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eqo
Millimetre-Wave People Screening System

SMITHS DETECTION
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Operating Instructions

95592593   Declaration of Conformity – CE 1595
95591608   Eizo FlexScan MX190 - User's Manual
95592663   User's Manual – FlexScan S1932 Color LCD Monitor - Eizo
95591849   Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide

Table of contents

General information

The products of Smiths Detection are developed and manufactured in compliance with the essential health and safety requirements of the European Community (EC).

Depending on the product the EC Directives are observed for

▷ machines
▷ low voltage
▷ electromagnetic compatibility (EMC)
▷ electromagnetic fields (EMF)
▷ radio equipment (R&TTE)
▷ and other relevant directives.

Important!

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC / IC Statement

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

This Category II radio communication device complies with Industry Canada Standard RSS-310.*

Declaration of Conformity CE 1595 ⊙

Hereby, Smiths Detection declares that eqo is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration of Conformity can be found in annex b of this document.

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* Carrier frequencies: (24.04, 24.08, 24.12 (default), 24.16, 24.20, 24.24) GHz , RF Output Power: 0 dBm

Preface

These operating instructions will enable you, as the operator, to operate the eqo system as intended.

These operating instructions do not, however, deal with the detection of objects in millimetre-wave images.

Using the functions of your eqo effectively and being able to detect threats requires a certain degree of expertise. It is possible to acquire these skills by attending an eqo operator training course.

It is recommended that you read these instructions carefully prior to using your eqo In particular, please be sure to read the section entitled "Safety instructions", which contains important information concerning your safety.

About these operating instructions

Place to keep the documentation

These operating instructions along with the referenced product documents (min. 1 copy of each) should be stored next to the operator's workplace. This is to ensure that the operator can access at any time the information he requires to perform his work.

Classification of the safety instructions

Danger categories

The safety instructions in this manual are subdivided into three danger categories. These categories differ with regard to the severity of injuries that can result from the non-compliance with the instructions:

> ⚠️ **DANGER**
>
> Indicates a directly threatening danger. Non-compliance leads to the most severe injuries or death!

> ⚠️ **WARNING**
>
> Indicates a possibly dangerous situation. Non-compliance can lead to the most severe injuries or death!

> ⚠️ **CAUTION**
>
> Indicates a possibly dangerous situation. Non-compliance can lead to slight or minor injuries!

Classification of the indications

In addition to the safety instructions, you will find the following general notes and application tips:

Caution!

Indicates a possibly detrimental situation.
Non-compliance can lead to the damage of eqo!

Important!

Application tip or useful information for the user.

Text references
Example: (⌂ 3) indicates a reference to page 3

Warning signs used

Explanation of the warning signs displayed on the eqo system and within this document.

Sign	Meaning
	Hazard! Observe the instructions in the documentation!
	Electric! Panels and connectors marked by this symbol may only be opened or used by qualified personnel with the appropriate training!
	Trip Hazard! Danger obstacles - Watch your step!
	Hearing Damage! Indicates a potential hearing damage!

How to read this documentation – Guide for different system configurations

The eqo system is available in different system configurations. This documentation contains information for different system configurations of the eqo system.
Each sub-chapter is clearly marked to which system configuration it concerns. When the feature does not apply, it will simply have a wire-frame box (grey) and no coloured (blue) fill.

Example:

If sub-chapter is marked with the following symbols,

the information containing in the sub-chapter is only concerning to the following two configurations:

▷ Local station only

▷ Local station with wireless audio base and remote station

System configurations for the eqo system

In the following the possible system configurations for the eqo system are listed:

Abbreviation	Description
	Local station only
	Local station with wireless audio base
	Local and remote station
	Local station with wireless audio base and remote station
	Local and remote station; both with wireless audio base

Important!

If a section isn't marked, the information contained in it is relevant for all configurations.

Product description

eqo has been developed to enhance the capability of security screening personnel by enabling the detection of weapons, explosives, or contraband hidden under clothing using millimetre-wave technology.

(!) Important!

In order to protect the subject's privacy, by default, the system is configured with local and remote station(s). The system can be setup and operated with a local station only (Other configurations are possible (⌂ 5, System configurations for the eqo system).

Fig. 1: Local and remote station

The operator at the local station manages the progression of the subject through the screening process and does not have access to the mm-wave image.

Fig. 2: Person standing in screening position

The remote operator (see Fig. 3) reviews the mm-wave image and determines whether the subject is clear or is suspect. This determination completes the review of the subject using eqo.

Fig. 3: Remote operator reviewing the image

The eqo system consists of three main modules (see Fig. 4), the local operator station ①, the flat scanning panel ②, and an entrance arch ③. The arch is attached at right-angles to the end of the flat scanning panel.
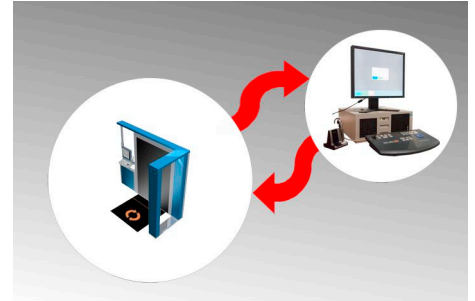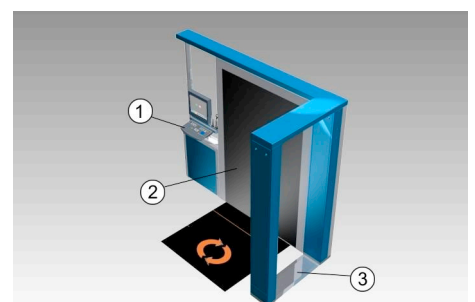
Fig. 4: Main components of the eqo system

Two different variants of eqo's local station exist, a left-hand and a right-hand version. The variants differ in the position of the flat scanning panel ② which can be attached on either side of to the power supply pillar ④. Fig. 4 shows the right-hand version of the eqo, Fig. 5 the left-hand version. The right-hand version is defined as the configuration where the flat scanning panel is on the right-hand side of the person who will be scanned as they enter the system through the arch, and vice-versa for the left hand version.
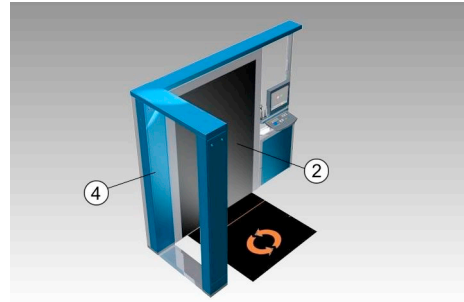
Fig. 5: Left-hand version of the eqo system

Furthermore, the local operator station can be placed at two different positions, either next to the flat scanning panel (see Fig. 6) or next to the arch.

In all variants, it is possible to turn the monitor at the eqo station around so that it faces away from the person being scanned.
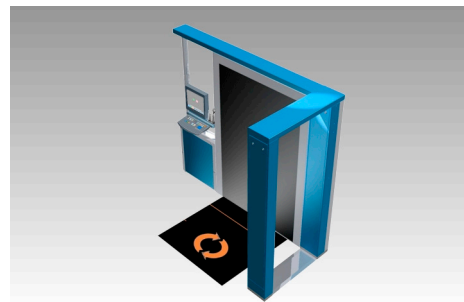
Fig. 6: Local operator station in position A

Referenced product documents

The following documents are included in the scope of delivery of the millimetre-wave people screening system eqo and are part of the documentation.

Designation	Order number
Eizo FlexScan MX190 - User's Manual	95591608
User's Manual – FlexScan S1932 Color LCD Monitor - Eizo	95592663
Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide	95591849

Legal requirements

Before operating eqo, you must acquaint yourself with any local accident prevention regulations and the local licence requirements regarding frequency assignment and terms of use!

Proper use of the system

Use as agreed

The only and exclusive purpose of eqo is the screening of persons using millimetre-waves by appropriately trained personnel.

Important!

The functionality of the eqo system and its protection can only be guaranteed as long as the unit is operated in a manner described in the operating instructions. An impairment or, at worst, a loss of protection can result if eqo is used in a manner other than that described in the operating instructions. Smiths Detection assumes no liability for obvious or unintended misuse.

Obvious misuse

The components of the system may not be used for purposes other than those described in this operating manual and in the referenced product documents.

Operating conditions

User group

Caution!	

Caution!

The eqo system may only be activated and operated by appropriately trained personnel!

Caution!

The national accident prevention regulations are to be observed for all activities.

The necessary knowledge for operating eqo can be acquired by attending an operator training course offered by Smiths Detection, or its designated/authorised agents.

Climatic conditions

	Operation	Transport & Storage
Temperature	0°C to +40°C	-20°C to +70°C
Relative Humidity	10% to 90% (not condensing)	10% to 98% (not condensing)
Protection class IEC 60529	IP 20	IP 20

Important!

The functionality of the eqo system can only be guaranteed as long as the unit is operated or stored within the climatic limits specified above and the protection class according to IEC 60529 is observed.

Controls and indicators of the eqo system
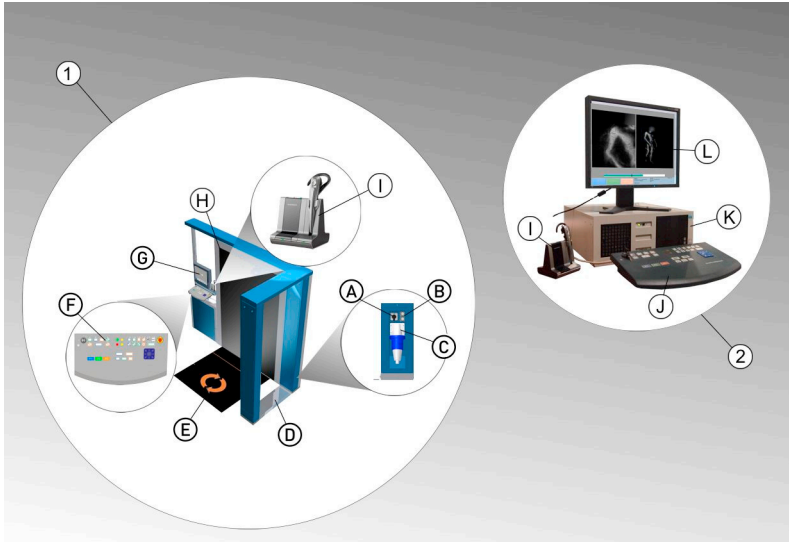
Fig. 7: Components of the eqo system

Local Station ①

No.	Designation	Description
Ⓐ	Mains switch	Mains ON/Off switch of the eqo system; acts as a disconnecting device.
Ⓑ	Network sockets	Network connection points to customers network if required.
Ⓒ	Mains power supply	Connector for the power supply
Ⓓ	Entrance arch	Houses the digital receiver, antenna horns and mains distribution
Ⓔ	Floor mat	Shows the centre of the scan volume.
Ⓕ	Keyboard	Local station's keyboard with emergency stop and key switch
Ⓖ	Flat screen monitor	Depending on the user login the screen either shows a live image of the current data or displays an information screen with two coloured button signs
Ⓗ	Flat scanning panel	Houses and protects the scanning antenna
Ⓘ	Audio base with charge cradle and headset	Allows the operators to communicate with each other over an audio channel.

Remote Station ②

No.	Designation	Description
Ⓙ	Keyboard	Remote station keyboard with key switch
Ⓚ	Remote station computer	Data exchange with local station via network connection
Ⓖ	Flat screen monitor	Displays live image of the current data

Description of the keyboards

The local and remote station keyboard are identical in construction, except that the remote station keyboard hasn't got an emergency stop.

The keyboard keys are divided in four main key panels: The control key panel, the priority key panel, the image enhancement key panel and the function key panel.

