WEBCEPH
User Manual
User Manual Information

This user manual is used solely for the purpose of explaining the use of WebCeph. This document cannot be printed or reproduced without the permission of the copyright holder.

Users are recommended to read this manual carefully before understanding the installation and functionality of WebCeph. In addition, this manual may be modified without notice. Also, the manual distributed with the product may not contain the latest version of the product.

For inquiries related to the product and this manual, please contact the following contact information.

Contact

• Website: http://www.WebCeph..com

Document information

• Manual Name: WebCeph User Manual
• Manual Version: 1.0.0
• Relevant WebCeph Version: 1.0.0

Customer Notice

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2. Some features of the product may not be available in all countries, languages and currencies.
3. It is illegal to reproduce and distribute the product without the consent of Assemble Circle.
4. Users should read this manual thoroughly before using this product.
5. In order to use the full functions of WebCeph, please follow the PC specifications described in this manual.

Key Features of WebCeph

WebCeph allows users to perform the following functions while other devices are ready for use.
1. Patient information management
2. Acquire images from equipment and manage storage
3. Patient image view (provides tools for image processing and viewing functions)
4. Reinforcing counseling through counseling content support
5. Write a report using patient images

WebCeph can be used in a network environment. If installed on multiple PCs, patient and image databases can be shared and used in multiple workspaces.
## CONTENTS

User Manual Information .................................................................................. 2
Key Features of WebCeph .................................................................................. 2

### CHAPTER 1 WHAT IS WEBCEPH?

1. What is WebCeph? ....................................................................................... 5
2. PC System Specifications for WebCeph ...................................................... 5
3. WebCeph Installation and run ...................................................................... 5
4. WebCeph Update ......................................................................................... 5
5. WebCeph SignUp ......................................................................................... 5
6. Account Management .................................................................................. 6
7. Membership Upgrade .................................................................................. 7

### CHAPTER 2 HOW TO START WEBCEPH?

1. WebCeph Start ............................................................................................ 10
2. Caseroom ..................................................................................................... 11

### CHAPTER 3 MAIN FUNCTIONS OF WEBCEPH

1. Digitization .................................................................................................. 13
2. Analysis ....................................................................................................... 15
3. Assessment .................................................................................................. 17
4. Treatment .................................................................................................... 18
5. Superimposition .......................................................................................... 21
6. Viewer ......................................................................................................... 23
7. Face ............................................................................................................. 24
8. Case ............................................................................................................. 25
9. Time-lapse ................................................................................................... 26
10. How-to video ............................................................................................... 26

### CHAPTER 4 OTHERS

1. Specifications .............................................................................................. 28
2. Member classification ................................................................................... 28
3. Error types and actions to be taken when they occur .................................. 28
4. Manufacturer Contact .................................................................................. 30
5. Indicated items ............................................................................................ 30
6. Re/revision history ....................................................................................... 31
CHAPTER 1

What is WebCeph?

1. What is WebCeph?
2. PC System Specifications for WebCeph
3. WebCeph Installation and run
4. WebCeph Update
5. WebCeph SignUp
6. Account Management
7. Membership Upgrade
1. What is WebCeph?

WebCeph is the Dental Imaging Software that enables users to save, manage, diagnose, and acquire patients' images. WebCeph is equipped with management and processing system for various images. Images can be acquired directly from the equipment that WebCeph currently supports. In addition, images can be imported from other digital sources.

2. PC System Specifications for WebCeph

<table>
<thead>
<tr>
<th>No.</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part name</td>
<td>SoftWare</td>
</tr>
<tr>
<td>Part control number</td>
<td>WebCeph</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications or Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model name: WebCeph Ver. 1.0.0</td>
</tr>
<tr>
<td>Development Tool: Sublime Text 3</td>
</tr>
<tr>
<td>Application:</td>
</tr>
<tr>
<td>Google Chrome Ver. 84.0.4149.125</td>
</tr>
<tr>
<td>Mozilla Firefox Ver. 79.0</td>
</tr>
<tr>
<td>Microsoft Edge Ver. 44.17763.1.0</td>
</tr>
<tr>
<td>- HARDWARE:</td>
</tr>
<tr>
<td>CPU: x64 based processor</td>
</tr>
<tr>
<td>RAM: More than 8 GB</td>
</tr>
<tr>
<td>Broadband internet connection and internet connection speed of 1Mbps or higher</td>
</tr>
</tbody>
</table>

3. WebCeph Installation and run

This software is a Software-as-a-Service(SaaS) cloud solution that does not require a separate program installation.

