



Digistat Smart Central

Quick Reference Guide

Digistat Smart Central V5.0

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Digistat Smart Central version 5.0

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Contents

1. Start-up procedure.....	5
1.1 Digistat Smart Central installation.....	5
1.2 How to run Digistat Smart Central.....	5
1.3 Log In procedure.....	6
1.3.1 How to disable the automatic user log out (“User lock” functionality)	7
1.4 Log out.....	7
2. Digistat Smart Central unavailability	8
3. Digistat Smart Central main screen	9
3.1 Bed areas.....	9
3.2 The Digistat Smart Central command bar	12
3.3 Events list	13
3.4 Dashboard configuration.....	14
3.4.1 Vital Signs.....	14
3.4.2 Charts.....	15
3.5 Notification area	16
4. Alarms notification (summary).....	17
4.1 Alarms notification on Control Bar.....	19
5. Sound Check procedure.....	19
6. Patients management	21
7. Digistat Smart Central Mobile	23
7.1 Login.....	23
7.2 General Notifications.....	24
7.3 Sound Check procedure	25

7.4 Patients search functionalities	27
7.5 “My patients” mode	29
7.5.1 “My patients” activation	30
7.5.2 How to select “My patients”	32
7.6 Single Patient Selection	33
8. Smart Central Mobile Application.....	35
8.1 Application start-up.....	35
8.2 “Smart Central” screen	36
8.3 Medical devices list.....	37
8.4 Alarms history.....	37
9. Digistat Smart Central IFU	39
9.1 On line manuals	39
9.1.1 How to download the manuals.....	40
9.1.2 How to display the Digistat Smart Central about box	41
9.2 Printed IFU.....	42
10. Contacts	43



This document is a Quick Reference Guide to some of the main Digistat Smart Central product features and functionalities.

This is not the Digistat Smart Central product user manual, and it does not fully describe all the product’s features and functionalities. See the Digistat Smart Central user manual for complete instructions on the product’s features and functionalities.

1. Start-up procedure

1.1 Digistat Smart Central installation

The Digistat Smart Central product can only be installed by Ascom UMS technicians or technicians explicitly authorized by Ascom UMS. The end-user will find the system already installed and properly configured on his/her workstation.

1.2 How to run Digistat Smart Central

To run Digistat Smart Central

- Double click the  icon on the workstation desktop.

The following window is displayed while the system is loading (Fig 1).



Fig 1

After a few seconds the Digistat Smart Central work area is displayed (Fig 2).

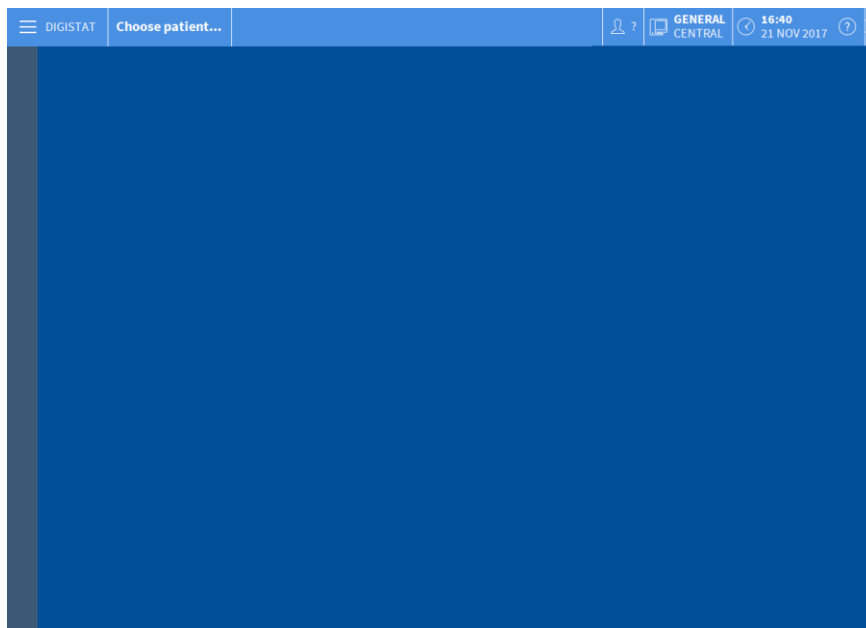


Fig 2

1.3 Log In procedure

To use Digistat Smart Central user login is required. I.e. the user must insert his/her credentials (user name and password). To log in, at the beginning of every work session,

- Click the **User** button indicated in Fig 3 **A**. The following screen is displayed.

Fig 3

Then,

- Insert the username in the “User Name” field (Fig 3 **B**).
- Insert password in the “Password” field (Fig 3 **C**).
- Click the **Ok** button (Fig 3 **D**).

The user is this way logged. An acronym indicating the user currently logged is displayed on the **User** button on the control bar (the acronym is “ADM” in Fig 4).



Fig 4

1.3.1 How to disable the automatic user log out (“User lock” functionality)

If the system remains idle for a certain time (configurable), the user is automatically logged out.

To disable this functionality it is necessary, after username and password specification and before clicking **Ok**,

- Click the **Lock** button on the “Log in” screen command bar (Fig 5 **A**).



Fig 5

If the user is locked, a padlock is shown at the bottom of the user icon (Fig 6).



Fig 6

1.4 Log out

The user, to close a work session with Digistat Smart Central, must “log out” from the system.

To log out

- Click the **User** button on the command bar (Fig 7 and Fig 3 **A**).



Fig 7

The user acronym disappears from the **User** button.

2. Digistat Smart Central unavailability

If, during start up, there are problems connecting with the server, Digistat Smart Central provides a specific “System recovery” window (Fig 8).

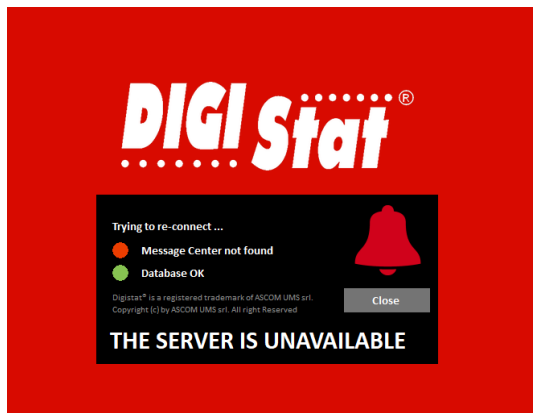


Fig 8

The connection problem sometimes is automatically solved after a short time. If not, please contact Ascom UMS/Distributor technical assistance. See paragraph 10 for Ascom UMS/Distributor contacts.

Cases exit, rare but possible, in which it is physically impossible to use the Digistat Smart Central (due to long duration black outs, catastrophic events etc.).

The healthcare facility using Digistat Smart Central should define an emergency procedure to face this kind of events and to:

- 1) allow the hospital departments to be operative again;
- 2) restore the Digistat Smart Central availability as soon as possible.

Ascom UMS/Distributor can provide support and assistance for the emergency procedure, but the healthcare facility is responsible for the procedure definition and execution.

See paragraph 10 for the manufacturer contacts.

3. Digistat Smart Central main screen

The “Smart Central” screen displays an overview of the situation of each patient in the ward (Fig 9).