In the following the function of each key will be explained. Depending on your eqo system configuration the layout of the keyboards are different.
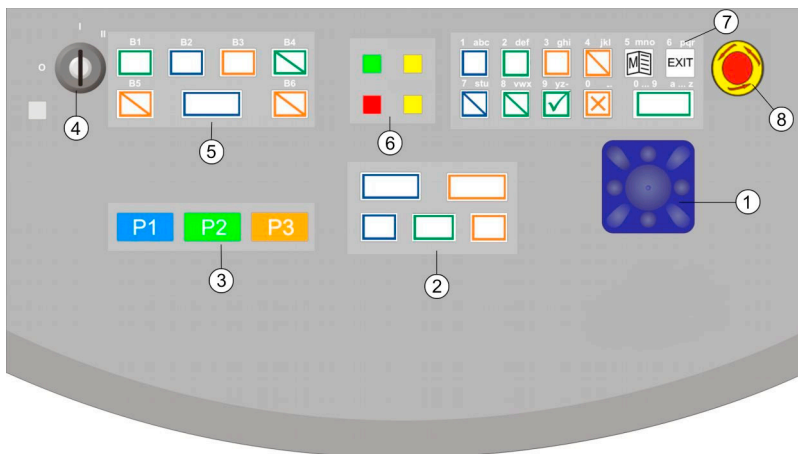
Local station keyboard

Fig. 8: Keyboard of the local operator station

Important!

If the system is operated without a remote station, the layout of the eqo local station keyboard is identical to the remote station keyboard, with an added emergency stop switch (⌂ 13, Remote station keyboard).
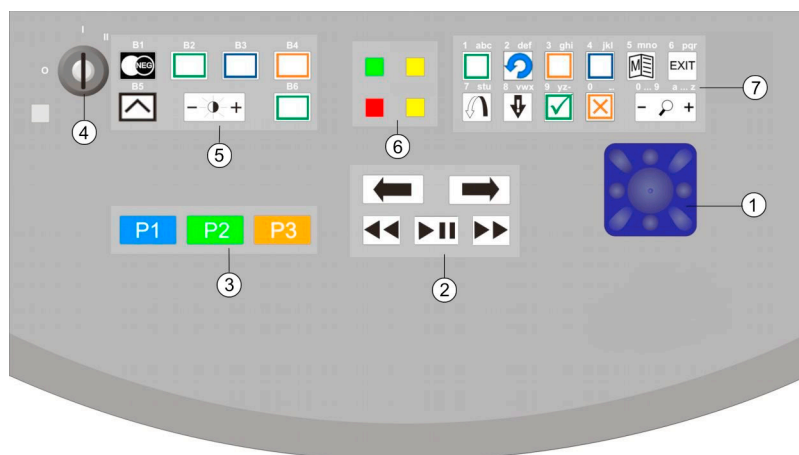

Remote station keyboard

Fig. 9: Keyboard of the remote station

Navigator ①

Symbol	Name	Description
	Navigator	Navigates inside the menu structure of a displayed menu. When using the zoom function, the navigator is used to move the zoom area around the main viewing window (⌂ 36).

Important!

Move between adjacent items in screen menus or windows by directing the navigator up or down.
If you direct the navigator to the right or to the left, you change the entries or call up a selected menu item or function.
You can delete wrong text entries by moving the cursor to the left using the navigator.

Control key panel ②

Symbol	Name	Description
➡	Direction/Step Key	Changes the direction of live image. If the image is paused then this key will step the image, frame by frame in the direction of the key.
⬅	Direction/Step Key	Changes the direction of live image. If the image is paused then this key will step the image, frame by frame in the direction of the key.

Symbol	Name	Description
▶▶	Increase Speed	Incrementally increases the playback speed of the displayed image. The available speeds are normal speed, x2, x4, x8, x0.5, x0.25. If the image is paused, pressing this key will play back the image at normal speed in the same direction as before pause.
◀◀	Decrease Speed	Incrementally decreases the playback speed of the displayed image. The available speeds are normal speed, x2, x4, x8, x0.5, x0.25.. If the image is paused, pressing this key will play back the image at normal speed in the same direction as before pause.
▶❚❚	Pause	Plays and pauses the current scan Image.

Important!

The keys of the control key panel are disabled at the local operator station for operator's use except only a local station is existent.

Priority key panel ③

Symbol	Name	Description
P1	Priority key 1	*Within screen messages and menus, the key can have different functions:* ▷ Acknowledge a message with "OK" ▷ Select a highlighted menu option with "SELECT" ▷ Accept a suggested function with "YES" *Within the title bar:* ▷ Genderless Setup: Initiates a scan of passengers ▷ Gender Setup: Initiates a scan of a male passenger. ▷ Add tags / Clear tags

Symbol	Name	Description
P2	Priority key 2	*Within screen messages and menus, the key can have different functions:* ▷ Discard a selected menu option with "CANCEL" ▷ Reject a confirmation with "NO

		Within the title bar:
		▷ Genderless Setup:
		  Not configured for operator use.
		▷ Gender Setup:
		  Initiates a scan of a female passenger.
		▷ Jump between tags

P3	Priority key 3	▷ Terminates scan if completed before maximum scan time. *Within the title bar:* ▷ Initiate a "Re-Scan"

Key switch ④

Symbol	Name	Description
	Key switch	Turn the key switch to the right (into position II) in order to switch on the unit. The key switch will backslide automatically to position I. In order to switch the unit off, turn the key switch to the left (into position 0).

Image enhancement key panel ⑤

Symbol	Name	Description
	Invert	Displays a reverse or negative type image of the scan.
	Contrast / Brightness Selector	Switch between Brightness / Contrast
	Contrast / Brightness Adjustment	Adjusts the image brightness or contrast, depending on which one is currently being adjusted.

Important!

The image filtering keys are disabled at the local station for operator's use when the eqo system is equipped with a remote station.

Indicator panel ⑥

Symbol	Name	Description
🟩	Operating indicator	Indicates that the keyboard is provided with power.
🟥	Wait indicator	Indicates that the system is not ready.
🟨	N/A	Not enabled in this version

Function key panel ⑦

Important!

Only when inside an input field the lower-case numbers and letters [1 abc] ... [0 _.] written above each function key are active. This gives the operator the ability to enter letters and numbers. The numbers are used by default. To switch between the entry of letters and numbers press $-\varrho +$ / ☐ (see Fig. 10, Ⓐ), Only the keys explained below are available operator's use.
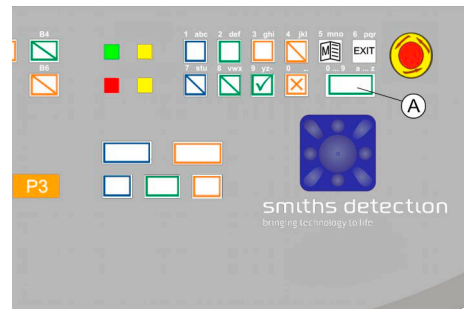
Fig. 10: Detail of eqo's local keyboard

Symbol	Name	Description
🔄	N/A	Not enabled in this version.
M	Menu	Opens the main menu
EXIT	Exit	Exits from the main menu to the main screen.
◺	N/A	Not enabled in this version.
⬇	N/A	Not enabled in this version.
$-\varrho+$ ☐	Selector	Allows the operator to zoom in and out of an area or item of interest. Zoom range is x2, x4 & x8.
☑	Clear	Identifies scanned person as clean and returns operator station to ready state.
☒	Suspect	Identifies scanned person as potentially suspect

Emergency stop switch ⑤

Symbol	Name	Description
	Emergency stop switch	When activated in an emergency situation, it shuts off the electrical power for the high frequency parts of the eqo system. The computer will shut down but still be powered by the supply voltage and the 24 V auxiliary supply.

Important!

The emergency stop switch is only available on the local station keyboard.

Monitors

Depending on the eqo system configuration different monitors are used for the local station.

Local station monitor A

The flat screen monitor of the local station can be adjusted using the buttons at the bottom of the screen.

Important!

Prior to using or adjusting the flat screen monitor, read the annexed documentation ¨User's Manual – FlexScan S1932 Color LCD Monitor - Eizo¨!

Fig. 11: Buttons of the flat screen monitor

Local station monitor B

The flat screen monitor can be adjusted using the buttons at the bottom of the screen.

Important!

Prior to using or adjusting the flat screen monitor, read the annexed documentation ¨Eizo FlexScan MX190 - User's Manual¨!
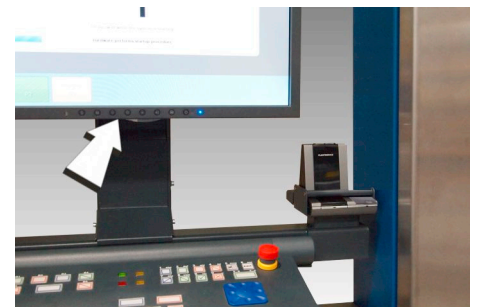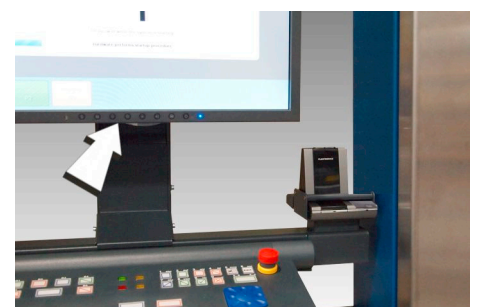

Fig. 12: Buttons of the flat screen monitor

Remote station monitor

The flat screen monitor can be adjusted using the buttons at the bottom of the screen.

> ## Important!
>
> Prior to using or adjusting the flat screen monitor, read the annexed documentation ¨Eizo FlexScan MX190 - User's Manual¨!

Fig. 13: Buttons of the flat screen monitor

Audio Hardware

Wireless audio base at the local station

At the local station a wireless base Ⓐ is mounted to the keyboard bracket (see Fig. 14). The audio hardware facilitates up to four operators (remote and local operators) to conference over an audio channel to one another.

> **Important!**
>
> Prior to using the audio hardware, read the annexed documentation ¨Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide¨and adhere to the safety instructions!
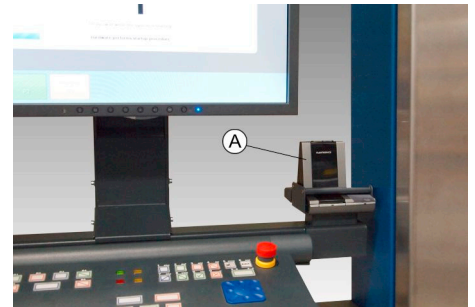
Fig. 14: Wireless audio base

Rack Charger

For matters of industrial hygiene each operator should have its own headset and charge cradle Ⓑ. The batteries of the headset Ⓒ are charged by means of the rack charger Ⓓ. The rack charger allows up to 5 headsets to be charged at one time (see Fig. 15).
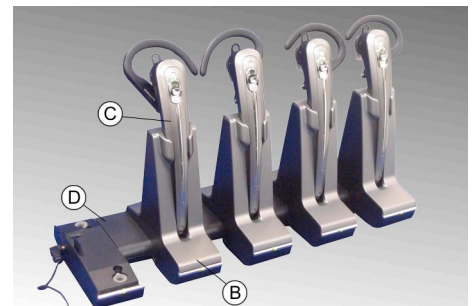
Fig. 15: Rack-charger

Docking and charging a headset

To charge a headset, just dock the charge cradle Ⓑ to the rack charger Ⓓ, as shown in Fig. 19, and place the headset into the charge cradle.
When the charging indicator light Ⓔ turns into green the headset is fully charged.

> **Important!**
>
> A full charge of the headset takes 3 hours and provide up to 9 hours of talk time.
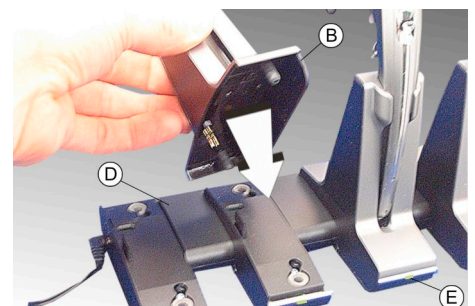
Fig. 16: Docking charge cradle to rack charger

Wireless audio base at the remote station

The base of the audio hardware is connected via USB to the remote stations computer (see Fig. 17). The audio hardware allows the remote operator to conference over an audio channel with the local operators. The batteries of the headset © are charged by means of the rack charger (see Fig. 15).