Google Chrome, Mozilla Firefox Ver.: You can use it by accessing www.webceph.com using a cloud environment such as Microsoft Edge.

4. WebCeph Update

WebCeph Server Update (Microsoft Windows & Mac OS setting)

- This software is a Software-as-a-Service (SaaS) cloud solution, and you can access https://webceph.com in an Internet-enabled environment to maintain the latest version of the software.

5. WebCeph SignUp

1. When accessing www.webceph.com, click the free sign-up button on the initial screen.

2. After entering personal information, click on the Next button. (Password must be at least 8 characters.)

3. After selecting your country/region, select your occupation. You can also enter the name of the hospital you belong to and a link to your personal Facebook page.

- Installation of separate updates is not required.
- If you find a problem during use, you can search for similar queries on the Q&A bulletin board, and if you cannot find a solution to the problem, you can contact admin@assemblecircle.com to solve the problem.
6. Account Management

① If you mouse over the left side of the homepage after logging in, the list bar is activated.

② When you click Account, you can edit the member information, change password, and delete account.

③ After confirming and agreeing to the Terms of Use and Privacy Policy, complete the membership registration.
① After accessing the web page, log in with the account that has been registered for membership.

② Click the Upgrade button within the homepage.

③ After checking the benefits of the membership upgrade, click on the activated Terms of Use.

④ Check the terms of use.

⑤ After reading the terms and conditions, check on the box to agree.

⑥ Register credit card information to finish payment and click Subscribe.

7. Membership Upgrade

Hospital information can be updated, and logos and member signatures can be registered.
⑦ Check your current membership status.

Membership

Current Membership

WEBCEPH PLUS
CHAPTER 2

How to start WebCeph?

1. WebCeph Start
2. Caseroom
1. WebCeph Start

① If you connect to www.webceph.com using various browsers, the login/membership page is displayed on the screen.

② After logging in, you will see the initial screen.

③ By scrolling down, you can access various features such as gallery, scheduler and more.

④ WebCeph Main Menu: If you mouse over the human-shaped emoticon on the left side of the main page, the hidden list will be activated.

⑤ Click on a channel to go to the Patient List tab. (A summary of the scheduler for the day is displayed on the right side of the list.)

⑥ You can enter patient information by clicking. If you click, you can only search for the specified tag. (WebCeph PLUS only)

⑦ When an individual patient is selected, that patient’s information, records and clinical picture are displayed.
⑧ If you want to use a picture that is taken, you can open the image stored on the local PC in WebCeph, check first, and then upload it.

⑨ Click on the corresponding upload field to upload. (Provided file format: JPG, PNG, BMP)

⑩ The selected image appears in a box within the Records tab.

⑪ Click on the corresponding upload field to upload. (Provided file format: JPG, PNG, BMP)

2. Caseroom

① If you click Case Room in the channel list, the Case Room page appears. If you click on, you can create a time-lapse of the patient's treatment. (Two or more records are required.)

② You can select two or more records to compare at a glance.

③ You can compare clinical pictures you want at once.

④ When is clicked, is activated. You can select a record to create a time-lapse of the treatment process.

⑤ You can also add only the templates you want by clicking and .

⑥ The completed case can be saved as an image on the local PC via and on the server via .

⑦ Through each toggle, the presence or absence of a watermark and the date hiding function can be used.
CHAPTER 3

Main functions of WebCeph

1. Digitization
2. Analysis
3. Assessment
4. Treatment
5. Superimposition
6. Viewer
7. Face
8. Case
9. Time-lapse
10. How-to video
1. Digitization

This tab measures the uploaded clinical picture.

1. Medical Imaging Digitization

1. Allows you to move to a higher level.
2. This is the patient information area, which displays the name, gender, age, and date of the video.
3. You can move between functions.
4. This is the area to display the medical image of the selected patient.
5. This is the area for image processing, simulation and storage.
6. This is the area where the zoom function is provided according to the mouse cursor.

