## Huvítz

# HUVITZ WEB-VIEWER

#### **User Manual**

-	HUVITZ	
		O HUVITZ
		Login to your account
		Password

#### Precautions

This product may malfunction due to the electromagnetic wave, generated from mobile phone, two-way radio, wireless calibration machine. Keep it away from device that affects this product.

This user manual's contents were examined carefully in detail, and we believe that they are accurate in overall. However, Huvitz does not assume any responsibility for any latent mistake or omission that results from the use of information included in this user manual.

Huvitz has the right to modify this product or product specifications any time, without special notification, and this modification may not be renewed in this document.

Huvitz does not guarantee any responsibilities for abnormal symptoms causing from the installation of S/W not related to the equipment

Do not install this program in HOCT-1/1F, and Huvitz does not guarantee any responsibilities for abnormal symptoms causing from the installation.

#### Revision History

Revision	Date	Approval	Description
А	2019.06.13		Initial release
В	2020.01.10		Angiography Analysis
С	2020.08.20		Added a precautions to avoid installation in HOCT-1/1F

9000ENG0083-C (Ver.2.2.0) (2020/08/20)

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### 1 Introduction

#### 1.1 Overview

HUVITZ-WebViewer software (hereafter, WebViewer) films eyeball's eyeground or retina's shape in a non-contact non-invasive manner, and it is the software that provides information that helps with the ophthalmic complications.

This software of the Server-Client structure exchanges data with the software built-into HUVITZ'S ophthalmic device (hereafter, device). PC with WebViewer installed (hereafter, server) becomes Server while device becomes Client. Server and device (Client) operate regardless of the distance as long as they are in the same network. Here, same network includes Internet when seen broadly and even the 1:1 cable connection when seen narrowly.

Image filmed on the device is transmitted to the server and user can check the result filmed from the personal PC through Web browser. Personal PC does not need to be installed with special software, and it can be used with the regular Web browser such as Internet Explorer, Chrome, Safari and Firefox. (WebViewer is optimized to the latest Chrome version, and there may be function that does not operate in other Web browser.)

#### 1.2 Purpose of Use

It is possible to check via personal PC screen at a place that is distanced, the same way of checking the result of the filming on the device.

#### **1.3 Recommended Specifications for the Installation**

#### 1.3.1 Server

- O/S: Windows 7 or greater (Windows 10 recommended)
- CPU: Intel i5 or greater
- Memory: 4GB or greater (8GB recommended)
- Ethernet: Fast Ethernet (Gigabit Ethernet recommended)

#### 1.3.2 Client

- O/S: Windows 7 or greater (Windows 10 recommended)
- CPU: Intel i5 or greater
- Memory: 4GB or greater (8GB recommended)
- Ethernet: Fast Ethernet (Gigabit Ethernet recommended)
- Browser: Chrome (recommended), IE 11 or greater

## 2\_\_\_\_

#### 2 Installer Installation

- 2.1 New Installation
- 1 Execute Setup\_HUVITZ\_Webviewer\_X.X.X(XX).exe Installer.

Setup\_HUVITZ\_Webviewer\_2.1.3(1)

#### 2 Start installation. Press on the Next button.



3 Select the component to install. In case of new installation, select both 'PostgreSQL\_Database' and 'HUVITZ Webserver'.

HUVITZ_Webviewer 2.1.3(1) Setup	– 🗆 X					
Choose Components Choose which features of HUVITZ_Webviewer 2.1.3(1) you want to install.						
Check the components you want to install and uncheck the or install. Click Next to continue.	components you don't want to					
Select components to install:   PostgreSQL_Database  HUVITZ Webserver	<b>Description</b> Position your mouse over a component to see its description,					
Space required: 423.5 MB						
HUVITZ Webviewer Installer	Next > Cancel					

4 Designate the path to install the program. Use the default value.

HUVITZ_Webviewer 2.1.3(1) Setup	_		×
<b>Choose Install Location</b> Choose the folder in which to install HUVITZ_Webviewer 2.1.3(1).			
Setup will install HUVITZ_Webviewer 2.1.3(1) in the following folder. To folder, click Browse and select another folder. Click Next to continue.	o install in	a differ	ent
Destination Folder C:\Program Files (x86)\HUVITZWeb	Brov	vse	
Space required: 423.5 MB Space available: 211.7 GB HUVITZ Webviewer Installer < <u>B</u> ack <u>N</u> ex	dt >	Са	ncel

5 Designate the path to save the patient data. Since the size of image data is large (5~25MB by each measurement), save on the disc with sufficient available space.

HUVITZ_Webviewer 2.1.3(1) Setup	_		×
Choose Install Location			$\bigcirc$
Choose the folder in which to HUVITZ Webviewer data.			
The HUVITZ WebServer will search the HUVITZ Webviewer data in the select in a differenct folder, click Browse and select another folder. Clic	following k Next ta	folder. T continue	0 2.
HUVITZ Webviewer Data Folder C:\\Program Files (x86)\\HUVITZWeb\\HOCTDATA	Brov	vse	
Space required: 423.5 MB			
Space available: 211.7 GB			
HUVITZ Webviewer Installer			
< <u>B</u> ack <u>N</u> ex	t >	Car	ncel

6 Designate the path to install the program for the PostgreSQL database.

HUVITZ_Webviewer 2.1.3(1) Setup	_		×
<b>Choose Install Location</b> Choose the folder in which to install PostgreSQL Database.			
The PostgreSQL Database will be installed in the following folder. To se folder, click Browse and select another folder. Click Next to continue.	elect in a	differenc	t
PostgreSQL Database	Bro	owse	_
Space required: 423.5 MB Space available: 211.7 GB			
HUVITZ Webviewer Installer	xt >	Car	ncel

7 Designates the port number to be used in the HUVITZ Webserver. Make sure to remember this port number since it is the number that is used when contacting from the personal PC via Web browser. For instance, when port number, set during this stage is 8080 and when the address of the installed server is <u>http://192.168.1.3</u> is assumed, WebViewer's contact address becomes <u>http://192.168.1.3:8080</u>. WebConnector is the internal server that is provided so that the HUVITZ Webserver can divide its work. Since this port number is used for the communication among servers, user does not need to remember. When two port numbers overlap, server does not work. Thus, it is necessary to set so that the port numbers do not overlap. Screen of the next stage gets output when the port numbers overlap.

HUVITZ_Webviewer 2.1.3(1)		_		
HUVITZ_Webviewer Configu Web Server Ports	ration			
Enter Web Server Ports numb	er			
WebServer Port	8080			
WebConnector Port	8081			
HLM Port	2100			
HRK Port	42000			
HUVITZ Webviewer Installer ——				
	<	<u>B</u> ack	<u>N</u> ext >	Cancel

8 The following error message gets output when the port number is already being used by other program. Other port number can be used, but must remember the input port number.



9 Designates port number to use in the PostgreSQL database. Use default value if possible since the port number is the number used by the system internally. There is no need to remember this port number.

G HUVITZ_Webviewer 2.1.3(1) Setup		_		×
HUVITZ_Webviewer Configuration Database Port				(
Enter Database Port number				
5432				
HUVITZ Webviewer Installer	( Part	Testell		
	< <u>B</u> ack	Install	Ca	incel

10 Error message gets output when the number that is the same as the WebViewer's port number is already in use. Set to another number when the following message appears.



11 Displays installation progress.

💮 HUVITZ_Webvie	ewer 2.1.3(1) Setup		_		$\times$
<b>Installing</b> Please wait while					
Extract: ndb.db	. 86%				
Extract: OctHttp Extract: opencv Extract: RetPara Extract: RetSeg Extract: SegmPr Extract: SegmSo Extract: SegmSo Extract: ucrtbas Extract: vcruntii Extract: sqlite3. Extract: ndb.db	o.dll 100% world343.dll 100% am.dll 100% m.dll 100% coc.dll 100% can.dll 100% ced.dll 100% me 140d.dll 100% dll 100% 86%				*
HUVITZ Webviewer I	nstaller	< <u>B</u> ack	<u>C</u> lose	Ca	incel

12 Install PostgreSQL database Start mid-way. Click on the Next button.

🗃 Setup		_		×
Packaged by: EDB POSTGRES	Setup - PostgreSQL Welcome to the PostgreSQL Setup Wizard.			
PostgreSQL				
(J)				
	< Back	lext >	Can	cel

13 Do not modify default value and continue to click on the Next. May malfunction when the default value is modified.

🗃 Setup	– 🗆 X
Select Components	
Select the components you want to install; clear the comp are ready to continue.	oonents you do not want to install. Click Next when you
PostgreSQL Server     pgAdmin 4     Stack Builder     Command Line Tools	Click on a component to get a detailed description
InstallBuilder	
	< Back Next > Cancel

14 Designates PostgreSQL database installation path. Continue to click on the Next button.

🗃 Setup			_		$\times$
Data Directory					
Please select a directory under which to store your data.					
Data Directory C:\PostgreSQL\10\data	<b>~</b>				
InstallBuilder					
	< Back	Ne	ext >	Can	cel

15 Designates PostgreSQL administrator password. Do not modify since it is used in the system internally. Continue to click on the Next button.