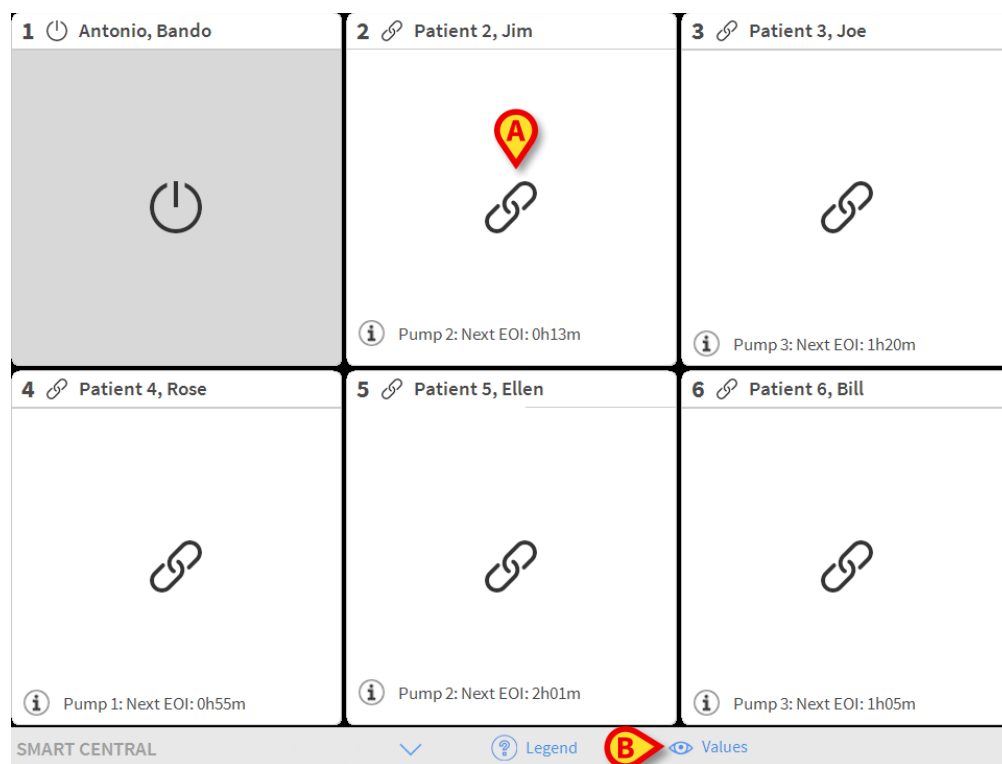


Fig 9

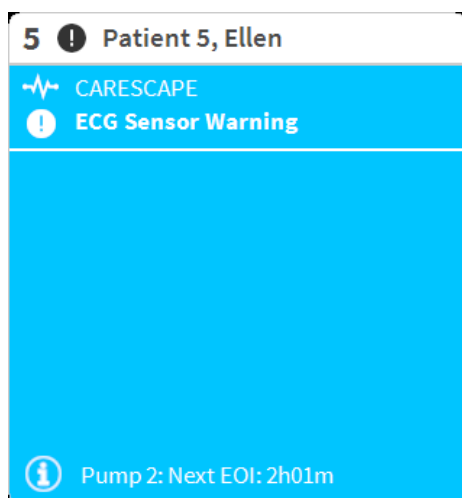
The screen is divided into rectangular areas, named “Bed areas” (Fig 9 **A**). Every area refers to a bed and displays information on the devices connected to the patient admitted to that bed. By default, only the data referring to alarmed beds is displayed, and only data relating to alarms is displayed. A bed is alarmed if at least one of the devices connected to the bed is alarmed. If multiple alarms occur at the same time on the same bed, the alarm with the highest priority is notified.

It is possible to display all the available data (both referring to the non-alarmed beds and referring to the non-alarmed devices on the alarmed beds) by clicking the “VALUES” button on the command bar (Fig 9 **B**).

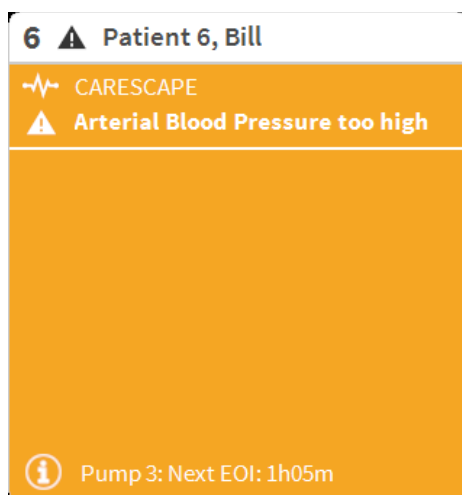
3.1 Bed areas

Each “Bed area” displays some of the data provided by the devices connected to the patient (Fig 10). The kind of data displayed depends on the design and configuration of the device.

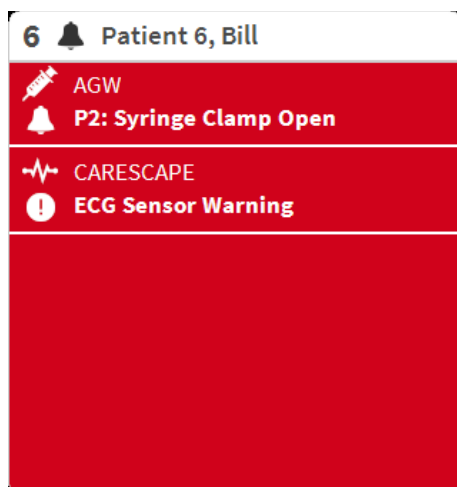
If the “Bed area” is light blue, as in Fig 10, it means that there is at least one low priority alarm, and no medium and/or high priority alarms, coming from the connected devices.

**Fig 10**

If the “Bed area” is yellow, as in Fig 11, it means that there is at least one medium priority alarm, and no high priority alarms, coming from the connected devices.

**Fig 11**

If the “Bed area” is red, as in Fig 12, it means that at least one of the connected devices is in high priority alarm state.

**Fig 12**

The connected beds from which no alarms are received appear as in Fig 13. No device data is displayed as this might distract the reading of possible alarms occurring on the other beds.

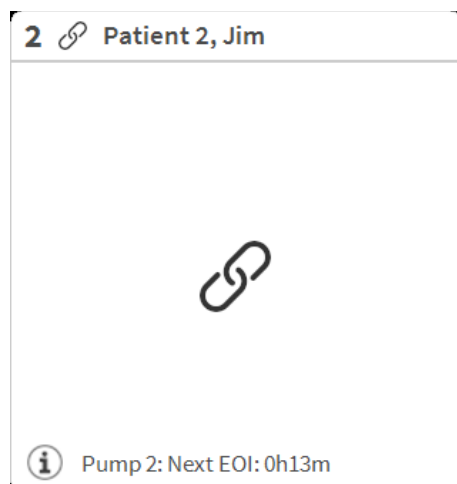


Fig 13

To display device data on these devices, click the **Values** button on the command bar (Fig 9 B). The “Bed area” will appear as in Fig 14.

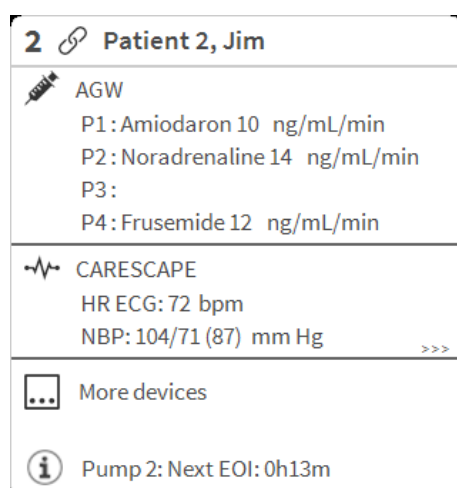


Fig 14

Disconnected beds are displayed as in Fig 15.



Fig 15

3.2 The Digistat Smart Central command bar

The buttons on the command bar of the Digistat Smart Central make it possible to perform different actions.

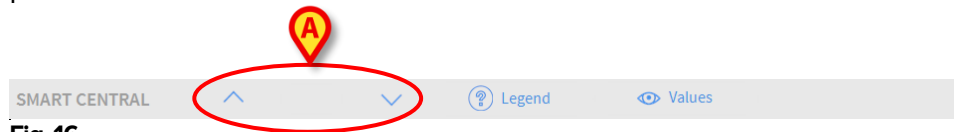


Fig 16

The arrow buttons (Fig 16 **A**) make it possible to scroll up and down the screen when it is not possible to display all the configured “Bed areas” at the same time.

When one (at least) of the non-displayed “Bed areas” is notifying an alarm, the corresponding button takes the color corresponding to the alarm priority level (blue = low; yellow = medium; red = high).

In case of multiple alarms the arrow color corresponds to the highest priority notified.

An icon can be displayed in the box between the arrow buttons (Fig 17). It indicates that there is an alarm on one of the “Bed areas” currently displayed.



Fig 17

The **Legend** button displays a reference-window indicating the meaning of all the different icons that can be found while using the software.

The **Values** button displays all the available data (both referring to the non-alarmed beds and referring to the non-alarmed devices on the alarmed beds).

3.3 Events list

It is possible to display a detailed list of all the events occurred in a bed.

To display the events list:

- Click the “Bed area” referring to the bed to be displayed (Fig 18)

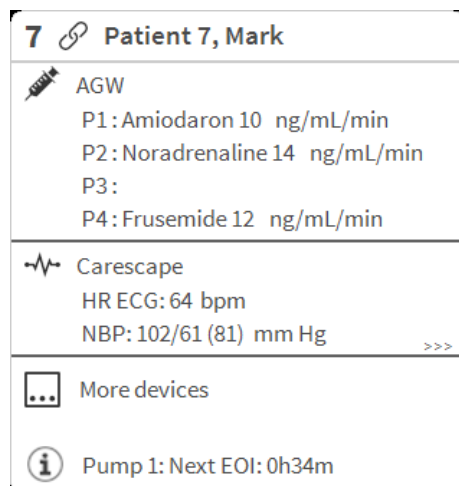


Fig 18

The events list will be displayed on the right (Fig 19).