2. Auto Digitization

When entering the page, the selected clinical image will be displayed on the screen and the measurement point will be automatically displayed. If the measurement is not automatically displayed, click the

- A.I. Digitization

to start measurement. When measurement is complete,

- A.I. Digitization

will change to this icon.

If you want to change the coordinates of the measured point, you can change the measured point through the

- Modify

icon. When you click on the button, the following pop-up will be displayed.

Please, save after finishing adjustment.

Cancel OK

change the measurement point, Click on the

- Save

icon to save it to the server.

3. Reset measurement point

When you want to initialize the measured point, click on the

- Reset

icon. When you click on the,

the following pop-up will be displayed.

All landmarks of this record will be deleted. Are you sure?

Cancel OK

Click on the OK button to initialize the measurement points as shown below.

4. Adding measuring point

In addition to automatically measured points, users can add measurement points arbitrarily. When you click on the

- Extra Landmarks

in section 5, the following pop-up will be shown.

Please, save after digitizing extra landmarks.
You can add extra landmarks up to 10.
You can undo by clicking the right mouse button.

Cancel OK

Added instrumentation points can be undone by right clicking then on the newest added section.

4. Adding measuring point

Resize the uploaded image to a specified size to reduce measurement errors and judgment errors.

When you click on the

- Image Size Calibration

the following pop-up is displayed.

Ruler (length 10mm) will be displayed on the image.
Move or stretch it by dragging to fit the size of ruler in your image.

OK

A 10mm long tape measure corresponds to the tape measure on the image.

5. Measurement data storage

Click on the

- Save

to save the measurement
data. When clicked, the following pop-up will be displayed. Measurement data is stored on the server.

Measurement point table
The location of each landmark stored on the server can be output as a table, and it can be saved as an Excel file on the local PC. Click on the [landmark table] to display the measurement point table as shown below.

Click on, [landmark table.xls] and it will be saved as an Excel file as follows. The file will be saved to the default saving location of the local PC. When you open the saved file, it will be displayed as shown below.

Adjusting the brightness of the image
Adjust to brighten or darken the entire image. The default value for Brightness is 100 and can be adjusted from 30 to 170 via the slider below.

Image contrast adjustment
Creates an effect that sharpens the contrast between black and white in the image. Blurred nerves or tissues can be seen more clearly. Contrast defaults to 100, adjustable from 50 to 150 via the slider below.

Image reset
Click on the [Reset] to remove the applied image processing and return to the initial image state.
2. Analysis

In the analysis tab, you can analyze the measured clinical image through various analysis methods.

1. Tool image
   Functions
   Contents

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
</tr>
<tr>
<td>2</td>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
</tr>
<tr>
<td>3</td>
<td>Move records</td>
<td>Change which record is displayed</td>
</tr>
</tbody>
</table>

1. Change analysis type
WebCeph provides various analysis methods for uploaded clinical images. When you enter the analysis tab, there is a tab where you can change the analysis method at the top of section 5. By clicking the tab, you can change to various methods as shown below.

2. Wizard
There are also methods provided by WebCeph by default, but the user can customize the method.
Click on the [Wizard] in the lower right corner of section 5 to customize methods and metrics.

3. Method and measurement customization

   The user selects an analysis name arbitrarily and clicks on the [Create] icon. If you select an existing measurement from the list, it will be displayed as “Method currently being edited” on the right. If the created method is displayed on the [Create] icon, select a metric in the “Full Library of Measurements” box located on the right and click the [Add] icon to add a metric.

   The user can create a new metric via the [Create Measurement] icon.

   When you click on the [Create Measurement] icon, the following screen will be displayed.

   After entering the appropriate information, click on the [Create Measurement] icon to complete the measurement setting.

   After adding all the metrics, click on the [Save Analysis] icon to add the method to the analysis type selection box.
④ **View Mode**

Directly below the method, the three analysis modes can be displayed in 4 sections. The three modes are divided into line analysis, profilogram and chart.

⑤ **Line analysis**

Line Analysis displays the analysis lines connected by the instrumentation points measured in the previous tab. Over 30 analysis lines are displayed and appear as shown below.