📑 Setup	—		$\times$
Password			
Please provide a password for the database superuser (postgres).			
Password ********			
Retype password			
InstallBuilder			
< Back	Next >	Can	cel

16 Previously set port number is designated automatically. Do not modify and continue to click on the Next button.

🗃 Setup			_		$\times$
Port					
Please select the port number the server should listen on. Port 5432					
InstallBuilder	< Back	Nex	t>	Can	cel

Setup			_		×
Advanced Options					
Select the locale to be used by the new database cluster.					
InstallBuilder					
	< Back	Ne	kt >	Can	cel

17 Sets up the PostgreSQL database language. Continue to click on the Next button since it is possible to use default value.

18 Continue to click on the Next button.

🗃 Setup	_		×
Ready to Install			
Setup is now ready to begin installing PostgreSQL on your computer.			
InstallBuilder			
Kack	Next >	Can	cel

19 Installation is executed. Wait for a moment.

<table-of-contents></table-of-contents>		_		×
Installing				
Please wait while Setup installs PostgreSQL on your con	nputer.			
Inst	alling			
Unpacking C:\PostgreSQL\10\doc\postgresql\html\tute	orial-select.html			
InstallBuilder				
	< Back	Next>	Cano	el

20 PostgreSQL database installation is completed. Click on the Finish.

<table-of-contents> Setup</table-of-contents>	-		×
Packaged by:	Completing the PostgreSQL Setup Wizard		
POSTGRES	Setup has finished installing PostgreSQL on your computer		
PostgreSQL			
(J)			
	< Back Finish	Cano	el

21 When the black screen appears as follows, do not close the window. Instead, wait and it will close automatically. <u>Since database initialization is in progress, it does not operate normally when it is closed mid-way.</u>



22 HUVITZ WebViewer installation is completed.

(₸) HOCTWeb 1.2.8(5) Setup —		$\times$
Installation Complete Setup was completed successfully.		
Completed		
Output folder: C:\Program Files (x86)\HOCTWeb\public\lib\threejs Extract: three.min.js 100% Output folder: C:\Program Files (x86)\HOCTWeb\installer Extract: changelog.json 100%		^
Extract: create_hct.sql 100% Extract: create_tables.sql 100% Output folder: C:\Program Files (x86)\HOCTWeb\config Extract: config.json 100% Created uninstaller: C:\Program Files (x86)\HOCTWeb\uninst.exe		
HOCTWeb Installer	Car	▼ ncel

#### 2.2 Version Upgrade

To upgrade version, re-install after removing the installed HUVITZ WebViewer program. Uninstallation of installed version will automatically start when the upgrade version of Web-Viewer installer starts.

1. To remove installed version, please click 'OK' button.

HUVITZ_W	/ebviewer 2.1.3(1) Setup	×
	HUVITZ_Webviewer is already installed. Click `OK` to remove the previous version or `Cancel` to cancel this upgrade.	
	확인 취소	

2. Confirm the installed version, and click 'Yes' to start uninstallation.

HUVITZ_V	Vebviewer 2.1.3(1) Uninstall	×
?	Are you sure you want to completely remove HUVITZ_Webviewer 2.1.3(1) and all of its components?	
	예(Y) 아니요( <u>N</u> )	

3. Removal in progress.

Uninstalling         Please wait while HUVITZ_Webviewer 2.1.3(1) is being uninstalled.         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#accessors\#         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#inp         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#inp         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#inp         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#In         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#L         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#L         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#Fu         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#Fu         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#Co         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#Co         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#Co         Delete file: C:\#Program Files (x86)\#HUVITZWeb\#public\#lib\#threejs\#hodes\#Att	HUVITZ_Webviewer 2.1.3(1) Uninstall	_		$\times$
Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes Waccessors W Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes Winp Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes Winp Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes Winp Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WIn Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WIn Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WGL Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WGL Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WFu Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WATt Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wib Wthreejs Whodes WATt	Uninstalling Please wait while HUVITZ_Webviewer 2.1.3(1) is being uninstalled.			0
Delete file: C: \Program Files (x86) \HUVITZWeb \Public \lib \Hver threejs \Prodes \Pr	Delete file: C:₩Program Files (x86)₩HUVITZWeb₩public₩ib₩threejs₩	tnodes∜	₩access	ors₩
	Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs Delete file: C: WProgram Files (x86) WHUVITZWeb Wpublic Wlib Wthreejs	₩nodes ₩nodes ₩nodes ₩nodes ₩nodes ₩nodes ₩nodes ₩nodes	sWinp sWinp sWinp sWIn sWGL sWFu sWFu sWFu sWAtt sWAtt sWac	*

4. Uninstallation is completed



5. Remove installed version manually by following instructions if the installed version is not deleted automatically.

Execute Window control panel and select 'remove program'.



6. Select HUVITZ\_Webviewer and execute 'remove'.



#### 7. HUVITZ\_Webviewer removal in progress.



8. Press on the Next button after executing new version Installer.



9. This the process for upgrading version. Thus, press on the Next button after clearing selection in case of PostgreSQL\_Database installation.

HUVITZ_Webviewer 2.1.3(1) Setup	_		×			
Choose Components Choose which features of HUVITZ_Webviewer 2.1.3(1) you want to install.						
Check the components you want to install and uncheck the compo install. Click Next to continue.	nents you don	't want to	>			
Select components to install:	Description Position your over a compose its descri	mouse onent to ption,				
Space required: 423.5 MB						
HUVITZ Webviewer Installer	<u>N</u> ext >	Can	cel			

#### 10. Designates path to install the program.

HUVITZ_Webviewer 2.1.3(1) Setup	_		×
Choose Install Location			NUMB
Choose the folder in which to install HUVITZ_Webviewer 2.1.3(1).			J
Setup will install HUVITZ_Webviewer 2.1.3(1) in the following folder. To folder, click Browse and select another folder. Click Next to continue.	o install in	a differ	ent
Destination Folder			
C:₩Program Files (x86)₩HUVITZWeb	Brov	wse	
Space required: 423.5 MB			
Space available: 211.6 GB			
HUVITZ Webviewer Installer			
< <u>B</u> ack <u>N</u> ex	:t >	Car	ncel

11. Designates path to save HUVITZ Web data. Designates the path that was set as it is since previous data needs to be used as is.

HUVITZ_Webviewer 2.1.3(1) Setup	—		$\times$
Choose Install Location Choose the folder in which to HUVITZ Webviewer data.			
The HUVITZ WebServer will search the HUVITZ Webviewer data in the select in a differenct folder, click Browse and select another folder. Cl	e following ick Next tเ	) folder. T	0
HUVITZ Webviewer Data Folder C:₩Program Files (x86)₩HUVITZWeb₩HOCTDATA	B <u>r</u> o	wse	
Space required: 423.5 MB Space available: 211.7 GB			
HUVITZ Webviewer Installer	xt >	Can	ncel

12. Designates the port number to use in the HUVITZ Webserver. Remember this port number since is the number that needs to be used when contacting HUVITZ Web.

HUVITZ_Webviewer 2.1.3(1)	Setup		_		×
HUVITZ_Webviewer Configu Web Server Ports	ration				
Enter Web Server Ports numb	er				
WebServer Port	8080				
WebConnector Port	8081				
HLM Port	2100				
HRK Port	42000				
HUVITZ Webviewer Installer					
	< <u>E</u>	lack	<u>N</u> ext >	Car	ncel

HUVITZ_Webviewer 2.1.3(1) Setup HUVITZ_Webviewer Configuration Database Port			_		×
Enter Database Port number					
HUVITZ Webviewer Installer	< <u>B</u> ack	Insta	31	Ca	ncel

13. Designates the port that is used in the installed PostgreSQL program.

#### 14. HUVITZ Web installation is in progress.

HUVITZ_Webviewer 2.1.3(1) Setup		_		$\times$
<b>Installing</b> Please wait while HUVITZ_Webviewer 2.1.3(1)	) is being installed.			
Extract: ndb.db 56%				
Extract: OctHttp.dll 100% Extract: opencv_world343.dll 100% Extract: RetParam.dll 100% Extract: RetSegm.dll 100% Extract: SegmProc.dll 100% Extract: SegmScan.dll 100% Extract: ucrtbased.dll 100% Extract: vcruntime140d.dll 100% Extract: sqlite3.dll 100%				^
Extract: ndb.db 56% HUVITZ Webviewer Installer	< <u>B</u> ack	<u>C</u> lose	Car	▼ ncel

15. HUVITZ Webviewer upgrade is completed.

₩ HUVITZ_Webviewer 2.1.3(1) Setup		$\times$
Installation Complete Setup was completed successfully.		Number of Street
Completed		
Extract: three.min.js 100% Output folder: C: \Program Files (x86) \HUVITZWeb \Installer Extract: changelog.json 100% Extract: create_hct.sql 100% Extract: create_tables.sql 100% Extract: update_tables.sql 100% Output folder: C: \Program Files (x86) \HUVITZWeb \Config Extract: config.json 100%		^
Created uninstaller: C:\Program Files (x86)\HUVITZWeb\uninst.exe Completed		<b>v</b>
HUVITZ Webviewer Installer	Car	ncel

Cache data of the previous version remains in the Web browser. Thus, there are instances in which screen does not appear properly on the Web browser after upgrading. In this case, open setting with Ctrl + Shift + Del button, delete all the Internet use records as follows and contact again.



## <u>3</u>

#### **3** Screen Description

#### 3.1 Access Screen

1 Execute Web browser. (As for the types of Web browser, there are Internet Explorer and Chrome. However, HUVITZ Webviewer (hereafter, Webviewer) is optimized for the Chrome browser. When using other Web browser, there may be functions that do not work since Web browser does not support those functions.)

