

USER GUIDE



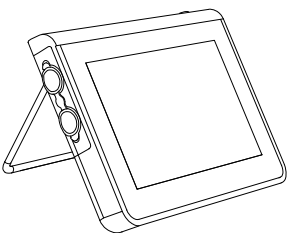
Ambu

Ambu[®] aView[™]

For use by trained clinicians/physicians only.

For in-hospital use.

For use with Ambu[®] visualization devices.



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Pat. Pending

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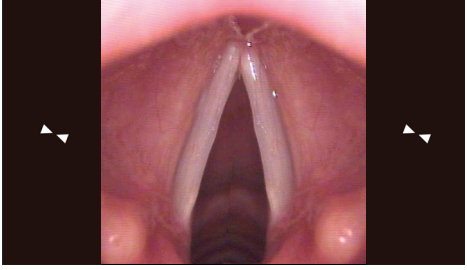
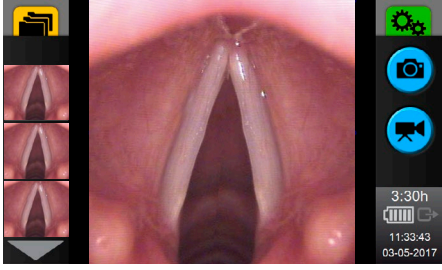
Important information









This is a user guide for Ambu® aView™. It is ONLY applicable to aView with item number 405002000 and software version 2.02 or higher. The user guide may be updated without further notice. The current version of the user guide is available online at ambu.com.

Please be aware that this guide does not explain or discuss clinical procedures. The user guide describes only information and functions related to the operation of the aView monitor.

Before operating aView, please read the Instruction for Use delivered with your aView.


The aView User Interface

Startup Image Mode	User Interface
<p>Starts immediately after the power button is pressed and continues until the User Interface is loaded (after approximately 1 min).</p> <p>A live image from the plugged in Ambu visualization device is available while aView is loading. If no device is connected the screen will be blue.</p>  <p>The screen layout may vary depending on the software version.</p>	<p>A live image is available and the User Interface displays advanced user functions.</p> <p>aView starts up in the Blue tab for Live Image Viewing and recording live image.</p>  <p>The screen layout may vary depending on the software version.</p>

Interface nomenclature	
 Power button.	 Video recording.
 Brightness adjustment.	 Viewing and recording live image.
 Contrast adjustment.	 Managing saved files.
 Snap shot.	 System settings and User Accounts.




Live image vs. recorded image




Round BLUE buttons are shown in the blue Live Image tab  and indicates a live image.

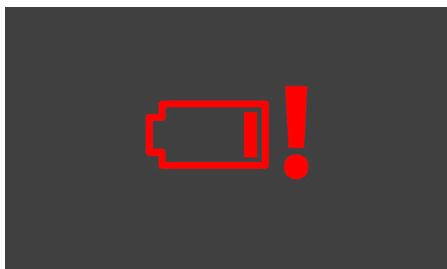
Square YELLOW or GREEN buttons are shown in the yellow File Management tab  and the green Settings tab  and indicates a recorded image.

Battery Status

During start up, aView powers up and configures the visualization device. If the aView battery icon on the screen changes from fully charged to low battery (red battery) within 30 minutes, aView must be replaced.

<p>The battery icon remains white until one block is left, after which it turns red. When remaining battery capacity is 10% the red battery icon starts flashing.</p>		
 Max. battery status of the aView.	 Min. battery status of the aView.	 Fully charged battery still connected to charger.

<p>Charging is shown with blocks flashing. Current capacity is shown with non-flashing blocks.</p>		
 Battery is charging.	 Battery current capacity.	 Battery damaged.



If battery is low (red battery status) when aView is shut down a low battery warning is displayed as a reminder to recharge aView.

If aView has a low battery (red battery) when it is turned off the power button will be flashing in orange colour 5 times every 10 seconds as an indication that it must be recharged.

Operating aView

This section describes how to operate the different features of aView.

Basic Functions


aView only has one physical button located on the top  for power ON and OFF.

All other functions are operated using the User Interface controlled from the front touch screen panel.

How to turn ON aView

(Assumption: aView is powered down)



Press power button  on top of the aView for at least one second.