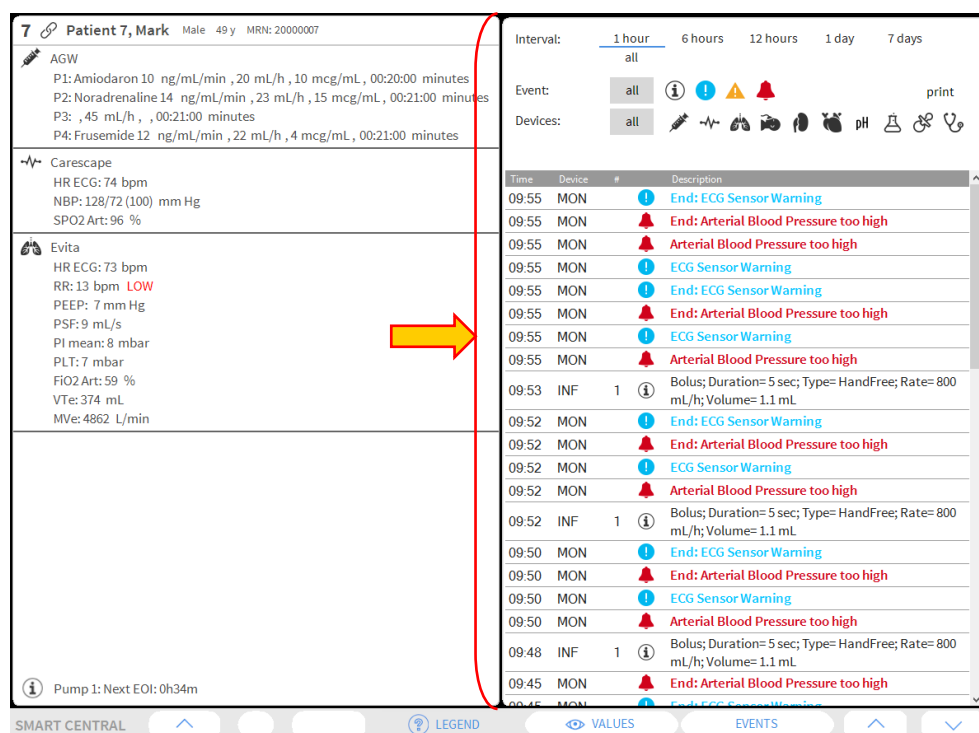


Fig 19

3.4 Dashboard configuration

If the Digistat Smart Central is configured as a “Dashboard” Smart Central, some additional functionalities are available. These are the “Vital Signs” and “Charts” functionalities.

Both functionalities are accessible from the “Events list” (Fig 20 **A**).

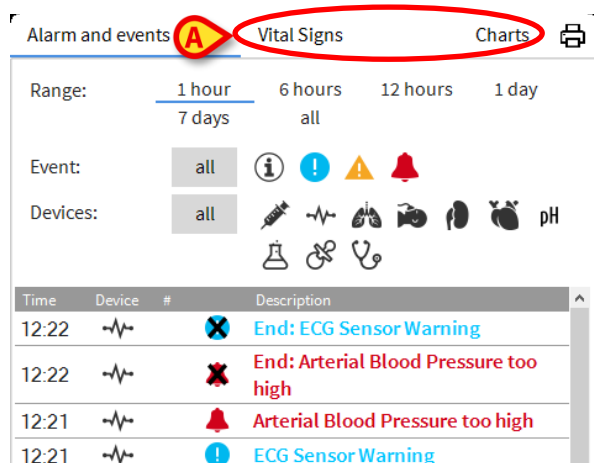


Fig 20

3.4.1 Vital Signs

- Click the Vital Signs button to activate the “Vital Signs” functionality (Fig 21 **A**).

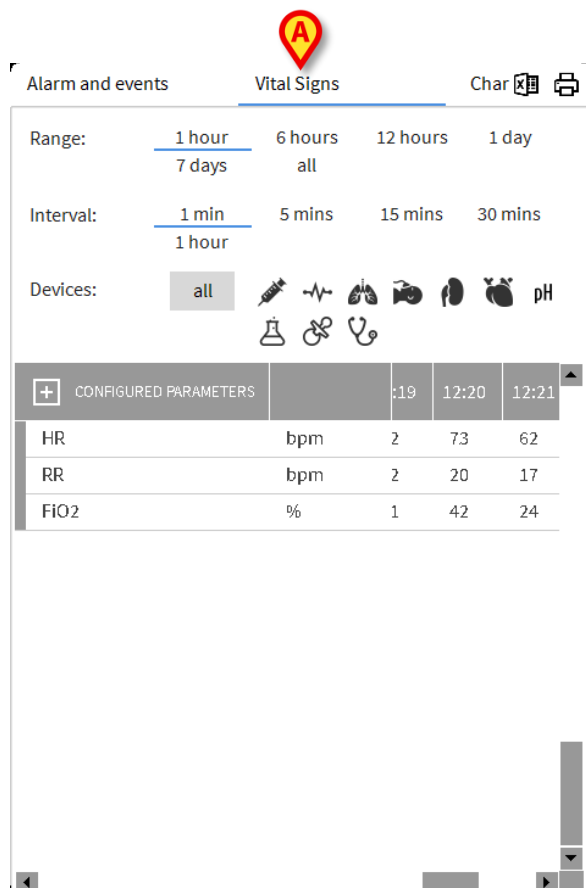


Fig 21

“Vital signs” makes it possible to display in a table some selected patient parameters (Fig 22). The displayed parameters are defined by configuration. In the table they are grouped by acquisition device.

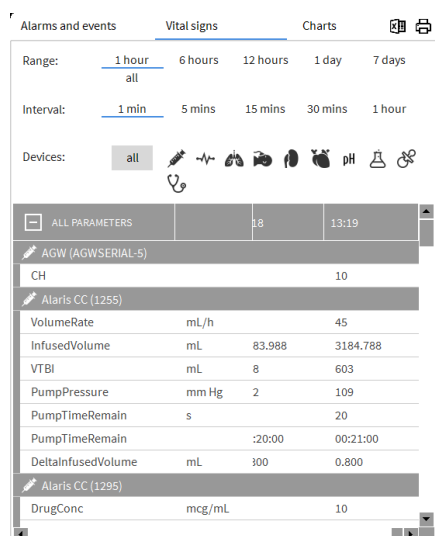


Fig 22

3.4.2 Charts

- Click the **Charts** button to activate the “Charts” functionality (Fig 23 A).

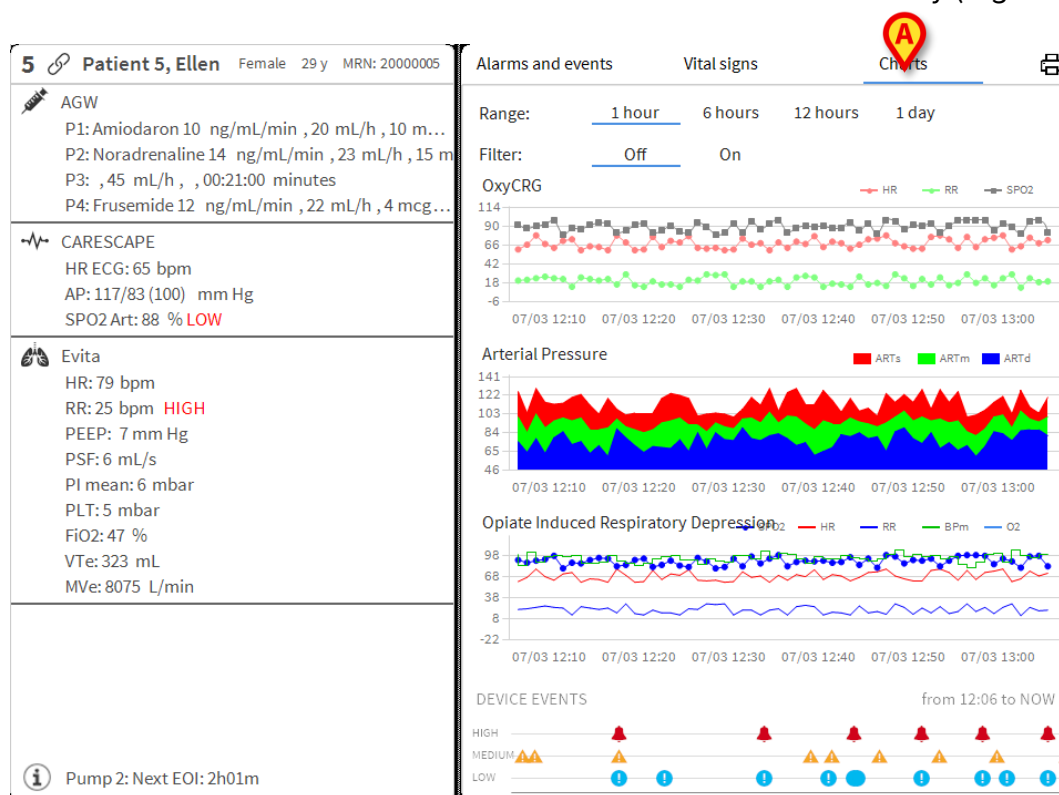


Fig 23

“Charts” makes it possible to display different charts drawn from the acquired parameters. The charts show the configured parameters as trends. The number of charts, their contents and names are defined by configuration.

3.5 Notification area

A notification area is displayed on the right of the “Smart Central” screen, reporting various notifications sent by the connected devices (Fig 24 **A**).