> **Important!**
>
> Prior to using the audio hardware, read the annexed documentation ˝Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide˝ and adhere to the safety instructions!


Fig. 17: Headset and wireless base

Description of eqo system software

Main screen

The main screen of eqo's system software is divided in four main regions, the viewing window ①, the progress bar ②, the title bar ③ and the priority keys ④.

Viewing window ①

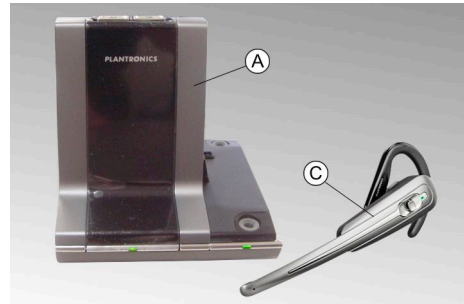Depending on the configuration the user login is different and also the viewing window can have a different look. The viewing window either shows a live image of the current data (see Fig. 19) or displays an information screen with two coloured button signs, a red "Search" and a green "Clear" one (see Fig. 18).
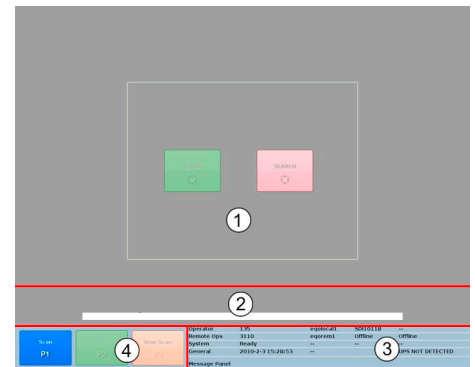
Fig. 18: Main screen with button signs

Fig. 19 shows the viewing window with the live image of the current data. The screen is split in two frames. The frame on the left side displays the normal (non-zoomed) image, and the other the zoomed image. The zoom factor can be increased / decreased (⌂ 36).

A blue box appears on the standard frame, and it may be moved using the blue navigator key (⌂ 13). This blue box indicates the region which is to be zoomed in on.

Fig. 19: Main screen with live image

Progress bar ②

The time line at the base of the screen displays the current length of the scan. A maximum scan will contain 30 seconds worth of image data.
The blue bar shows the current position of the LIVE scan. The green bar shows the amount of the sequence that the operator has reviewed.

Fig. 20: Progress bar

Title bar ③

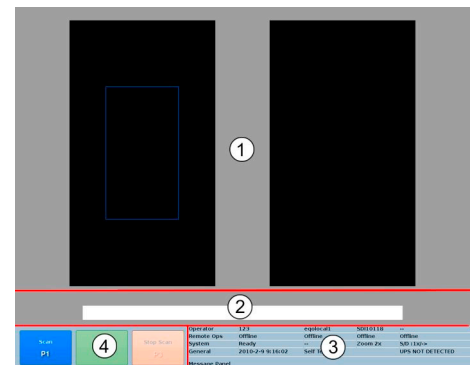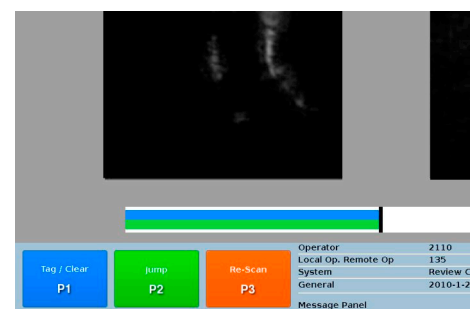|	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ
①	Operator	135		XXX12345--	
②	Remote Ops	Offline	--	Offline	Offline
③	System	Waiting for Reviewer	Enhancement ----		--
④	General	2009-11-26 15:08:25	Self Test: OK	--	UPS NOT DETECTED
⑤	Message Panel				

Fig. 21: Title bar

The title bar of the viewing window (see Fig. 21) shows information such as current operator logged in, connection status, current enhancement functions, etc. as detailed in the following table.

Row	Column	Description
①	Ⓐ	Role of the User logged in at that station i.e., one of: Operator, Service_SP, Service_C, Factory, Test_Mode, Supervisor, Operator, Operator_Male, Operator_ Female
	Ⓑ	Operator ID logged in at that station
	Ⓒ	Machine name of the station
	Ⓓ	Station ID/Machine ID of that station
	Ⓔ	No function currently
②	Ⓐ	*At the local operator station:* The row contains information about the remote stations connected to the local operator station (Remote Ops). *At a remote station:* The row contains information about the local operator station connected to and the other remote station which is connected to the local station, if applicable (Local Op. Remote Op.).
	Ⓑ	Operator ID logged in at the local station
	Ⓒ	Machine name of the local operator station
	Ⓓ	Operator ID of the operator logged into the other remote station. "Offline" if no operator is logged in.
	Ⓔ	Machine name of the remote station (if connected, "Offline" otherwise)

Row	Column	Description
③	Ⓐ	"System" contains system information
	Ⓑ	State of the local operator station e.g. : Startup, Standby, Ready, Reviewing, Scanning, Reviewing Suspect, Scanning Suspect, Review Completed, Scan Completed, Finish Suspect, Diagnostics, Menu, Error, Fatal Error, Dialog, Login Failed, Startup Error, Logout, Data Analysis, Factory Setup, Standby Error, Incident, Settings, Shut down, Review Sequence, Review Complete, Sequences, Loading Sequence, Save Sequence, Export Sequence, Logging In, Site Setup, Dlp Stopping, Status Wait, Reboot, User Mngmt, User Mngmt Error, FDRS, Diagnostics, Waiting For Local, Machine Login, Waiting For Reviewer
	Ⓒ	Image enhancements applied (contrast/brightness)
	Ⓓ	Current zoom level applied to the image (2x, 4x, 8x or --)
	Ⓔ	Speed and direction for the time line indicators. Speed levels are 0.25x, 0.5x, 1x, 2x, 4x, 8x, Direction: → Right, ← Left)
④	Ⓐ	"General" contains general information
	Ⓑ	Current date and time
	Ⓒ	Self Test results: OK, Fail or Uncalibrated (Information only displayed at the local operator station)
	Ⓓ	No function currently
	Ⓔ	Shows the status of an attached UPS: Not detected or UPS on battery
⑤	Ⓐ	Message Panel (No function currently)

Priority key symbols ④

The priority keys can have different functions in every screen or menu. The priority key symbols on the screen display the function which is accessible with each priority key.

Main menu

Pressing the ▣ key on the keyboard opens the main menu (see Fig. 22). Depending on the user role (user login, ⌂ 25) the menu items can differ. Some items can be invisible. Navigate between the menu items using the navigator and select the desired menu item by pressing [P1]. The following table explains accessible menu items.

Fig. 22: Main menu at the local station

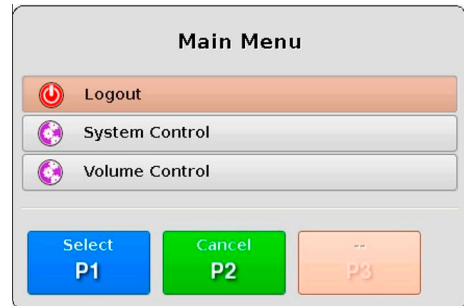| Menu item	Visible for user role	Description
Logout	135, 246, 2110, 3110	▷ Logout a user before switching the eqo system off. ▷ Log off a user in order to log on a different user.
System Control	135, 246, 2110, 3110	▷ Change and view settings: Date/Time, General, Communications, Software ▷ Access to system diagnostics to read / export the incident report.
Volume Control	135, 246, 2110, 3110	Adjust the master volume level of the audio connection.* Each headset has its own volume control also. *only valid when VoIP is uses for audio communication

Logout / login a user

Logout

Before switching off the eqo system or logging in another user, it is necessary to log off a logged in user first.

▷ Press the ▣ key to open the main menu (see Fig. 23). Depending on the user login the menu items differ, some can be invisible.

▷ Navigate to the "Logout" menu item using the navigator control on the keyboard (⌂ 13)

▷ Select the "Logout" menu item by pressing [P1]. The logout confirmation screen (see Fig. 24) is displayed. Choose [P2] to jump back to the main screen.
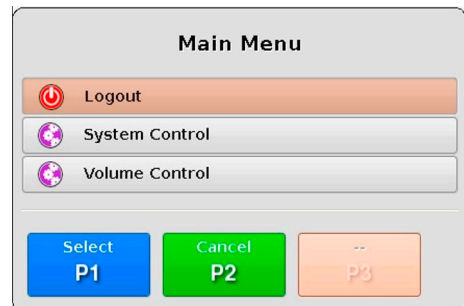

Fig. 23: Main menu - Logout

▷ Confirm the logout process by pressing [P1].
In the case you want to cancel the logout process press [P2].
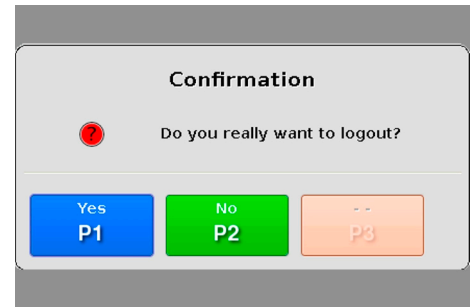This will bring you back to the main menu.

Fig. 24: Logout confirmation screen

Login

After the initial boot sequence or after logging out a user (⌂ 24, chapter ¨ Logout¨) the login screen is displayed (see Fig. 25).

The default user logins are:

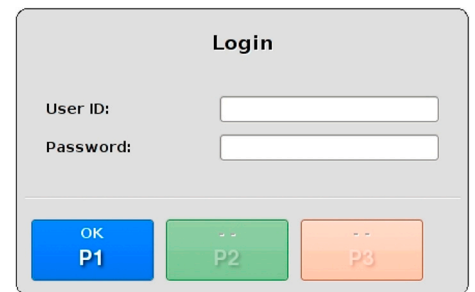| User	User role	Note
Operator	135	Primarily used at the local sta-tion.
	246	
Operator male	2110	Primarily used at the remote sta-tion.
Operator female	3110	

Fig. 25: Login screen

The login data is entered by using the function keys Ⓐ and the navigator Ⓑ. Fig. 26 shows a detail of the keyboard's function keys.

Important!

Inside an input field the lower-case numbers and letters [1 abc] ... [0 _.] written above each function key are active. This gives the operator the ability to enter letters and numbers. The numbers are used by default. To switch between the entry of letters and numbers press [   ] / [- 🔍 +].
You can delete wrong text entries by moving the cursor to the left using the navigator.
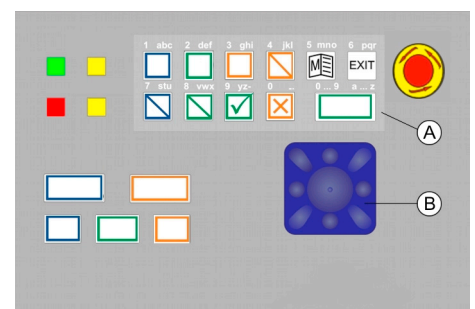

Fig. 26: Function keys and navigator

After a successful login, the main screen is displayed. Depending on the user login the viewing window can have a different look (⌂ 21).

In the event of a failed log-in, a ˝login failed˝ message is displayed. Depending on the reason, either an invalid password has been entered (see Fig. 27) or the user id is locked (see Fig. 28), the displayed message varies.

