

4.4 User settings

NOTE

The “User Settings” function is not available in Endo Capsule Software Light.

You can add or remove users, as well as change passwords.

1. Select “Settings” from the “Tools” menu on the main screen.
2. Click the “User accounts” tab. The user settings screen is displayed.

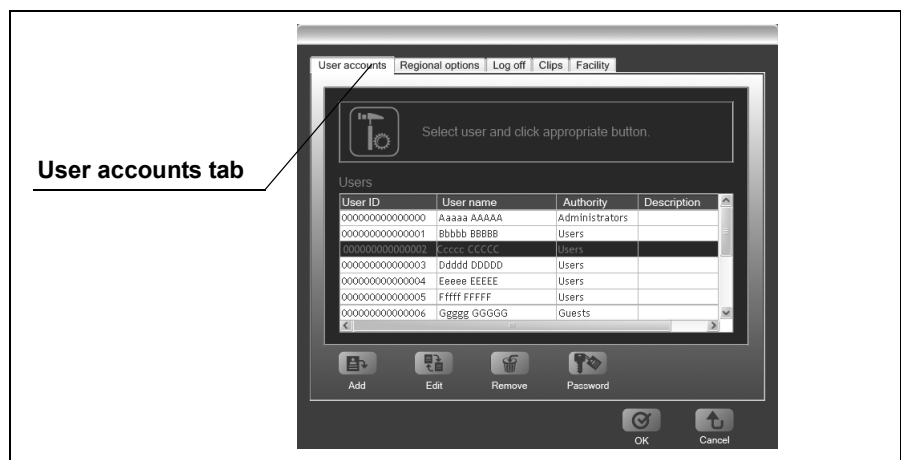


Figure 4.15

Adding users

NOTE

- You must log in as an administrator in order to add a user.
- Characters that can be used for user IDs and passwords are shown in Table 4.2.
- For more information on authority levels, see “Workstation operation limitations” on page 82.

Table 4.2

Uppercase	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Lowercase	a b c d e f g h i j k l m n o p q r s t u v w x y z
Numbers	0 1 2 3 4 5 6 7 8 9
Symbols	` ~ ! @ # \$ % ^ & * () _ + - = { } [] ¥ : " ; ' < > ? , . /

1. Click the [Add] button on the user settings screen. The adding user screen is displayed.

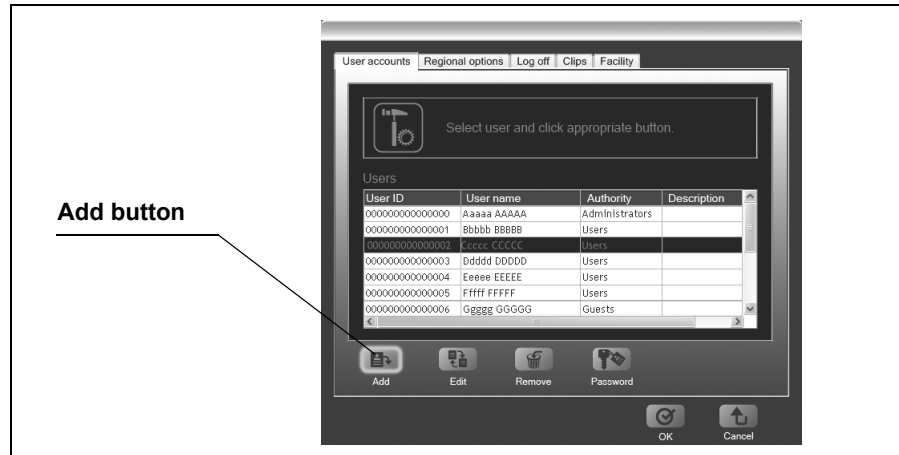


Figure 4.16

2. Enter the user ID, user name, authority, and password. Enter additional information in the "Remarks" field as necessary.

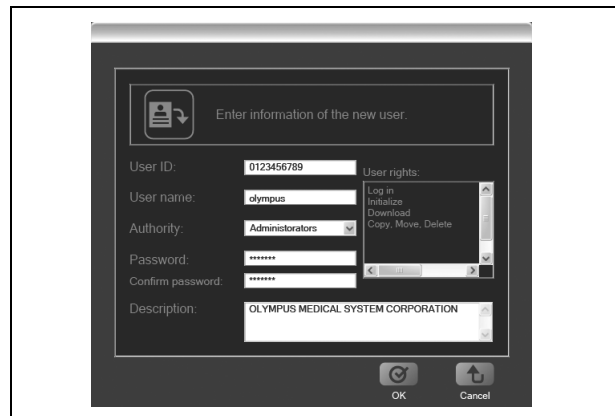


Figure 4.17

NOTE

- The user ID and password can be up to 32 characters in length.
- All fields are case sensitive.
- Operation on the workstation will be limited depending on the user's authority (see "Workstation operation limitations" on page 82).
- The password to be set is for initial use.

3. Click the [OK] button. The user settings screen is displayed, and the new user is added to the list on the user settings screen.

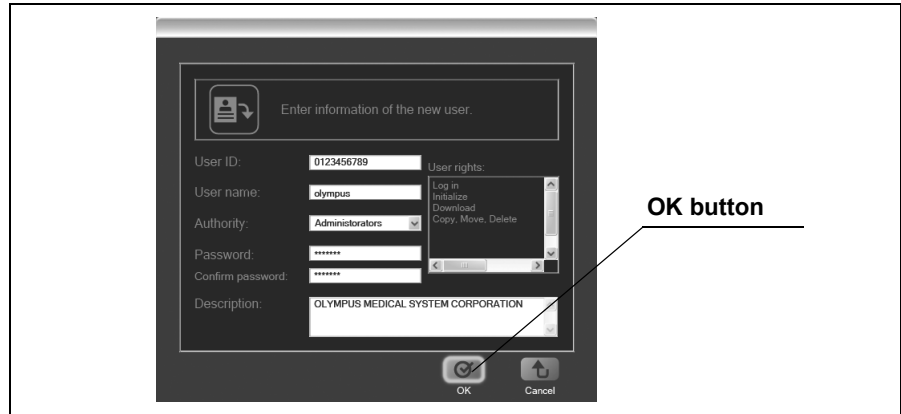


Figure 4.18

NOTE

Click the [Cancel] button to return to the user settings screen without adding a user.

4. Click the [OK] button on the user settings screen. The new user is added.

NOTE

Click the [Cancel] button to cancel the addition.

Changing user information

NOTE

You must log in as an administrator in order to change user information.

1. Select the user whose information you wish to change, and click the [Edit] button. The user information update screen is displayed.

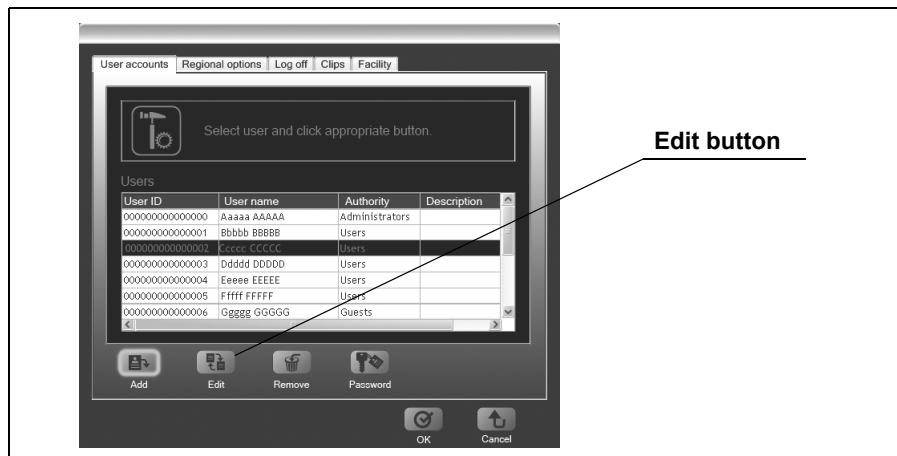


Figure 4.19

2. Enter the new information.



Figure 4.20

3. Click the [OK] button. The user settings screen is displayed.

NOTE

Click the [Cancel] button to return to the user settings screen without changing the user information.

4. Click the [OK] button on the user settings screen. The user information is updated.

NOTE

Click the [Cancel] button to discard the changes.

Changing passwords

NOTE

- You can only change the password for the user who is currently logged in.
- If you forget your password, an administrator can change the user information.