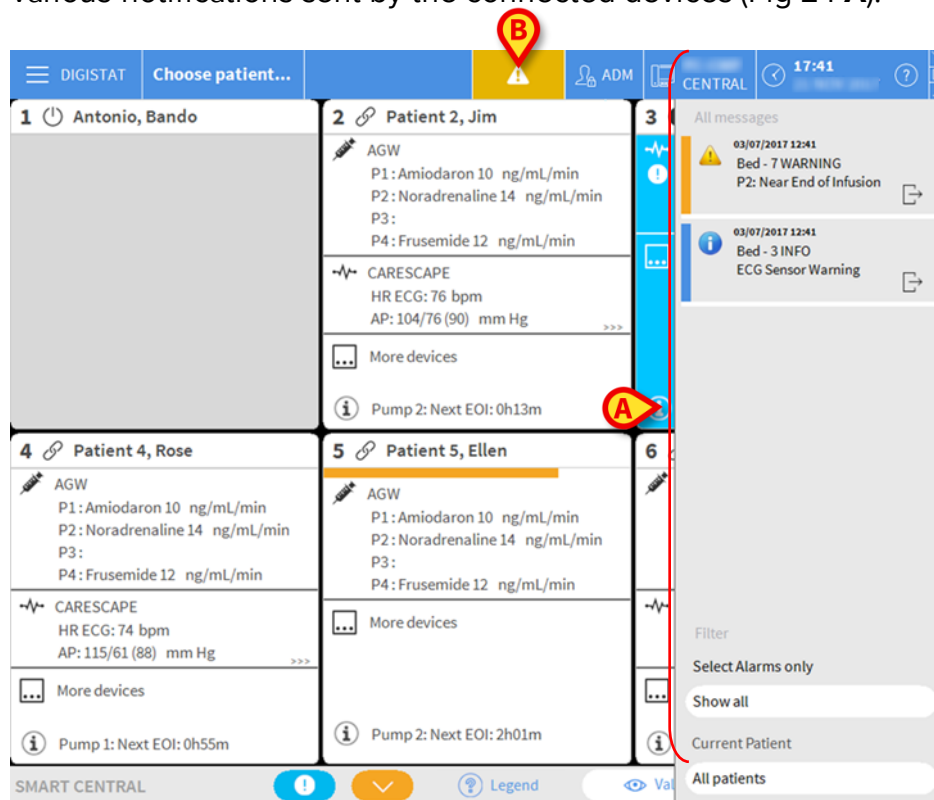


Fig 24

The notification area can be, by configuration:

- Always visible
- Automatically displayed when a new notification comes
- Only visible after user click on the notifications button on the Control Bar (Fig 24 **B**).

The different messages are displayed in chronological order (most recent on top) and by criticality (High priority alarms on top, then medium priority, then low priority).

Each notification is characterized by the colour corresponding to the priority level (red for high priority, yellow for medium priority, blue for low priority).

4. Alarms notification (summary)

By default, the Digistat Smart Central screen displays the device data on a bed only if there is an alarm notification coming from at least one of the devices connected to that bed.

In a condition of “No notifications” the “Smart Central” screen would appear as in Fig 25, where five connected “Beds” are displayed and no devices on any of the beds is in alarm state.

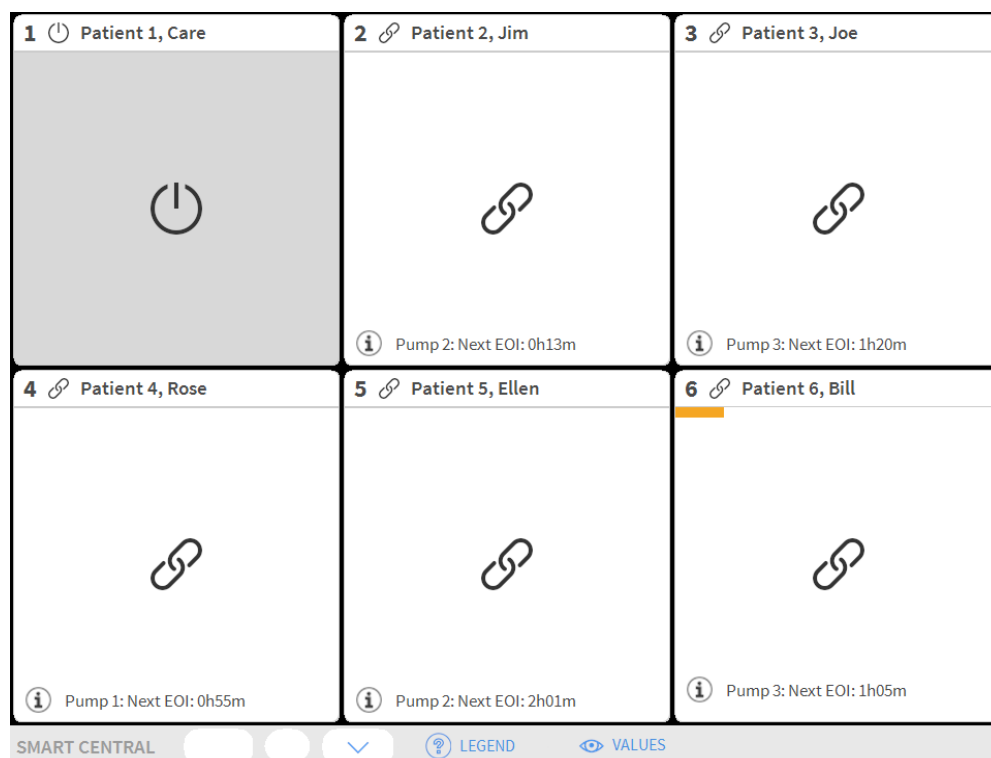


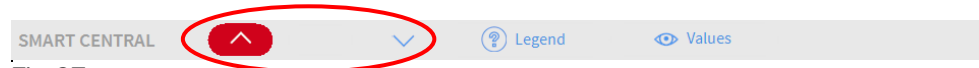
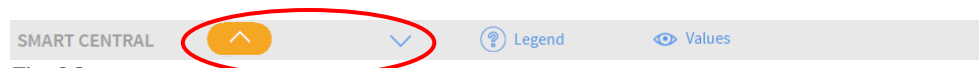
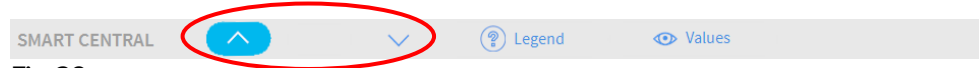
Fig 25

Each time an alarm occurs on one of the devices, the data relating to the bed to which the device is connected is displayed. In Fig 26, for instance, bed 3 is notifying a high priority alarm. A short text specifying the kind of alarm occurring is displayed on the “Bed area”.

**Fig 26**

In addition, a sound notification is provided. Three different sounds exist, one for each alarm priority level. In case of multiple alarms, the sound corresponding to the one with highest priority is provided.

The occurrence of alarms is also notified on the command bar by the arrow-buttons indicated in Fig 27, Fig 28 and Fig 29.

**Fig 27****Fig 28****Fig 29**

An icon can be displayed between the arrow buttons (Fig 30). It indicates that there is an alarm on one of the “Bed areas” currently displayed.

**Fig 30**

A visual feature on the upper bar on each “Bed area” keeps temporarily track of the last alarm notified after the “Bed area” has changed to a different priority level alarm

(or no alarm). This makes it possible to be aware of alarms occurring and rapidly passing.

When the state of a “Bed area” changes to a lower level alarm (or no alarm), the color relating to the previous alarm (Fig 31) remains on the heading bar for a certain configurable time.

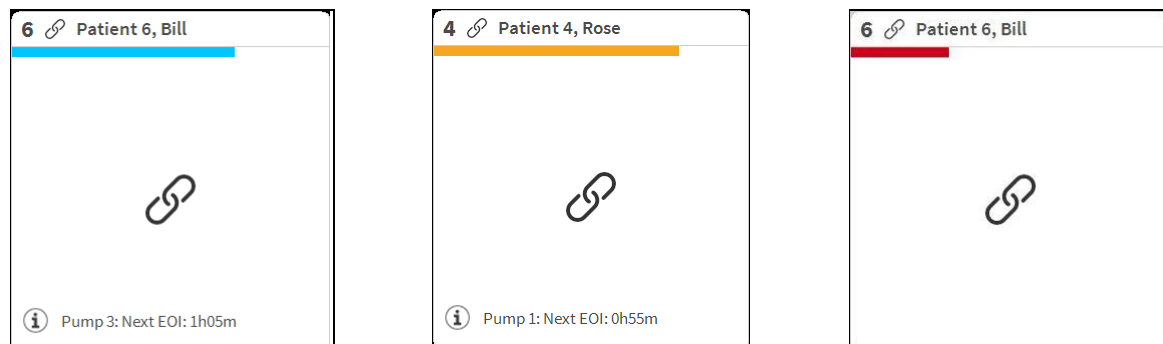


Fig 31

4.1 Alarms notification on Control Bar

Alarms are also notified on the Control Bar, so that they are always visible.