A D synerical K /		1000	100	0.	× .
🗧 🔅 🖸 🕒 Orome   (hrome)(blank					1
	μ				
	사이트에 여긴하 스 연유				
	NOL-M CEE T WE				
	chrome://black/미 컬레이지가 열시적으로 다운되었거나 새 웹 주소로 완전히 이동했을 수 있습니다.				
	(MCMARK)CON				

2 Input address and port number where the HUVITZ Web server is installed in the Web browser's address input space (①). In the example, address is 172.10.106.161 and the port number is 8080. If the PC in use is Web server, then it is possible to input as localhost:8080 or 127.0.0.1:8080.



• Method for finding out Webviewer's server address

1. Execute command screen in the computer where HUVITZ Web server is installed (input 'cmd' after clicking on the task bar's Window button)

2. Input 'ipconfig'. IPv4 address on the result screen is the Web server's address.



#### 3.2 Log-in Screen

-	HUVITZ	
		Login to your account.

- Input user's ID and password in the ID/Password input space used for logging-in.
   Administrator's ID and Password that are used for logging-in after the first installation are admin / admin.
- 2 Click on the LOGIN button.
- 3 Check "REMEMBER ME" to log-in automatically when the Web browser is executed next time.



4 The following type of administrator page is shown first when logging-in as administrator instead of regular user. Use after creating regular user ID. Ensure that only the user that manages the system can access the system.

	4	LOGOUT
USER		
CONFIGURATION		
PATIENTS		

5 Moves to the patient information screen when 'PATIENTS' is clicked on.



#### 3.3 Administrator Screen

#### 3.3.1 User Management

1 To add user, click in the following order; 'USER' > 'CREATE'. Input the information of the user to add on to the 'Create an account' input space and then click on the CREATE button.

				LOGOUT
USER				
CHEATE				
UST		Create	an account	
CONFIGURATION		Creater	maccount	
CHANGE LOGO	First	name	Last name	
PATIENTS	User	D.		
	Pann	word	Confirm Paseword	
	Ema	ail address		
	Phon	ne	Location	
	Webs	site/Link (optional)		
	Select	t a role		
				l l
		CR	ATE	

2 Pop-up appears when user is added on normally. Click on 'Confirm'.

	localhost8080 내용: Successfully created		LISCOUT
USER		No. 1	
ORATE		a di secondo	
UST	Cr	eate an account	
CONFIGURATION	CI		
CHANGE LOGO	test2	Last name	
PATIENTS	test2		
			_
	E-mail address		
	Phone	Location	
	Website/Link (optional	(). ().	
	Operator		
	100		
		CREATE	

3 Currently registered user information appears when clicked in the following order; 'USER' > 'LIST'. Each user can be modified and deleted. (Precaution) never delete the administrator. Since new user is added on, click on the 'LOGOUT' button at the upper right side and then log-in using new ID.

								LOGOUT
USER CRATE LIST CONFIGURATION CHARGELOGO PATIENTS	User ID : user 1 test 2 test admin	First Name + user1 tes11 admin	LastName : সূল্যন	Role : operator operator operator administrator	Phone 3	E-mail ±	Location :	Login time : : 0001-01-01 00:00:00 -0000 UTC 0001-01-01 00:00:00 -0000 UTC 0001-01-01 00:00:00 -0000 UTC 0001-01-01 00:00:00 -0000 UTC
								面 delete 🖋 edit

#### 3.3.2 Configuration

May modify the settings related to the report in the REPORT menu.

		LOGOUT
USER CONFIGURATION ANALYSIS REFORT PATIENTS	Report       1. Report Fryme       2. Report Type       Support Tile Running Rule       VIDPORT Tile Running Rule       VIDPORT Tile Running Rule       Support Tile Running Rule	
	SAVE	

#### 3.4 Patient Information Screen

The following screen is the patient information screen that is seen first when regular user logs-in.

	Q				🗸 Today	<b>7</b> )+ ^	dd Patient	Ecam	+ Refraction	+ Tono / Pachy	8	9 we 213	8
ID ‡	Name	Birth Date :	Last Visit +		Patient ID		Name		Gender	Birth Date	Ethnicity	Macular 3D Scenent Brtina Macular	30
manoj511120	Thomas Erikason	1951-11-20	2018-09-25 18:40	*	196912015564		INGELA GIL	LHOLM	*e	1969-12-01	Caucasian	Scan Size 512x	96
manoj450424	Lena Andersson	1945-04-24	2018-09-25 17:49		Refraction		Operator		Physician			Date 6 2018-09	25
manoj610410	Assiat Tadares	1961-04-10	2018-09-25 17:31		0.0	0.0		0				Fination 16.33 Hacu	No.
manoj15510427	Roger Soderlund	1951-04-27	2018 09 25 17:03		Description			(2)				Image Quality Color Fundus	6 No
196110152524	Marie Redlund	1961-10-15	2018-09-25 16:38					-		Ê	DELETE 🖋 EDIT		
196912015564	INGELA GILLHÖLM	1969-12-01	2018-09-25 16:33		00/05 1	Date :		Measurement	1	Detail :			
manoj19760319	Dan Jungsdorff	1976-03-19	2018-09-25 16:18		60 05	2018-09-25	16:33:48	O Color Fundus		6	Loading		
manoj500333	Jan Rosenqvist	1950-03-13	2018-09-25 15:39		0003	2018-09-25	16:33:46	G Macular 300H	• 3	512x96/9x9mm	5 BO		
manoj431203	John Erik Wardemark	1943-12-03	2018-09-25 15:38		60 63	2018-09-25	16:32:42	Macular 30(H	, 9	512x96/9x9mm	9		
manoj19410721	Rose Marie Lundkvist	1941-07-21	2018-09-25-15:37		00	2018-09-25	16:30:30	Macular 300H	0	512x96/9x9mm		testes :	
manoj590304	Christer Dahlstrom	1959-03-04	2018-09-25 15:37									results	
manoj470320	Gizella Jonison	1947-02-20	2018-09-25 15:36										
manoj19390128	Lonnart Thornblom	1939-01-28	2018-09-25 15:35										
manoj570729	Ana Erazo Silva	1957-07-29	2018-09-25 15:34										
manoj470720	Margareta Palmberg	1947-07-20	2018-09-25 15:33										
manoj500225	Anita Soderberg	1950-02-25	2018-09-25 15:33										

- Shows the patient list saved in the HUVITZ WebViewer database currently. New patient gets added into the patient list when new patient information is transmitted at the HUVITZ's ophthalmic device or when patient is added on using 'Add Patient' in the WebViewer. When mouse is placed on top of the patient list, URL copy icon that enables move to the applicable patient immediately, gets activated.
- 2 Outputs detailed information on the selected patient. Displays information such as patient ID, name, age, gender, ethnicity, eyesight (refractive index), operator and doctor in charge.
- 3 Outputs inspection list on the selected patient. Moves to the Analysis Screen of the selected inspection when double clicked.
- 4 In case of the inspection that is transmitted from and in progress in the equipment "Loading..." message is displayed. Inspection that is being transmitted and in progress gets completed, and when the Loading message disappears, it is possible to move to the Analysis Screen.
- 5 When the mouse is placed on top of the inspection list, URL copy icon that enables immediate move to the applicable inspection and delete inspection icon is activated.
- 6 Outputs summary information on the selected inspection. Moves to the Analysis Screen when 'Analyze' button is clicked on.
- 7 Only the inspection measured today is output when 'Today' button is clicked on. Able to add patient when 'Add Patient' button is clicked on.
- 8 By clicking the Refraction button, processed examination list will be shown. And it can be saved as its patient's own examination. The button is shown when choosing patient.
- 9 Information on the software version is displayed. When user icon is pressed on, ID loggedin currently is displayed, and it is possible to log-out when log-out button is pressed on.

#### 3.5 Patient Add-on Screen

1 Click on the 'Add Patient' button to add new patient. When button is clicked on, pop-up for adding in a patient appears, and click on the 'Save' button after inputting information on the patient in the input space.

	۹	_	_	✓ Today + Add Palant Dam + Referction + Topo/ Packy	
	Marrie 121	Birth Date	Last Visit		Macular 30
NEWDOODL	NEW Parking	1909-01-01	2019-06-27-15	udd Patient 1919 32 02 Cawasian	Scan Star \$1246
31965850	4 ministering	1917-03-08	2019 06 20 12		Date 2218 09 25
00003		2010-02-02	2010-06-17 34	Patient ID	Farm BLD2-49 Finalism Madudat
Yest.MI	Anthoyo	1974-10-16	3029-06-14 34	Name First Mode Last	Image Qualify 8 Color Funders No.
199604054263	Salero Salad	1995 (14,45)	2019-06-14.11	Gender M * Birth Date 1969-01-01 Ethnicity *	
324 30504901	9HX	1996 (01 (01	2010-04 2020		
54 6030312	ter and the second s	1951-01-01	369,66 B L		
591 9955533	MIN	1999 41 41	2010-04-0912	Operator • Physician •	
500 0101/MIT	( 10K), ;;	1910 GL OF	3010-04-29 23	Description	
544-26812552	HUS	1956-41-01	2019-04 19:11		
544-25456312	(ane)	3951-01-01	2010-04-1933	A. A	Analyse
SH 28514773	CYL	1057-01-01	3019 04-19 12		
5G-20107293	SKH	1979-01-01	2019-04 19 11	Cancel Save	
54 6620003	14.647	1962-01-01	2010-04 19 11:31		
5156 12154943		3977 01 01	2019-04-19 30-51		
96220404	1015	1964-01-01	2019-04-19-10-11		