1. Click the [Password] button. The password update screen is displayed.

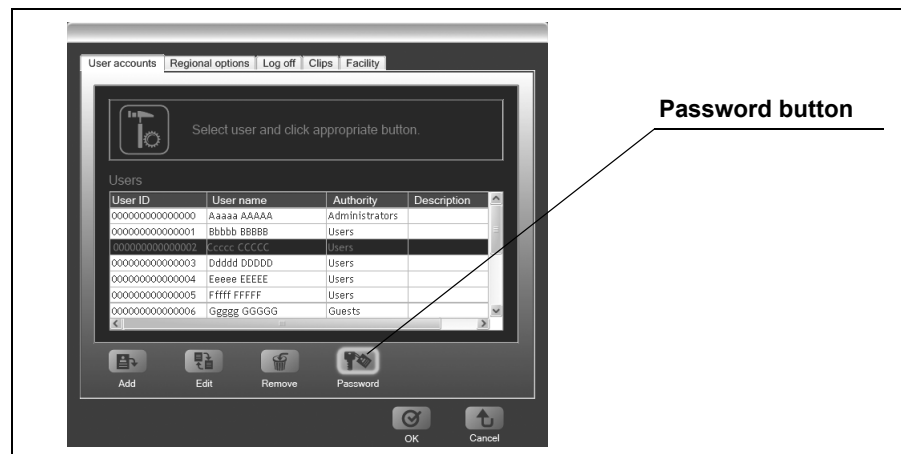


Figure 4.21

2. Enter the old and new passwords. Enter the new password twice to confirm it.

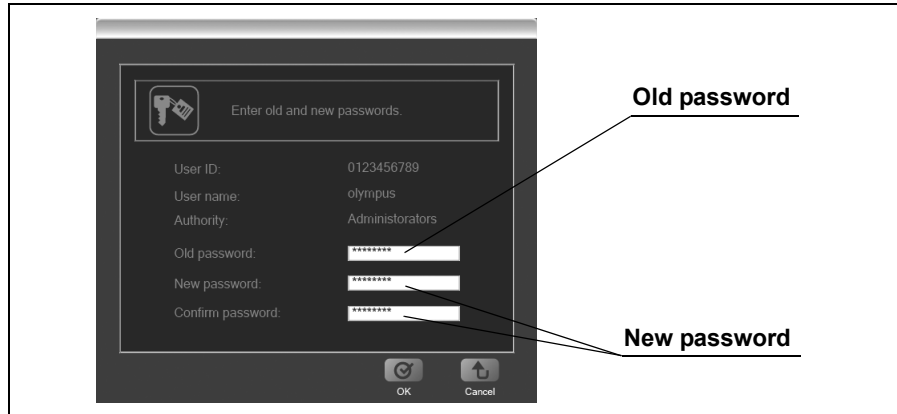


Figure 4.22

3. Click the [OK] button. The password is changed, and the user settings screen is displayed.

NOTE

Click the [Cancel] to return to the user settings screen without changing the password.

4. Click the [OK] button on the user settings screen. The new password becomes effective.

NOTE

Click the [Cancel] button to discard the new password and keep the old password.

Removing users

You must log in as an administrator in order to remove a user.

NOTE

Once a user is removed, the user can no longer log in to the workstation.

1. Select the user that you wish to remove and then click the [Remove] button.

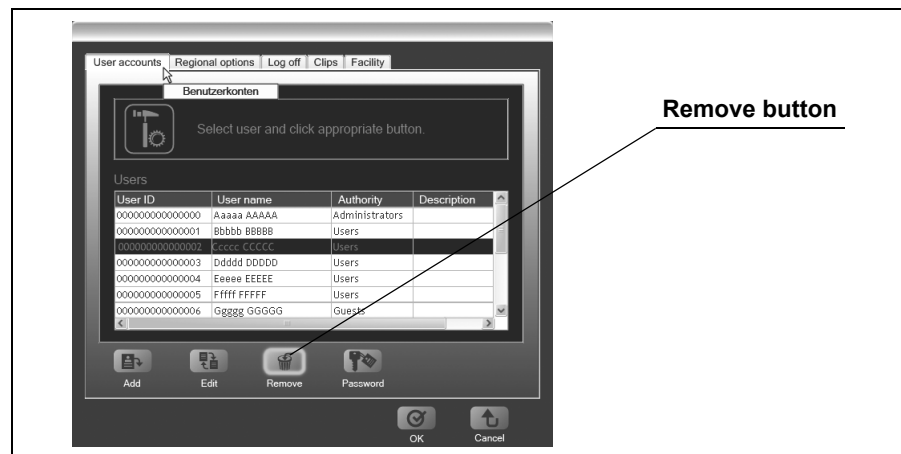


Figure 4.23

2. The user is removed from the "Users" list.

NOTE

Click the [Cancel] button to discard the removal.

3. Click the [OK] button on the user settings screen. The removal becomes effective.

Workstation operation limitations

The following table summarizes the workstation operations permitted for each authority level.

Table 4.3 ○:YES –:NO

Operation	Administrator	User	Guest
Login	○	○	○
Register patient data	○	○	○
Download image data	○	○	○
Observe image data	○	○	–
Select thumbnails	○	○	–
Add comments	○	○	–
Generate reports	○	○	–
Save reports	○	○	–
Export image data	○	○	–
Copy and delete image data	○	○	○
Browse diagnosis log	○	○	–
Change user information	○	–	–
Add and remove users	○	–	–
Change passwords	○	○	○

4.5 Language and units settings

1. Select “Settings” from the “Tools” menu on the main screen.
2. Select the “Regional options” tab. The local information settings screen is displayed.

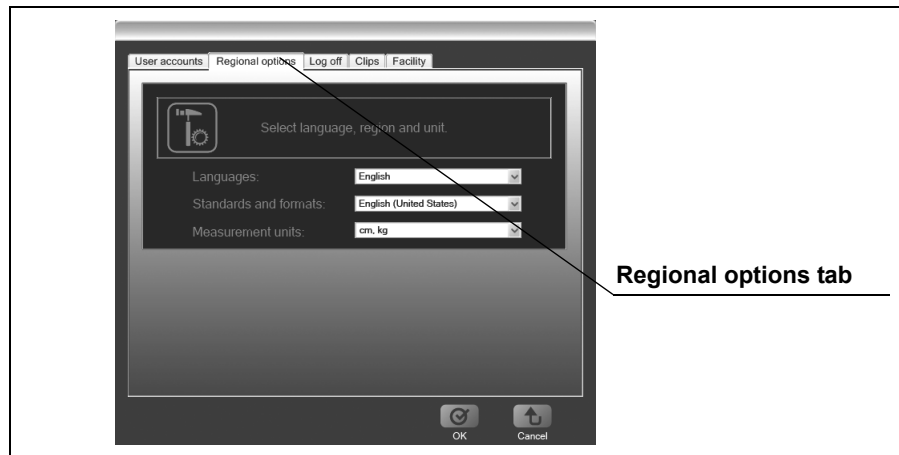


Figure 4.24

3. Click the “▼” to the right of “Language” to select the language (see Figure 4.25). The available languages are listed in Table 4.4.

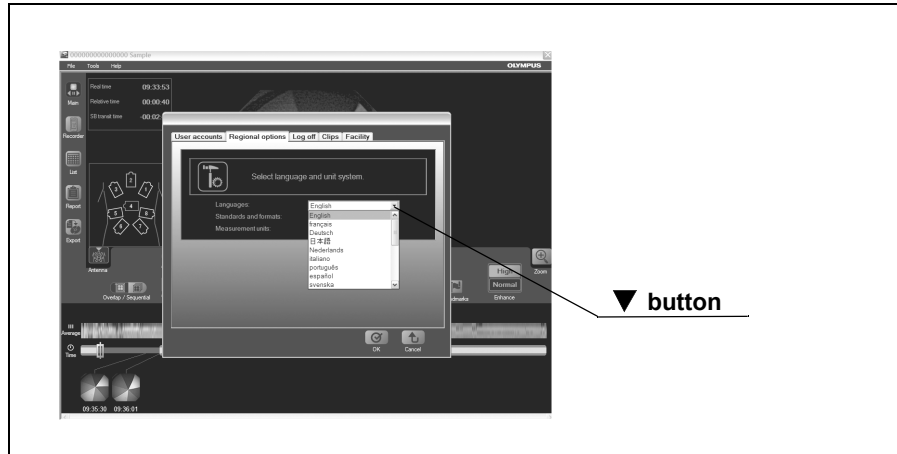


Figure 4.25

Table 4.4

Available Languages
English
Italian
Dutch
Greek
Swedish
Spanish
Danish
German
Norwegian
Finnish
French
Portuguese
Estonian
Latvian
Lithuanian
Polish
Slovak
Slovene
Hungarian
Czech

NOTE

You need to change a language in some languages other than English when you input alphabets. Please right-click on the text box and select “Language” and then “English” from the context menu.

4. Click the “▼” to the right of “Standards and formats” to select the region (see Figure 4.26). The format of date depends on the selected region.

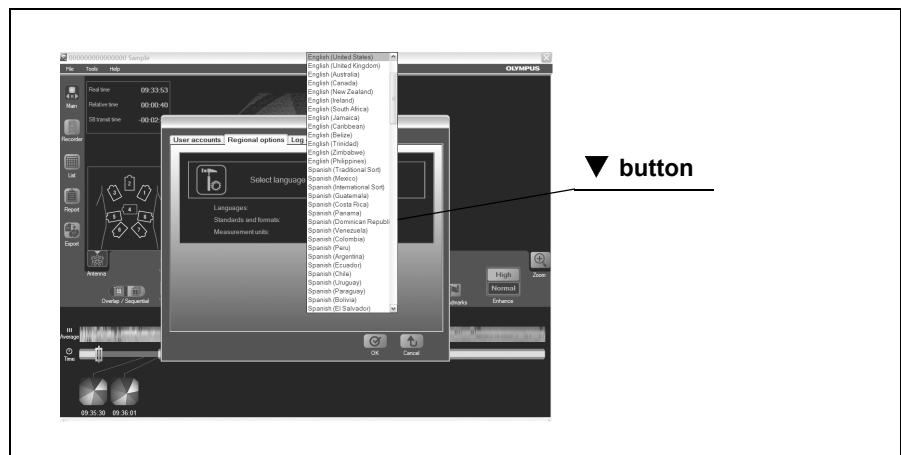


Figure 4.26

5. Click the “▼” to the right of “Measurement units” to select the measurement units (see Figure 4.27). The available units are listed in Table 4.5.

