. EDIT allows only Name changes.

5-5 Registration of implant system name and program name

You can register the implant system name and program name by touching the below in the IMPLANT SYSTEM and the PROGRAM displays on the Data Log screen. The default is "---".

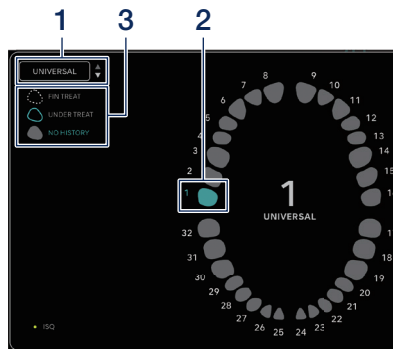




NOTICE

- The implant system name and program name can be registered for each DENTIST.
- When saved in CSV format, the implant system name and program name registered at that time are also saved.

5-6 Tooth number selection

Touch the tooth number selection icon to display the tooth number selection dialog. In this dialog, you can change the numbering method, select teeth to be treated, and record the treatment history.



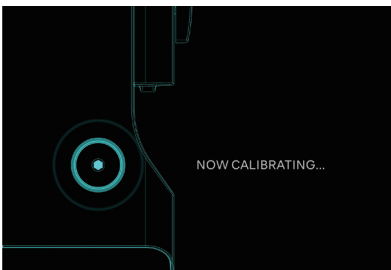
- 1 To change the numbering method, touch “UNIVERSAL”. You can select the UNIVERSAL and FDI methods.
- 2 Touch the tooth icon to select the tooth to be treated. The selected tooth icon will flash in blue, and the number at the center will be the number of the tooth selected.
- 3 To record the treatment history, touch “NO HISTORY”, “UNDER TREAT”, or “FIN TREAT”. “NO HISTORY” is the default value for all teeth.
- 4 Touch the “” icon to determine. To cancel the selection, touch the “” icon.

5-7 Displaying the status of the control unit

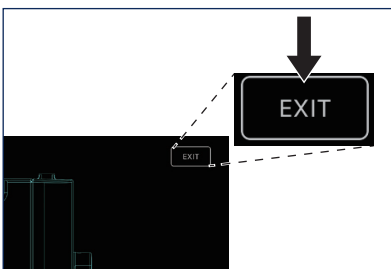
The status of the connected control unit can also be checked on the terminal.

5-7-1 Calibration mode

The connected control unit enters calibration mode.

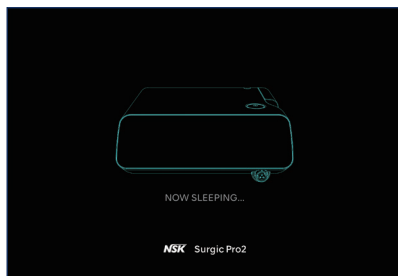


To return to the Home screen, touch anywhere on the screen and touch “EXIT”. A confirmation dialog box is displayed and touch “OK”.



5-7-2 SLEEP mode

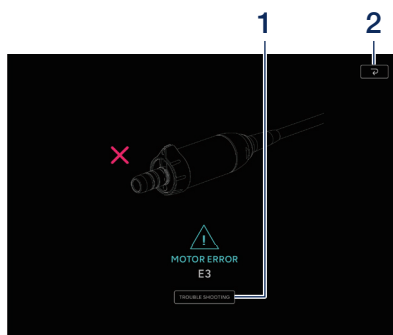
The connected control unit enters SLEEP mode.



To return to the Home screen, touch anywhere on the screen and touch "EXIT". A confirmation dialog box is displayed and touch "OK".

5-7-3 Error code display

If an error occurs in the connected control unit and an error code is displayed on the LCD, the following is displayed in the application.



- ① Touch "TROUBLESHOOTING" to check the content of the error.
- ② If the control unit does not recover from the error, touch the "↺" icon. It returns to the screen immediately before the error. If you have already obtained the operation data, you can save it.