- The power button will light up orange for 2 seconds
- The power button will stay lit and orange if aView is charging or change to green and stay lit green if not charging.
- aView is now in STARTUP IMAGE MODE.
- A live image will appear within 1-2 seconds if a Ambu Visualization Device is connected or a blue screen will appear. - After about one minute, aView will be ready.
- A white hourglass indicating that aView is loading the User Interface will appear on the screen.

NOTE: During startup the screen may flicker for about a second.

How to turn OFF aView

(Assumption: aView is powered ON)



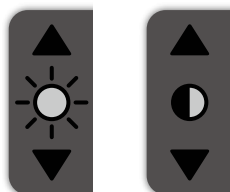
Press the power button  on top of the aView for at least two seconds.


The light of power button goes off if not charging or stays lit orange if charging.

- A blue hourglass indicating that aView is powering down will appear on the screen and aView will power down.


NOTE: Clicking twice on the power button will also initiate shutdown of aView.

How to adjust brightness and contrast



Press  the up arrow to increase brightness and the down arrow to decrease brightness.

- The arrow will light up red when pressed and the level attained will be shown for a few seconds instead of the brightness icon.

Press  the up arrow to increase contrast and the down arrow to decrease contrast.


- The arrow will light up red when pressed and the level attained will be shown for a few seconds instead of the contrast icon.

NOTE: Contrast can only be changed on a live image.

How to take a SNAPSHOT




Keep the Ambu Visualization device as still as possible when taking a snapshot to prevent blurring of the picture.


- Press  to take snapshot.
- The button turns red while the file is saved and then returns to blue.

NOTE: The snapshot is saved automatically in the folder for the device. See section 'Placement of files' for file placement.

How to record a VIDEO



- Press  to start recording video.
- The button turns red while recording.
 - The recorded time is shown.

- Press  to stop recording video.
- The button turns back to blue.

NOTE: The video is saved automatically in the folder for the device. See section 'Placement of files' for file placement.

Image Extend

(Assumption: Live image is present.)



To extend the live image double click on the live image displayed.
To remove Image Extend double click on the image again.

NOTE: For aScope 3 and aScope 4 Broncho live image is converted to a rectangular image shape using Image Extend why a minor part of the image is removed in the top and bottom to fit the screen. The horizontal field of view is unchanged. Vivasight live image is decreased by double click removing part of the live image in both sides.

Remaining battery time

3:30h

The aView displays the expected time to auto shutdown of aView when running on battery. The time is displayed white when aView is running on battery and grey when aView is charging. The time displayed will turn red when battery is at low power.

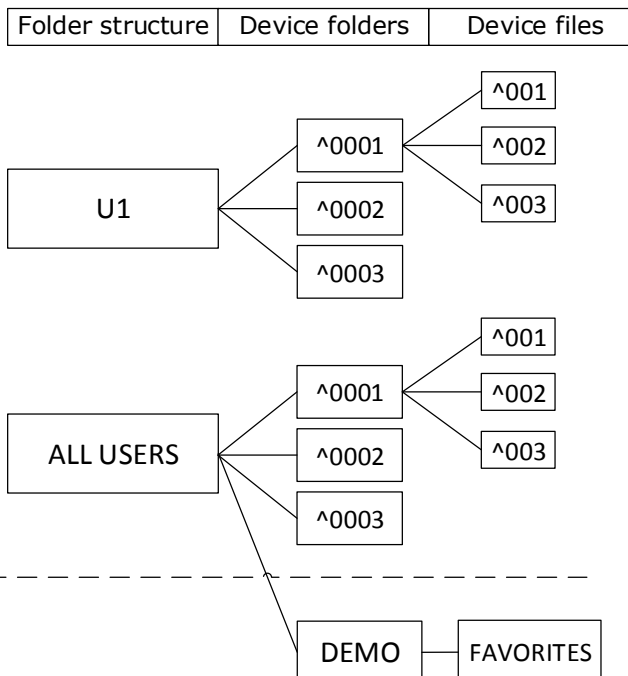
File Management

Placement of files – File structure in aView

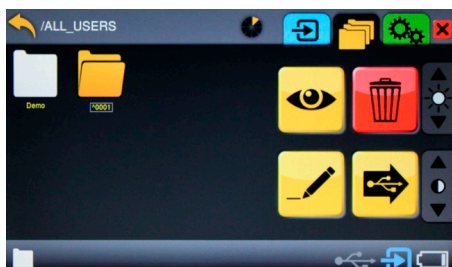
A folder is created when the first recording is initiated with the plugged in device.