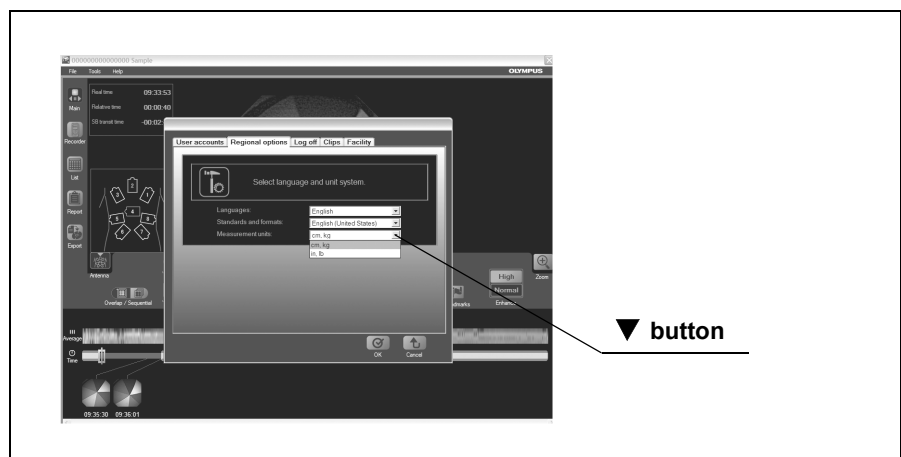


Figure 4.27

Table 4.5

System	Units
CGS system	Length: cm / Weight: kg
Yard-pound systems	Length: inches / Weight: pound

6. Click the [OK] button on the local information settings screen.
The new language and unit settings will be reflected.

NOTE

Click the [Cancel] button to discard the changes.

4.6 Lock function

NOTE

The “Lock” function is not available in Endo Capsule Software Light.

The application is locked after a period of inactivity, and the lock screen is displayed. To release the lock, you will need the user ID and password of the user who was last logged in.

Releasing the lock

1. Enter the user ID and password on the lock screen (see Figure 4.28).

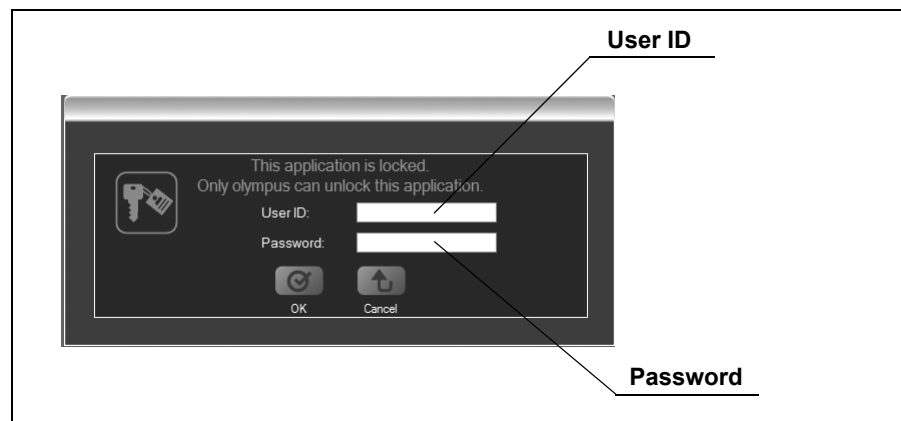


Figure 4.28

2. Click the [OK] button. The screen is restored to the state before the activation of the lock.

NOTE

- By default, the lock is not activated.
- To set the activation time for the lock, refer to “Setting the lock function” on page 89.
- Only the user who was most recently logged in can regain access. If another user attempts to unlock the system, the error message in Figure 4.29 will be displayed.

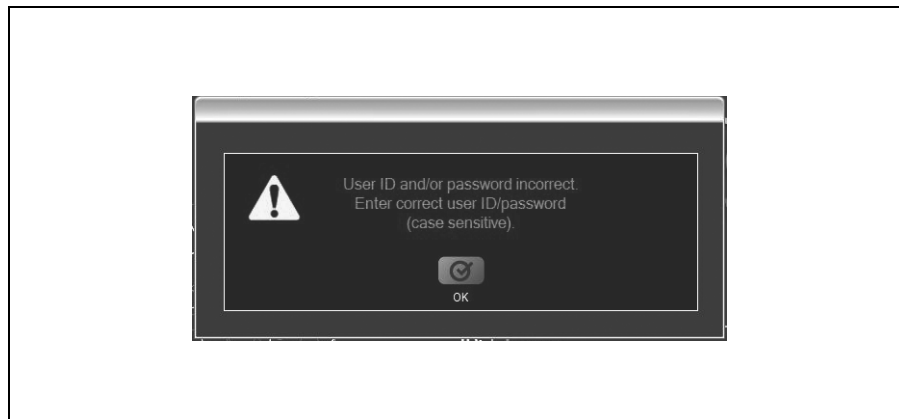


Figure 4.29

- If you attempt to shut down the system while it is locked, the following screen is displayed, allowing you to save the thumbnail data.

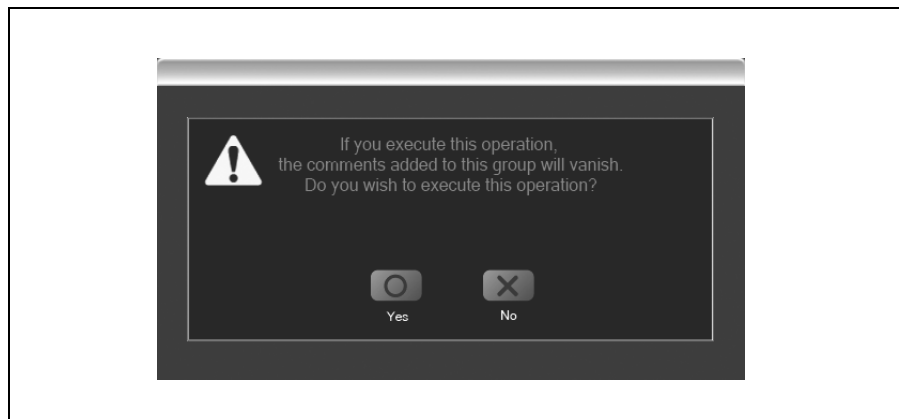


Figure 4.30

NOTE

Pressing the power button of the workstation shortly enables to shut down the workstation.

Setting the lock function

1. Select “Settings” from the “Tools” menu on the main screen.
2. Select the “Log off” tab. The log off settings screen is displayed.



Figure 4.31

3. Click the “▼” to the right of “Lock application” to select the activation time for the lock screen (see Figure 4.32).

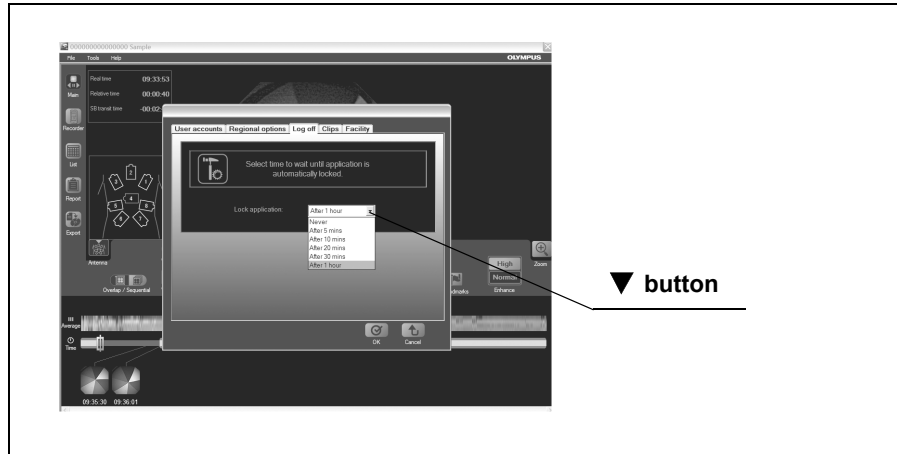


Figure 4.32

NOTE

The following activation times are available:

- Never (defaults)
- 5 minutes
- 10 minutes
- 20 minutes
- 30 minutes
- 1 hour

4. Click the [OK] button on the log off settings screen.

NOTE

Click the [Cancel] button to discard the changes.

4.7 Facility logo

1. Select “Settings” from the “Tools” menu on the main screen.
2. Select the “Facility” tab. The facility information settings screen is displayed.