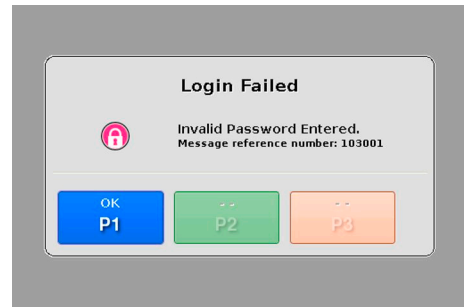Pressing P1 returns you to the log-in screen (see Fig. 25).

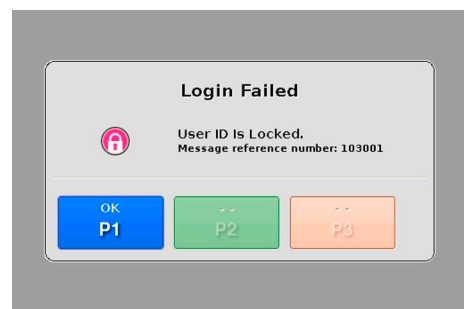Fig. 27: ˝Login Failed˝ message – Invalid password

Fig. 28: ˝Login Failed˝ message – User ID locked

By default all passwords have a lifetime of 90 days until they are changed or expired. The lifetime of the passwords are configurable and can be extended or cut shorter if needed by a user with the appropriate rights.
In case that the password has expired, the ˝User Details˝ screen will advise the user to enter a new password.

Pressing P2 opens the ˝Edit User Password˝ dialog (see Fig. 30).

Fig. 29: ˝User Details˝ message

Edit user password

The ˝Edit User Password˝ dialog allows you to edit your password using the function keys (⇑ 16) and the navigator (⇑ 13).

Pressing P1 will confirm your changes and return you to the main screen (⇑ 21)

Pressing P3 will display the ˝Force Logout˝ dialog, which when you press P1 , returns you to the log-in screen (see Fig. 25).
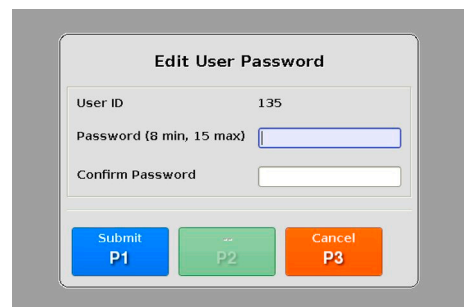

Fig. 30: ˝User Details˝ dialog

System control

The "System Control" menu provides access to two sub menus, settings and diagnostics. The following table shows the accessible functions below each menu item:

Menu item	Function
Settings	▷ Date /Time ▷ General ▷ Communications ▷ Software
Diagnostics	▷ Incident Report ▷ Export

Settings

The "Settings" menu (see Fig. 31) allows you as an operator, to view or change the system configuration of your eqo depending on your access rights.
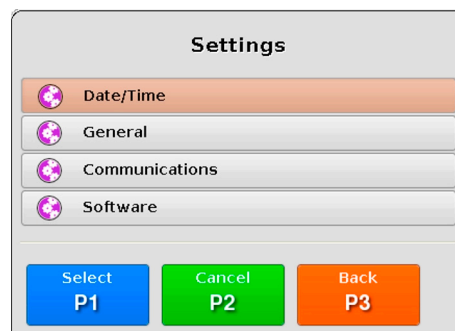
Fig. 31: Menu: "Settings"

Date and time settings

The "Date and Time Setting" dialog shows the actual time, date and time zone configuration for eqo's local station. Depending on your access rights you are allowed to view only or modify them. By default the local operator has read-only access.

The navigation tree in Fig. 32 shows a quick overview of how to navigate to the "Date and Time Setting" dialog.

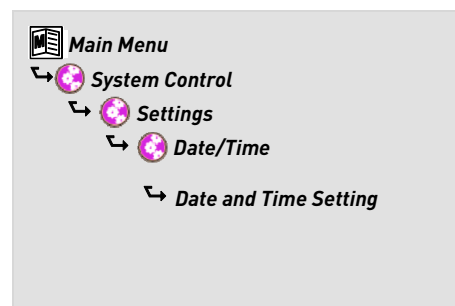▷ Press the 📖 key to open the main menu (see Fig. 22).

Fig. 32: Navigation tree to the "Date and Time Settings" dialog

▷ Navigate to the "System Control" menu item using the navigator control on the keyboard (⌂ 13) and select it by pressing **P1** .

▷ In the "System Control" menu navigate to the "Settings" menu item and select it by pressing **P1** . The "Settings" menu is displayed.

▷ In the "Settings" menu navigate to the "Date/Time" menu item and select it by pressing **P1** . The "Date and Time Setting" dialog is displayed (see Fig. 33).

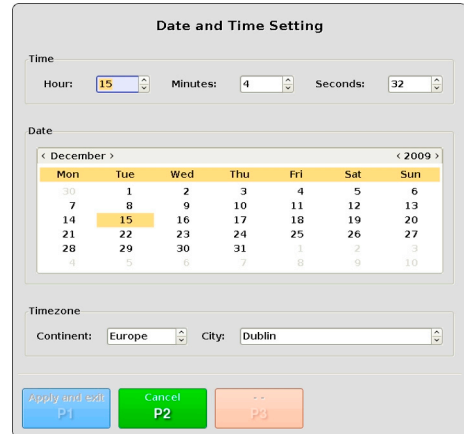The "Date and Time Settings" dialog provides you with the information explained below:

Item	Description
Time	Time in hours, minutes and seconds
Date	Year, month and day
Time zone	List of continents and several cities on these

! **Important!**

Move between adjacent items in screen menus or windows by directing the navigator up or down.
If you direct the navigator to the right or to the left, you change the entries or call up a selected menu item or function.

▷ Make the desired modifications and press **P1** to apply the changes and exit or **P2** to discard your changes.

General settings

The "General Settings" dialog gathers information of the local station such as: Station name, serial number, machine id, location, etc. Depending on your access rights you are allowed to view only or modify them. By default the local operator has got read-access only.

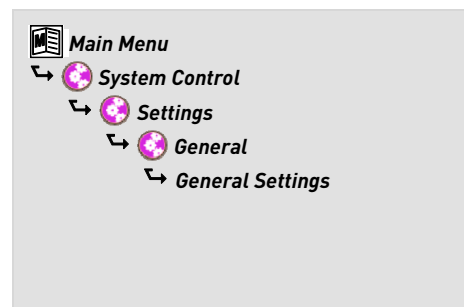The navigation tree in Fig. 34 shows a quick overview how to navigate to the "General Settings" dialog.

▷ Press the 🗏 key to open the main menu (see Fig. 22).

▷ Navigate to the "System Control" menu item using the navigator control on the keyboard (⌂ 13) and select it by pressing **P1** .

▷ In the "System Control" menu navigate to the "Settings" menu item and select it by pressing **P1** . The "Settings" menu is displayed.

Fig. 33: "Date and Time Settings" dialog

Fig. 34: Navigation tree to the "General Setting" dialog

▷ In the ″Settings″ menu navigate to the ″General″ menu item and select it by pressing **P1** . The ″General Settings″ dialog is displayed (see Fig. 35).

The ″General Settings″ dialog provides you with the information explained below:

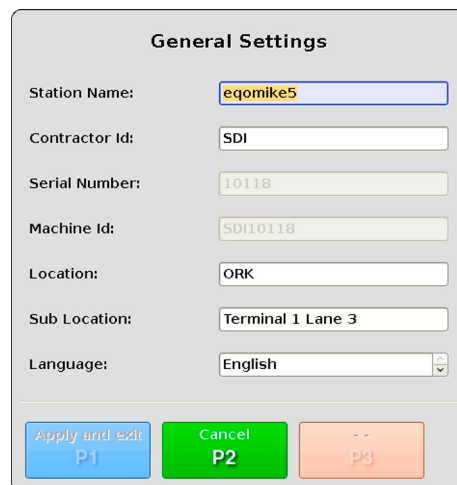| Item	Description
Station Name	Name of the station
Contractor Id	Name/Id of the contractor
Serial Number	Serial number of station
Machine Id	Machine id of the station
Location	Location of the station
Sub Location	Sub locations
Language	Change system language of the station

Important!

Move between adjacent items in screen menus or windows by directing the navigator up or down.
If you direct the navigator to the right or to the left, you change the entries or call up a selected menu item or function.
Enter numbers or letters inside an input field using the function keys. The lower-case numbers and letters [1 abc] ... [0 _.] written above each function key are active. The numbers are used by default. To switch between the entry of letters and numbers press 〔   〕./ – 🔍 +.

▷ Make the desired modifications and press **P1** to apply the changes and exit or **P2** to discard your changes.

Communications

The ″Communications″ dialog allows you to change the IP address of your eqo system in order to integrate your eqo system into your local area network. Depending on your access rights the ″Communications″ dialog allows you to view only or modify the IP address. By default the local operator has read-access only.

The navigation tree in Fig. 36 shows a quick overview how to navigate to the ″Communications″ dialog.
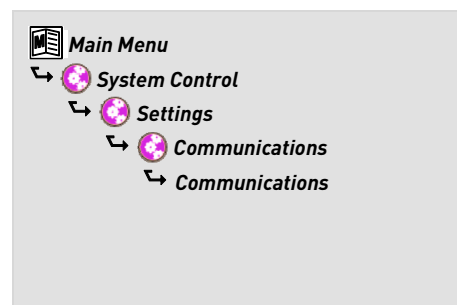
▷ Press the 🖾 key to open the main menu (see Fig. 22).

▷ Navigate to the ″System Control″ menu item using the navigator control on the keyboard (⌂ 13) and select it by pressing **P1** .

Fig. 35: ″General Settings″ dialog

Fig. 36: Navigation tree to the ″Communications″ dialog

▷ In the ″System Control″ menu navigate to the ″Settings″ menu item and select it by pressing **P1** . The ″Settings″ menu is displayed.

▷ In the ″Settings″ menu navigate to the ″Communications″ menu item and select it by pressing **P1** . The ″Communications″ dialog is displayed. Fig. 37 shows the ″Communications″ dialog at the remote station. If the system is configured only with a local station the ″Communications″ dialog will only show the local station IP address input field.
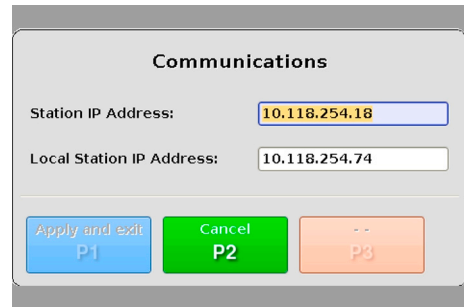

Fig. 37: ″Communications″ dialog

Important!

Move between adjacent items in screen menus or windows by directing the navigator up or down.

If you direct the navigator to the right or to the left, you change the entries or call up a selected menu item or function.

Enter numbers or letters inside an input field using the function keys. The lower-case numbers and letters [1 abc] ... [0 _.] written above each function key are active. The numbers are used by default. To switch between the entry of letters and numbers press [____] ./ [- 🔍 +].

▷ Contact your local network administrator to obtain a valid IP addresses. Enter the IP address of your local station and press **P1** to apply the changes or **P2** to discard them.

Software

The ″Software Settings″ dialog gathers information about the software configurations of your local station, such as: Gender configuration, face detection, etc..

Depending on your access rights you are allowed to view only or modify them. By default the local operator has got read-access only.

The navigation tree in Fig. 38 shows a quick overview how to navigate to the ″General Settings″ dialog.

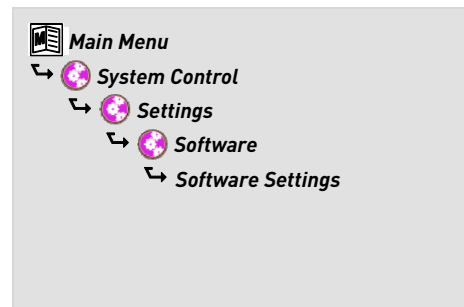*Fig. 38: Navigation tree to the ″Software Settings″ dialog*

▷ Press the 📖 key to open the main menu (see Fig. 22).