The folder will be placed under the ALL USERS folder if the user is not logged in or under the user account folder (example U1) if logged in. (See below file structure).


The folder will be named with a continuous number. The recorded files will be located in the device folder and will be named with a continuous number.





The DEMO folder is located under ALL USERS folder.



Yellow tab for File Management  :


Press the yellow *File Management* tab  to view, delete, rename or transfer recorded files:


NOTE: Press the blue *Live Image* tab  or  to view a live image from a connected Ambu Visualization Device with just one click.



How to locate recorded files and folders

Press the yellow File Management tab  to access the file structure.
(For file placement see section 'Placement of files').

Press a folder  once to select.

- The folder icon will appear open  when selected.

Press  to view the contents of the folder.

- Files are shown in chronological order.
- Press  to go up in the file structure.
- Press  to see more content in current folder.
- Repeat until the desired file or folder is located.

NOTE: The location in the folder structure is shown in the top bar.



How to view snapshot



(Assumption: Snapshot has already been located.)

Press the snapshot to select.

Press  to view the snapshot.

- Press  or  to toggle between snapshots in the folder.

NOTE: Double click to Select and View.



How to view a video



(Assumption: Video has already been located.)

Press the video file to select.

Press  to view the file.

- Press  or  to jump 10 seconds backward or forward in the video.

- Press  to pause video.


NOTE: Double click to Select and View.

How to delete a recorded file or folder



(Assumption: The file or folder have been located)


Press the file or folder to select.

- The folder icon will appear open  when selected.

- File is highlighted when selected.

Press  to delete the file or folder.

- Confirm delete by pressing .

- Cancel delete by pressing .


NOTE: More files or folders can be selected simultaneously.

How to rename a file or folder




(Assumption: The folder, snapshot or video file has been located)

Press the file or folder to select


- The folder icon will appear open  when selected.


- File is highlighted when selected.

Press  to rename the folder or file.

- Foldername/filename and keyboard appears

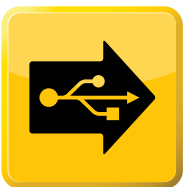
- Enter new filename

- Confirm name by pressing .

- Cancel rename by pressing .

NOTE: Renaming is also possible when a selected file is being viewed.


How to transfer a file or folder to a USB stick




(Assumption: The folder or file has been located and a USB stick has been plugged in)

Plug in a standard USB stick in the USB port.


Select the file or folder to be exported by pressing the file or folder. The folder icon will appear open when selected and a file is highlighted when selected. A file can also be exported directly while viewing it.

Press  to copy the file or folder to the USB stick.

- The button will turn red while USB port is active.

- The USB icon  will turn white while copying.

- The button will turn grey with a green check mark for one second when the copy process has ended successfully and then go back to yellow.

- The button will turn grey with a red cross for 4 seconds and the go back to yellow if the copying process is unsuccessful. The USB icon  will turn red.


NOTE: Files are not deleted from aView in the copy process. More files or folders can be selected simultaneously.

How to access the DEMO folder





Press yellow TAB *File Management*  to access the file structure.

Press the  to highlight the ALL USER folder.

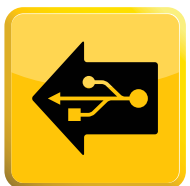
- Press  to view the folder.

Press the  to highlight the DEMO folder.

- Press  to view the folder.

NOTE: The DEMO folder can be accessed by using the white folder located in the ALL_USERS  folder or from the bottom bar .

How to transfer files to DEMO folder by USB



(Assumption: The DEMO folder is located.)


Prepare a USB key with the folders and/or files to be transferred.

- In the root of the USB key make a folder called USERDEMO.

- Inside the USERDEMO folder place folder(s) containing the files to be transferred.

The files have to be contained inside a folder.

Go to the location in aView DEMO structure where the folder(s) shall be transferred.

