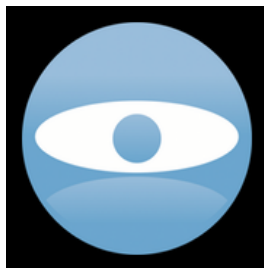


endoscope-i[®]

Endoscopic mobile imaging



e-i Pro

User Guide

V2.0



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Information

For the latest information on the e-i Pro app and endoscope-i adapters refer to <http://endoscope-i.com/>

For a video tutorial: <http://youtu.be/68yc3gZKxYQ>

Contact Info

Sales	<u>sales@endoscope-i.com</u>
Support	<u>support@endoscope-i.com</u>

we recommend you use the built in support request button so that we know what device and app version you are using.



e-i Pro V2

App Features

- Manual focus, exposure, ISO and colour temperature
- Image centralised on screen
- Image maximised on screen
- Internal image library PIN and TouchID protected
- Grouped video and picture files (internal library)
- Store images in phone camera roll (selectable)
- Still capture during video recording
- Still image extraction from video files
- Trimming of video files
- Landscape and portrait camera modes
 - Slide to activate camera
 - Rotate phone to activate camera (portrait upside down)
- HD video recording (black region removed)
- Sound recording on demand
- Five endoscope memory settings
- e-mailable HD videos

New

- Manual control of focus, exposure, ISO and colour temperature
- Five customisable endoscope settings
- Camera initialised with stored settings
- Portrait and landscape camera modes supported
- Audio recording selectable during recording session (off by default)
- Secure app with TouchID if supported by device

Removed

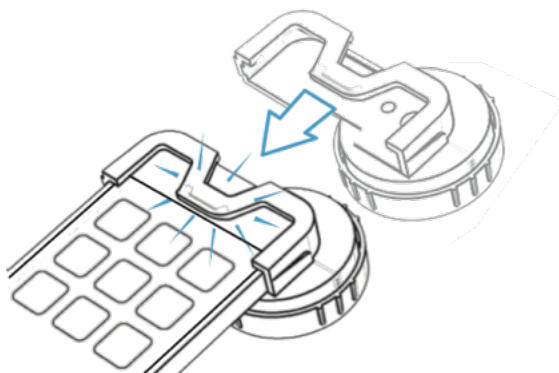
- ISO and shutter speed lock function
- Tap and hold for focus and exposure
- ISO increment mode during imaging
- Scope values removed from settings
- Tap to take still photo



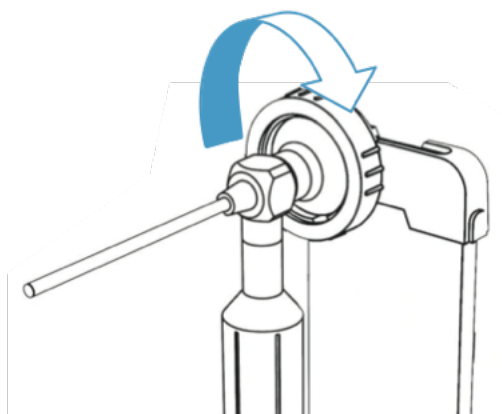
Getting Started

There are four steps to getting going with your endoscope-i system:

Fit the Adapter

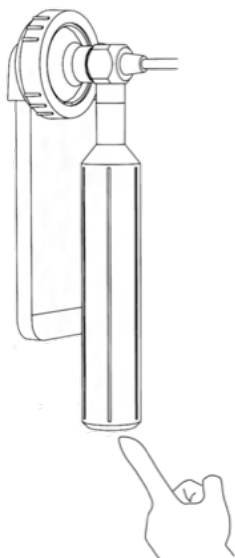


Lock on The Scope

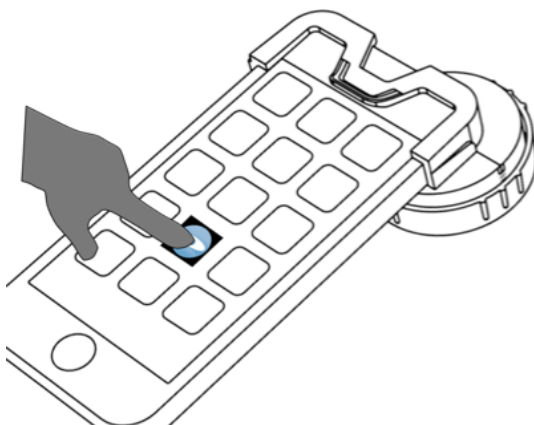




Turn on The Light Source



Start e-i Pro App





Basic App Usage

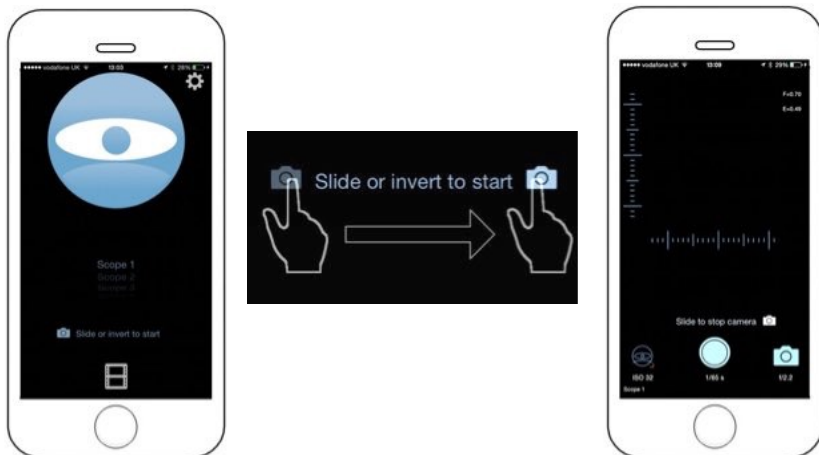
The e-i Pro app default screen allows access to the image library, video modes, scope and app settings. While the main screen is displayed the camera is disabled to reduce power consumption.