▷ Navigate to the ″System Control″ menu item using the navigator control on the keyboard (⌂ 13) and select it by pressing **P1** .

▷ In the "System Control" menu navigate to the "Settings" menu item and select it by pressing **P1** . The "Settings" menu is displayed.

▷ In the "Settings" menu navigate to the "Software" menu item and select it by pressing **P1** . The "Software Settings" dialog is displayed (see Fig. 39).

The "Software Settings" dialog provides you with the following information:

Fig. 39: "Software Settings" dialog

Item	Description
Software Revision	Software Revision installed on the local machine
Model Type	Model type of eqo
Gender Mode	For privacy reasons the gender mode of eqo can be configured as: ▷ Genderless: There is no differentiation between male and female persons to be scanned. Gender of the remote operator is unimportant. ▷ Male/Female: A differentiation is made between male and female persons to be scanned. Minimum two remote operators must be connected to the local station with different gender.
Face Detection	eqo can be configured with an option to blur the facial features of scanned persons. This field informs if this option is turned on or off.
I/O Board Firmware Revision	Firmware revision of the I/O Board

Important!

Move between adjacent items in screen menus or windows by directing the navigator up or down.
If you direct the navigator to the right or to the left, you change the entries or call up a selected menu item or function.

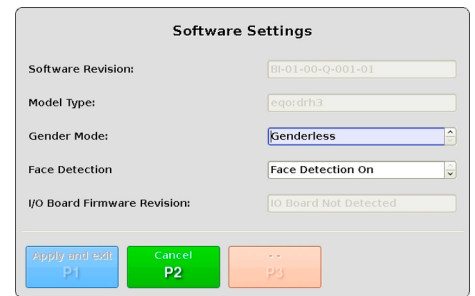▷ Make the desired modifications and press **P1** to apply the changes and exit or **P2** to discard your changes.

Diagnostics

In case of a malfunction of eqo the diagnostics functions help you as an operator to localise or narrow down the problem.
Depending on the user login the menu items can differ, some items can be invisible. Navigate between the menu items using the navigator and select the desired menu item by pressing **P1**. The following table explains accessible menu items.

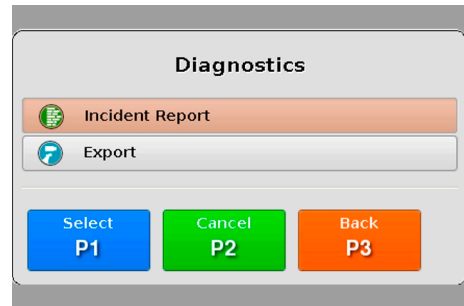| Menu item	Visible for user role	Description
Incident Report	135, 246	View incident report
Export	135, 246, 2110, 3110	View or export the set up diagnostics report

Fig. 40: Menu: "Diagnostics"

Incident Report

The "Incident Report" gathers information about the the status of eqo and records every malfunction of the system.
The navigation tree in Fig. 41 shows a quick overview how to navigate to the "Incident Report" dialog.

▷ Press the 🔲 key to open the main menu (see Fig. 22).

▷ Navigate to the "System Control" menu item using the navigator control on the keyboard (⬆ 13) and select it by pressing **P1**.

▷ In the "System Control" menu navigate to the "Diagnostics" menu item and select it by pressing **P1**. The "Diagnostics" menu is displayed.

▷ In the "Diagnostics" menu navigate to the "Incident Report" menu item and select it by pressing **P1**. The "Incident Report" dialog is displayed (see Fig. 42).

▷ Use the navigator control on your keyboard to scroll down in the incident report. Press **P3** to close and jump back to the "Diagnostics" menu.
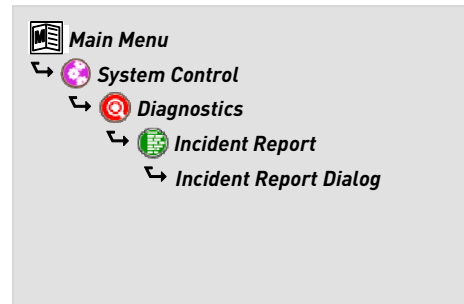
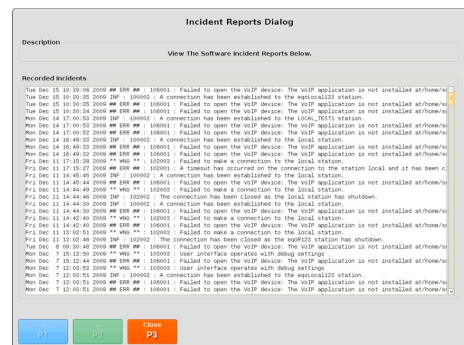*Fig. 41: Navigation tree to the "Incident Reports" dialog*

Fig. 42: "Incident Report" dialog

Export the set up diagnostics

The ˝Setup Diagnostics Report˝ gathers the configuration informa-
tion of your eqo system. These have been created during the setup
of the system.
Depending on your access rights you are allowed to view only or
download the ˝Setup Diagnostics Report˝.
The navigation tree in Fig. 43 shows a quick overview how to navig-
ate to the ˝Setup Diagnostics Report˝ dialog.

▷ Press the ⊞ key to open the main menu (see Fig. 22).

▷ Navigate to the ˝System Control˝ menu item using the navigator
   control on the keyboard (⌂ 13) and select it by pressing **P1** .

▷ In the ˝System Control˝ menu navigate to the ˝Diagnostics˝
   menu item and select it by pressing **P1** . The ˝Diagnostics˝
   menu is displayed.

▷ In the ˝Diagnostics˝ menu navigate to the ˝Export˝ menu item
   and select it by pressing **P1** . The ˝Export Diagnostics˝ dialog
   is displayed (see Fig. 44).

▷ Press **P1** to create the ˝Setup Diagnostics Report˝ and use
   the navigator control on your keyboard to scroll down in the ˝Ex-
   port Diagnostics Report˝.

Important!

The export functionality is only available at the local sta-
tion!

Fig. 43: Navigation tree to the ˝Setup
Diagnostics Report˝ dialog

Fig. 44: ˝Export Diagnostics˝ dialog

Volume control

The volume control is the master control for the VoIP system. It al-
lows you to adjust the level of the speaker and microphone of the
audio connection established between local operator and remote
operators.

Important!

The headsets of the audio system have their own indi-
vidual volume control.

If the audio system uses radio communication only, then these set-
tings don't impact the volume control. Depending on the user login
the menu items can differ, some items can be invisible. Navigate
between the menu items using the navigator and select the desired
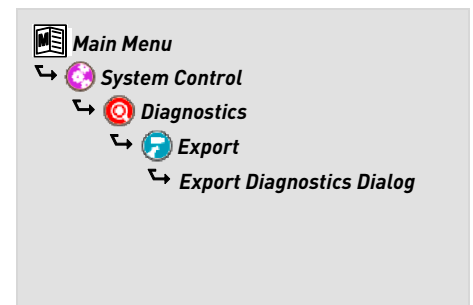menu item by pressing **P1** .
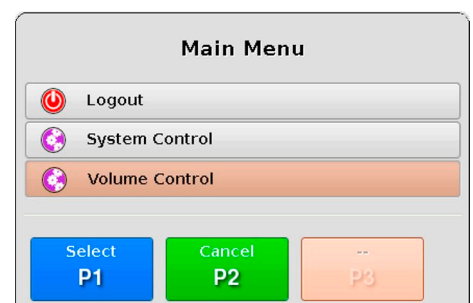

Fig. 45: Main menu – Volume Control

▷ Press the ▣ key to open the main menu (see Fig. 22).

▷ Navigate to the "Volume Control" menu item using the navigator control on the keyboard (⌂ 13).

▷ Select the "Volume Control" menu item by pressing **P1**. The "Volume Control" screen (see Fig. 46) is displayed.

Fig. 46 shows the "Volume Control" dialog.

Important!

Move between adjacent items in screen menus or windows by directing the navigator up or down.
If you direct the navigator to the right or to the left, you adjust the speaker and microphone levels.

▷ Press **P1** to apply the changes and exit to the main screen or **P3** to discard your changes and close the "Volume Control" dialog.
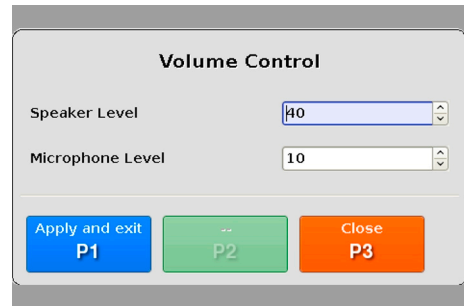

Fig. 46: "Volume Control" dialog

Image enhancement features

Brightness

Pressing the ⬠ key, switches between brightness and contrast adjustment. Fig. 48 shows the title bar with activated brightness adjustment.

▷ Use the ⬠ key to switch to brightness adjustment if necessary.

Press the „Contrast / Brightness Adjustment" key ⊣✲⊢ to increase/decrease the brightness of the displayed image in steps of 8 from -64 to +64.
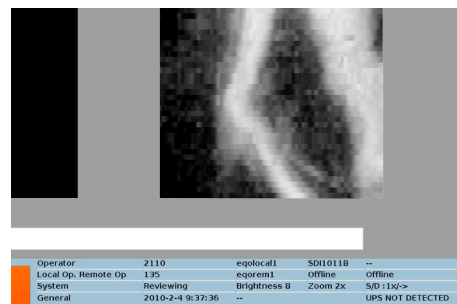

Fig. 47: Title bar – Image enhancement: Brightness

Contrast

Pressing the ⬠ key switches between contrast and brightness adjustment. Fig. 47 shows the title bar with activated contrast adjustment.

▷ Use the ⬠ key to switch to contrast adjustment if necessary.

Press the „Contrast / Brightness Adjustment" key ⊣✲⊢ to increase/decrease the contrast in steps of 1 from -28 to +7.
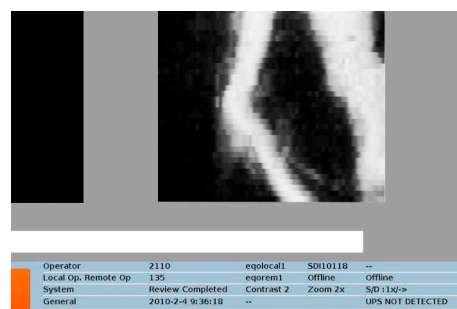
Fig. 48: Tile bar – Image enhancement: Contrast

Invert

When the 🔘 key is pressed the image of the screen inverts as shown in Fig. 49.
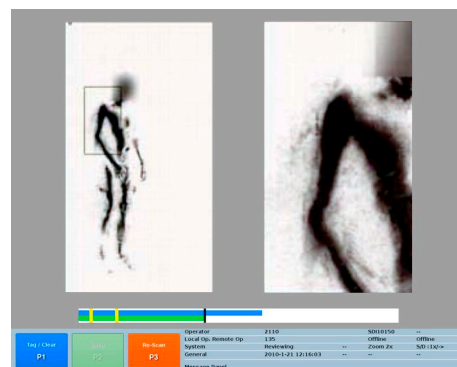
Fig. 49: Image display in invert mode

Zoom

One frame shows the normal (non-zoomed) image, and the other the zoomed image. The zoom factor can be increased / decreased from 2x to 4x to 8x, by pressing − 🔍 + .

A blue box appears on the standard frame, and it may be moved using the blue navigator key. This blue box indicates the region which is to be zoomed in on.
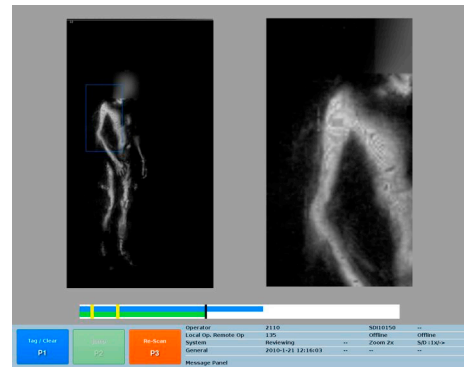
Fig. 50: Image display with activated zoom

Safety instructions

Safety instructions for start up

⚠ **CAUTION**

Risk of hearing damage!
Excessive sound volume settings or "sound-spikes" on the audio headsets could lead to temporary or permanent hearing loss.