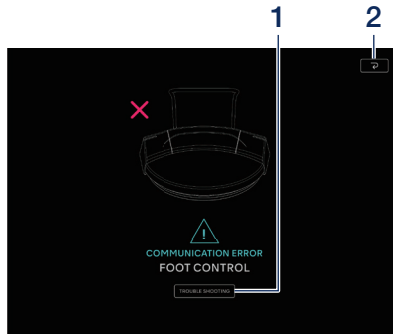
NOTICE

- Display varies depending on the error code.

Data Log Screen

5-7-4 Communication error display

If “COM ERR” is displayed on the connected control unit, the following is displayed in the application.



- 1 Touch TROUBLESHOOTING to check the content of the error.
- 2 If the control unit does not recover from the error, touch the “” icon. It returns to the screen immediately before the error. If you have already obtained the operation data, you can save it.

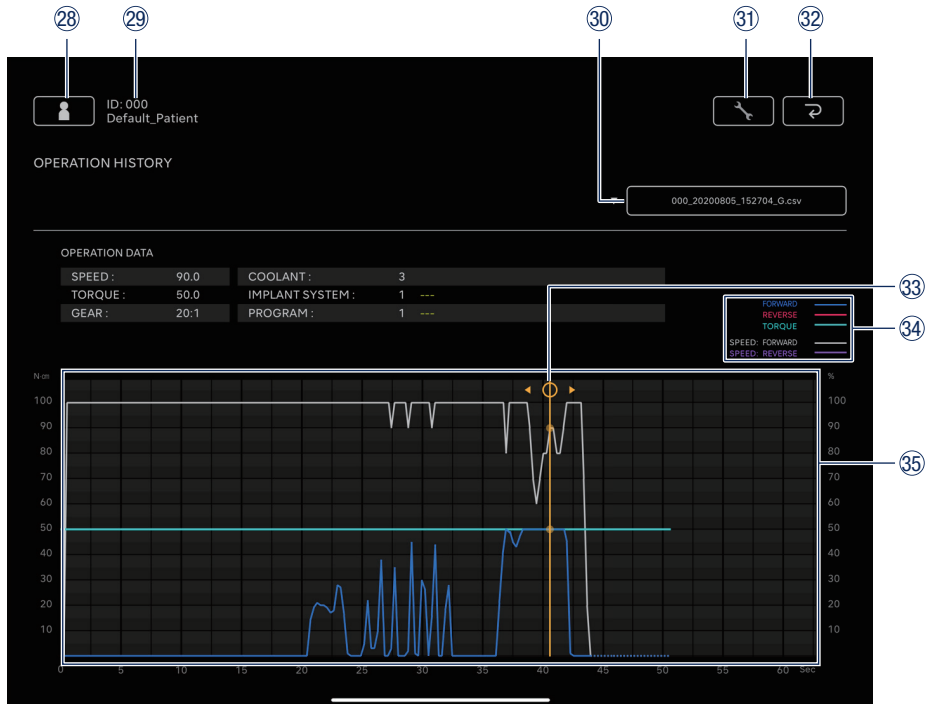
NOTICE

- Display varies depending on the error code.

6 Viewer Screen

In the Viewer screen, the saved operation data can be checked. The Viewer screen can be opened even if it is not connected to the control unit.