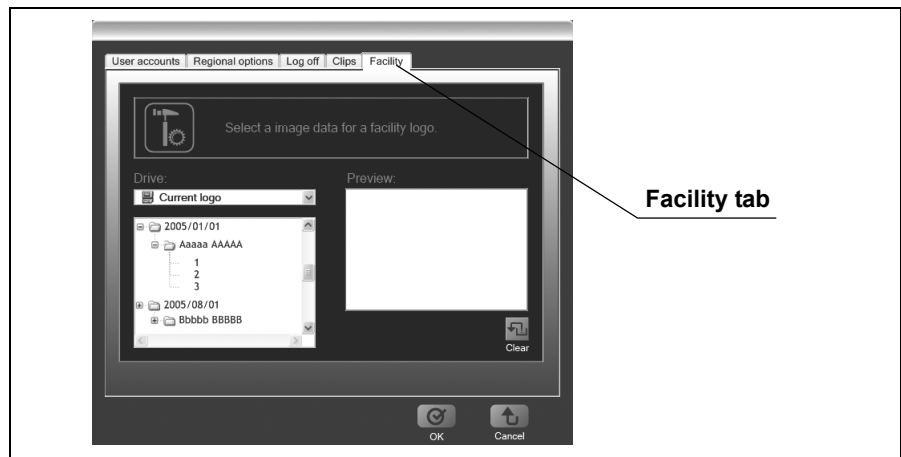


Figure 4.33

3. Select “Current logo” from the drive selection box. The current logo is displayed in the preview area.



Figure 4.34

4. Select the logo file (Bitmap file) in the file selection box and click the [OK] button on the facility information settings screen. The selected logo file is displayed in the preview area.

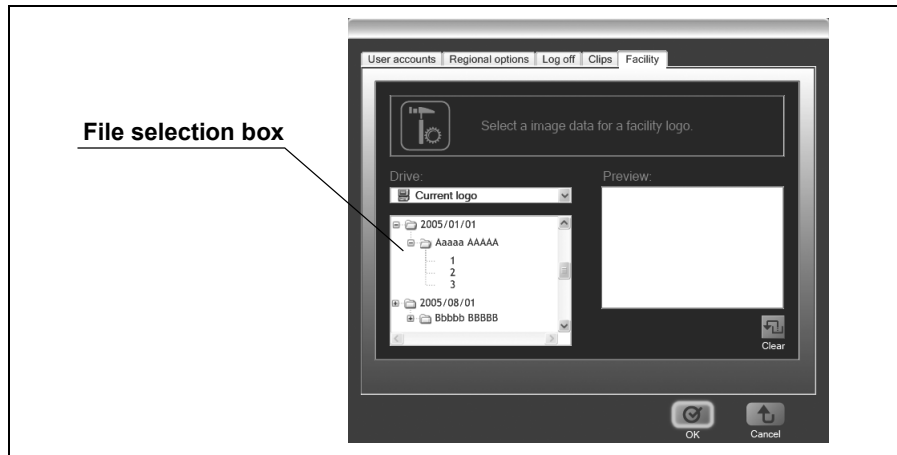


Figure 4.35

5. Click the [OK] button on the facility information settings screen. The selected logo file is registered.

NOTE

Click the [Cancel] button to discard the settings.

6. To clear the current facility logo, click the [Clear] button on the facility information settings screen.

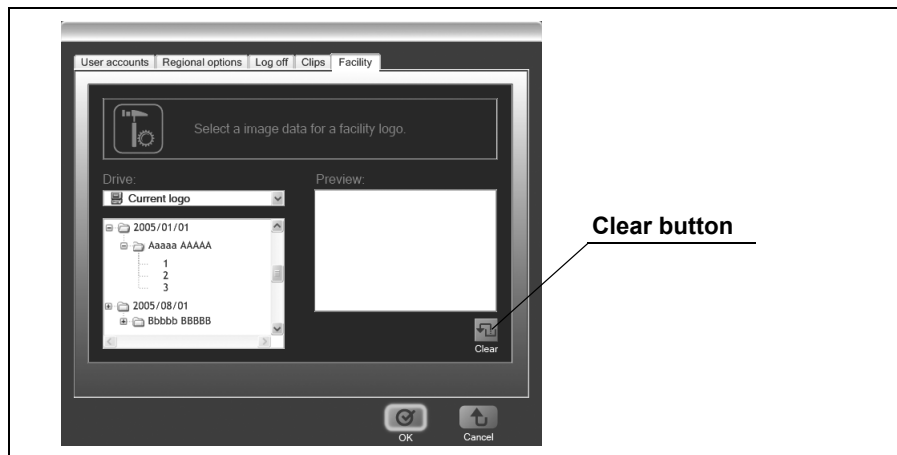


Figure 4.36

4.8 Log off and exit

Endo Capsule software

1. Select “Log off” from the “File” menu on the main screen (see Figure 4.37).
The login screen is displayed.

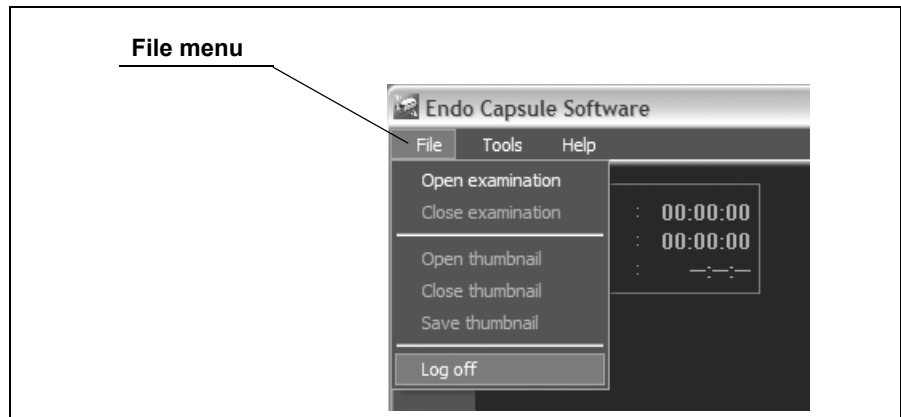


Figure 4.37

NOTE

- You also can log off by clicking the [X] button at the upper-right of the main screen.
- If the thumbnail data is not saved, you will be asked if you wish to save the data (see Figure 4.38). Click the [Yes] button if you wish to save the thumbnail data, or the [No] button to discard any work since the last save. Click the [Cancel] button to cancel the logoff.

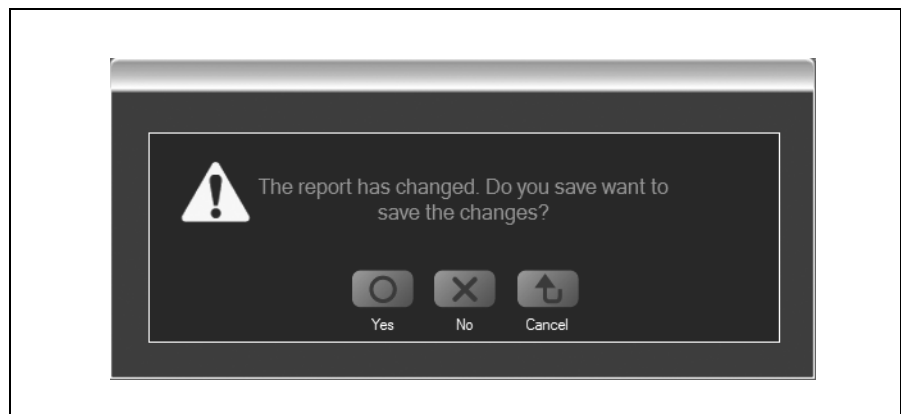


Figure 4.38

2. Click the [Shut Down] button on the login screen. The workstation will be turned OFF.

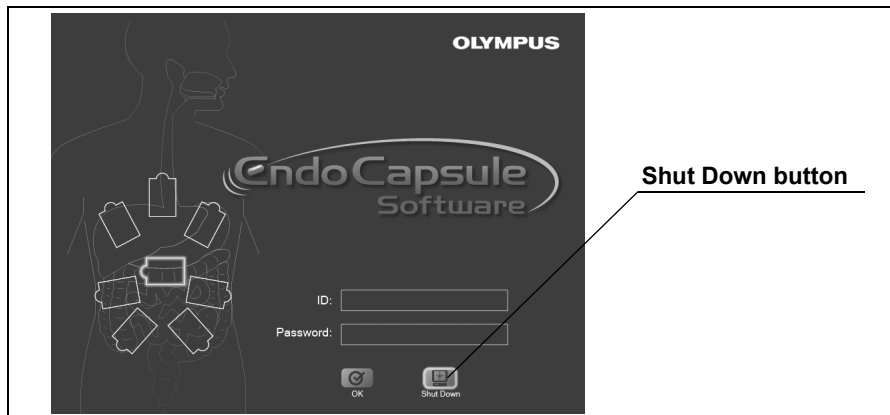


Figure 4.39

Endo Capsule software light

1. Select “Exit” from the “File” menu or click the [X] button at the upper right on the main screen (Figure 4.40).

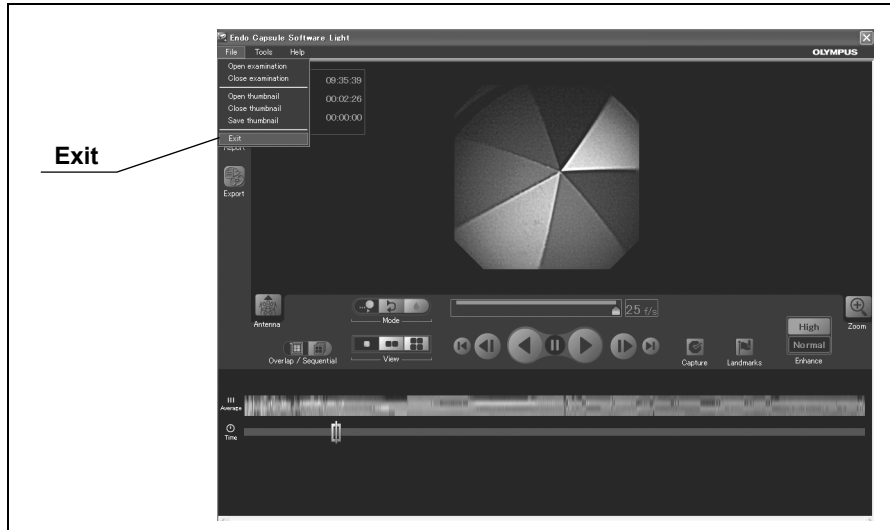


Figure 4.40

NOTE

If the thumbnail data is not saved, you will be asked if you wish to save the data (see Figure 4.41). Click the [Yes] button if you wish to save the thumbnail data, or the [No] button to discard any work since the last save. Click the [Cancel] button to cancel exiting (see Figure 4.41).