When adjusting the volume level of your headset increase the sound level in small steps. Adhere the safety instructions of the annexed documentation "Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide"!

Safety instructions for operation

⚠ **CAUTION**

Risk of falling!
When walking through the arch there is a potential trip hazard. Persons to be scanned should be made aware of this!

Start up

Switching on the local station

▷ Turn the main switch of the eqo system clockwise into the ON position (see Fig. 51). The unit is now ready to switch-on.
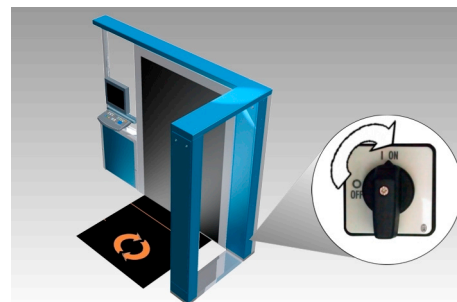
Fig. 51: Main switch

▷ Turn the key switch of the eqo system clockwise (into position II) in order to switch on the unit (see Fig. 52). The key switch will backslide automatically to position I.

Fig. 52: Key switch of the local operator keyboard

After the initial boot sequence, a splash screen will appear (see Fig. 53) on the monitor, which will clear after approximately five minutes when the system has started. During that time eqo is performing several start-up activities. The text on the progress bar reflects the system start-up activities which are:

- Connecting to hardware
- Hardware performing start up procedure
- Hardware performing start-up
- Hardware performing background collection
- Start up is completed

Fig. 53: Splash screen

Logon to the local station

The splash screen is followed by the login screen (see Fig. 54).
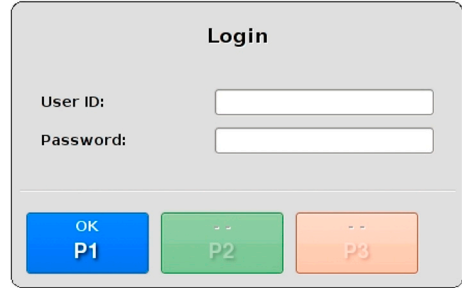
Fig. 54: Login screen

▷ Enter your login data by using the function keys Ⓐ and the navigator Ⓑ (see Fig. 55).

Important!

Inside an input field the lower-case numbers and letters [1 abc] ... [0 _.] written above each function key are active. This gives the operator the ability to enter letters and numbers. The numbers are used by default. To switch between the entry of letters and numbers press ⬜ / ⊟ 🔍 ⊞ .
You can delete wrong text entries by moving the cursor to the left using the navigator.
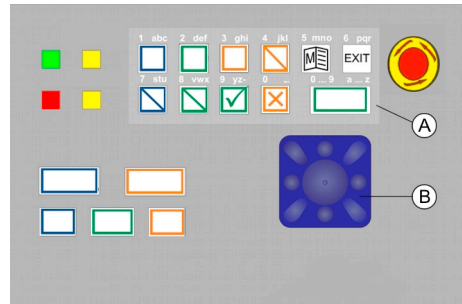
Fig. 55: Function keys and navigator

In the event of a failed log-in a "Login failed" message is displayed (see Fig. 27 and Fig. 28.on page 26). In this case press **P1** on the keyboard to return to the log-in screen (see Fig. 54).

After a successful login, the main screen is displayed (see Fig. 56).

Important!

One should wait 5 minutes before performing scans, as there is a "background collection" task initiated, which needs to be completed, to enable the system to prepare to capture images correctly. The scanning area should be kept clear during this time, and at all times other than when a scan is in progress.

*Fig. 56: Local operator station's main screen*

Switching on the remote station

▷ Turn the key switch Ⓐ of the remote station clockwise (into position II) in order to switch on the unit (see Fig. 57). The key switch will backslide automatically to position I and the green LED Ⓑ lights up.
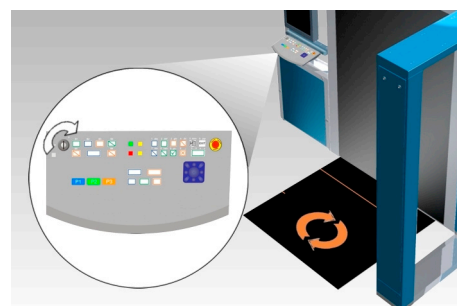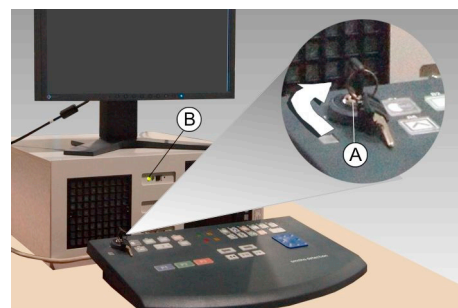

Fig. 57: Key switch of the remote station

After the initial boot sequence, a splash screen will appear (see Fig. 61) on the monitor, which will clear after approximately five minutes when the system has started. During that time the remote station is performing several start-up activities. The text on the progress bar reflects the system start-up activities.
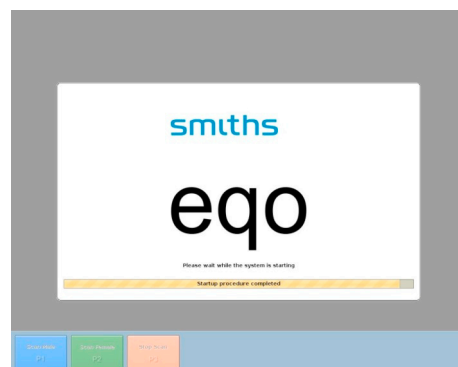
Fig. 58: Splash screen

One of these start up activities is to search for a local station to connect to. If the remote station locates the local station it establishes a connection and a message box is displayed, that a connection to an eqo local station has been established (see Fig. 59).

▷ Acknowledge this message by pressing **P1**.
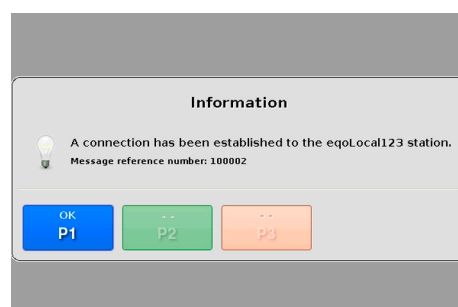
Fig. 59: Connection established to local station

At the same time a message will appear at local operator station which informs the local operator that a remote station has made a connection to the local station.

▷ Acknowledge this message by pressing **P1**.

Fig. 60: Connection established with remote station

Logon to the remote station

The splash screen is followed by the login screen (see Fig. 61).

▷ Enter your login data by using the function keys (⌂ 13).

Important!

Inside an input field the lower-case numbers and letters [1 abc] ... [0 _.] written above each function key are active. This gives the remote operator the ability to enter letters and numbers. The numbers are used by default. To switch between the entry of letters and numbers press ‒ 🔍 + .
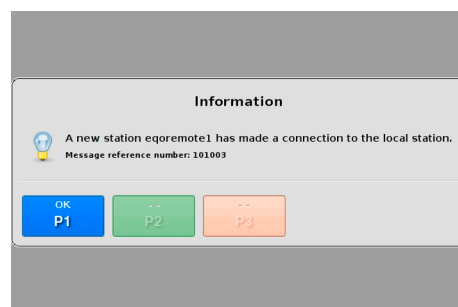You can delete wrong text entries by moving the cursor to the left using the navigator.

A remote login will fail if there is no connection to a local station or if a remote operator has already logged in, who is of an equivalent gender. For example if a male remote operator is logged in, then a login at the other remote station by a male operator will fail.

▷ In the event of a failed log-in, Fig. 61 is displayed. Press **P1** on the keyboard to return to the log-in screen (see Fig. 61).

In the event that the remote station can't find a local station a message box is displayed that the remote station failed to make a connection to the local station (see Fig. 62).

▷ Acknowledge this message by pressing **P1** .

After a successful login, the login information dialog will appear. This contains details about the last login date, the number of failed logins and the number of days remaining on the password. Pressing **P2** the remote operator gets the ability to change the password (⌂ 26).

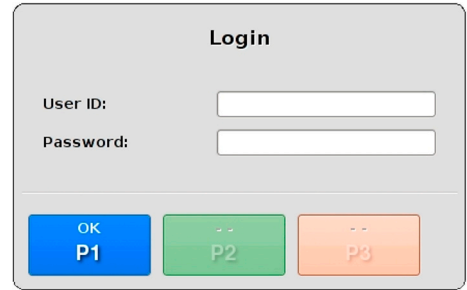▷ Acknowledge this message by pressing **P1** .
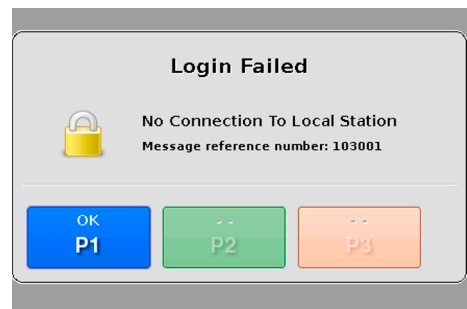

Fig. 61: Login screen

Fig. 61: "Login Failed" screen

Fig. 62: Failed to connect to a local station

Fig. 63: Login information dialog

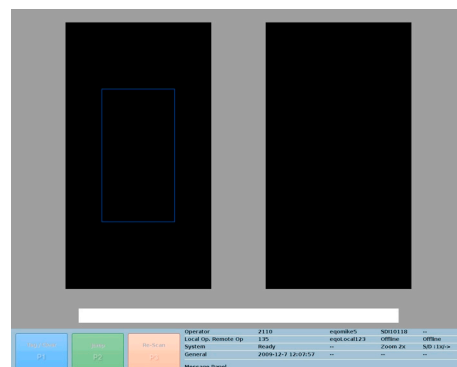After acknowledging the login message, the main screen will appear (see Fig. 64).

Fig. 64: Remote station's main screen

Audio communication

In combination with the eqo system three different audio communication configurations are possible.

▷ No audio solution provided
▷ Wireless audio base at local station only
▷ Wireless audio base at local and remote station

In the following the different audio communication configurations will be described in detail:

No audio solution provided
If no audio solution has been provided, it may be the case that you are already using a communication solution or your concept of operation does not require and a communication solution.

Audio base at the local station only
A wireless audio base is located at the local station of the eqo system. This facilitates up to four operators to conference over an audio channel to one another.

To protect the subject's privacy the system is configured with local and remote stations. The remote stations are physically separated from the local station. The remote operator subscribes his headset to the audio base connected to the local station.

> **Important!**
>
> Depending on the proximity of the local and remote stations and customer requirements a second base may be mandatory.

Audio base at local and remote station
One wireless audio base is located at the local station, a second one at the remote station of your eqo system.
Up to four local operators subscribe their headsets to the wireless audio base connected to the local station, the remote operator subscribes his headset to the base which is connected to the remote station.

The communication link between local and remote operator station is established via a network connection between local and remote station using Voice over IP (VoIP). This communication link is controlled by the eqo system and only established as long as a scanning process is is active.

Important!

Prior to using the audio hardware, read the annexed documentation ˝Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide˝!

Subscribing a master headset to the local station audio base station

The primary local operator subscribes his headset as master. Other operators are linked in via a conferencing facility (⌂ 45, Conference in additional headsets). This local wireless link is independent of eqo and remains in place until terminated by one of the operators.

▷ Step 1:
Double press the subscribe button Ⓕ on the base.
The subscribe indicator Ⓖ will flash red and green.