Fig 32

The button color depends on the alarm priority level (cyan=low; yellow=medium; red=high). For high and medium priority alarms, the button flashes.

- Click the button to display the notification area (Fig 32 **A**)

The notification disappears when the alarm conditions no longer exist.

5. Sound Check procedure

When Smart Central is started, it provides a specific sound indicating that the sound notification of alarms is working properly.

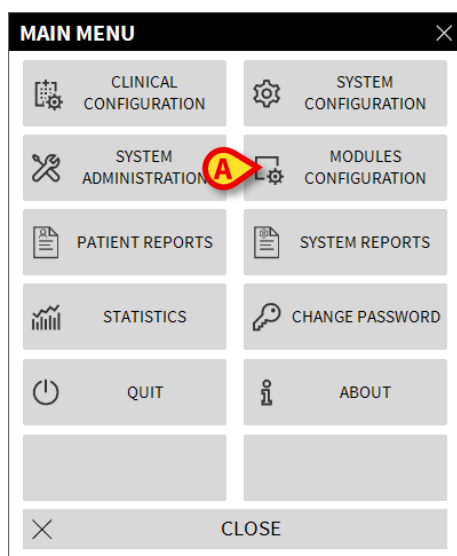
If the sound is not provided the user can perform a “Sound Check” procedure. To perform the “Sound Check” procedure

- Click the **Menu** button on Control Bar (Fig 33)



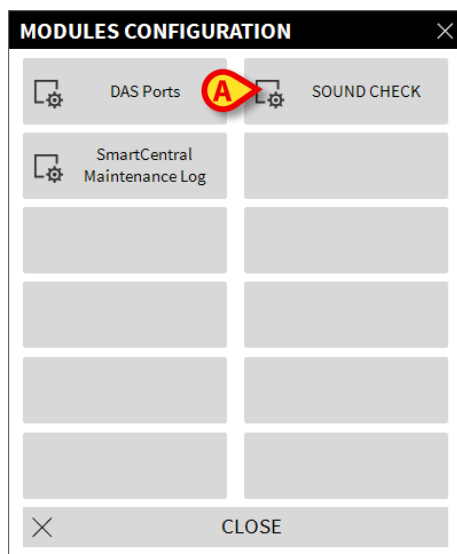
Fig 33

The following menu is displayed (Fig 34).

**Fig 34**

- Click on **Modules Configuration** (Fig 34 **A**)

The following menu opens (Fig 35).

**Fig 35**

- Click on **Sound Check** (Fig 35 **A**)

A pop-up window opens, asking whether a sound is heard or not from speakers.

If a sound is heard, then click **Yes**. The pop-up window disappears and nothing else happens (meaning that the Digistat Smart Central is working correctly).

If no sound is heard, then click **No**. The pop-up window disappears and a notification is displayed on the Control Bar, meaning that an error occurred while checking the sound notification system.

6. Patients management

To access the Patients management functionalities

- Click the **Patient** button on Control Bar (Fig 36 **A**).

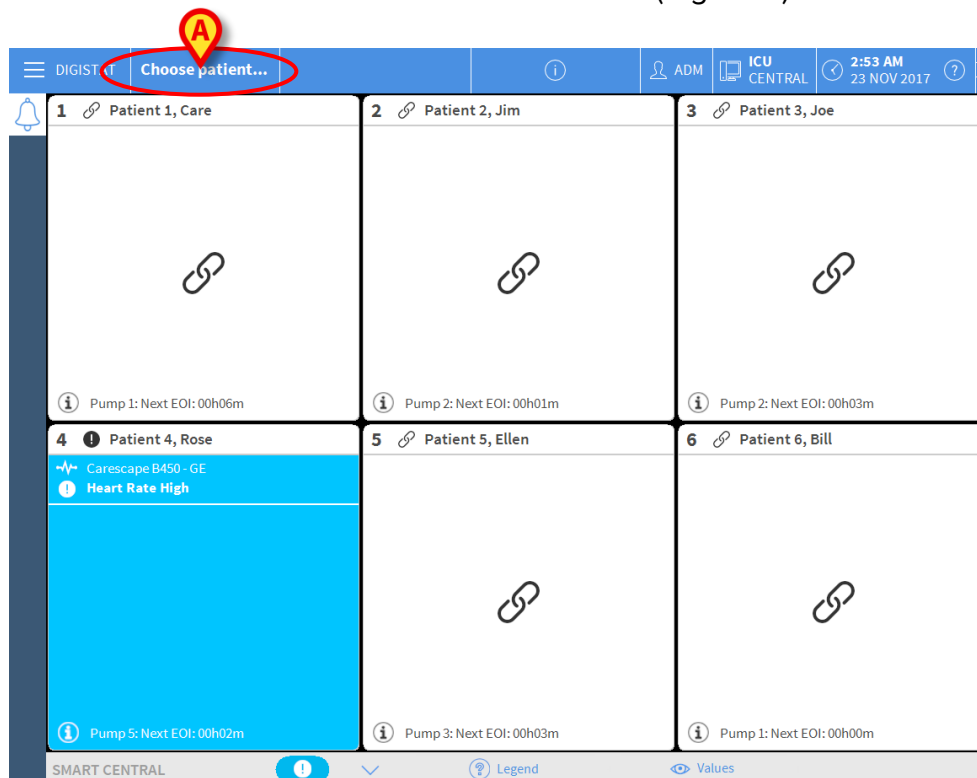


Fig 36

The screen displayed after clicking this button depends on the chosen configuration. If the list of admitted patients (Fig 37) is not displayed by default, to display the list of admitted patients:

- Click the **In Bed** button on the command bar (Fig 37 **A**)

The list of beds configured in the domain is this way displayed (Fig 37 **B**).



Fig 37

The rectangular buttons on the screen (Fig 37 **A**) represent the beds configured in the workstation domain (usually the beds of a specific ward). If a patient is admitted to a bed, the patient name is displayed on the area (Fig 38 **A**). Below the patient name the admission date is displayed. Buttons with no name correspond to empty beds (Fig 38 **B**).



Fig 38

- Click one of the buttons to select the corresponding patient

The name of the selected patient is then displayed on the **Patient** button on Control Bar (Fig 39).



Fig 39

After clicking one button the current situation of the selected patient on the Smart Central (i.e. the corresponding “Bed area”) is displayed in full-screen mode.

Some configurations make it possible to admit patients from the healthcare facility ADT, to create new patients and to operate on “anonymous” patients when patient personal data is not available. Refer to the Digistat Smart Central user manual for a description of these functionalities.

7. Digistat Smart Central Mobile

7.1 Login

To login to Digistat Smart Central Mobile

- Touch **Login** on the lower-right corner of the “Applications list” screen (Fig 40 **A**)

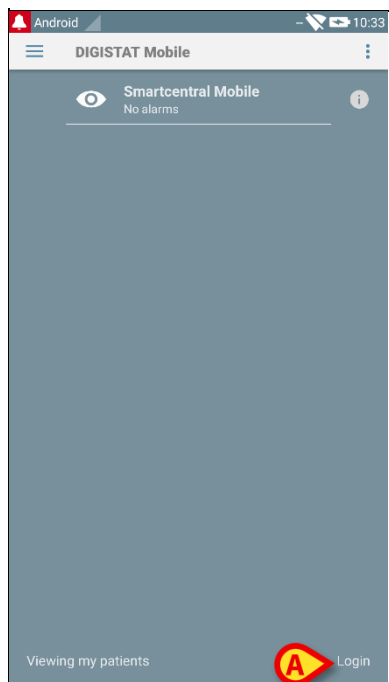


Fig 40

The following screen will be displayed (Fig 41)

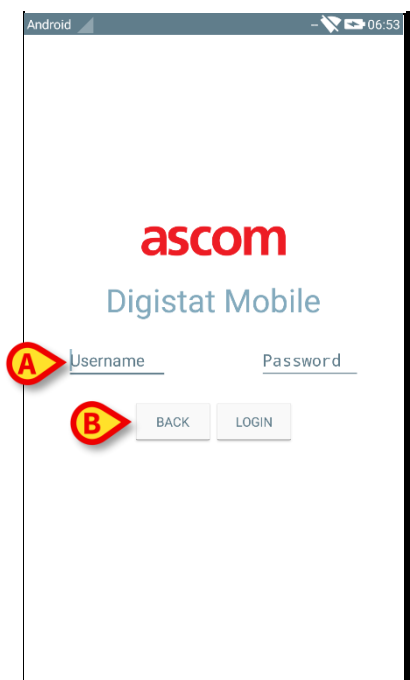


Fig 41

- Insert username and password (Fig 41 **A**).
- Touch the **Login** button (Fig 41 **B**)

7.2 General Notifications

Digistat Smart Central Mobile provides short notifications when the application is not active as well (Fig 42 **A**).