Clinical picture (Cephalo X-ray), tracing line, analysis line, and measurement value can be turned on/off through the toggle key and you can change it. Available in 11 colors.

⑥ **Profilogram**

Users can compare the patient's dento-skeletal pattern with the template of the average dento-skeletal pattern by clicking on the Profilogram tab. The average template matched to the patient's age and gender is provided as an average template for comparison.

⑦ **Chart**

In the chart tab, you can check at a glance how much difference the measured values of the patient are compared to the same age, same sex, etc. It can be analyzed conveniently by using the graph and is displayed as shown below.

Items with large deviations from the mean are displayed in red for easy identification.

⑧ **Save**

Analyzed data can be saved in various ways. If you click on the ▬ Export Analysis Report ▬ and ▬ Export Full Report ▬ icons, you can save the analysis as a PDF file. The photo below is the report saved in PDF format.

If you click on the ▬ Export Measurements to Excel ▬ icon, you can also save the analysis in the form of an Excel file.

Click on ▬ Archive Analysis ▬ or ▬ Archive Chart ▬ to keep the analysis and charts in the Case Room. When clicked, the following pop-up is displayed and can be saved. (The pop-up format is the same for both analysis and chart.)

<table>
<thead>
<tr>
<th>Archive to Caseroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title...</td>
</tr>
<tr>
<td>Start a post...</td>
</tr>
</tbody>
</table>

Teosapp ▬ WebCeph Gallery ▬

Click Create.
3. Assessment

Based on the artificial intelligence model of WebCeph, it will automatically present the measured values in the problem list coming from the records of patients that have already been measured before.

- The list of skeletal problems is largely divided into the maxilla, mandible, and tip of the jaw, and is divided into skeletal class I and skeletal class II.
- The list of odontogenic problems is largely composed of horizontal over cover, vertical over cover, maxillary anterior angle, mandibular anterior angle, interanterior angle, and maxillary anterior exposure degree, and is divided into angle I and angle II.

The soft tissue problem list is largely divided into upper labial protrusion and lower labial protrusion. For each problem list, the user can add a diagnosis, and when the writing is completed, the Save icon saves it.

The treatment plan box below is a user's arbitrary note to help with treatment and consultation.

① Assessment

The list of problems is largely divided into a list of skeletal problems, a list of dental problems, and a list of soft tissue problems. ※ Caution: The contents of this report should not be regarded as a medical definitive diagnosis and must be interpreted by a dentist. The picture below is an example picture of the problem list.

- The list of skeletal problems is largely divided into the maxilla, mandible, and tip of the jaw, and is divided into skeletal class I and skeletal class II.
- The list of odontogenic problems is largely composed of horizontal over cover, vertical over cover, maxillary anterior angle, mandibular anterior angle, interanterior angle, and maxillary anterior exposure degree, and is divided into angle I and angle II.

The soft tissue problem list is largely divided into upper labial protrusion and lower labial protrusion.

For each problem list, the user can add a diagnosis, and when the writing is completed, the Save icon saves it.

The treatment plan box below is a user's arbitrary note to help with treatment and consultation.

② Case summary and problem list arrangement

On the right side, patient information is organized for easy viewing, and patient information can be easily changed. When you click on the, Edit icon, the following page is displayed.
4. Treatment

1. Allows you to move to a higher level.
2. This is the patient information area, which displays the name, gender, age, and date of the video.
3. You can move between functions.
4. Shows the list of analyzed problems and the expected course of treatment.
6. Displays a list of saved treatments.

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>List</td>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
</tr>
<tr>
<td>List</td>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
</tr>
<tr>
<td>Date</td>
<td>Move records</td>
<td>Change which record is displayed</td>
</tr>
</tbody>
</table>

① Treatment simulation
- WebCeph displays the lateral picture uploaded in the Patient Information step.
- If you click on the icon, the patient's lateral picture and the cephalothorax image will automatically aligned according to the measurement points. The pictures below are the pictures displayed on the screen before and after sorting.

After sorting you will see the pop-up below:

- In case of minor errors, click on the button below to operate.

Once the images are aligned, start treatment. When you click on the icon, the table below will be displayed on the screen and the toggle will be turned on.