Figure 4.41

Chapter 5 Capsule Endoscope Procedures

Before starting the examination, be sure to read and clearly understand the information in this instruction manual.

DANGER

The patient must stay away from generators of strong magnetic fields (such as MRI equipment), between ingestion and excretion of a capsule endoscope. Otherwise, the patient could suffer injury within the body cavity.

WARNING

If the patient experiences abdominal pain, discomfort, or nausea after ingesting a capsule endoscope, have him/her consult a physician immediately. If treatment is delayed, it may result in injury to the body cavity.

CAUTION

- Do not remove the antenna lead set or the recorder unit harness until the examination is completed. Failure to follow instructions may interfere with the examination.
- Do not turn the recorder unit's power OFF, remove the battery pack from the recorder unit, or disconnect the antenna lead set during the examination. Failure to follow instructions may interfere with the examination.
- During the examination, avoid pointing radio-transmitting devices (i.e. keyless entry, home security, waitress call system, garage door remote, wireless headphones, ham radio, etc.) at the antenna leads.

5.1 Preparation

The following items are required for the capsule endoscope examination. Inspect them the day before the examination as described in this chapter.

Table 5.1

Equipment	Quantity	Description
Capsule endoscope	2 (1 spare)	Ingested to capture endoscopic images of the gastrointestinal tract. Image data is transmitted to the antenna lead set.
Antenna lead set	1	Receives signals from the capsule endoscope.
Recorder unit	1	Records the endoscopic image data received via the antenna lead set.
Real time viewer	1	Checks the operation of the capsule endoscope prior to the examination.
Recorder unit cradle	1	Holds the recorder unit during initialization, download, etc.
Real time viewer cable	1	Connects the real time viewer to the recorder unit.
Recorder unit cradle cable	1	Connects the recorder unit cradle to the workstation.
Battery charger	1	Recharges the battery pack.
Battery pack	2	Used as power source for the recorder unit and the real time viewer.
Recorder unit harness	1	Holds the recorder unit during the examination.
Workstation	1	Registers patient information and patient ID onto the recorder unit.
Capsule activator	1	Turns ON the capsule endoscope.
Antenna lead cover	10 (2 spares)	Attached to each antenna pad. The adhesive side is attached to the patient's body.
Drinking water	As required	Used by the patient to ingest the capsule endoscope.
Shaver	As required	To remove body hair from the areas of the patient's skin where the antenna lead cover will be attached.
Antenna locations guide	1	Used as reference in attaching the 8 antennas to the patient.

Equipment	Quantity	Description
Gauze	As required	Used to remove perspiration, for temporarily placing the capsule endoscope, and for cleaning the equipment.
Ethyl or isopropyl alcohol	As required	Used for cleaning the equipment.

5.2 Exterior

Inspect the equipment as described in Table 5.2 below.

Table 5.2

Equipment	Inspection Details
Antenna lead set	Check that the antenna lead cover fit the antenna pads, that the antenna pads are not folded, and that the coating of the antenna pads and the cables are not damaged. Ensure that no metal parts are exposed.
Antenna lead cover	Take out 10 antenna lead covers. Check that they have not been folded or creased, and that their surfaces are clean.
Recorder unit	Check that the unit is free of cracks, deterioration, deformation, and other damage.
Real time viewer	Check that the unit is free of cracks, deterioration, deformation, and other damage.
Recorder unit cradle	Check that the unit is free of cracks, deterioration, deformation, and other damage. Check the power supply cable for scratches and bends. Check the connectors for cracks, deterioration, deformation, and other damage.
Real time viewer cable	Check that the unit is free of cracks, deterioration, deformation, and other damage.
Recorder unit cradle cable	Check the cable for scratches and bends. Check the connectors for cracks, deterioration, deformation, and other damage.
Battery charger	Check that the unit is free of cracks, deterioration, deformation, and other damage.
Battery pack	Check that the unit is free of cracks, deterioration, deformation, and other damage.

5.3 Capsule endoscope

WARNING

Perform the following inspections before use. Should any irregularity be observed, do not use the equipment. Equipment damage or irregularity may cause equipment malfunction or patient injury.

1. Confirm that the expiration date has not passed.
2. Check the sterile package for ruptures, damage to the seal or water that might have entered the sterile package.
3. Before removing the capsule endoscope from the sterile package, inspect the capsule's surface for cracks, deterioration, deformation, and other damage.

5.4 Preparation on the day before the examination

Recharging the battery packs

Fully charge the battery packs to prevent low battery charge, which could cause the examination to end prematurely. In preparation for the examination, recharge the battery packs on the previous day.

1. Connect the power supply cable to the battery charger.

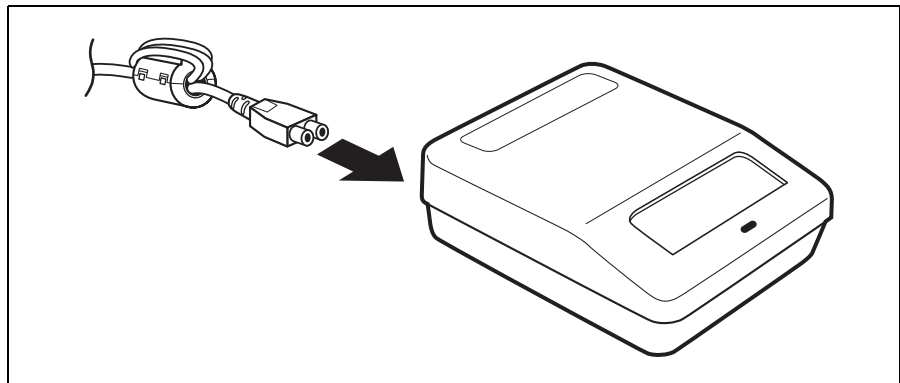


Figure 5.1

2. Plug in the battery charger's power supply cable into a power outlet.
3. With the back of the battery pack facing towards you, attach the battery pack to the battery charger by pushing it down into the battery charger's battery slot cover (see Figure 5.2).

The battery pack has a reversal prevention slot to prevent it from being inserted in the wrong direction.

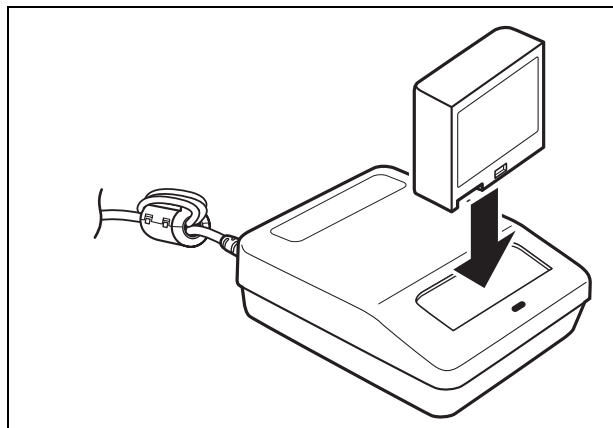


Figure 5.2

4. When the battery pack is properly attached, the charge lamp on the battery charger is illuminated yellow to indicate the start of a recharge (see Figure 5.3). The recharging time is approximately 2 hours.

NOTE

- The battery charger will not charge the battery if the temperature of the battery pack is below 0°C/32°F. In this case, the charge lamp will blink in yellow at about 1.5 second intervals.
- The battery charger will not charge the battery if the battery pack or the battery charger is damaged. In this case, the charge lamp will blink in yellow at about 0.5 second intervals.
- The recorder unit cradle cannot be used to recharge the battery pack. To recharge the battery pack, remove it from the recorder unit, and use the dedicated battery charger.