	Q			1	🗸 Today	+	Add Patient	Exam	+ Refraction	+ Tono / Pach	Y		we.213	8
ID ‡	Name 1	Birth Date 🕴	Last Visit ÷	6	Patient ID		Name		Gender	Birth Date	Ethné	city	Segment_Retina	
NEW00001	NEW Patient	1969-01-01	2019-06-27 19:48	6	NEW00001		NEW Patient		M	1969-01-01			Scan Size Scan Length	
31965850	3 namkung	1937-03-08	2019-06-20 11:24		Refraction		Operator		Physician				Date	
00001		2018-02-02	2019-06-17 14:05		0.0	0.0							Fination	
TestAH	An Heyo	1974-10-16	2019-06-14 16:07		Description								Image Quality Color Funders	
199604054263	Sahro Salad	1996-04-05	2019-06-14 11:04							1	PELETE	# LDIT	RNotmage	
5H-30504901	IH S	1956-01-01	2019-04-19 14:19		00/05	Date	1	Measurement	1	Detail :				
SM-6050912	363	1951-01-01	2019-04-19 13:59					No data availa	ble in table					
514-9958833	мјк	1949-01-01	2019-04-19 13:30											
SM 31015931	HKL.	1970-01-01	2019-04-19 13:06											
SM-26017552	iu s	1956-01-01	2019-04-19 12:59											
SM-25436312	JH B	1951-01-01	2019-04-19 12:31										Analyze	
SM-28514773	CYL	1957-01-01	7019-04-19 12:11											
SG-30907393	SKH	1970-01-01	2019-04-19 11:49											
SM-6620003	MJP	1962-01-01	2019-04-19 11:31											
5H5G-12954943	нио	1977-01-01	2019 04 19 10 51											
SM-22314241	HRL	1984-01-01	2019-04-19 10:41											

#### 2 New patient was added on.

#### 3.6 Move to Analysis Screen

Able to move to Analysis Screen by clicking on the ' $(1) \rightarrow (2) \rightarrow (3)$ ' in this order. Moves first to Macular 3D Analysis Screen.

	Q			-	🗸 Today	+ *	dd Patient	Exam	+ Refraction	+ Tono / Pachy		wer.2.1.3	<u>)</u> 8
ID ‡	Name (	Birth Date :	Last Visit +		Patient ID		Name		Gender	Birth Date	Ethnicity	Macular 3D Segment Betina	Macular 3D
56-24329973	DKK	1959-01-01	2018-10-23 11:33	*	01-10-2018		drissi mehd	8	*м	1986-02-04	Caucasian	Scan Size	512x96
SG-19148864	SB S	1950-01-01	2018-10-23 11:14		Hefraction		Operator		Physician			Date	2018-10-17
56-32928833	LIKS	1997-01-01	2018 10 23 10:56		00 0.0 0	0.0						Time Fisation	15:34:05 Macular
SG-32827330	LHL	1959-01-01	2018-10-23 10:34	1.1	Description							Image Quality Color Fundus	6 No
SG-30358643	WS S	1964-01-01	2018-10-23 10:17	Π.						前	DELETE 🖋 EDIT		
SG-3824618	WKP	1950-01-01	2018-10-23 09:53		00/05 1	Date :		Measurement	: 0	etall :			
01-10-2018	drissi mehdi (1	1985 02-04	2018-10-17 15:34		00 00	2018-10-17	15-34.09	Macular 3004	1 5	12x96/9x9mm	-	The Party of Street, or other	
2222	manop	1977-10-17	2018-10-17 11:03		00 03	2018-10-17	15:26:33	Macular 3001	0 5	12x96/9x9mm			
00119	Jorge	1956-10-17	2018-10-17 10:58		60 03	2018-10-17	13:07:50	* Anterior Radi	al 1	324x12/6x6mm			
00118	sursk k	2018-10-17	2018-10-17 10:52		00 03	2018-10-17	13:01:43	* Anterior Radi	al 1	024x12/6x6mm		1.00	
333333	Cam	1982-10-17	2018-10-17 10:48		00	2018-10-17	13:00:15	* Anterior Radi	al a	24x12/6x6mm		6	
00116	eurico	1986-10-17	2018-10-17 10:42		00	2018-10-17	12:56:29	- Anterior Line	00 1	024x1/6x0mm		3	9
00114hs		1969-01-17	2018-10-17 10:28		00	2018-10-17	12-54-14	Anterior Radi	al t	134x12/fadimm			
199407318188	Matilda Markusson	1994-07-31	2018-10-15 17:40		00	2010 10 17	12.010.04						
198603304604	Frida Johansson	1985-03-30	2018-10-15 17:34			2018-10-17 1	12:50:54	- Antenor Line	. 1	124x1/080m185			
19870403	lovisa bergstrom	2018-10-15	2018 10-15 17:29		00 00	2018-10-171	12:48:45	* Anterior Radi	al a	24x12/6x6mm			
				2.7				A					



#### 3.7 Analysis Screen Overview

- 1 Summary: Shows summary information on the results of measuring one eye. This tab is selected by default.
- 2 OU: Able to carry out comparative analysis on the measurement data on the both eyes.
- 3 Progression: Able to carry out comparative analysis with the various previous data using the currently selected data as the standard.
- 4 Comparison: Able to carry out comparative analysis on the data of the measurement part that is the same as that of the currently selected data using a different date.
- 5 3D: Shows 3D modeling image using image of measured result.
- 6 URL that can move immediately to the current inspection is copied.
- 7 Export the current inspection data as zip.
- 8 Displays the screen where Comment can be input. When Enter button input, menu modification and COMMENT button are pressed once again, Comment is saved. Input contents are output to the comment category at the report's lower part.
- 9 Report on the result displayed currently is saved as pdf or jpg.
- 10 Current screen is saved as pdf.
- 11 Recalculate the current inspection data



#### 3.8 Macular 3D Analysis Screen – Summary (1)

- 1 Dates with current patient's inspection history are displayed.
- 2 This the selected date's right eye (OD) inspection list in case of current patient's 1.
- 3 This the selected date's left eye (OS) inspection list in case of current patient's 1.
- 4 Fundus image is displayed.
- 5 Thickness ETDRS chart and Thickness Average chart can be analyzed.
- 6 Thickness Map, Deviation Map, Normative Map and Enface image are displayed.
- 7 B Scan image for the yellow scan line (horizontal) shown on ④ is displayed.
- 8 B Scan image for the blue scan line (vertical), shown on ④ is displayed (HD image fixation).



#### 3.9 Macular 3D Analysis Screen – Summary (2)

- 1 Button that displays scan path (No. ①) on top of the Fundus image or makes it disappear.
- 2 Button that displays Thickness Map on top of the Fundus image or makes it disappear.
- 3 Button that displays Thickness chart on top of the Fundus image or makes it disappear.
- 4 Button that displays Enface image on top of the Fundus image or makes it disappear.
- 5 Button that displays deviation from Normative data on top of the Fundus image or makes it disappear.
- 6 Thickness can be selected to ILM-RPE / ILM-IPL. Images displayed on (3~5) and Thickness chart are displayed differently depending on the thickness selection.
- 7 Button that displays Normative Map on top of the Fundus image or makes it disappear.
- 8 Able to amplify and view Fundus image.
- 9 Ensure that IR Fundus is displayed in the Fundus domain.
- 10 Displayed on the list when the button is pressed on when there is the Fundus image that can be displayed.
- 11 Fundus image is displayed. Basically, Color Fundus images that were filmed on the same day are displayed. If none, IR Fundus image is displayed. B Scan image moves to the positon that is the same as that of the scan line when the handle at the end of the scan line on top of the Fundus image is drafted with mouse to move or it is possible to move immediately by clicking any part of the square with mouse (1-Point-Magic function). After clicking the mouse, it is possible to see that the thickness value is displayed on top of the Thickness Map while position is displayed on the Enface image.
- 12 Moves Thickness ETDRS Chart Center to the center of the scan domain.
- 13 Moves Thickness ETDRS Chart Center to the detected Fovea position.


### 3.10 Macular 3D Analysis Screen – Summary (3)

1 Displays Thickness chart.

Displayed differently depending on the selected Thickness (ILM-RPE/ILM-IPL) domain.

• ILM-RPE

Diameter of 6mm is divided into 9 domains, and the ETDRS Chart that displays average thickness by each domain is displayed.

ILM-IPL & PATIENT LIST -6 0 Huvitz\_Demo / Test 2018-09-20 / 11:08:19 / OS / Macular 3D(H) / 512x96 / 9 DAT tIt -O Q ¢ . 1 0

GCC Chart that displays average by dividing thickness Width diameter of 4.8mm and length diameter of 4mm for oval shape into six domains is displayed (the part in the above shown image that is displayed in red square)

- 2 Normative data's legend is displayed
- 3 Selected Thickness Average Chart is displayed.
  - ILM-RPE
    - Total average thickness for the diameter of 6mm domain is displayed.
  - ILM-IPL

Average thickness is displayed by dividing width diameter of 4.8mm, length diameter of 4mm for oval shape to higher and lower parts (the part in the No. ① image that is

displayed in blue square)

- 4 ILM-IPL Thickness Map is displayed. Applicable position's thickness can be seen when the top of the image is clicked on with the mouse (1-Point-Magic function)
- 5 ILM-RPE Thickness Map is displayed. Able to use 1-Point-Magic function.
- 6 Enface image is displayed. Able to use 1-Point-Magic function.