Press  to transfer the folder(s) from the USB key to the location inside the DEMO folder on aView.




NOTE: aView (405002000) does not accept files from the previous aView model (405001000) and other devices. The folder(s) placed in USERDEMO must not contain subfolders.

How to transfer files from device folder to DEMO folder 'FAVORITES'





(Assumption: Files to be transferred are located.)

Select the files to be transferred.

The white folder in the bottom bar will change from  to  indicating that files are ready for transfer. Press the  in the bottom bar.

- The demo folder is entered.

Press  to transfer the files to the demo folder called 'FAVORITES' .

NOTE: Files from a device folder can only be transferred to the DEMO folder called 'FAVORITES'.

Multi-select functionality

To select more files click the files one by one to highlight them. To deselect a file click the file again. To select more folders click the folders one by one to highlight them. To deselect a folder click the folder again.

To select all files inside a folder:

- Press and hold one non-highlighted file for more than 2 seconds. All files will be selected.

To deselect all files inside a folder:


- Press and hold one highlighted file for more than 2 seconds. All files will be deselected.


NOTE: Renaming will not be possible when more than one file or folder is selected.



Memory management in aView



Recorded files are stored on an 8GB SD card, which is placed inside the battery compartment.

The memory usage is illustrated by 8 triangles in a memory card icon placed in the top bar in File Management tab. Yellow triangles illustrate the amount of memory used and grey triangles illustrate unused memory .

When the SD card is full, it is illustrated by red triangles  in memory card icon in file management and the ability to record files are disabled. The recording buttons in blue Live Image.

Tab will turn grey with a red memory full icon display on the snapshot button  and video recording button .


The recording buttons will return to blue when files are deleted and free memory is available for recording.

NOTE: See 'How to DELETE a recorded file or folder' or 'How to DELETE all user data' to free up memory on the SD card.

User Accounts




Green tab for Settings  :

Press the green *Settings tab*  to setup system settings and upgrade software.


NOTE: Press the blue *Live Image tab*  to view a live image from a connected Ambu Visualization Device with just one click.

How to CREATE a User Account



Press  to create a user account.

- The keyboard appears.

Type the desired User Account name (up to 4 characters) and press 

- If the selected User Account name is already in use the typed account name is automatically deleted and a new one must be selected.

- User Account button turns grey displaying the selected user account name and the PIN selection button turns red.


Type a 4 digit PIN and press .

- User Account is created and the user is automatically logged in.

NOTE: Create User Account is also accessible from Edit User Account. When logged into a User Account device folders and device files are saved inside the User Account folder structure.


How to LOGIN into a User Account



Press  to login to a user account.

- User Accounts are displayed.




- Press  to display more accounts.

- Press  to return to settings main menu.

Press the User Account to select.


- Press PIN to login or press  to cancel login.


If incorrect PIN press  to type PIN again.

NOTE: During LOGIN the User Name is displayed in the Yellow tab  and on the LOGIN button  in the Green tab .

How to LOGOUT of a User Account



Press  to LOGOUT of the User Account.


- User Name disappears from the yellow tab .

User Name disappears from the LOGIN button  in the green tab .

How to DELETE a User Account




(Assumption: The User or ADMIN is logged in)


Press  to edit a user account.

- User Accounts are displayed.


- Press  to display more accounts.



- Press  to return to settings main menu.

Press the desired User Account to select it.

- Press  to delete the selected user account.

- Press  to confirm deletion of the user account.

- Press  to cancel deletion.


NOTE: Press  to create a user account or  to login.


How to change User Account PIN or ADMIN PIN




Login to the ADMIN account.


- After login to ADMIN account all User Accounts are displayed.

- Press and hold the  in the top bar for more than 5 seconds.


- The top bar changes to .

- Select the specific account to change the PIN (either user account or ADMIN account)

- Type the new 4-digit PIN twice. Press the  after each time for confirmation.



- If the PIN is not the same both times the last confirmation button stays grey . If the PIN are the same both times the button turn red.


- After second confirmation the PIN is changed to the new 4-digit PIN.

- Press  to cancel the change of PIN.

Advanced Settings




Green tab for Settings  :
 Press the green *Settings tab*  to setup system settings and upgrade software.