Fig. 65: Wireless audio base at the local station

▷ Step 2:
Press the call control button (volume up button) on the headset up for three seconds. When the subscribe indicator Ⓖ turns solid green at the base, the subscription process is completed.

Important!

If the subscription process times out after two minutes or if the subscription process fails, the subscription light will become solid red for four seconds and then return to its previous state. If this occurs, try to re-subscribe the headset again.

Fig. 66: Headset

Conference in additional headsets

Up to four headsets can be subscribed to the wireless audio base for conferencing. Follow the following steps to conference in a headset.

▷ Step 1:
Place the headset into over-the-air subscription mode by pushing the headset call control button Ⓗ (volume up button) up for three seconds.
The indicator light Ⓘ of the headset becomes solid green.

Fig. 67: Headset

▷ Step 2:
Short press (less than one second) the subscription button Ⓕ on the wireless audio base Ⓐ.
The subscription indicator Ⓖ will flash yellow and green. When it turns to solid yellow, you will hear a tone in the master headset. This indicates to the master headset, that a headset wants to join the conference.

▷ Step 3:
Press the call control button Ⓗ on master headset within five seconds to accept the conferencing request (see Fig. 67).
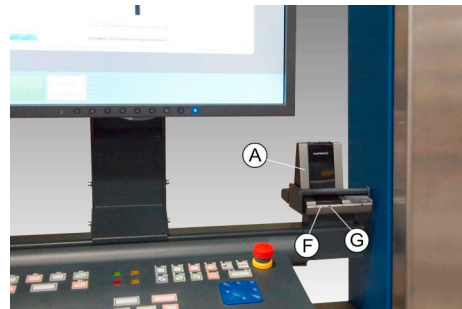The headset has joined the conference.

Fig. 68: Wireless audio base at the local station

❗	**Important!**
	If the call control button on the master headset isn't pressed within five seconds the guest's request to conference is rejected and they will hear an error tone in their headset.

Adjusting the headset hearing volume

⚠	⚠ **CAUTION**
	Risk of hearing damage!
	Excessive sound volume settings or "sound-spikes" on the audio headsets could lead to temporary or permanent hearing loss.
	When adjusting the volume level of your headset increase the sound level in small steps. Adhere the safety instructions of the annexed documentation "Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide"!

▷ Push the call control button Ⓗ up/down to adjust the volume of the headset. Tones indicate the volume level.

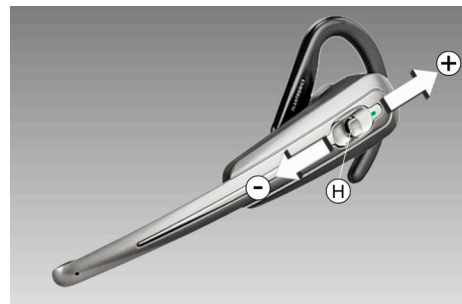| ❗	**Important!**
	The headset transmit volume is set over the menu option by the PC (⌂ 33).

Fig. 69: Adjustment of the headset volume

Terminate a conference link

▷ Press the call control button on a guests headset to leave the conference.
A single tone in the master headset indicates that a guest has left the conference.

Important!

If you want to terminate the conference press the call control button Ⓗ on the master headset.

Fig. 70: Headset

Subscribing headset a master to the remote station's audio base

▷ Follow the steps 1-2 on the page 45 (Subscribing a master headset to the local station audio base station) to subscribe a headset as master to the remote station's wireless audio base.

Operation

Conducting the person into the scanning area

> ⚠️ **CAUTION**
>
> Risk of falling!
> When walking through the arch there is a potential trip hazard. Persons to be scanned should be made aware of this!

> ℹ️ **Important!**
>
> In the following one screening process will be explained. Please remember that this is only one possible concept of operation (CONOPS) for the eqo system. Depending on your requirements your CONOPS can be different from the described CONOPS below.

▷ Direct the person to be scanned through the arch, into the scanning area.
The optimum position for the person is marked by a symbol on the floor mat. The person should stand in front of the flat scanning panel with arms down, facing the local operator.

> ℹ️ **Important!**
>
> Remember that the minimum distance between the person to be scanned and the flat scanning panel of the eqo system is 30 cm. The person should stand at the centre of the operational area as indicated by the symbol on the floor.

Fig. 71: Local operator directing a person into the imaging volume

Screening process

> ℹ️ **Important!**
>
> When the eqo system is configured with a remote station, starting the screening process is only possible as long as the remote operator station is in "Ready"-state. When the remote operator is inside a menu, and the local operator presses **P1**, a message at the local station's screen is displayed indicating that the remote station is busy.

▷ Press **P1** at the local station to start the screening process. The image capturing begins.

Fig. 72: Local station's main screen when system configured with remote station

▷ Instruct the person to turn in slow motion through at least 360 degrees. Before they begin turning, they must raise their arms up as shown in Fig. 73.
This allows the remote operator, during the screening process to view also the sides of the arms

▷ Press **P3** in order to stop the image capturing. Image capturing will also stop after the maximum scanning time of 30 seconds has elapsed.
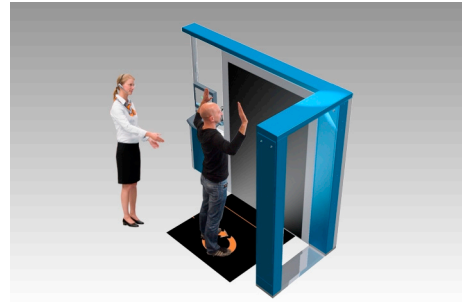

Fig. 73: Person standing in screening position

If no anomaly is detected, the person who has been scanned can then be told that they are free to proceed.

Important!

In the case where an anomaly has been identified, any site specific standard operating procedure (SOP) should be followed. For example a targeted pat-down should be performed as indicated by the position of the anomaly on the image.

Reviewing the image sequence

To avoid, that the operator misses the beginning of the live image capture, the scan information is buffered. After starting the scan at the local station, the blue progress bar indicates the progress of the live image capture.
The remote operator must press ▶❚❚ before the image sequence will begin playback on the remote operator's screen.
The blue bar Ⓐ shows the current position of the LIVE scan. The green bar shows the amount of the sequence that the operator has reviewed. The black cursor Ⓑ shows the actual position within the image sequence the operator is reviewing.
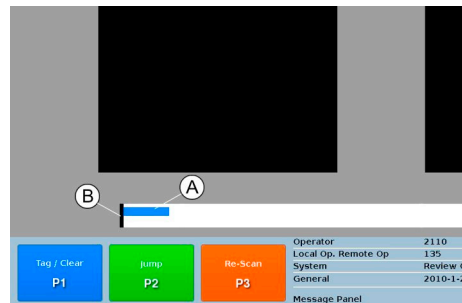

Fig. 74: Progress bar

▷ Press ▶❚❚ at the remote station to start the display of the image sequence.

The remote operator (see Fig. 75) reviews the mm-wave image and evaluates the image to decide whether the subject is clear or is suspect. While reviewing the mm-wave image the remote operator uses the function keys to tag anomalies and to move forwards and backwards on the timeline through the image data.

Fig. 75: Remote operator reviewing the image

Tag areas of interest

Pressing P1 while the image plays allows the operator to mark areas of interest where potential threats are identified. Yellow marker positions Ⓒ in the green and blue bar identify these positions in the image data (see Fig. 76). They can be used to quickly find these positions in the image data to playback that portion of the image for further analysis.
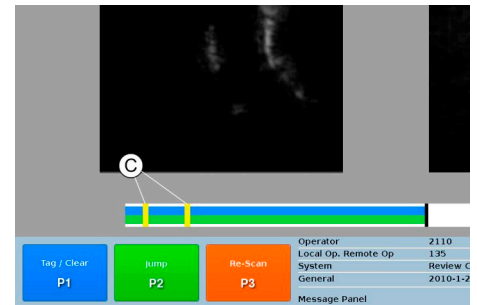

Fig. 76: Tags on the timeline

Reviewing tags

To review areas of interest, the image playback must be paused, either by pressing the ▶❚❚ key during a scan, or after a screening process has been stopped at the local station.

While the image playback is paused, it is possible to review areas of interest. Pressing P2 will skip the tags in sequence, if there have been any marked and playback the a short image sequence around the tag.

After reviewing a tag, the operator can clear the tag by pressing the P1 key again or jump to the next tag by pressing P2. After clearing a tag, the cleared tag Ⓓ will appear grey on the time line (see Fig. 77).
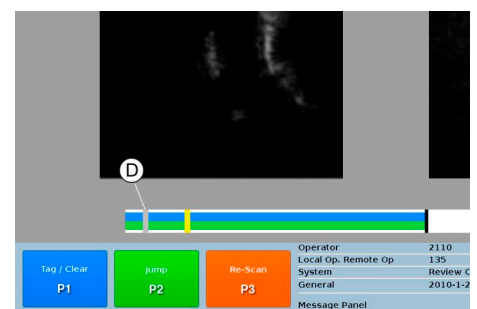

Fig. 77: Cleared tags

Using the control keys (⇧ 13) allows the operator to move the image backwards or forwards in the image sequence and in different speeds on the time line.

Evaluation of the image sequence

After reviewing an image sequence the remote operator has to evaluate the image data.

In case, that no anomaly has been identified, he presses the clear key ☑ on the function key panel (⌂ 16).
At the local station's main screen the clear-button is highlighted, and the local operator station returns to ready state (see Fig. 78).

Fig. 78: Local station in ready state

In case, that remote operator identifies an anomaly, he presses the suspect key ☒ and communicates the position of the anomaly via an audio channel to the local operator

> **Important!**
>
> In the case where an anomaly has been identified, any site specific standard operating procedure (SOP) should be followed. For example a targeted pat-down should be performed as indicated by the position of the anomaly on the image.
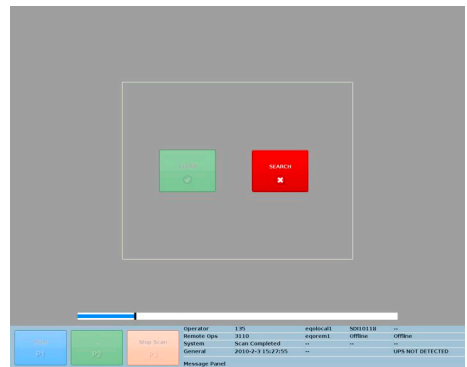

Fig. 79: Local station's main screen - "search" button active

After the SOP has been accomplished the remote operator has to press the clear key ☑ to get the local station back to the "Ready"-state.

Initiate a Re-Scan

In case, that the image sequence has been to short or the quality of the collected image sequence is insufficient the remote operator has the possibility to initiate a Re-Scan by pressing **P3** .

The Re-Scan is available anytime during the remote reviewing session. If the re-scan is pressed it has the effect of clearing the scan on the local station but it does not report a decision i.e. "CLEAR" or "SEARCH".

The Re-Scan has the effect of a new scan, but the passenger count is not incremented.

Pressing `P3` will clear the timeline and the ˝Clear/Search˝ buttons at the local station if activated. The local station's status will change to the ˝Ready˝-state and the `P1` button will enable.

At the remote station the timeline and the image are cleared. The status of the remote station will change to the ˝Waiting˝-state and the screening process can now be repeated.

Shut-down

Shut-down the local station

▷ Step 1:
  Press 🖹 and the main menu is displayed (see Fig. 80).

▷ Step 2:
  Use the navigator control on the keyboard (⇧ 13) to select the Logout menu item.

▷ Step 3:
  Press **P1** to select logout menu item.
  The logout confirmation screen (see Fig. 81) is displayed.
  Choosing **P2** will bring you back to the main screen.

Fig. 80: Main menu

▷ Step 4:
  Press **P1** to confirm the logout process.
  Choosing **P2** will cancel the logout and bring you back to the main menu (see Fig. 81).

Fig. 81: Logout confirmation screen

▷ Step 5:
  Turn the key switch to the left (into position 0) in order to switch off the unit (see Fig. 82).