6-1 Function list



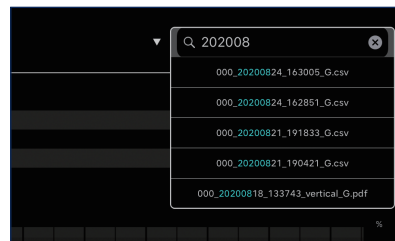
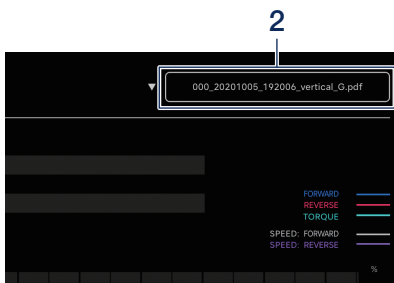
No.	icon	Name	Function
②⑧		Dentist/patient information change icon	Register, select, edit, and delete dentist/patient information.
②⑨	-	Selected patient information	Check selected patient information (ID and Name).
③⑩	-	Search bar	Select the operation data to display. Select CSV file: Display graph in Graph display area. Select PDF file: Display PDF.
③①		Setting icon	Select the showing/hiding of graph drawing.
③②		Return icon	Move to the Home screen
③③	-	Detail display bar	Touch the graph display area to display and move it. Check detailed numerical values by "OPERATION DATA". To hide the Detail display bar, double-touch the graph display area with two fingers.

Viewer Screen

No.	icon	Name	Function
③④	-	Explanatory notes	<p>FORWARD: Actual torque when forward rotation is selected.</p> <p>REVERSE: Actual torque when reverse rotation is selected.</p> <p>TORQUE: Torque upper limit set by the control unit.</p> <p>SPEED: FORWARD: The ratio of the actual rotation speed to the maximum rotation speed set by the control unit when forward rotation is selected.</p> <p>SPEED: REVERSE: The ratio of the actual rotation speed to the maximum rotation speed set by the control unit when reverse rotation is selected.</p>
③⑤	-	Graph display area	Display the selected GRAPH data.

6-2 Selection of the file to view

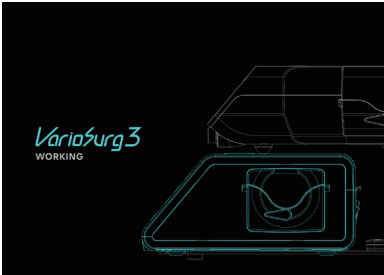
- ① Select the patient.
- ② Touch the search bar to display the list of saved files.
- ③ Touch the file to view.



7 Connection to Optional Products

7-1 Connection to Link Module

When the control unit and Link Module are connected, VarioSurg 3 can be operated with the wireless foot control of Surgic Pro2. When VarioSurg 3 is operated, the control unit is in the LINK mode. The Data Log screen is as shown in below.



To return to the Home screen, touch anywhere on the screen and touch "EXIT". A confirmation dialog box is displayed and touch "OK".

7-2 Connection to Osseo 100+

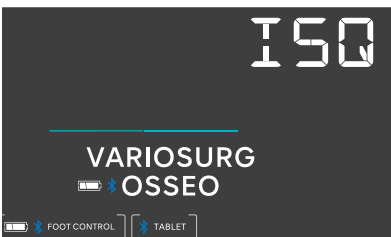
Bluetooth connection between Osseo 100+ and the control unit is enabled. (Refer to the Osseo 100+ operation manual for the pairing method and connection method.)

7-2-1 Connection to Osseo 100+

You can save the ISQ VALUE data (GRAPH data, patient data, tooth numbers, etc.) in the storage of your terminal in the following way. The data is saved in both CSV and PDF formats.

- 1 Connect Osseo 100+ and your terminal to the control unit via Bluetooth. The terminal is not directly connected to Osseo 100+.
- 3 Launch the App.
- 4 Touch the Data Log icon on the Home screen to display the Data Log screen.

- 2 Move the control unit to ISQ mode.
When the control unit and Osseo 100+ are connected, press and hold the LINK key of the control unit for more than 2 seconds. If "ISQ" is displayed on the LCD display of the control unit, it switches to ISQ mode.



- 5 When the ISQ value is measured with Osseo 100+ under this condition, the ISQ value displayed on the control unit is also displayed on the screen of the terminal. Touch "SAVE" to save the ISQ VALUE data to the terminal storage and the PDF is automatically displayed.

NOTICE

- The CSV file of ISQ value is one for each patient information. If you already have a CSV file of the patient information, a new ISQ value will be added to the file.