### 3.11 Macular 3D Analysis Screen – Summary (4)



- 1 Button that can adjust B Scan image's Brightness/Contrast.
- 2 Able to designate the number of B Scan images that are displayed on one screen. Displays up to the number of (Line x row).
- 3 Able to measure the length by clicking the mouse at the inside of the B Scan image. After activating by clicking on this button, click on the mouse on the B Scan image to move the cursor up to the desired length. Then, click again to display length information.
- 4 Displays by applying Color Map in the B Scan image.
- 5 B Scan image is displayed in Monochrome.
- 6 B Scan image is displayed in Monochrome after reversal
- 7 HD (high definition) B Scan image is displayed.
- 8 B Scan image is displayed by amplifying.
- 9 Download a currently displayed Bscan as jpg
- 10 Displays the direction of the Scan that is currently on display in the B Scan image.
- 11 Button that displays information of seven segmentations in the B Scan image. Able to select the segmentation among the seven that display (multiple selection enabled) 7 Among the segmentations, selected ones and each is displayed in different colors.
  - 7 Among the segmentations, selected ones and each is displayed in different co
  - Types of segmentations displayed ILM, NFL, IPL, OPL, IOS, RPE, BRM
- 12 B Scan image can be subjected to browsing. Animation effect is displayed when pressing on the up/down button.

# 3.12 Macular 3D Analysis Screen – OU

User is able to carry out comparative analysis on patient's both eyes through OU.



- 1 Displays Fundus image. Basically, Color Fundus image measured on the same day is displayed, but if none, then IR Fundus image is displayed. When the end of the scan line, displayed on top of the Fundus image is dragged with mouse, B Scan image displayed on No. (5) moves to the position that is the same as that of the scan line. When clicked on top of the Fundus image with mouse, then it is possible to use the 1PM (1-Point-Magic) function.
- 2 Thickness Chart and Thickness Average for the selected Thickness are shown on the upper part of No. (6).
- 3 Selects the measurement data for the comparative analysis.
- 4 Thickness Map, Deviation Map and Normative Map are displayed.
- 5 B Scan image is displayed.
- 6 Thickness Chart and Average difference of the two sides are displayed according to the selected Thickness.

# 3.13 Macular 3D Analysis Screen – Progression (1)

User can analyze patient state trend through Progression. Seven past data are displayed including selected measurement.

& PATIENT LIST	Huvitz_Demo / Test 2018-09-20 / 11:08:19 / OS / Macular 3D(H) / 512x	96 / 9x9mm / SSI:6				URL ENFORT COMMENT REPORT SCHERKOMP RECALC
DATE		Summary	OU Progr	ession Comparison		
2018-09-20	= List Edt [= Teldress (2)	LW AFE - D				
2018-09-20 OD Macular Wide(H) 512:06 Macular Wide(H) 512:06 Macular 200(H) 512:06 Macular 200(H) 512:06	2018-09-20/10:17-48	5 4 •	2018-09-20/11/00:19			
Anterior Linepol 200481 Anterior Radial 1024812 Color Fundus	CTDRS Graph		PART SUFFICE	GCC Graph (9)		
OS Macular Wide(H) 512:06 Macular Wide(H) 512:06 Macular 300:0 512:06 Macular 30(H) 512:06 Anterior Line(H) 102:4x1			Index Notal Index IndexOM Index IndexOM Index SubRecom Outlin SubRecom Outlin SubRecom Outlin Tolecom			
Anterior Radial 1024x12 Color Fundus	200 Seales M			The second se	ui i	

- 1 Able to select measurements subjected to comparative analysis independently through Progression.
- 2 Able to select Thickness. (ILM-RPE or ILM-IPL)
- 3 Thickness Map is displayed on top of each Fundus image.
- 4 Thickness Chart is displayed on top of each Fundus image.
- 5 Enface is displayed on top of each Fundus image.
- 6 Deviation information with the Normative data is displayed on top of each Fundus image.
- 7 Normative Map is displayed on top of each Fundus image.
- 8 Trend for each ETDRS domain for the listed measurement is displayed.
- 9 Trend for each GCC domain for the listed measurement is displayed.



# 3.14 Macular 3D Analysis Screen – Progression (2)

- 1 Click to select the measurements to compare through Progression.
- 2 Patient measurement information is displayed in the form of a list. Check measurement subjected to comparative analysis and click on the 'Save' button.

# 3.15 Macular 3D Analysis Screen – Comparison

User can carry out comparative analysis on the measurement data for the diagnosed patient's same area through Comparison. Function is the same as that of the <u>Macular 3D Analysis</u> <u>Screen – OU</u>.



1 Selects the measurement data subjected to comparative analysis.



### 3.16 Macular 3D Analysis Screen – 3D (1)

- 1 IR and Color Fundus are displayed. Able to show by moving the Scan Line vertically/horizontally by dragging the mouse.
- 2 B-Scan image is displayed.
- 3 3D modeling image is displayed.
- 4 3D Surface modeling image is displayed.



### 3.17 Macular 3D Analysis Screen – 3D (2)

- 1 3D modeling image's vertical/horizontal sides can be viewed.
- 2 3D modeling image's Brightness/Contrast can be calibrated.
- 3 Able to modify 3D modeling image's surface texture.
- 4 3D modeling image's transparency level can be calibrated. Becomes more transparent when closer to 0%.
- 5 Able to select one among the four types of models (volume, ILM, IPL, RPE surface texture) displayed on the 3D modeling image.



### 3.18 Macular Wide Analysis Screen

Macular Wide provides Macular, Disc simultaneous Analysis Screen.

Result of the analysis on the below mentioned domain is displayed on No. 2 according to the No. 1 Thickness selection.

- ILM-IPL : Macular
- ILM-RPE: Macular
- ILM-NFL: Disc

Able to analyze by modifying the domain, same for OU, Progression and Comparison according to the Thickness selection.



### 3.19 Macular Line Analysis Screen – Summary

 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. Scan path is displayed on top of the Fundus image line.

Thickness can be selected to ILM-RPE / ILM-IPL. No. ③ Thickness graph are displayed differently depending on the thickness selection.

2 B Scan image is displayed.

- 3 Thickness for B Scan image is displayed in graph.
- 4 B Scan image's Brightness / Contrast can be calibrated.
- 5 Able to display by applying measurement of the distance between the two points of B Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.
- 6 Able to display seven Segmentation information on the B Scan image.

### 3.20 Macular Line Analysis Screen – OU

User can carry out comparative analysis of the data on the measurement of the patients' two eyes through OU.



- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 B Scan image is displayed.
- 3 Thickness is displayed as a graph.
- 4 Thickness graphs of the both eyes are compared and displayed.

### 3.21 Macular Line Analysis Screen – Comparison

久 PATIENT LIST	Huvitz_test / 2018-07-05 / 17-88:29 / OD / Macular Line / 1024x1 / 9x0mm / SSt.8
DATE	Summary OU Comparison
2018-07-05	R     Fundus     OD     2018 07 06/17:45:29 Macdatrities/1004t1 Sudmen     Image: Source of the source
2018-07-05	
00 Macular Radial 1024x12 Macular Radial 1024x12 Macular Cross 1024x10 Macular Line 1024x1 Macular Line 1024x1 Color Fundus Disc 30 512x96	
OS Disc Circle 1024x1 Disc Raster 51224 Disc Radial 1024x12 Macular Radial 1024x12 Macular Radial 1024x12 Macular Cross 1024x10 Macular Line 1024x1	

1 Measurement data that serves as the standard for comparison.

2 Able to select the measurement data that serves as the standard for comparison.

# & EXERCISE Medic Johnson / Edit Johnson / John

### 3.22 Macular Cross Analysis Screen – Summary

1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. Scan path is displayed on top of the Fundus image line.

Thickness can be selected to ILM-RPE / ILM-IPL. No. ③ Thickness graph are displayed differently depending on the thickness selection.

- 2 B Scan image is displayed. Horizontal and vertical scans are displayed on the left and right, respectively.
- 3 Thickness for the B Scan image is displayed as a graph. Likewise, left side is the horizontal scan while the right side is the vertical scan.
- 4 B Scan image's Brightness / Contrast can be calibrated.
- 5 Able to display by applying measurement of the distance between the two points of B Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.
- 6 Able to display seven Segmentation information on the B Scan image.



### 3.23 Macular Cross Analysis Screen – OU

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 B Scan image is displayed.
- 3 Thickness graph is displayed.
- 4 Thickness graphs of the both eyes are compared and displayed.

久 PATIENT LIST	Huoliz, Demo/ Test 2019-07-02/09:40-20 / OD / Macular Cross / 1024x10 / 9x9mm / 551:8	
DATE	Summary OU Comparison	
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2019-07-02		
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US No dora available in table		

# 3.24 Macular Cross Analysis Screen – Comparison

- 1 Measurement data that serves as the standard for comparison.
- 2 Able to select the measurement data that serves as the standard for comparison.



### 3.25 Macular Radial Analysis Screen - Summary

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. Able to use 1-Point-Magic function.
- 2 Thickness Map for the selected Thickness is displayed. Thickness chart, Average information is displayed. Able to use 1-Point-Magic function.
- 3 B Scan image's Brightness / Contrast can be calibrated.
- Able to designate the number of B Scan images displayed on one screen. Able to display up to the number of (lines x rows).
   Able to display by applying measurement of the distance between the two points of B Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.
- 5 B Scan image for the yellow scan line is displayed.
- 6 B Scan image for the blue scan line is displayed.
- 7 Thickness graph for the yellow scan line is displayed.
- 8 Thickness graph for the blue scan line is displayed.