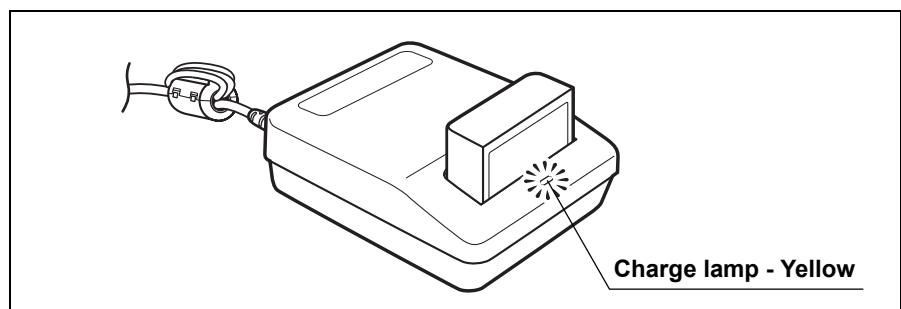


Figure 5.3

5. When recharging is complete, the charge lamp turns from yellow to green (see Figure 5.4).

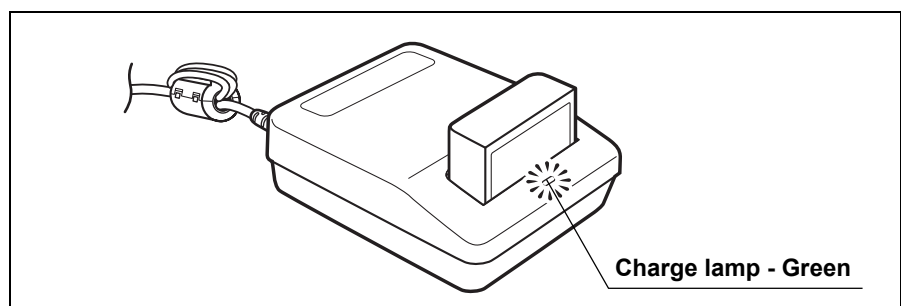


Figure 5.4

6. Pull the battery pack upward to remove it from the battery charger. The battery charger's charge lamp will go out.
7. Be sure to recharge both battery packs required for the examination (1 for the recorder unit, 1 for the real time viewer).

5.5 Initial setup of the recorder unit

NOTE

The “Initial Setup of the Recorder Unit” function is not available in Endo Capsule Software Light.

Connecting the recorder unit

The recorder unit is connected to the workstation via the recorder unit cradle.

WARNING

If the antenna lead set being worn by a patient is connected to the recorder unit, do not connect the recorder unit to the workstation. Doing so may result in electric shock.

CAUTION

While setting up the recorder unit, do not remove the recorder unit from the cradle or remove the cradle cable. Doing so may result in loss of image data. If you do so, connect the recorder to the workstation through the cradle and the cradle cable and restart the workstation before setting up the recorder unit again.

NOTE

- Up to two recorder units can be simultaneously connected to the workstation.
- If you connect a third recorder unit to the workstation, it will be turned OFF.
- Restart the workstation when the workstation does not work properly.
- Remove the USB devices from the workstation and restart the workstation when it does not work properly. Then connect the removed USB devices again.

1. Firmly insert the recorder unit all the way into a cradle that is connected to the workstation. The recorder unit will be turned ON automatically. The indicator lamp on the recorder unit is illuminated yellow for 2 seconds, and then turns to green.

NOTE

- When the recorder unit is inserted into the recorder unit cradle, its power turns ON, and the normal startup screen is displayed on its display panel for approximately 3 seconds.

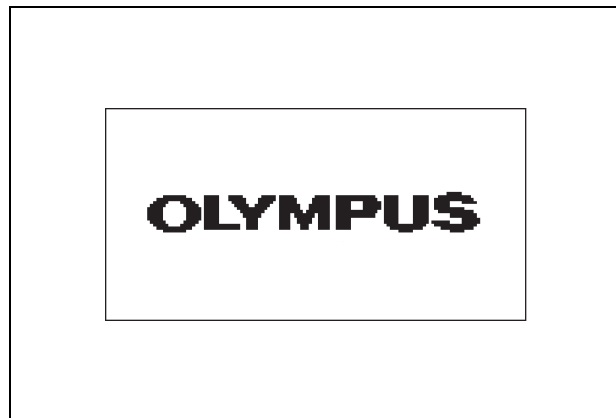


Figure 5.5

- If the recorder unit contains image data, the patient ID and patient name are displayed on the recorder unit's display panel (see Figure 5.6).

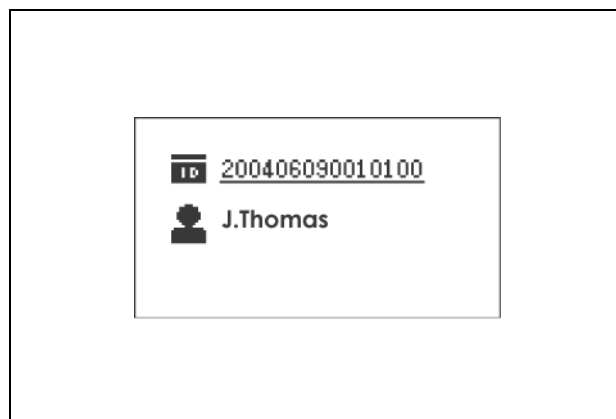


Figure 5.6

- If an error is detected on the recorder unit, the indicator lamp will blink yellow, and the corresponding error code will be displayed on the display panel. To troubleshoot, refer to Chapter 8, "Troubleshooting" on page 233.

2. Click the [Recorder] button on the main screen (see Figure 5.7). The recorder management screen is displayed, and the information recorded on the recorder unit is shown.

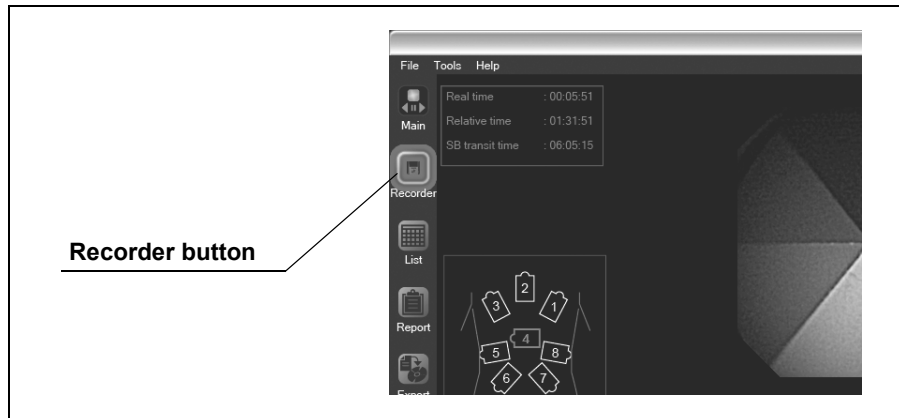


Figure 5.7

NOTE

- If two recorder units are connected to the workstation, information for both units is displayed (see Figure 5.8).

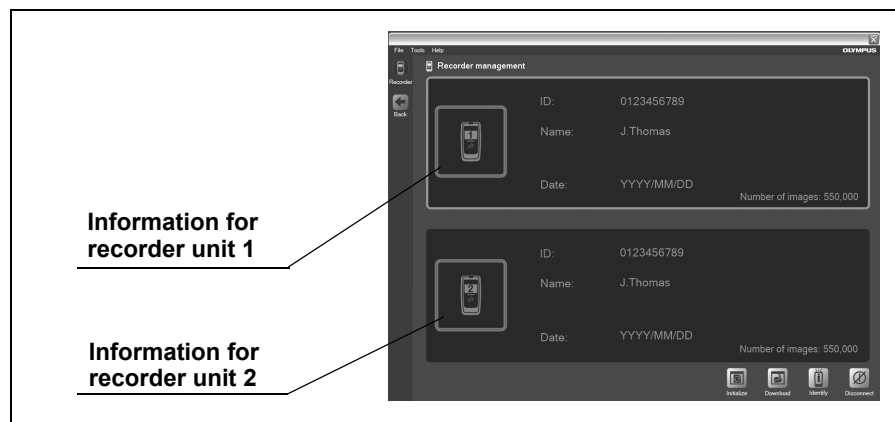


Figure 5.8

- To identify which recorder unit is selected to display information onto the recorder management screen, click the [Identify] button. The selected recorder unit will blink green three times.

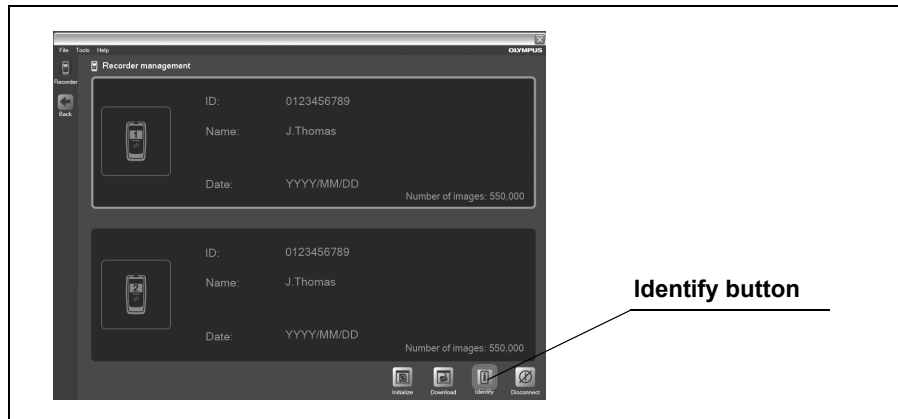


Figure 5.9

Setting up the recorder unit

1. Select the recorder unit for which the initial setup is to be performed.

CAUTION

If two recorder units are connected to the workstation, first identify which recorder unit is being set up.

2. Click the [Initialize] button on the recorder management screen (see Figure 5.10). The initial settings screen is displayed.