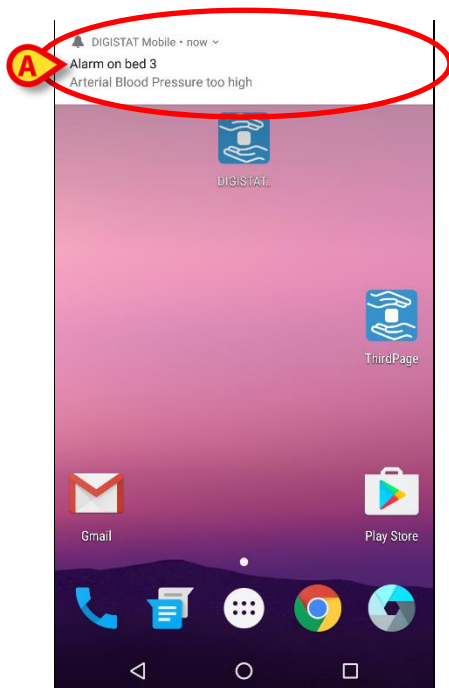


Fig 42

- Swipe the notification to make it disappear.
- Touch the notification to directly access the relevant patient (see an example in Fig 43).

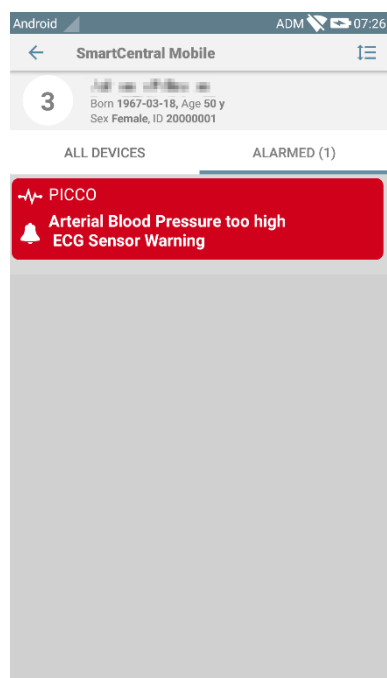



Fig 43

7.3 Sound Check procedure

The Sound Check Procedure makes it possible to verify if the sound and vibration notification of alarms is working properly.

To perform the “Sound Check” procedure

- On the home screen of the Digistat Smart Central Mobile Application, touch the  icon on the top-left corner of the screen (Fig 44 **A**)

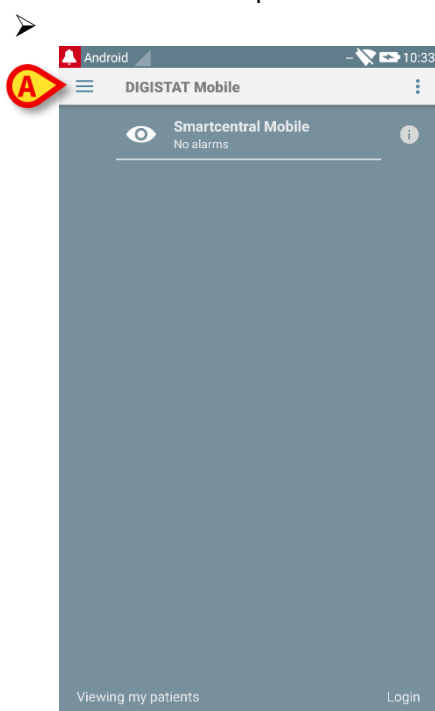
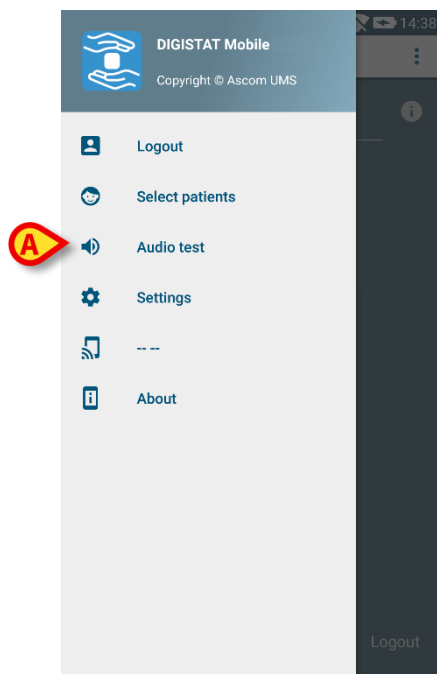


Fig 44

The following menu will be displayed (Fig 45).

**Fig 45**

- Touch the **Audio test** option (Fig 45 **A**).

A test notification/sound will be this way provided (Fig 46 **A**).

**Fig 46**

7.4 Patients search functionalities

Digistat Smart Central implements some patients search tools. These tools can be accessed from the Patients List screen.

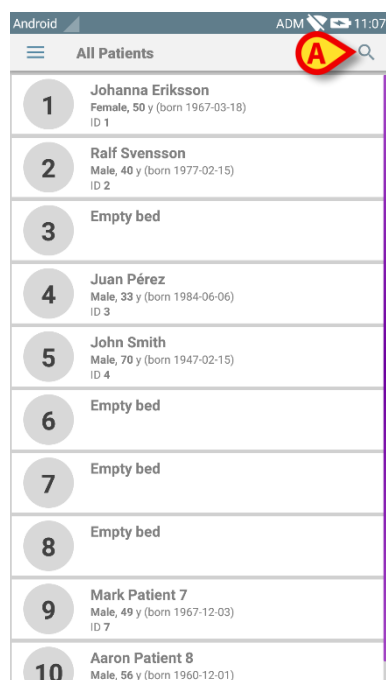
To access the Patients List

- Touch the “mode” indication on the lower-left corner of the screen (Fig 47 **A** - this indication shows the current application mode, i.e. either “All Patients” or “My Patients” or “One Patient”, see paragraph 7.5 for a deeper explanation).



Fig 47

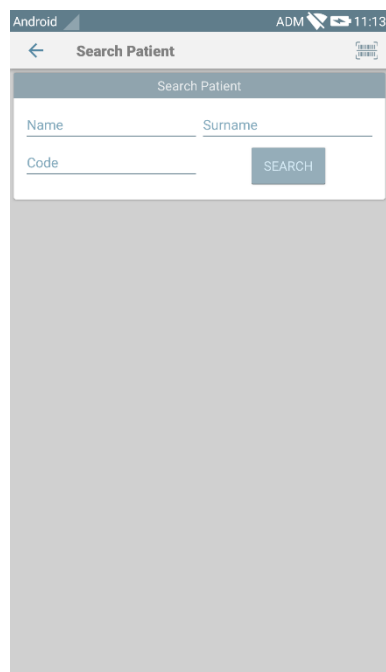
The following screen will open, containing the list of all the patients configured on the device domain (Fig 48).

**Fig 48**


To access the search functionalities

- Touch the icon indicated in Fig 48 **A**.

The following screen will open (Fig 49).

**Fig 49**

Three search options are available:

- 1 - textual search (insert patient data, then click **Search**)
- 2 - barcode scan (touch the  icon and then scan the patient's barcode)
- 3 - NFC code scan (position the device close to the patient's Tag).

7.5 “My patients” mode

“My patients” mode makes it possible for a user to select one or more patients and create a “group” of patients who are under their charge.

On the lower-left corner of the main screen, it is specified if the device is currently set on “My patients” or “All patients” (Fig 50 **A**).

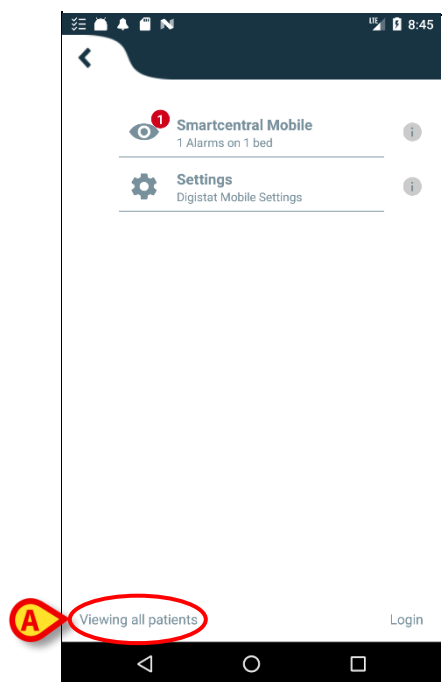


Fig 50

- Touch the indication (Fig 50 **A**) to display the managed patients list (Fig 51).