Treatment Summary Table

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1IncisalTip</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>U1RoolTip</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>L1IncisalTip</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>L1RootTip</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>U6Mesial</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>L6Mesial</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>A-point</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>B-point</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>ANS</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>PNS</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
<tr>
<td>Pog</td>
<td>0.00 mm 0.00 mm</td>
<td></td>
</tr>
</tbody>
</table>

If you click on the icon, soft tissue lines will be displayed on the aligned image and can be fine-tuned by dragging. The photo below shows the change in color of the dot into pink that represents the soft tissue and became draggable.

Morphing refers to the deformation of the lateral clinical picture based on the dragged soft tissue tracing line. Click on the icon and it will automatically finish morphing then you will see the pop-up below. Also the icon will be activated.
when the **Compare** icon is clicked, the following list will appear. If you click on the **Compare** icon on the list, the following pop-up will be displayed.

The before-and-after comparison results can be saved in two ways. The option is to save it in the general storage or the storage in the case room.

When you click on the **Send to Case Room** icon, the following pop-up is formed and you can save the before-and-after comparison photos in the case room.

All treatments can be reset via the **Reset** icon. A warning message like the one below is displayed and asks if you want to run it.

When you click on the **Save Treatment** icon, a pop-up appears where you need to enter the name of the treatment plan, which will be saved on the server.

When the **Save** icon is clicked, it will be saved to the local PC in jpg. form. The photos will be saved on the previous location saved. The photos below are the actual saved photos.

When the **Animate** icon is clicked, an animation video comparing the before and after is transmitted into section 4. When you click on the **Superimpose** icon, the before and after treatment lateral face photos are superimposed in sections like the photo below.

When the treatment results are saved as above, they are saved in the list as shown below.
When you click on the saved list, Archive Simulation, Archive Treatment, and Export to PDF icons are activated.

When you click on the Export to Excel icon, it will be saved to your local PC in the form of an excel file. The file will be saved based on your previously saved location. The photos below are the actual saved photos.

When you click on the icon, the following pop-up will appear then you can save the treatment plan to the server.

Click on the icon and it will be displayed as a pdf file. Click on the icon to save. The picture below is the displayed pdf file.
5. Superimposition

1. Auto Cephalo Image Overlay
WebCeph automatically superimposes cephalo-radiation images in seconds by the use of artificial intelligence. Nesting is largely divided into lateral cephalos and profiles. You must have at least 2 records for nesting.

2. Record list
A list of records held for that patient is displayed. You must select at least two records for nesting.

3. Superimposition
Select two or more records and click the icon to nest them. The photo below is the superimposed result.

When the and icons are pressed, the tracing lines overlapping only the maxilla and mandible, respectively, are displayed.
- In case of minor errors, click on the button below to operate.

Clinical photos (cephalo X-rays), pre-treatment tracing, and post-treatment tracing can be turned on/off through the toggle key. Except for clinical photos (cephalo X-rays), tracings of the before and after treatment can be easily presented by changing the color of the tracing for analysis. Available in 11 colors.

This is the result when the clinical picture (cephalo X-ray) is turned off through the toggle key.

4. Superimposition Slider
You can compare the before and after through the tool.

The video will be displayed in section 4. You can select whether or not to transmit the video through the icon and if you toggle it off at the desired point, the animation will end at that point.

The video will be saved on the local PC in the form of a gif through the icon. The file will be saved based on the previous setting. The photos below are the actual saved photos.
When you click on the icon, the following pop-up will be displayed and you can save it to the server.

![Superimposition Name](image)

Click on the icon to display the overlaid tracing lines in pdf format. Click on the icon to save. The picture below is the displayed pdf file.

![Export Tracings](image)

Click on the icon to organize the data you have collected so far. It is displayed in pdf format and if you want to save it, click on the icon. The picture below is the displayed pdf file.

![Export Case Report](image)

To save the nested tracing lines and animations to the server, click the and icons.

It also provides the ability to overlap the overlapped trace lines with other overlapping data. If you select two or more overlapping results stored in the overlapping list and then on click the icon, you can proceed with the overlap between the overlapped images once again. The photos below are multi-overlaid photos.