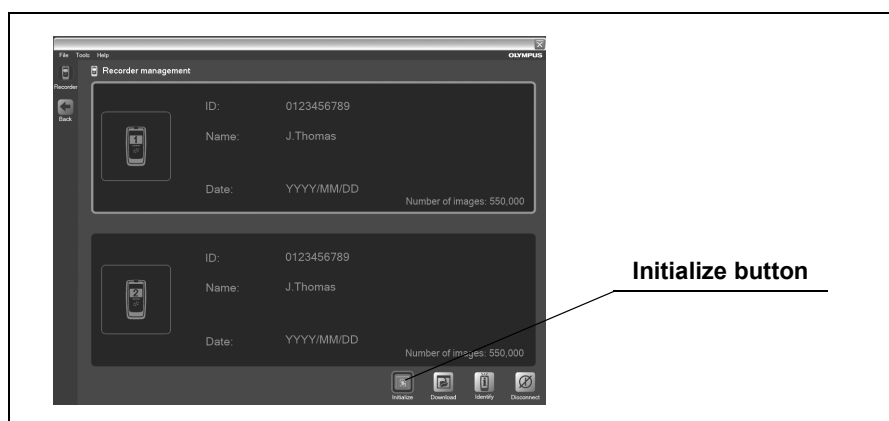


Figure 5.10

CAUTION

When you perform the initial setup of the recorder unit, all data on the recorder unit will be deleted. If you wish to keep any of the data stored on the recorder unit, be sure to download it before initializing.

NOTE

- If there are any image data remaining on the recorder unit, a confirmation message will be displayed (see Figure 5.11). If you click the [NO] button, the initial setup screen will be displayed. Click the [YES] button to display the download screen.
- If the workstation cannot recognize the connected recorder(s), please remove the cradle cable from the workstation, restart the workstation and then connect it again.
- Do not remove the recorder unit from the cradle while initializing with two recorders connected whether the data is now set to it or not. Doing so may result in the hangup of the workstation. If the workstation does not work properly, please restart the workstation.

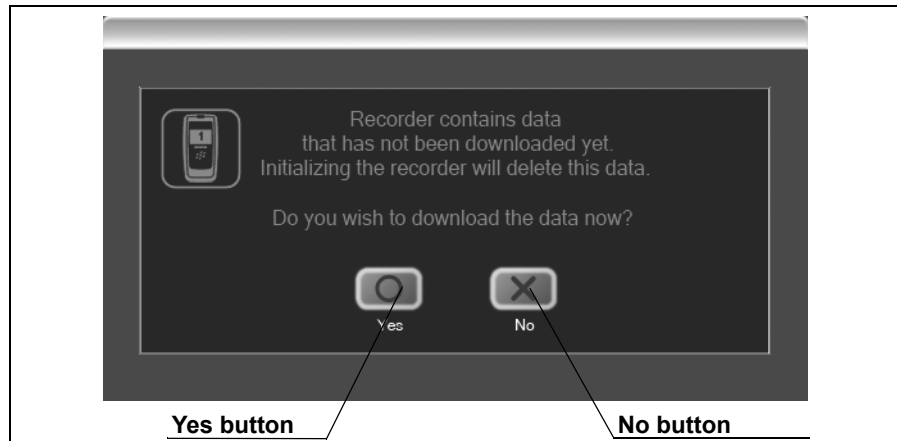


Figure 5.11

3. Enter the patient information on the initial setup screen.



Figure 5.12

NOTE

- For details on the patient information to be entered on the initial setup screen, refer to Table 5.3 below.

Table 5.3

Item	Description
Examination date*	Year, Month, and Day (numbers)
Patient ID*	Up to 15 alphanumeric characters
First name*	Up to 40 characters
Last name*	Up to 40 characters
Middle name	Up to 20 characters
Sex	Select “male” or “female” from the pull-down menu
Birth day	Year, Month, and Day (numbers)
Age	Automatically displayed after entering the birthday

* Essential information

- Click the [Today] button to enter today's date in the examination date field. Click the [Tomorrow] button to enter tomorrow's date in the examination date field.

4. Click the [Show more detail] button to display the panel for entering detailed patient information, like the patient's height, weight, and waist size.

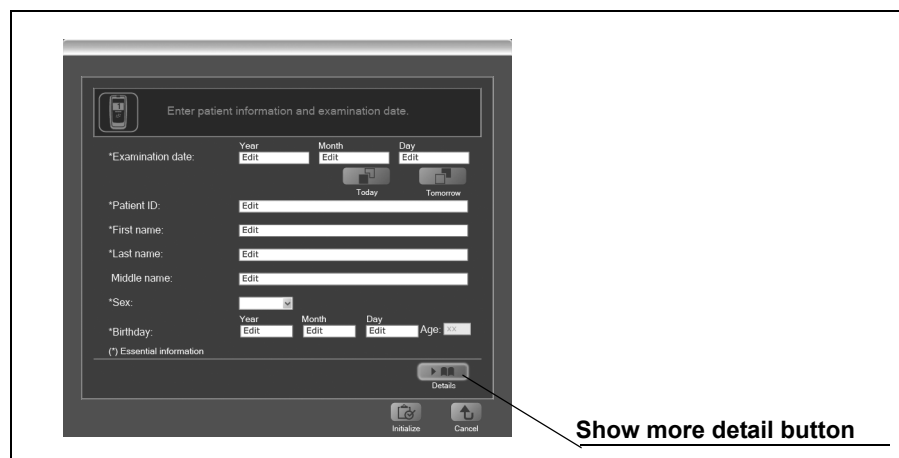


Figure 5.13

NOTE

- Click the [Close detail] button to hide the details panel.

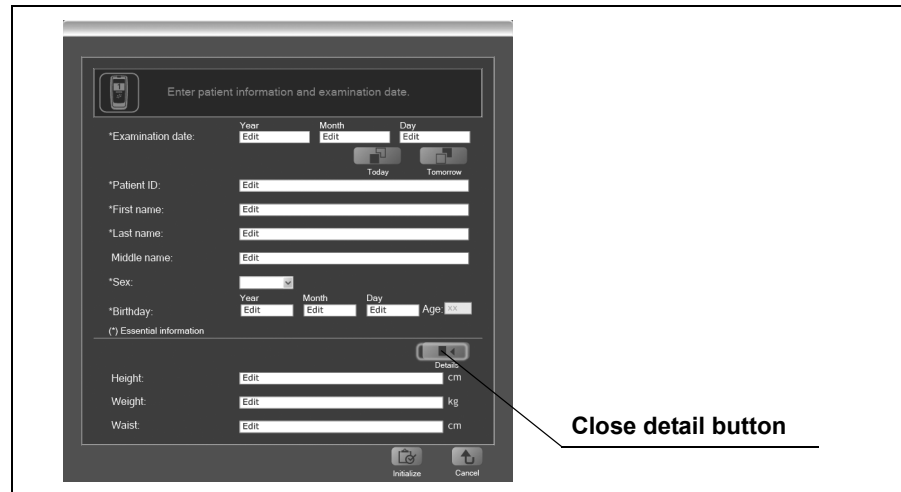


Figure 5.14

- The height, weight, and waist must be entered as a number with 5 or less digits, with up to 3 digits in the integer part, and up to 2 digits in the decimal part.

5. Click the [Initialize] button. The initial setup confirmation screen is displayed.

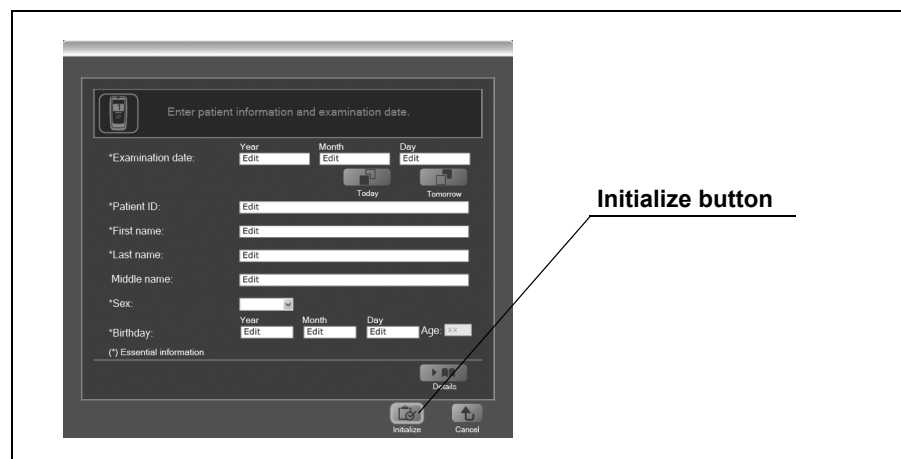


Figure 5.15

NOTE

If you click the [Initialize] button with any essential information missing, the message “Enter patient information and examination date.” is displayed. Complete all the essential information, and then click the [Initialize] button again.