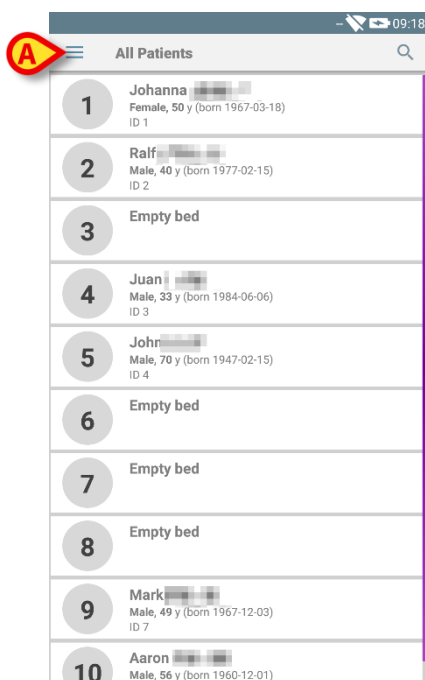


Fig 51

7.5.1 “My patients” activation

To activate “My patients”

- Touch the  icon (Fig 51 **A**).

The following menu will open (Fig 52).

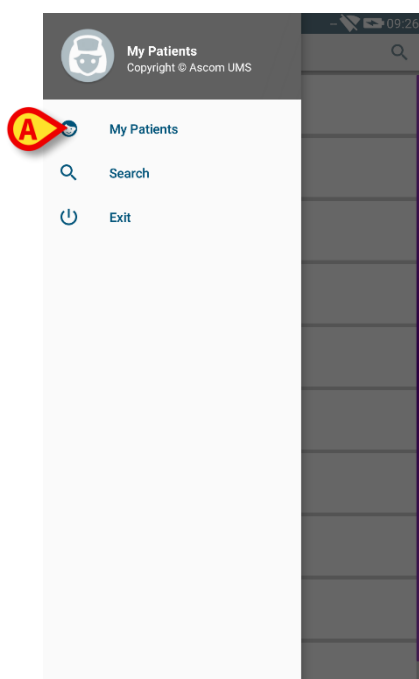


Fig 52

- Touch **My Patients** (Fig 52 **A**).

The device switches this way to “My patients” mode. “My patients” list will be displayed. In Fig 53 no patients is selected to be part of “My patients” list. See next paragraph for instructions on how to select “My patients”.

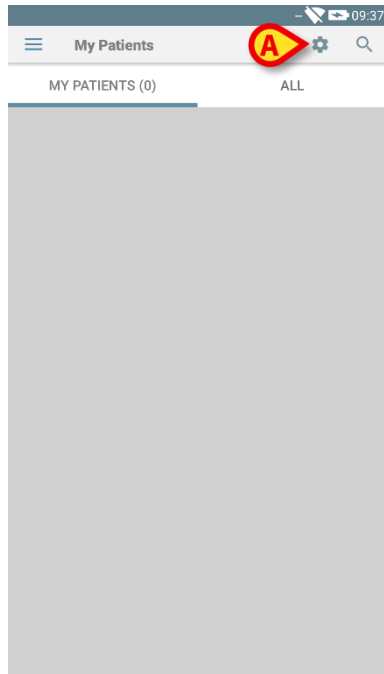


Fig 53

NOTE: The same procedure can be performed to switch back to “All patients”.

7.5.2 How to select “My patients”

To select the list of patients forming “My patients” list, on “My patients” list screen,

- touch the  icon (Fig 53 **A**).

The following screen will be displayed (Fig 54 - “My patients setup”).

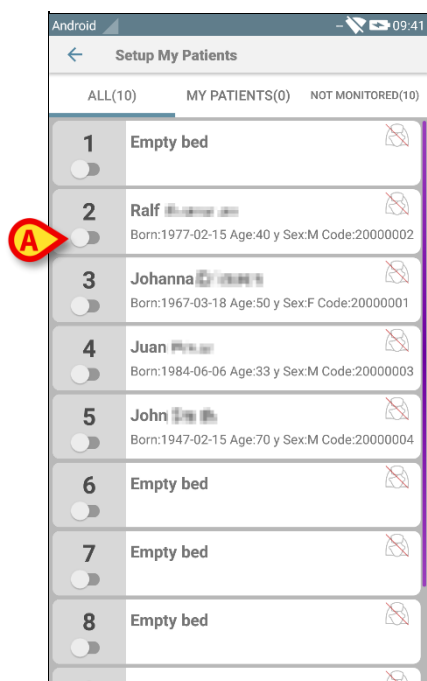


Fig 54

A patient can be selected/deselected by touching the corresponding “tile”. Each tile corresponds to a bed. In Fig 55 patients in bed 2, 3 and 5 are selected as “My patients”.

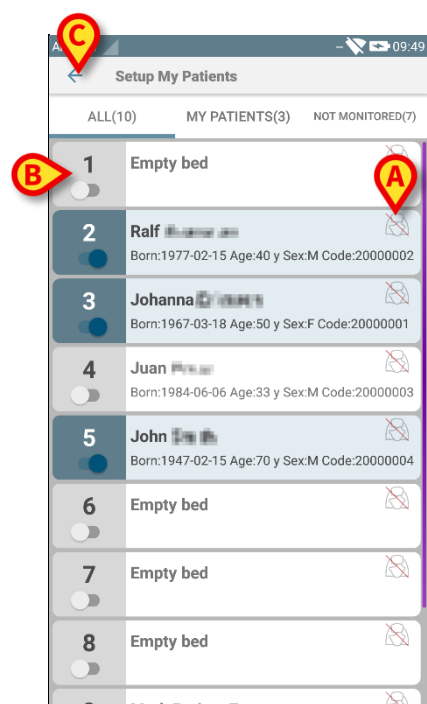


Fig 55

NOTE: When “My Patients” mode is active only the information relating to “My patients” is notified.

7.6 Single Patient Selection

One single patient can be selected by touching the tile corresponding to his/her bed.

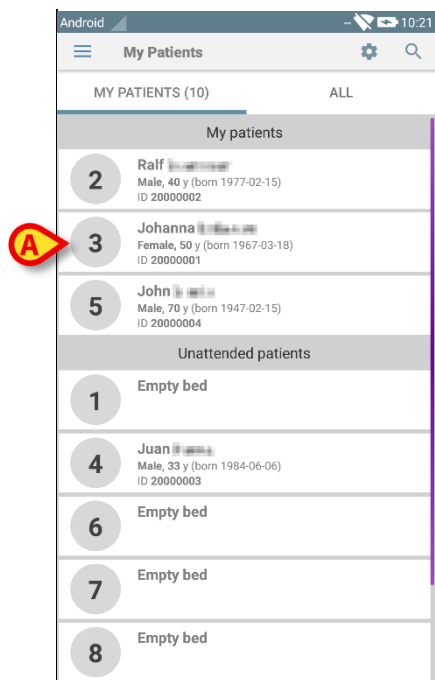


Fig 56

For instance, to select the patient on bed 3,

- Touch the tile indicated in Fig 56 **A**. User confirmation is required (Fig 57).

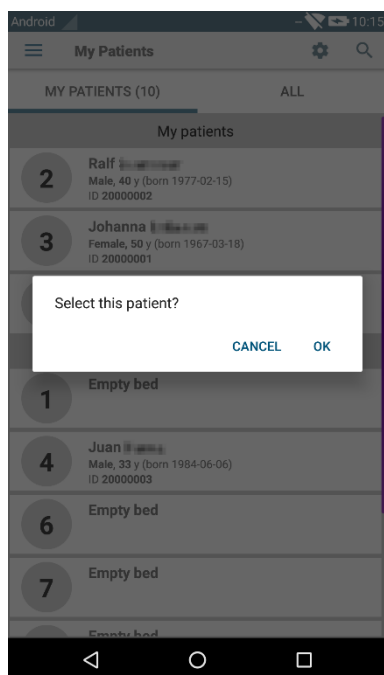


Fig 57

- Touch **Ok** to confirm. After confirmation the following screen is displayed.

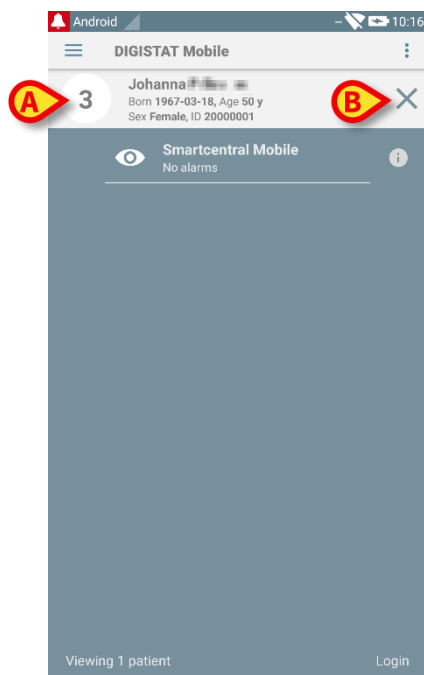


Fig 58

Patient data are on top of the page (Fig 58 **A**). All data displayed is now filtered by patient (i.e. all and only the selected patient alarms/notifications are displayed).

- Touch the cross indicated in Fig 58 **B** to deselect the patient and turn to “All Patients” mode again.

8. Smart Central Mobile Application

8.1 Application start-up

To start the Smart Central Mobile application

- Touch the corresponding row on the handheld device screen.



Fig 59

The Smart Central screen, shown in Fig 60, opens.