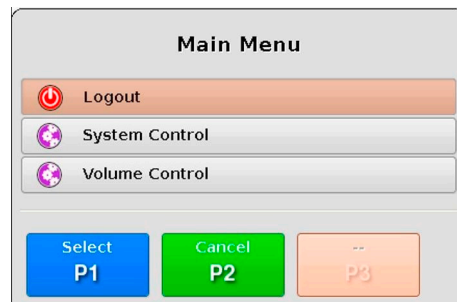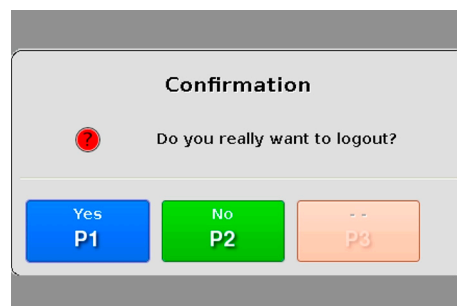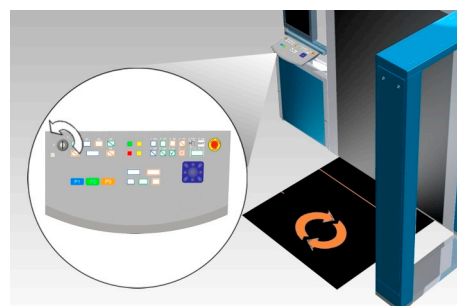Fig. 82: Key switch of the local operator keyboard

▷ Step 6:
Turn the main switch to the left into position OFF (see Fig. 83).
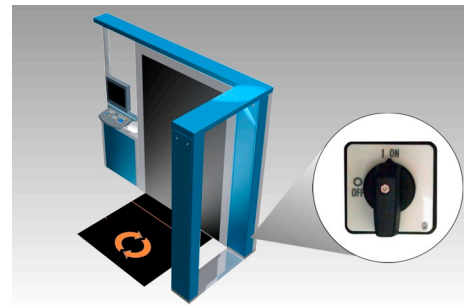

Fig. 83: Main switch

Shut-down the remote station

▷ Step 1:
Press [M] and the main menu is displayed (see Fig. 84).

▷ Step 2:
Use the navigator control on the keyboard (⌂ 13) to select the Logout menu item.

▷ Step 3:
Press **P1** to select logout menu item.
The logout confirmation screen (see Fig. 85) is displayed. Choosing **P2** will bring you back to the main screen.

▷ Step 4:
Press **P1** to confirm the logout process.
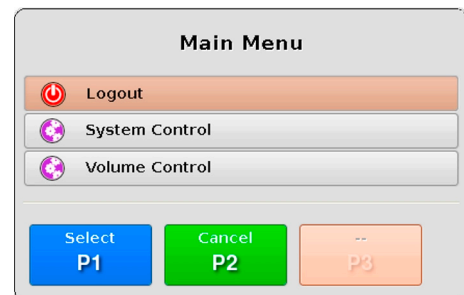Choosing **P2** will cancel the logout and bring you back to the main menu (see Fig. 85).

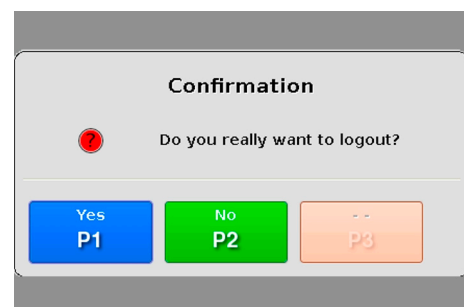*Fig. 84: Main menu*

Fig. 85: Logout confirmation screen

▷ Step 5:
Turn the key switch Ⓐ of the remote station counter to the left (into position 0) in order to switch off the unit (see Fig. 86).
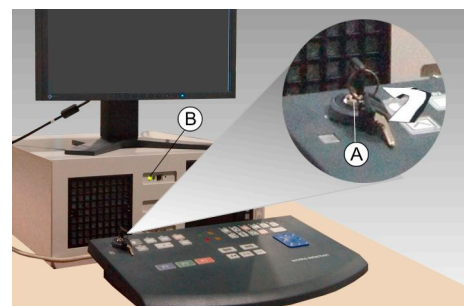

Fig. 86: Key switch of the remote station

Technical data

Local Station

Electrical data

Power Supply	100-240 VAC, N, PE
Power Consumption	1.36 kVA
Frequency	50 - 60 Hz
Fuse	2 x 10 A

Sound Pressure Level

Sound Pressure Level	< 55 dBA

Weight

Weight	< 400 kg

Temperatures

Storage Temperature	-20° C to + 70° C
Operating Temperature	0° C to +40° C

Environment

Relative Humidity (non-condensing)	10% to 98%
Altitude	2 km max

Dimensions
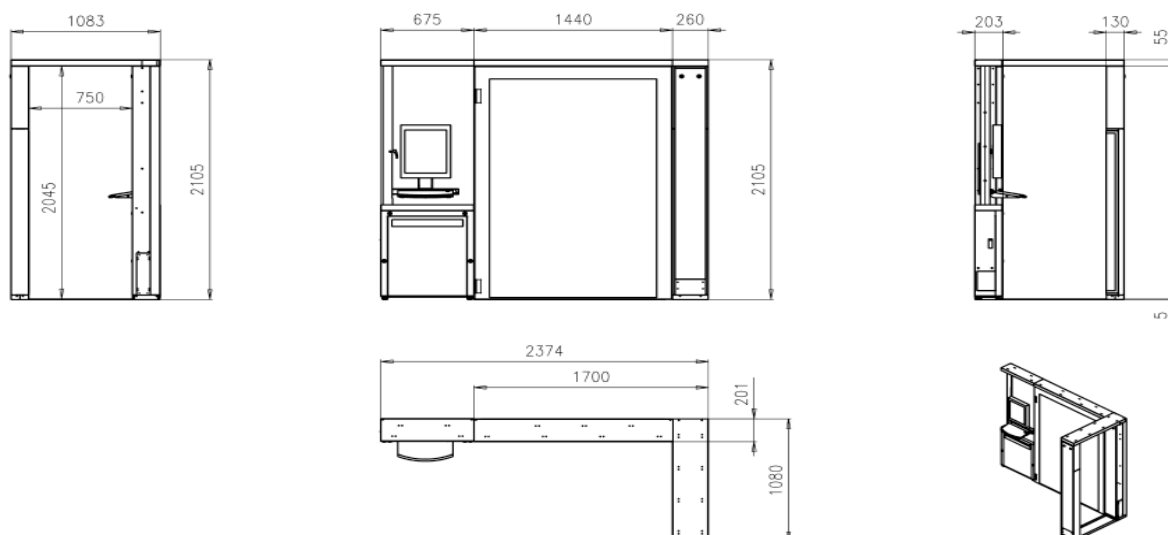
Remote Station

Electrical data

Power Supply	90-264 V AC, N, PE
Power Consumption	300 W
Frequency	

Sound Pressure Level

Sound Pressure Level	< 55 dB

Weight

Weight	< 20 kg

Temperatures

Storage Temperature	-20° C to + 70° C
Operating Temperature	+5° C to +40° C

Environment

Relative Humidity (non-condensing)	10% to 90%
Altitude	2 km max

Dimensions

Depth	438 mm
Width	177 mm
Height	424 mm

Annex A

Daily Test Procedure

After starting eqo each morning, the operator is advised to perform a test card scan. This is done using a specifically designed test card (see Fig. 86). The card is manufactured from a plastic material which is transparent to millimetre waves. Metal strips of different widths are attached to the surface of the card. The number next to each section signifies the width of each strip in that section and the gap between adjacent metal strips.

During the test the operator holds the card vertically in front of the system (i.e. in the orientation shown in Fig. 86), in the centre of the scan volume (this is identified by the centre of the symbol on the floor mat), at a height of approx. 1.5 m from the floor to the top of the test card.
It is expected that at the centre of the scan volume, a properly set-up system will be able to resolve lines (horizontal or vertical) of 6mm width. The results of the test will be different depending on the distance from the panel and the location in the scanned volume. Moving the test card closer to the panel should result in the resolution of lines down to 4mm.
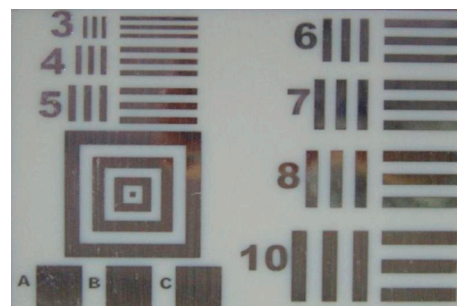

Fig. 86: Test card

Important!

The card may need to be rotated in the vertical plane (max. 10 degrees) to achieve optimum results.

The test procedure is as follows:

▷ Start the system according to the procedure outlined in the operator manual.

▷ Allow the system to run for a minimum of 5 minutes after log on - make sure there are no objects in the scan volume during this time.

▷ Rotate or tilt the card to achieve best image, as described above.

▷ Review the image after the test using ◄◄ and ►► keys.

▷ Make sure the number of lines on the image corresponds to the number of lines in the test card.

▷ Watch out for blurring or double lines in the image.

In the event of the image result not being acceptable, a system set-up should be carried out by a suitably trained technician.

Test card example images

Fig. 87 shows an image where the test card is out of focus. The test card has been placed too far away from the flat scanning panel.
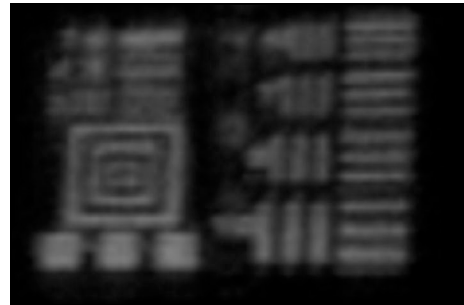

Fig. 87: Image with test card too far away

Fig. 88 shows an image where the test card has been placed at an incorrect angle to the flat scanning panel.
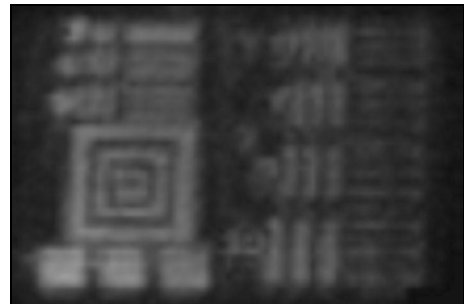

Fig. 88: Image with test card at incorrect angle

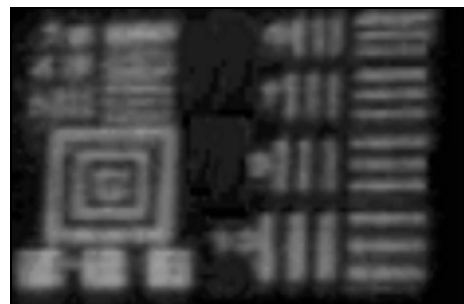Fig. 89 shows an image where the test card has been positioned correctly.

Fig. 89: Image with test card positioned correctly

Fig. 90 shows an image where the test card has been placed closer to the flat scanning panel.
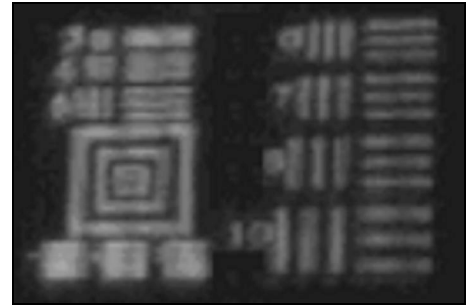

Fig. 90: Image with test card placed closer

Annex B

Document	Order number
Declaration of Conformity – CE 1595	95592593
Eizo FlexScan MX190 - User's Manual	95591608
User's Manual – FlexScan S1932 Color LCD Monitor - Eizo	95592663
Plantronics Savi Office W0100 – Professional Wireless Headset System (W01 Base + WH100 Headset) with Optional HL10 Lifter – User Guide	95591849