![MultiSuperimpose](image)
6. Viewer

1. Allows you to move to a higher level.
2. This is the patient information area, which displays the name, gender, age, and date of the video.
3. You can move between functions.
4. Various tools are provided to help interpret clinical images.
5. Displays the patient’s medical image.
6. Displays a list of stored records, and a control panel is provided.

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>① Section 4</td>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
</tr>
<tr>
<td>② Section 5</td>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
</tr>
<tr>
<td>③ Section 6</td>
<td>Move records</td>
<td>Change which record is displayed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>function image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pen</td>
<td>You can use the pen function for clinical images.</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>You can change the color of the pen function.</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>You can change the thickness of the pen function.</td>
<td></td>
</tr>
<tr>
<td>Zoom</td>
<td>You can zoom in/out the clinical image with the mouse wheel.</td>
<td></td>
</tr>
<tr>
<td>Rotate</td>
<td>Clinical images can be rotated 90°.</td>
<td></td>
</tr>
<tr>
<td>Flip</td>
<td>The clinical image can be reversed left and right.</td>
<td></td>
</tr>
<tr>
<td>Crop</td>
<td>You can use the crop function. After dragging the desired area, save it with the Save button.</td>
<td></td>
</tr>
<tr>
<td>Distance</td>
<td>Distance is given in units of base pixels. Draw a line on the 10mm tape measure and click the &quot;Set to 10mm&quot; on the pop-up window to change in mm unit.</td>
<td></td>
</tr>
<tr>
<td>Angle</td>
<td>Measure three arbitrarily chosen angles.</td>
<td></td>
</tr>
<tr>
<td>Undo</td>
<td>Cancels the function that has been executed. One by one will be canceled in order of latest.</td>
<td></td>
</tr>
<tr>
<td>Clear Canvas</td>
<td>Cancel all functions and return to the original clinical image.</td>
<td></td>
</tr>
<tr>
<td>Save</td>
<td>Save functions that worked. However, canvas drawings created with a pen are not saved. Only cropped images, rotated or inverted images are saved.</td>
<td></td>
</tr>
</tbody>
</table>

: One clinical image of the patient from Section 5 will be displayed.

: Section 5 displays two clinical images of the patient. All clinical images saved in the record can be loaded. Each clinical image can be rotated, reversed, enlarged, reduced, and moved.

: Recalls the records saved in Section 5 and displays them in the form of templates.

Click on the icon to save in PDF format.
7. Face

1. Allows you to move to a higher level.
2. This is the patient information area, which displays the name, gender, age, and date of the video.
3. You can move between functions.
4. Various tools are provided to help interpret clinical images.
5. Displays the patient’s medical image.
6. Displays a list of stored records, and a control panel is provided.

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
</tr>
<tr>
<td>2</td>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
</tr>
<tr>
<td>3</td>
<td>Move records</td>
<td>Change which record is displayed</td>
</tr>
</tbody>
</table>

① Section 5

Click on the icon to explore the landmarks of the selected side photo. The icon changes to when navigation is complete.

If you click on the icon after arbitrarily adjusting the soft tissue points, a soft tissue line is created connecting the points, and 5 control panels are created to control the lines. If you click on the icon after operating the soft tissue control panel, the following pop-up will be displayed.

Morphing is done. Click Compare to check the result.

You can compare the results of the before and after in 4 methods, and the 4 methods are displayed as follows.

Click on the icon to initialize the treatment you have progressed.

When you click on the icon, the following pop-up will be displayed, and it will be saved in section 6.

When you click on the icon, the following pop-up will be displayed, and it will be saved in the case room on the WebCeph server.

The picture above shows a list of the saved treatments.
1. **Section 4**
The case room at the top displays the desired cases in the saved record. You can also delete it by clicking on the icon in the upper right corner anytime you want.

If you click on the icon, an empty case is added as shown below. Click a record from the record (section 6) list on the right to add it.

2. **Section 5**

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
<td></td>
</tr>
<tr>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
<td></td>
</tr>
<tr>
<td>Move records</td>
<td>Change which record is displayed</td>
<td></td>
</tr>
</tbody>
</table>

The picture above displays the record list, and you can choose whether to have a watermark and a date stamp or not.

When you click on the icon, it is saved in the form of JPG on your local PC. The file will be saved based on the previous saving setting.