8.2 “Smart Central” screen

The “Smart Central” screen displays a schematic summary of the status of the medical devices connected to each bed configured in the specific handheld device (Fig 60).

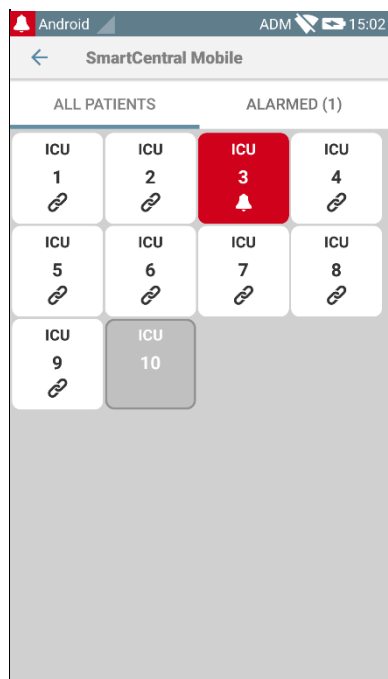
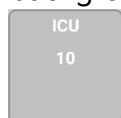


Fig 60

The numbered squares displayed on screen represent the beds configured in the handheld device (Fig 60 **A**). The squares visible on a single screen form the “domain” of beds covered by the handheld device. The “domain” is defined by configuration.

The number displayed inside the square indicates the bed number. On each square, the status of the connected medical devices is indicated in graphic form by the background color and the related icon:



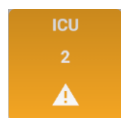
- All the medical devices connected to the bed are on hold.



- There is at least one connected medical device running.



- At least one of the connected medical devices is sending a low priority alarm.



- At least one of the connected medical devices is sending a medium priority alarm.



- At least one of the connected medical devices is sending a high priority alarm.

8.3 Medical devices list

Touch one of the squares on the “Smart Central” screen to display the list of medical devices connected to the bed (Fig 61).

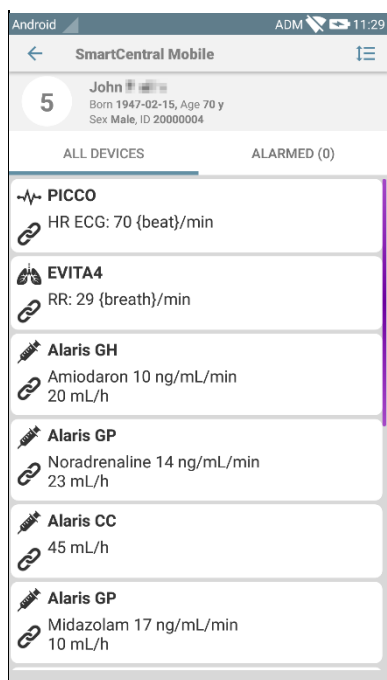
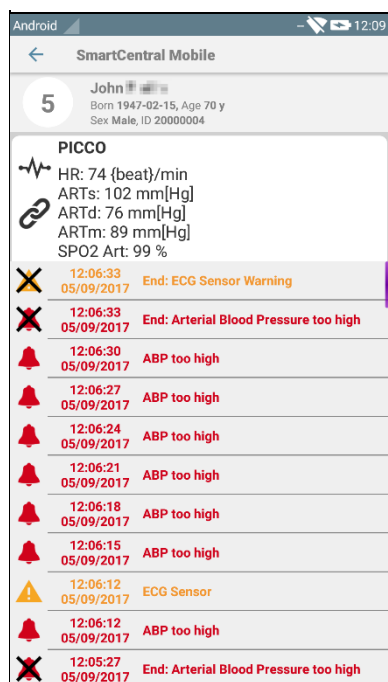


Fig 61

8.4 Alarms history

Each “device card” can be touched to access the list of all the alarms provided by the medical device (Fig 62).

**Fig 62**

For each alarm, a short description and the time of occurrence are provided. For each alarm are displayed the beginning time and end time (black cross on the icon ✗).

9. Digistat Smart Central IFU

The Digistat Smart Central instructions for use (IFU) are provided with the product. They can be displayed in digital format within the Digistat Smart Central product. To access the instructions for use

- Click the **Help** button on the command bar (Fig 63)



Fig 63

A screen opens, making it possible to access:

- 1) the relevant user manuals;
- 2) possible quick reference guides referring to specific procedures.

The on line documentation is in PDF format.

9.1 On line manuals

The Digistat Smart Central user manuals can also be downloaded from a dedicated site on the internet.

Every Digistat Smart Central customer can access a protected area on which all the existing versions of the relevant manuals are present. The user can this way check if an updated version of his/her manuals exists. Ascom UMS/Distributor inform their customers in case of updates impacting safety issues and provide in these cases the updated user manuals.

The area can only be accessed after user authentication. Each customer has a username and password that they must insert to access the protected area. These credentials are provided when Digistat Smart Central is installed together with the product labelling.

Each manual is identified by a specific code having this form:

“DIG DD [*Product name*] IU NNNN ENG **Version MM**”

For instance

“DIG DD IU 0001 ENG **V01**”

The final digits of the code (“V01”) are the ones the progressively increase in case of updated versions of the same manual.

New versions of a document are released in case of updates of the former document (after, for instance, detection and correction of minor errors, typos, omissions etc... both in the Product and in the document).

In case of new versions of the Product a new manual is released (not a new version of an existing manual). In these cases the document code changes (in the example the document code is “0001”, underlined below).

“DIG DD IU 0001 V01”

The new document is provided to the customer together with the Product update.

The document code can be read on the frontispiece and in the footer of each page. The relevant Product version is indicated on the frontispiece.

The Product version currently installed is indicated in the “About box” (see paragraph 9.1.2 for instructions on how to display the “About box”).

The Product version is indicated by a number, for instance “3.0.1”. The first two digits indicate new releases and major system updates. The last digit indicates minor updates and bug corrections. A user manual refers to all the Product versions sharing the first two digits. It is valid if it is the latest version published on the ftp site.

In case of loss of username and/or password please contact the Product Distributor technical assistance by phone, fax or e-mail to get new credentials.

9.1.1 How to download the manuals

The user manuals can be downloaded on the dedicated Ascom site using any browser (eg. IExplorer, Chrome, Firefox).

To download the manuals, type the following address on your web browser address bar:

Host URL: <https://confluence.ascom-ws.com>

It is now required to enter username and password to access the User Manuals list.

Username – User name provided by the local distributor

Password – Password provided by the local distributor

Select Digistat and then Digistat Smart Central (NA).

Select here the Product version. The relevant manuals are there available in PDF format.

9.1.2 How to display the Digistat Smart Central about box

To display the Digistat Smart Central about box

- Click the **Menu** button on the Control Bar (Fig 64 **A**)



Fig 64

A menu containing different options opens (Fig 65).

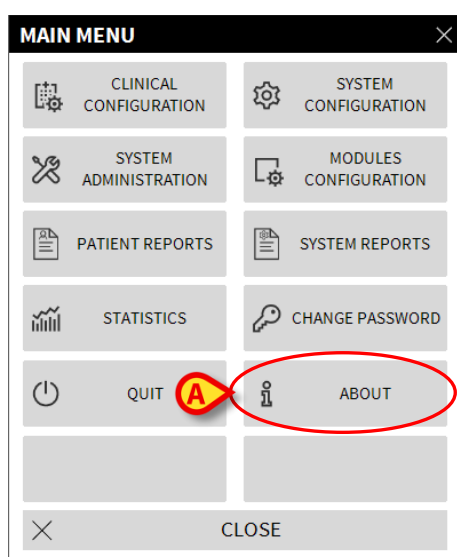


Fig 65

- Click, on the menu, the **About** button (Fig 65 **A**).

The Digistat Smart Central about box opens (in Fig 66 an example).

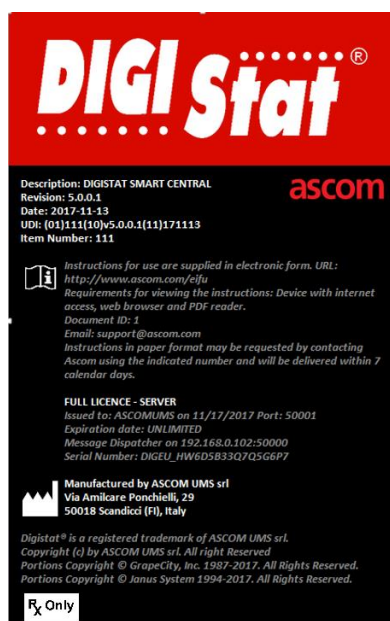


Fig 66

9.2 Printed IFU

The customer can request a printed version of the user manuals of the purchased products. Ascom UMS will provide the requested manuals as soon as possible.

The request must be forwarded to the technical assistance. See paragraph 10 for the list of Ascom UMS contacts.

10. Manufacturer and Distributor Contacts

For any issue, please refer first to the Distributor who installed the Product.

Distributed in the U.S. and Canada by

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