A PATIENT LIST	- Huwitz, Demo / Test. 📋 📴 🛤 🙆 👌
DATE	Summary OU Control rison
2018 09-20	R Findle • OD 2018/02/10243 Internet • OS 2018/02/10240 • R Findle • Findle
2018-09-20	
00 Macular Line(h) 302441 Macular Cress 3024410 Color Fundus Macular Radial 3024422 Color Fundus Macular Raster(h) 532x2 Color Fundus	
OS Macular Wide(1) 512:06 Macular Wide(1) 512:06 Macular 20(1) 512:06 Macular 20(1) 512:06 Anterior Line(9) 102461 Anterior Rudial 1024612 Color Fundus	

# 3.26 Macular Radial Analysis Screen – OU

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 B Scan image for the yellow scan line is displayed.
- 3 Thickness graph for the yellow scan line is displayed.
- 4 Thickness graphs of the both eyes are compared and displayed.

久 PATIENT UST	Hunitz, Denno / Test 2019-07-02 / 09:40:52 / 00 / Macular Radial / 1024x12 / 9x8mm / 55k:7	
DATE		
2018-09-20		
2019-07-02 OD Disc Circle 1024x1		
Disc Raster(H) 512524 Disc Radial 1024x12 Macular Raster(H) 51252 a		199
Macular Radial 1024x12 Macular Cross 1034x10 Macular Limbili 1034x1		·
OS No data available in table	🖕 · Q	

# 3.27 Macular Radial Analysis Screen – Comparison

- 1 Measurement data that serves as the standard for comparison.
- 2 Able to select the measurement data that serves as the standard for comparison.

### 3.28 Macular Raster Analysis Screen – Summary

а С	え PATIENT UST	Huvitz_Demo / Test 2018-09-20 / 10:20:12 / 00 / Macula	er Raster(H) / 512x24 / 9x9	nm/SSE6			(III) URL		IT REFORT SC	CO (	Č ICALC
DAT				Sum	mary OU						
2018	09-20		Fundus +				(4) 10	• 🖶			0
		•		11/4		0 ++	13/24			Q	¥.
2018 00	09-20 Macular Cross 1024x10 Color Fundus		A)			V					
3	Macular Radial 1024x12 Color Fundus Macular Raster(H) 512x2 Color Fundus	C Tacloss RH.077 -	8	-	1			Ť		0	
os	Macular 3D(H) 512x96 Macular Wide(H) 512x96 Macular Wide(H) 512x96	Thickness ETD		-				$\backslash$			
	Macular 30(H) 512x96 Macular 30(H) 512x96 Anterior Line(H) 1024x1 Anterior Radial 1024x12		1								
	ColorFundus	2				U				(8)	

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. Able to use 1-Point-Magic function.
- 2 Thickness Map for the selected Thickness is displayed. Thickness chart, Average information is displayed. Able to use 1-Point-Magic function.
- 3 Scan image's Brightness / Contrast can be calibrated.
- Able to designate the number of B Scan images displayed on one screen. Able to display up to the number of (lines x rows).
   Able to display by applying measurement of the distance between the two points of B Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.
- 5 B Scan image for the yellow scan line is displayed.
- 6 B Scan image for the blue scan line is displayed.
- 7 Thickness graph for the yellow scan line is displayed.
- 8 Thickness graph for the blue scan line is displayed



### 3.29 Macular Raster Analysis Screen – OU

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 B Scan image for the yellow scan line is displayed.
- 3 Thickness graph for the yellow scan line is displayed.
- 4 Thickness graphs of the both eyes are compared and displayed

义 PATIENT UST	Huxitz, Demo / Test 2019-07-02 / (99:41:19 / 00 / Macular Raster(H) / 512e24 / 9x8mm / S516		NORT COMMENT REPORT SCREEN FUNRE RECALL
DATE	Summary OU Comparison		· · · · · · · · · · · · · · · · · · ·
3019-02-02 3018-09-30	R Fundus - C 2015 67 62/09.44.47 Macdair Rester / S1204 Indown	6176 J	H Funda •
2019-07-02			
OD Disc Circle 1074x3 Disc Raster(H) 512x24 Disc Raster(H) 512x24 Macular Raster(H) 512x23 Macular Riadial 1024x12 Macular Cross 1024x13 Macular Line(H) 1024x1			
OS No data available in table			

# 3.30 Macular Raster Analysis Screen – Comparison

- 1 Measurement data that serves as the standard for comparison.
- 2 Able to select the measurement data that serves as the standard for comparison

# Apriles Test Description (Display Display (Display (Disp

### 3.31 Disc 3D Analysis Screen – Summary

1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. List up the list by clicking on the button when there is Color Fundus image that can be displayed. Able to use 1-Point-Magic function.

Thickness map and Enface image that are displayed on top of the Fundus image according to the Thickness (ILM-RPE/ILM-NFL) selection are displayed differently. Auto center and restore center buttons below the Fundus image that moves position of the RNFL Chart to Disc position or to the center of the scan domain position.

- 2 Disc and Cup domain's measurement information is displayed.
- 3 Displays diameter of 3.45mm ring's Thickness Profile by stacking with the Normative data.
- 4 Displays diameter of 3.45mm ring's B Scan by synthesizing.
- 5 Displays diameter of 3.45mm ring's Thickness with the average for each T-S-N-I domain.
- 6 Displays each T-S-N-I domain of No. (5) by segmenting into three parts.
- 7 B Scan image is displayed for the yellow scan line (horizontal) displayed on No. ①.
- 8 B Scan image for the blue scan line (vertical) displayed on No. ① is displayed (HD image fixation)
- 9 Scan image's Brightness / Contrast can be calibrated.
- 10 Able to designate the number of B Scan images displayed on one screen. Able to display up to the number of (lines x rows). Able to display by applying measurement of distance among the two points of the B Scan image, Color Map Overlay, Monochrome and Monochrome reverse function.
- 11 Thickness Map and Enface image are displayed. Able to use 1-Point-Magic function.
- 12 Other functions are the same as those of the Macular 3D Analysis Screen Summary.



### 3.32 Disc 3D Analysis Screen – OU

- 1 Displays diameter of 3.45mm ring's Thickness Profile stacked with Normative data along with the two eyes.
- 2 Difference value of ① is displayed as candle chart.
- 3 Measurement information figure for the Disc domain for both eyes is displayed together.
- 4 Other functions are the same as those of the Macular 3D Analysis Screen OU.



### 3.33 Disc 3D Analysis Screen – Progression

- 1 RNFL-4 value trend for the listed measurement is displayed in graph.
- 2 Cup/Disc Ratio trend for the listed measurement is displayed in graph.
- 3 Cup/Disc Area trend for the listed measurement is displayed in graph.
- 4 Able to select measurements subjected to comparative analysis individually through Progression

久 PATIENT UST	Huvitz_Demo / Test 2018-09-20 / 11:24:01 / 0D / Disc 3D(H) / 512x96 / 6x6mm / 5SI:7	ULL LEDORT COMMENT RECEIT SOUTH FLOW FROM
DATE	Summary OU	Progression Comparison 3D
2018-09-20	R         Fundos         D         2018/09.26 / 11.24481           Image: State of the state of th	The dense     LA MEL       BNL Tockness     00     2013 093 20/11:3936     III       BNL Tockness     00     2013 093 20/11:3936     IIII       10     00:20/11:2936     00     00:20/11:2936       10     00:20/11:2936     IIIII     IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
OD Color Fundus Disc 200(9) 532:06 Macater Welley 0) 512:06 Macater Welley 0) 512:06 Macutar Welley 0) 512:06 Macutar 200(0) 512:06	Televise for the second	Built Inclues Difference         Differenc
OS Macular Wole(H) 512:06 Macular Wole(H) 512:06 Macular 20(H) 512:06 Macular 20(H) 512:06 Macular 20(H) 512:06 Anterior Line(H) 102:41 Anterior Radial 102:412 Color Fundas	+ + 44/95 → + + + + + + + + + + + + +	Summary Parameter C(2) Racio Norti C(2) Racio Norti C(3) Racio

# 3.34 Disc 3D Analysis Screen – Comparison

- 1 Measurement data that serves as the standard for comparison.
- 2 Able to select the measurement data that serves as the standard for comparison

# 3.35 Disc 3D Analysis Screen – 3D

Function is same as that of the Macular 3D Analysis Screen – 3D.





### 3.36 Disc Radial Analysis Screen – Summary

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. Able to use 1-Point-Magic function.
- 2 Thickness Map for the selected Thickness is displayed. RNFL-4 Chart and RNFL-12 Chart are displayed. Able to use 1-Point-Magic function.
- 3 B Scan image for the yellow scan line is displayed.
- 4 B Scan image for the blue scan line is displayed.
- 5 Thickness graph for the yellow scan line is displayed.
- 6 Thickness graph for the blue scan line is displayed.

### 3.37 Disc Radial Analysis Screen – OU

A PATIENT LIST	Hunitz_Demo / Test 2018-09-20 / 10:55:40 / 00 / Disc Radial / 1024x12 / Gelmm / SSI:5	URL EXPORT COMMENT REPORT SCREEN PLANS RECAL
DATE	Summary OU Compaction	
X18-09-20	R Findes • OD 2018-99.29/1800.40 DOL Radid / 130/k12 Eddme	. B Forda .
2018-09-20		
OC Anterior Line(H) 1054x1 Anterior Residu 1024x1 Color Fundus Macular Wide(H) 512x66 Dec Retial (1024x12 Disc Rater(H) 512x64		
OS Macular Wide(H) 512066 Macular Wide(H) 512066 Macular 30(H) 51206 Macular 30(H) 51206 Anterior Line(H) 1024x1 Anterior Badial 1024x12 Color Fundus		

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 Thickness graph for the yellow scan line is displayed.
- 3 Thickness graphs of the both eyes are compared and displayed.