6. Check your input on the initial setup confirmation screen, and then click the [OK] button.

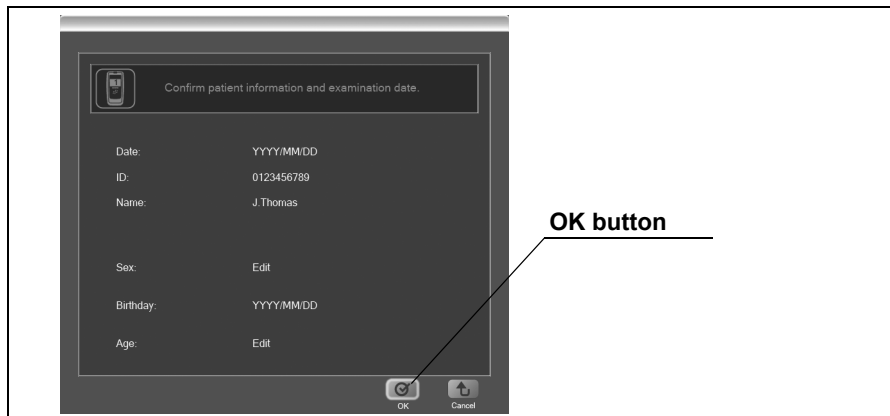


Figure 5.16

CAUTION

- Check that the information being displayed belongs to the patient who is being examined.
- Patient information cannot be altered after the completion of an examination. To change an entry, click the [Cancel] button and return to the initial setup screen, then re-enter the information.

7. Patient information is transmitted to the recorder unit. After transmission is completed, the initial setup completion screen is displayed (see Figure 5.18).

NOTE

During the initial setup, the icon shown in Figure 5.17 will be displayed on the recorder unit's display panel, and the recorder unit's indicator lamp will blink yellow.

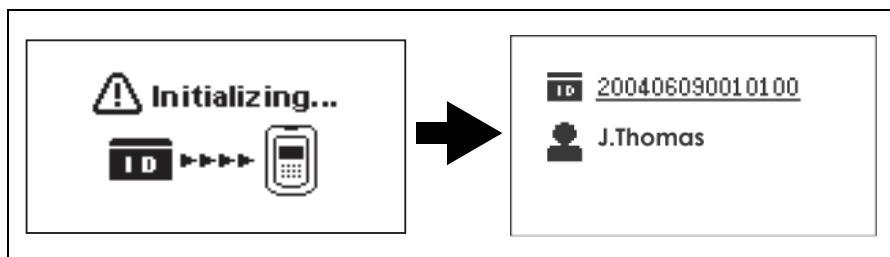


Figure 5.17

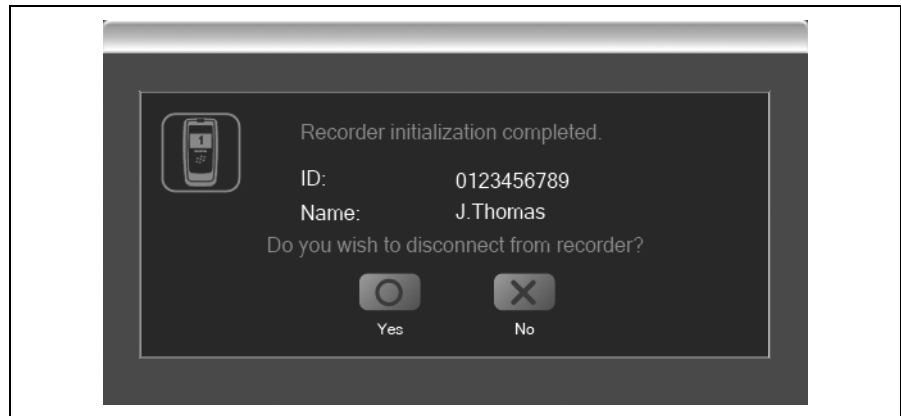


Figure 5.18

8. Click the [YES] button. The recorder unit is turned OFF and the recorder management screen is displayed.

NOTE

If you want to manually turn OFF the recorder unit later, click the [NO] button.

9. Holding the cradle with one hand, lift the recorder unit upward to remove it from the cradle.

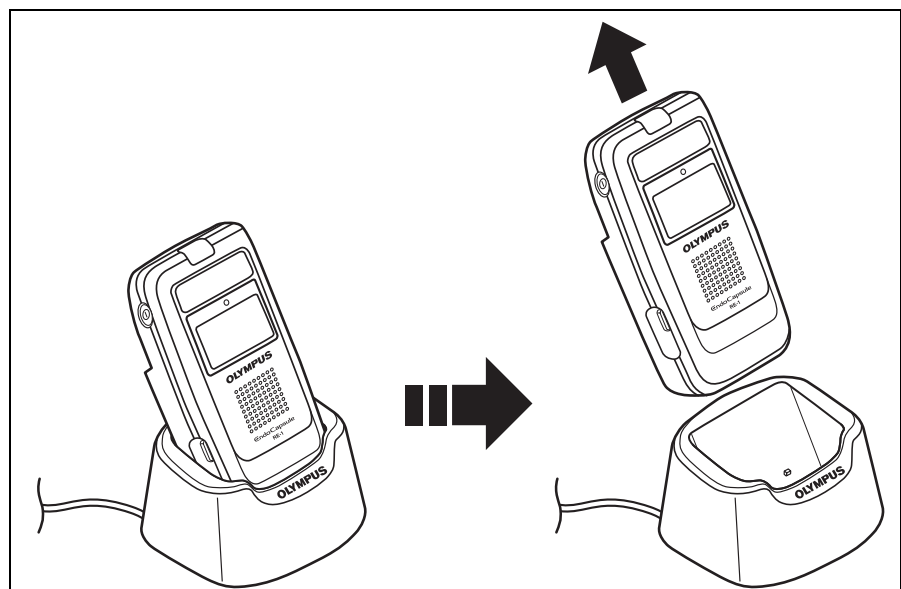


Figure 5.19

CAUTION

- Do not connect the recorder unit to the cradle while the antennas are attached to the patient. In the worst case, electric shock and burns may result.



- If the recorder unit is ON, first turn it OFF by clicking the [Disconnect] button after selecting the recorder unit on the recorder management screen. If you remove the recorder unit from the cradle while it is ON, it may become damaged.

Inserting battery pack into recorder unit

WARNING

- Use only the specified battery pack (MAJ-1473) for the receiver/real time viewer. Use of other battery packs may result in excessive heat, fire, and/or explosion.

NOTE

- Use a fully charged battery pack for the recorder unit. Otherwise, the recorder unit will display a warning, and prevent the examination from continuing.
- The life span of a battery pack is approximately 1 year from the date of purchase, or 320 recharging cycles, whichever is first. When the battery pack approaches its end-of-life, the recorder unit will prompt for replacement. Order a new battery pack and replace.

1. Open the battery pack slot cover by sliding it in the direction of the arrow (see Figure 5.20 (b)).

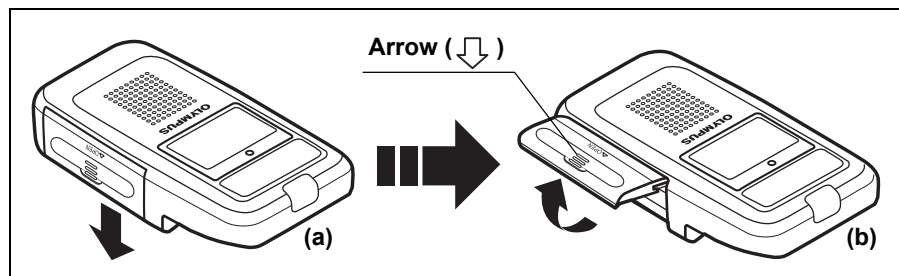


Figure 5.20

2. With the battery pack removal ribbon hanging out of the battery pack slot, insert a fully charged battery pack into the slot (see Figure 5.21 (b)).

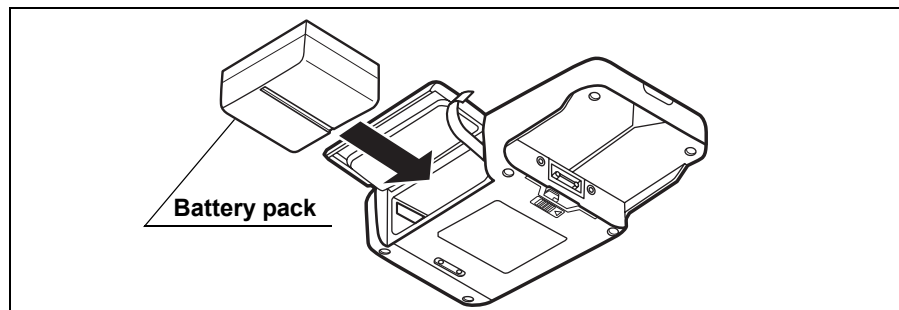


Figure 5.21

3. Close the battery back slot cover, taking care not to catch the battery pack removal ribbon, and then slide the cover upward to lock it (see Figure 5.22 (b)).

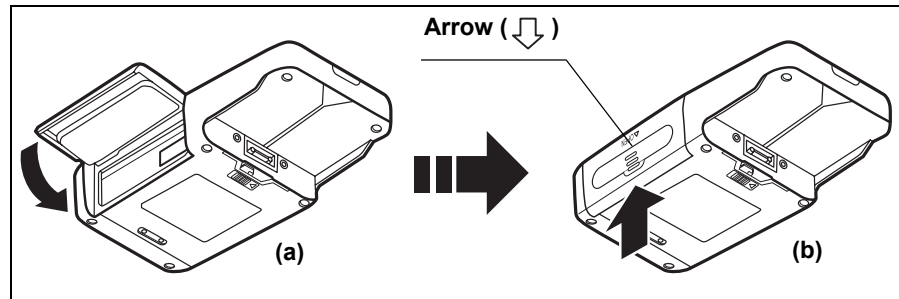


Figure 5.22