When you click on the icon, the following pop-up will be displayed and it will be saved in the Case Room on the WebCeph server.

When you click on the icon, the same pop-up will appear as when you click on the icon.

+ **Tool image** | **Functions** | **Contents** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
<td></td>
</tr>
<tr>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
<td></td>
</tr>
<tr>
<td>Move records</td>
<td>Change which record is displayed</td>
<td></td>
</tr>
</tbody>
</table>

1. Allows you to move to a higher level.
2. This is the patient information area, which displays the name, gender, age, and date of the video.
3. You can move between functions.
4. Displays the patient's case, and you can also add templates.
5. Tools to save cases are provided.
6. Shows a list of saved cases.
9. Timelapse

1. Allows you to move to a higher level.
2. This is the patient information area, which displays the name, gender, age, and date of the video.
3. You can move between functions.
4. Displays the clinical picture of the patient.
5. Tools to select records are provided and can be saved.
6. Displays a list of saved time-lapse templates.

<table>
<thead>
<tr>
<th>Tool image</th>
<th>Functions</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Move to a higher level</td>
<td>Move to the desired higher level</td>
</tr>
<tr>
<td></td>
<td>Move between tabs</td>
<td>Move to the desired tab</td>
</tr>
<tr>
<td>2021-01-15</td>
<td>Move records</td>
<td>Change which record is displayed</td>
</tr>
</tbody>
</table>

When the **Save a timelapse** icon is clicked, the same pop-up will be displayed as when you have clicked the **Archive to Case Room** icon. The content created can be sent to accounts linked with Toosapp.

10. How to video


Click on the **Save a timelapse** icon to save. Saved timelapses will be saved on your local PC. The file will be saved based on the previous saving setting.

If you select 2 or more records and click on the icon, the following pop-up will be displayed, and they will be saved in the Case Room on the WebCeph server.
CHAPTER 4

Others

1. Specifications
2. Member classification
3. Error types and actions to be taken when they occur
4. Manufacturer Contact
5. Indicated items
6. Re/revision history
1. Specifications

<table>
<thead>
<tr>
<th>No.</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part name</td>
<td>Software</td>
</tr>
<tr>
<td>Part control number</td>
<td>WebCeph</td>
</tr>
</tbody>
</table>

### Specifications or Characteristics

- **Model name**: WebCeph
- **Ver.**: 1.0.0
- **Development Tool**: Sublime Text 3
- **Application**:
  - Google Chrome Ver. 84.0.4149.125
  - Mozilla Firefox Ver. 79.0
  - Microsoft Edge Ver. 44.17763.1.0
- **HardWare**:
  - CPU: x64 based processor
  - RAM: More than 8 GB
  - Broadband internet connection and internet connection speed of 1Mbps or higher

| Lot. | 1 |

2. Member classification

A. WEBCEPH FREE
- No limit on the number of records
- No speed limit
- Exposure to advertisement video
- Basic analysis of orthodontic medical images
- Basic treatment simulation function
- Basic medical image overlay function

B. WEBCEPH PLUS
- No limit on the number of records
- No advertisement video
- Provides additional landmark features
- Upper/mandibular bone overlapping function
- Printing clinic logo to the PDF file
- Provides treatment result prediction video
- Treatment progress video provided
- Treatment result prediction simulation photo download function
- Case room enhancements
- Clinical photo multi-overlapping time-lapse function
- Viewer Crop function
- Toosaspp PLUS

3. Error types and actions to be taken when they occur

A. System instability
   a. configuration error

- **Error Cause**: Attempting to connect in an environment without a network connection.
- **Error screen**:

- **Action**: Check the Internet connection status of the user's computer and try again.

b. network error
- **Error Cause**: Occurs when a connection request is made to an incorrect sub-address in the WebCeph service.
- **Error screen**:

- **Action**: Return to the main page by pressing the ‘Return to Home’ or ‘Return to home’ button.

c. application error
- **Error Cause**: Occurs when trying to log in page with a browser other than Google Chrome, Mozilla Firefox, or Microsoft Edge.
- **Error screen**:

- **Action**: Access and log in with Google Chrome, Mozilla Firefox, or Microsoft Edge browsers.
B. System error (software error)
   a. Member registration error 1 (required fields omitted)
      - Error Cause: Occurs when you click the Next button without entering the required fields (first name, last name, email, password, confirm password, country, job type).
      - Error screen:
      - Action: Enter all required fields (first name, last name, email, password, password confirmation, country, occupation) and retry membership registration.

   b. Member registration error 2 (duplicate email)
      - Error Cause: When you try to sign up with a duplicate email address.
      - Error screen:
      - Action: Retry signing up with a different email address that does not overlap with the existing user.

   c. Member registration error 3 (not conforming to e-mail format)
      - Error Cause: When you try to sign up by entering a string that does not match the email format in the email field.
      - Error screen:
      - Action: Retry signing up with a valid email address.

   d. Member registration error 4 (short password error)
      - Error Cause: Occurs when you enter a password of less than 8 characters.

   e. Member registration error 5 (Inconsistent password confirmation)
      - Cause of error: When the password and the password entered in the Confirm Password field do not match.
      - Error screen:
      - Action: Retry sign-up by entering the same password in the password and password confirmation fields.

   f. login error
      - Error Cause: When trying to log in with an email that has not been previously registered or an email that has not been authenticated.
      - Error screen:
      - Action: Retry logging in by entering the email and password that were previously registered correctly. If e-mail ownership has not been verified, check the e-mail box entered during registration and retry login after completing e-mail ownership verification process.
f. Automatic logout
   - Cause of error: Occurs when moving to the patient list page after 3 hours at the first login.
   - Error screen:

   ![WEBCEPH](image)

   - Action: Re-login.

g. Image upload error
   - Error Cause: Occurs when uploading a file in a format other than the supported image file format (JPG, BMP, PNG)
   - Error screen:

   ![Error Screen](image)

   - Action: Try re-uploading in a supported image file format (JPG, BMP, PNG)

h. Measurement error
   - Error Cause: Occurs when an automatic measurement is attempted by uploading an image that is not a side-to-side radiograph.
   - Error screen:

   ![Error Screen](image)

   - Action: Retry measurement by uploading a right-sided radiograph.

i. Digitization incomplete Tab-to-tab error
   - Cause of error: Occurs when an attempt is made to move to the Analysis tab or Treatment tab while the anatomical landmark detection is not completed.
   - Error screen:

   ![Error Screen](image)

   - Action: Move to the ‘Measurement tab’ by pressing the ‘Go to Measurement’ button, and move to another tab after automatically measuring and saving.

4. Manufacturer Contact
   A. Tel. +8231-697-0433  
   (Service time : business days 09:00-18:00)  
   B. E-mail. admin@assemblecircle.com  
   C. Address. R02, 8f, 12, Daewangpangyo-ro 645beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

5. Indicated items
   A. Software GUI notes

<table>
<thead>
<tr>
<th>manufacturer Name/Address</th>
<th>Assemblecircle R02, 8f, 12, Daewangpangyo-ro 645beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>permit number</td>
<td>Write after permission</td>
</tr>
<tr>
<td>Product name (grade)</td>
<td>Medical image analysis device software (Level 2)</td>
</tr>
<tr>
<td>Model (model name)</td>
<td>WEBCEPH</td>
</tr>
<tr>
<td>packaging unit</td>
<td>Standalone software</td>
</tr>
<tr>
<td>Serial number (version)</td>
<td>Ver. 1.0.0</td>
</tr>
<tr>
<td>Date of manufacture (date of distribution)</td>
<td>2020.10.11</td>
</tr>
<tr>
<td>Performance and usage</td>
<td>See user manual</td>
</tr>
<tr>
<td>Precautions for use</td>
<td>See user manual</td>
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</tbody>
</table>

※ This product is a medical device.
### 6. Re/revision history

<table>
<thead>
<tr>
<th>RE/REVISION NO.</th>
<th>RE/REVISION PAGE</th>
<th>RE/REVISION DATE</th>
<th>RE/REVISION HISTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>-</td>
<td>2020.10.20</td>
<td>Ministry of Food and Drug Safety Announcement &quot;Medical Device Manufacturing and Quality Control Standards&quot;, enacted to fit the company's site to introduce a quality management system.</td>
</tr>
</tbody>
</table>