# 3.38 Disc Radial Analysis Screen – Comparison

1 Able to carry out comparative analysis by selecting the list on the measurements of the same area.



### 3.39 Disc Raster Analysis Screen – Summary

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed. Able to use 1-Point-Magic function.
- 2 Thickness Map for the selected Thickness is displayed. RNFL-4 Chart and RNFL-12 Chart are displayed. Able to use 1-Point-Magic function.
- 3 B Scan image for the yellow scan line is displayed.
- 4 B Scan image for the blue scan line is displayed.
- 5 Thickness graph for the yellow scan line is displayed.
- 6 Thickness graph for the blue scan line is displayed.
- Able to designate the number of B Scan images displayed on one screen. Able to display up to the number of (lines x rows).
   Able to display by applying measurement of the distance between the two points of B Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.

久 PATIENT UST	Huvitz, Demo / Test 2018-09-20 / 10:52:33 / 00 / Disc Raster(H) / 512x24 / Galimm / S51:6	
DATE	Summary CU Comparison	
X18-09-X2	R Fonder • OD 2018 09:29 / 80:23.31 Des Rater / 513.24 ladans III Thukees EX HT • OS 2018 09:29 / 80:23.41 Des Rater / 513.24 ladans	· B Forder ·
2018-09-20 Macular 20(9) (512:06) Anterior Line(9) (52:84:1 Anterior Radial 120:44:12 Color Fundus Macular Wele(9) (512:06) Disc Radial (1214-12) Disc Radial (1214-12)		
OS Macutar Wide(H) 6312466 Macutar Wide(H) 6312466 Macutar 30(H) 532266 Macutar 30(H) 532266 Anterior Line(H) 532266 Anterior Radial 3024612 Color Fundus		

### 3.40 Disc Raster Analysis Screen – OU

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 Thickness graph for the yellow scan line is displayed.
- 3 Thickness graphs of the both eyes are compared and displayed.

Q DATIENT LIST	Huvitz_Demo / Test	
Cinici osi	2019-07-02 / 09:42:01 / OD / Disc Raster(H) / 512x24 / 6x6mm / 55k6	URL EXPORT COMMENT REPORT SCREENDUMP RECALC
DATE	Summary OU Comparison	
2019-07-02	Funder      OD     2014/07/09/0028     Exter / S1204/6d/mm     Exter / S1204/6d/mm     OD     Disc Rater / S1204/6d/mm     OD     Disc Rater / S1204/6d/mm	x Fundar •
2019-07-02		
OD Direc Circle 1024-01 Disc Restance(9 1024-02 Disc Restance(9 1024-02 Macular Restance(9 1024-02 Macular Restance(9 1024-02 Macular Liver(9 1024-02	HH 13/24 HH 13/24 A 2 A 2 A 2 A 2 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4	•

### 3.41 Disc Raster Analysis Screen – Comparison

1 Able to carry out comparative analysis by selecting the list on the measurements of the same area.



### 3.42 Disc Circle Analysis Screen – Summary

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 B Scan image filmed along the yellow circle is displayed.
- 3 Thickness graph for the B Scan is displayed.
- 4 Able to display by applying measurement of the distance between the two points of B Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.

ス PATIENT LIST	Hunitz_Denno / Test 2018-09-20 / 10:41:96 / 00 / Disc Circle / 1024x1 / 4x4mm / SSI-5	
DATE	Summary OU Comparison	1
2018-09-20	Forde • OD 2018-09-29/194126 Inc Code/1940 1 States Inc Code/1940 1	
OBLEO-30 OC Lasor Fundus Macutar Widely (\$12:06 Disc Radial (\$2:4:12 Use: manry(1) (\$12:24 Celor Fundus Disc Cold (\$12:4:12 Disc Circle (\$12:4:12		
OS Macular Wide(H) 512x96 Macular Wide(H) 512x96 Macular 200(H) 512x96 Macular 200(H) 512x96 Anterior Line(H) 1024x12 Celor Fundus		

### 3.43 Disc Circle Analysis Screen – OU

- 1 Fundus image is displayed. Basically, Color Fundus image, measured on the same day is displayed. But if none, IR Fundus image is displayed.
- 2 Thickness graph for the yellow Circle scan line is displayed.
- 3 Thickness graphs of the both eyes are compared and displayed.



# 3.44 Disc Circle Analysis Screen – Comparison

1 Able to carry out comparative analysis by selecting the list on the measurements of the same area.



### 3.45 Anterior Radial Analysis Screen – Summary

- 1 Fundus image is displayed. Basically, IR Fundus image is displayed. Scan path is displayed on top of the Fundus image.
- 2 Selects Thickness to display on top of the Fundus image.
- 3 Thickness and curvature measured according to the selected Thickness domain is displayed into height through Color Map.
- 4 B Scan image for the yellow scan line is displayed.
- 5 B Scan image for the blue scan line is displayed.
- 6 Thickness graph for the yellow scan line is displayed.
- 7 Thickness graph for the blue scan line is displayed.
- Able to designate the number of B Scan images displayed on one screen. Able to display up to the number of (lines x rows).
   Able to display by applying measurement of the distance between the two points of B

Scan image, Color Map Overlay, Monochrome, and Monochrome reverse function.

옷 PATIENT LIST	Hunitz_Demo / Test 2018-09-20 / 10:59:57 / 00 / Anterior Radial / 1024x12 / Gx6mm / SSI:6	
DATE	Summary OU st Compart Am	
2018-09-20	R         Fundos         OD         2018 493 20 / 105957         The doess         EPI 490         OS         2018 493 20 / 1150244           •	pen * R Funds *
2018-09-20		
OD Macular 30(10):512:56 Anterior Iline(10):512:56 Anterior Radial 3024:52 Color Fundus Macular Wite(10):512:56 Disc Ratter(10):512:524		
OS Macular 30(1) 512:36 Anterior Line(1) 102:45 Anterior Risdial 102:45 Color Fundus Macular Wide(1) 512:06 Disc Rubil 102:45 Disc Rubil 102:45 Disc Rubil 102:45		

### 3.46 Anterior Radial Analysis Screen - OU

- 1 Fundus image is displayed. Basically, IR Fundus image is displayed.
- 2 Thickness graph for the yellow scan line is displayed.
- 3 Thickness graphs of the both eyes are compared and displayed.



3.47 Anterior Radial Analysis Screen – Comparison

- 1 Able to carry out comparative analysis by selecting the list for the measurement of the same part.
- 2 Function is the same as that of the <u>Anterior Radial Analysis Screen OU</u>.





1 Fundus image is displayed. Basically, IR Fundus image is displayed. Scan path is displayed on top of the Fundus image.

- 2 B Scan image's Brightness / Contrast can be calibrated
- 3 Able to display by measuring the angle and length within the B Scan, Color Map Overlay, Monochrome, and by applying Monochrome reverse function.
  - 3.49 Anterior Line Analysis Screen OU



- 1 Fundus image is displayed. Basically, IR Fundus image is displayed.
- 2 Bscan for the both eyes are displayed.



### 3.50 Anterior Line Analysis Screen – Comparison

- 1 Able to carry out comparative analysis by selecting the list for the measurement of the same part.
- 2 Function is the same as that of the <u>Anterior Line Analysis Screen OU</u>.



# 3.51 Color Fundus Analysis Screen – Summary (1)

- 1 Displays on the Fundus image by removing RED color (Red-Free button). Displays on the Fundus image by applying Red-Free and Emboss filter (Emboss button).
- 2 Download a currently displayed Fundus as jpg
- 3 Fundus image's reference point is displayed.
- 4 Length, Area mass, Cup/Disc proportion are measured.
- 5 Displays on the Fundus image using selected color.
- 6 User can apply the following values on the Fundus image arbitrarily.
  - Brightness: Brightness control
  - Contrast: Contrast control
  - Hue: Color control
  - Saturation: Chroma control
- 7 Values measured on ④ are displayed.

# 3.52 Color Fundus Analysis Screen – Summary (2)



1 Measures the length at the inside of the Fundus. Displays the distance from mouse click to release by measuring the length. Able to calibrate move and length after measurement is completed, by clicking on the measurement point (unit: mm).

- 2 Measures the area mass at the inside of the Fundus. Displays the distance from mouse click to release by measuring the length. Able to calibrate move and length after measurement is completed, by clicking on the measurement point. When segment is clicked on, point is added, and able to modify into polygon (unit: mm2).
- 3 When the button is clicked on, two circles are drawn, and move to the Cup/Disc position for measuring diagram takes place. Proportion is measured by calibrating to suit the size.

### 3.53 Color Fundus Analysis Screen – OU

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Able to carry out comparative analysis on the Fundus of the both eyes.

1 Able to carry out comparative analysis by selecting the list on other measurement parts.



3.54 Color Fundus Analysis Screen – Comparison

1 Able to carry out comparative analysis by selecting the list on the same measurement parts.



# 3.55 Color Fundus Analysis Screen – Panorama

- Selects the fundus image that is the target for moving. Selected image is displayed on 1 No. 2 domain, and it is displayed slightly more transparent compared to other images.
- 2 3 Modify positon by selecting Fundus image.
- Able to modify background color.
- 4 Able to apply redfree effect after Stitch is completed.
- When the stitch button is pressed on after modifying image's position in the No. 2 5 domain, merged image gets output.