NOTE: Press the blue *Live Image tab*  to view a live image from a connected Ambu Visualization Device with just one click.

How to enable Video Out





(Assumption: Video out cable is connected)


Press  to access video out.



Press  to enable video out. The red X on the button is removed .

- Toggle between NTSC and PAL depending of therequirements of the external screen.

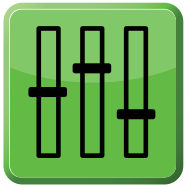
The chosen format will be shown by a green button  and the other button will turn grey .


Return to blue Live Image tab and the live image will be shown on the external screen simultaneously.


Press  to disable video out.


NOTE: Battery time is reduced when video out function is enabled.
 The video out indicator will turn green  when video out is enabled and grey  when disabled.
 There will only be a live image on the external screen, when a live image is displayed on aView.


How to setup Display settings





Press  to enter Display settings.

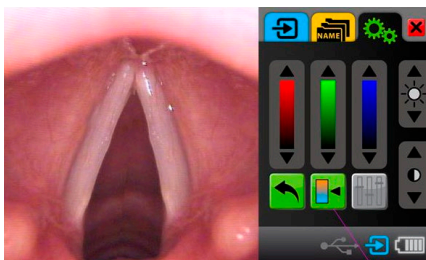
Press  the up or down arrow to adjust the colour for the Red, Green and blue.
 - The arrow will light up red when pressed and the achieved level will be shown for a few seconds.
 - The value for each colour is preset to a default, why more of one specific colour may be obtained by decreasing the two others.


Press  the up arrow to increase brightness and the down arrow to decrease brightness.
 - The arrow will light up red when pressed and the achieved level will be shown for a few seconds instead of the brightness icon.




Press  the up arrow to increase contrast and the down arrow to decrease contrast.
 - The arrow will light up red when pressed and the achieved level will be shown for a few seconds instead of the contrast icon.

Press  to return all values to defaults. Press  to return to main menu.

How to change colour temperature settings




Press  to toggle between the three standard colour scales in aView:

 Default colour scale.  Cold colour scale.  Warm colour scale.

The RGB colours can also be changed manually (see "How to change Display settings").

This will change the colour scale icon to .

For some Ambu visualization devices the colour scale feature is not available and the icon will be .

Change live image size



The size of the live image can be changed between two sizes:



480x480 – Default setting.





560x480 – Expanded view.

NOTE: For aScope 3 and aScope 4 Broncho live image is converted to a rectangular image shape using the expanded view (560x480) why a minor part of the image is removed in the top and bottom to fit the screen. The horizontal field of view is unchanged. This feature is not available for Vivasight.

How to view Device Usage Time




Press  to view the total time the Ambu Visualization Device connected has been turned on.
- Usage time is displayed for 2 seconds and then disappears automatically.



NOTE: The device icon  will be in the colour of the device interface where the Ambu Visualization Device is connected.

How to set the time and date




Press  to access system time and date.

Press  to toggle between 12 and 24 hour clock.

Press  to increase value and  to decrease value.
- Year, month, day, hour and minute can be set.
- Changes are saved automatically.


Press  to enable or disable clock in SIMPLE MODE.



Press  to return to main settings menu.



Enable/ disable 'User Accounts', 'USB Transfer and Renaming' and 'USB ZIP'





Assumption: ADMIN is logged in.

Press  to enter software settings.

Press the 'USER ACCOUNT' button to toggle between enabled  and disabled .
- Enabling/disabling User accounts in main settings menu.


Press the 'USB Transfer and Renaming' button to toggle between enabled  and disabled .
- Enabling/disabling USB transfer and renaming in file management.


Press the 'USB ZIP' button to toggle between enabled  and disabled .
- Enabling/disabling files/folders to be compressed to ZIP format during transfer to a USB stick. The ZIP file will be password protected with password '12345678'.


NOTE: ZIP files can be unzipped on a computer using an UNZIP program.

How to login/logout of the ADMIN account



Press  to show the accounts.


- ADMIN account is displayed .

Press  to select the ADMIN account.

Type PIN 0000.

- ADMIN is now logged in.

- ADMIN is displayed in the file management tab and on the LOGIN button.