Connection to Optional Products

7-2-2 Editing ISQ data

The data saved in CSV can be edited by moving a tooth number or deleting ISQ data.

NOTICE

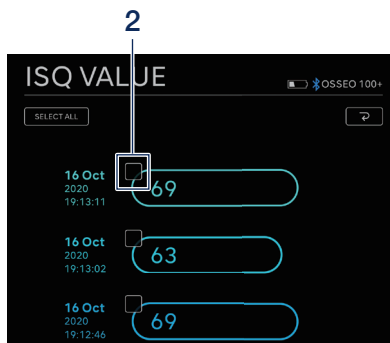
- You can edit with either Data Log Screen or Viewer Screen.
 - Data Log Screen: Only the ISQ value for the selected tooth number is displayed.
 - Viewer Screen: All ISQ values for selected patient are displayed.

1 Touch “EDIT”.



2 Touch the checkbox of the ISQ value you want to edit.

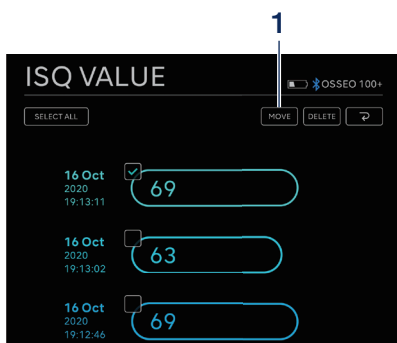
- “SELECT ALL” icon: You can select all checkboxes.
- “DESELECTION” icon: You can deselect all checkboxes. (Selecting all checkboxes changes the icon)



3 If you want to move the tooth number, see “Moving the tooth number”, and if you want to delete ISQ data, see “Deleting ISQ data”.

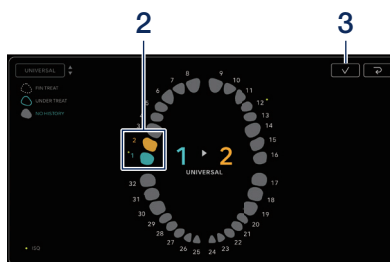
Moving the tooth number

1 Touch “MOVE”.

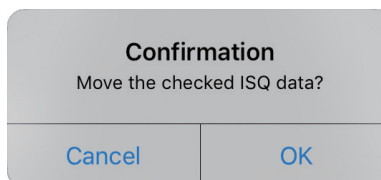


2 Touch the tooth you want to move to. (The selected tooth and its number are displayed in yellow)

3 Touch  icon.



4 The confirmation dialog box is displayed. Touch “OK” if you want to move the tooth number.

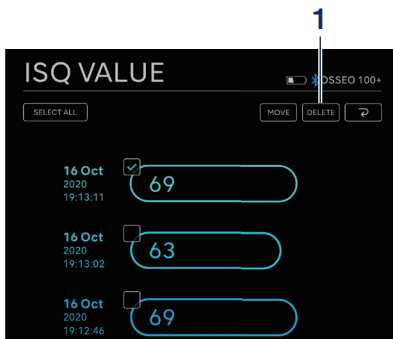


NOTICE

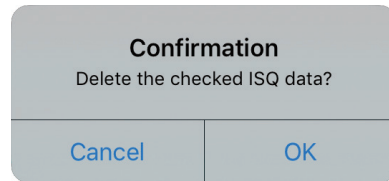
- In Data Log Screen, if you move the tooth number, the ISQ value will not be displayed on the screen. To display the ISQ value, select the moved tooth number.

Deleting ISQ data

1 Touch "DELETE".



2 The confirmation dialog box is displayed. Touch "OK" if you want to delete ISQ data.



NOTICE

- Only CSV files can be edit. PDF files cannot be edit.

NAKANISHI INC.  www.nsk-dental.com
700 Shimohinata, Kanuma, Tochigi 322-8666, Japan

NSK Europe GmbH 
Elly-Beinhorn-Strasse 8, 65760 Eschborn, Germany

Visit our website