Press on the stitch reset button to merge again after modifying the position. 6



# 3.56 Angiography Analysis Screen - Summary (1)

- 1 Single: display angio information about only single eye.
  - OU: display angio information about both of eyes.
  - Progression: It is easy to check the progress by comparing the eyes taken over several days.
  - Compare: compare angio data from two different days.
- 2 Choose one between Basic angio map and Detail angio map
- 3 Select the angiogram in the combo box.

- Custom: Its signal depth is customized by user. As user set the depth range, angiogram is also changed

- Superficial: Its signal depth is from ILM(0um) to IPL(0um).
- 4 Deep: Its signal depth is from IPL (0um) to OPL(0um).
- 5 Outer: Its signal depth is from OPL(0um) to BRM(0um).
- 6 Choriocapillary: Its signal depth is from BRM(15um) to BRM(45um).
- 7 Retina: Its signal depth is from ILM(0um) to OPL(0um).
- 8 Select the image in the combo box.
  - Enface: It represent Enface image.
    - Thickness: It represent Thickness map.
  - Depth coded map: Choriocapillary, Deep, Outer map is overlapped in this image.
- 9 Inform the layer&depth of the displayed image.
- 10 Acquired B-Scan with angiogram. And Tomography can overlap with a red color for a blood probability.
- 11 Able to amplify and view B-scan image.
- 12 B Scan image can be subjected to browsing. Animation effect is displayed when pressing on the up/down button.



# 3.57 Angiography Analysis Screen - Summary (2)

- 1 Select the angiogram in the combo box.
  - Superficial: Its signal depth is from ILM(0um) to IPL(0um).
  - Deep: Its signal depth is from IPL (0um) to OPL(0um).
  - Outer: Its signal depth is from OPL(0um) to BRM(0um).
  - Choriocapillary: Its signal depth is from BRM(15um) to BRM(45um).
  - Retina: Its signal depth is from ILM(0um) to OPL(0um).
  - Custom: Its signal depth is customized by user. As user set the depth range, angiogram is also changed
- 2 Select the image in the combo box.
  - Enface: It represent Enface image.
  - Thickness: It represent Thickness map.
  - Depth coded map: Choriocapillary, Deep, Outer map is overlapped in this image.
- 3 Calculate Blood vessel densities and Flows in each sections.





-Area: FAZ area in mm<sup>2</sup>. -Perimeter: FAZ perimeter in mm. -Circularity: FAZ circularity ratio.

5 Acquired B-Scan with angiogram. And Tomography can overlap with a red color for a blood probability.



# 4 Fovea Avascular Zone



# 3.58 Angiography Analysis Screen – OU

- Change the standard of single eye. FAZ (1) Screen
- 1 2
- 3 VESSEL





# 3.59 Angiography Analysis Screen – Comparison

- Change the standard of single eye. FAZ (1) Screen 1 2
- 3 VESSEL





# 3.60 Angiography Analysis Screen – Progression

- Select data with which you want to compare in the list box. 1
- 2 Select data with which you want to compare in the list box.
- 3 Select data with which you want to compare in the list box. Select the angiogram in the combo box.
- 4
  - Superficial: Its signal depth is from ILM(0um) to IPL(0um).
  - Deep: Its signal depth is from IPL (0um) to OPL(0um).
  - Outer: Its signal depth is from OPL(0um) to BRM(0um).
  - Choriocapillary: Its signal depth is from BRM(15um) to BRM(45um).
  - Retina: Its signal depth is from ILM(0um) to OPL(0um).
  - Custom: Its signal depth is customized by user. As user set the depth range, angiogram is also changed
- 5 FAZ, VESSEL : It shows progression with graph.
- FAZ Parameter : Area, Perimeter, Circularity 6

久 PATIENT LIST	00001 / 2019-06-28 / 15:30:52 / / Refraction /			(8) 🗎				
DATE	Refraction							
2019-06-28 2019-06-14 2019-06-13 2019-04-11 2018-02-02	REF/KER Select. 7 - OD PD64.0 OS No data available in table	Lensmeter Select. 7 - OD PD OS No data available in table	Subjective Select. 7 - OD PD64.0 OS No data available in table	Final Data Select. 0 • 00 PO64.0 05 No data available in table				
	<ul> <li>Color</li> <li>Kol</li> </ul>	3	(4)	5				
	Comment			9				

# 4.1 Refraction Screen Overview

- 1 Indicates the dates for the current patient's examination history.
- 2 Indicates measurement data for both eyes. By popup, can check Color, IOL, TFBUT and MEIBO image.
- 3 Indicates measurement date of Lensmeter for both eyes.
- 4 Indicates measurement date of subjective both eyes.
- 5 Based on the values adjusted during the measured, the final measurement data for both eyes are displayed.
- 6 Displays the screen where Comment can be input.
- 7 It displays measurement result from server in descending order. When choosing one from the list, it displays below.
- 8 URL that can move immediately to the current inspection is copied
- 9 Save or cancel the imported measurement data

久 PATIENT LIST	00001 / 2019-06-28 / 20:21:46 / / Refraction /						URL	
DATE	Refraction							
2019-06-28	REF/KER Select 2 - Lensmeter	Select	Subjective Select		Final Data	Select		
2019-06-14 2019-06-13	OD PD64.0 OS OD	PD64.0 OS	OD PD64.0	OS	OD	PD64.0	OS	
2019-04-11	+ 5.00 SPH + 5.00 +02.06	SPH –	+ 5.00 Sph(Far)	+10.00	+ 5.00	Sph(Far)	+10.00	
2018-02-02	REF +21.00 CYL +21.00 -05.00	CYL -	+21.00 Cyl(Far)	+00.11	+21.00	Cyl(Far)	+00.11	
	10 AXIS 100 💙 080	AXIS —	10 Axis(Far)	10	10	Axis(Far)	10	
	+2.00 R1 +2.00 -00.09	PRISM(X) –	+2.00 Add(Far)	+2.00	+2.00	Add(Far)	+2.00	
	KER +2.00 R2 +2.00 +00.67	PRISM(Y) -	<ul> <li>Hor. Prism(Far)</li> </ul>	-		Hor. Prism(Far)		
	mm > +2.00 Axis 100 00.00	ADD1 22.22	– Vert. Prism(Far)	-		Vert. Prism(Far)		
	€ Color 4 ♦ IOL 2 11.11	ADD2 33.33	- Va(Far-OU)	-		Va(Far-OU)		
	🔿 ТГВИТ 1 🔿 МЕНВО 1 💾 100/100	UV/BLUE 005/030	Va(Far)	-	-	Va(Far)	-	
			– Sph(Near)	-		Sph(Near)		
	Comment		- Cyl(Near)	-		Cyl(Near)		
			<ul> <li>Axis(Near)</li> </ul>	-		Axis(Near)		
			– Hor. Prism(Near)	-	-	Hor, Prism(Near)	-	
			<ul> <li>Vert. Prism(Near)</li> </ul>	-		Vert. Prism(Near)		
			Va(Near-OU)	-		Va(Near-OU)		
			– Va(Near)	-		Va(Near)		
						Cancel Save	5)	

### 4.2 Refraction Analysis Screen

- 1 It creates the latest measurement data for the selected patient.
- 2 Click the list button to import patient's measurement data
- 3 Confirm the measurement data.

Confirm Color, IOL, TFBUT, MEIBO values if REF/KER data exists. The numbers besides Color, IOL, TFBUT, MEIBO displaying on Refractor Image, indicate number of images for each examination. By click the button, it shows a image. 4



5 Save all measurement data
**HUVITZ-Web Viewer** 

## **5** Information Needed for Service

When trouble-shooting measures fail to solve the problem, place contact the Huvitz distributor along with the information on the following matters.

Year/month/day		
purchased:	_	_
Client name:		
Client address:		
Client contact number:		
Model number:		
Serial number:		

Supply of parts needed for repair:

- Parts needed to repair for this device will be keep for 7 years.

Parts that the service personnel need to repair:

- The following parts are consumables by nature and quality tends to decrease after using for a long time. But the user must not replace it in person. When the parts are consumed or deteriorated due to long time use, contact the Huvitz's distributor for replacement.
- Back-up battery for clock and data

Contact the Huvitz's service department directly by referring to the address and telephone numbers below if you cannot contact the distributor where you purchased the product.

## How to Contact Huvitz Co., Ltd.

Huvitz Co., Ltd.

38, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055, Republic of Korea Tel: +82-31-428-9100 Fax: +82-31-477-9022(F/A)

E-mail : <u>svc@huvitz.com</u> website : <u>www.huvitz.com</u>

EU Representative

Medical Device Safety Service GmbH (MDSS) Schiffgraben 41, 30175 Hannover, Germany Tel: +49-511-6262-8630

Canada Representative

AXIS Medical Canada Inc., 9260, Boulevard des Sciences Anjou, QC H1J 3A9 Tel: +1-877-388-1515

U.S.A Representative

**COBURN TECHNOLOGIES** 55 Gerber road, South Windsor, Connecticut, 06074, United states Tel: +1-860-648-4906

Brazil Representative

VR Medical R. BATATAES 391, CEP 01423, SÃO PAULO Tel: +55-11-3889-0875