Press  in settings main menu to logout of the ADMIN account.






- ADMIN Account is now logged out

- ADMIN is no longer displayed in the file management tab and on the LOGIN button.

How to change User Account PIN or ADMIN PIN







Login to the ADMIN account.

- After login to ADMIN account all User Accounts are displayed.
- Press and hold the  in the top bar for more than 5 seconds.
- The top bar changes to .
- Select the specific account to change the PIN (either user account or ADMIN account)
- Type the new 4-digit PIN twice. Press the  after each time for confirmation.
- If the PIN is not the same both times the last confirmation button stays grey . If the PIN are the same both times the button turn red.
- After second confirmation the PIN is changed to the new 4-digit PIN.
- Press  to cancel the change of PIN.

How to reset ADMIN PIN




Press  to enter the login menu.


- Press  to select the ADMIN account.
- Press the  in the top bar for more than 5 seconds.
- The top bar changes to .
- Type the PIN '2750'.
- The ADMIN is temporary logged in.
- Immediately change the ADMIN PIN to a new 4-digit PIN by using section 'How to change User Account PIN or ADMIN PIN' directly from the menu displayed.

How to UPDATE the software




(Assumption: The ADMIN account is logged in)

Connect the power adapter before commencing a software update. Press  to enter software settings.

Insert USB stick containing the upgrade file in its root directory. Press  to initiate software upgrade.

- Do not unplug power or power down during update.
- aView will restart when update has finished.
- If no USB stick is inserted or no file is found no update will initiate.

NOTE: User files will remain after update. Only use software upgrade files supplied by Ambu.

If the ADMIN is not logged in the  is not accessible.



How to RESET to factory defaults




(Assumption: The ADMIN account is logged in)

Connect the power adapter before running the command to do a reset to defaults.

Press  to enter software settings. Press  to initiate reset to factory defaults.

- Press  to confirm reset.
- Press  to cancel reset.

NOTE: The user files will be deleted and software settings will be reset to factory defaults.



If the ADMIN is not logged in the  is not accessible.



How to DELETE all user data




(Assumption: The ADMIN account is logged in)

Connect the power adapter before running the command to delete all user data.

Press  to enter software settings. Press  to delete all user data.

- Press  to confirm deletion of all data.
- Press  to cancel deletion.

NOTE: All settings will remain, but user data and user accounts will be deleted.

If the ADMIN is not logged in the  is not accessible.

Troubleshooting

If problems occur with the aView monitor, please use this trouble-shooting guide to identify the cause and correct the error.

Problem	Possible cause	Recommended action
No live image on the screen but User Interface is present on the display or the image shown is frozen.	An Ambu visualization device is not connected to aView.	Connect an Ambu visualization device to the blue or green port on aView.
	aView and the Ambu visualization device have communication problems.	Restart aView by pressing the power button for at least 2 seconds. When aView is off restart by pressing the power button once more.
	The Ambu visualization device is damaged.	Replace the Ambu visualization device with a new one.
	A recorded image is shown in the yellow file management tab.	Return to live image by pressing the blue Live image tab or restart aView by pressing the power button for at least 2 seconds. When aView is off restart by pressing power button once more.
Low picture quality.	Light reflecting on the aView screen.	Move aView to a position where no direct light influences the screen.
	Dirty / damp screen.	Wipe the screen with a clean cloth.
	Brightness and contrast settings not optimal.	Adjust the contrast and brightness using the designated menu on aView.
Video out is not working.	No live image on the external screen.	Make sure the external monitor is connected to aView using the composite cable and that the external monitor is displaying the correct input. The external monitor shall be capable of receiving NTSC or PAL. Toggle between NTSC and PAL in the video out menu on aView for best result. The external monitor is only displaying a live image when aView is displaying a live image. The image size on the external monitor is determined by the settings in the external monitor.
	The colours, brightness and contrast looks different from the aView screen.	Adjust the colours, brightness and contrast on the external monitor to achieve the desired result.
	Horizontal lines (noise) on external monitor.	If horizontal lines (noise) appear on the external monitor, try to connect the aView power supply.
Failed data transfer from aView into the USB.	USB format is incorrect.	aView monitor supports data transfer through USB formatted as FAT32 only.

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