Enabling Camera

The phone can be used in portrait, landscape left or right and portrait upside down. The orientation is locked in the mode selected until 'slide to stop camera' is selected or the phone rotated to portrait (if rotated to select camera).

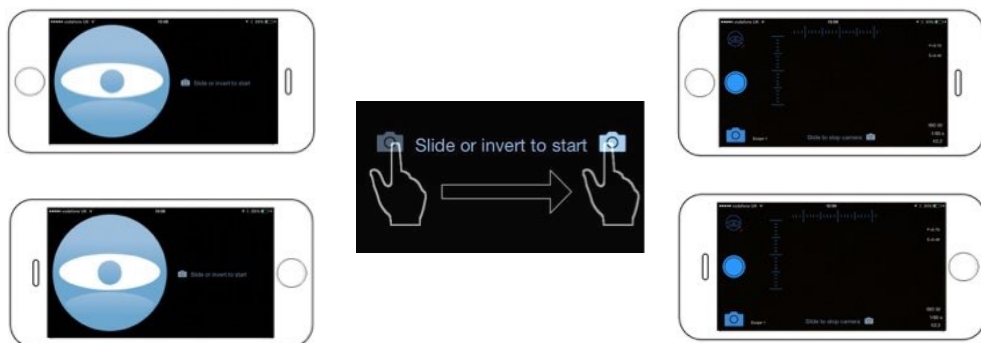
Portrait Operation

To use camera in this mode, slide camera icon to the right to start the camera.

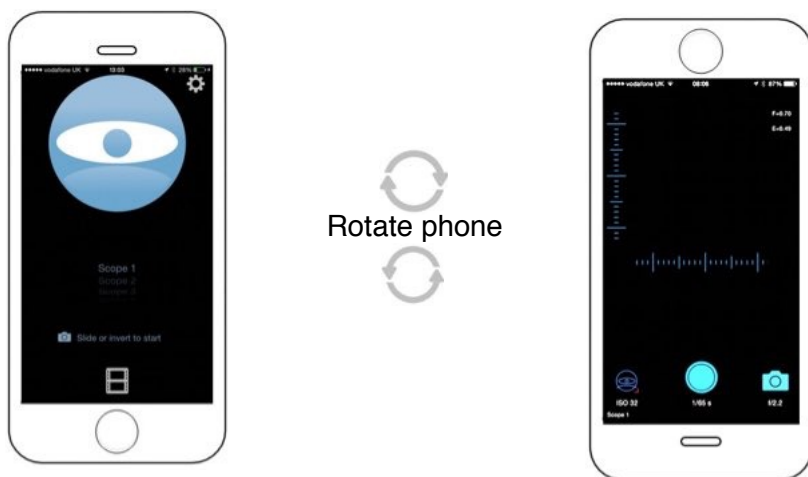




Landscape Left or Right Operation Enable



Portrait Upside Down Operation Enable

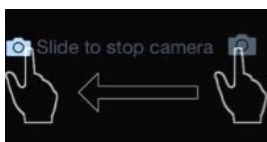




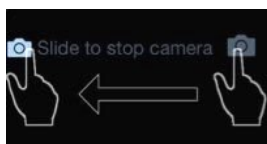
Exiting Camera Mode

To exit the camera mode use 'slide to stop camera' or rotate the phone to portrait.

Portrait and Landscape Disable

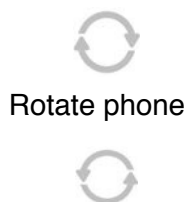


OR





Portrait Upside Down Disable





Targeting

The image region obtained from the scope needs to be defined by selecting it in the targeting mode. Once selected the region is stored for future use. When target mode is selected, the camera exposure is adjusted to give a clear view of the scope, producing a white disc.

Selecting Target Mode



Tap Targeting Icon



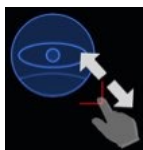
Adjusting Target Mode

To move the target, tap and hold in centre of eye and move over scope image.





To change the size of the target, tap and drag the red handle to increase or decrease.



Deselecting Target Mode



An image is now visible in the main camera view. The default focus and exposure values should give a good image. Refer to the Advanced Controls section for adjusting Focus and Exposure if required.



Recording and Still Images

Video is recorded by tapping the record button. Photos can be taken during video recording or on their own. Videos and photos are grouped together in a dated folder if the internal image library is used.



Tap the record button to start recording video.



The duration of the video is displayed below the record button. A pulsing indicator is displayed in the upper right of the display.



Tap the photo button to take a still image.



Photo without recording



Photo during recording

Audio Recording

To record audio, press and hold (long press) the record button whilst recording. A microphone icon will appear inside the record button, along with an icon in the upper right of the screen. The icon in the record button is animated with the audio level for feedback.



Long press to start audio recording



Audio level indicated by moving bar



To disable audio but



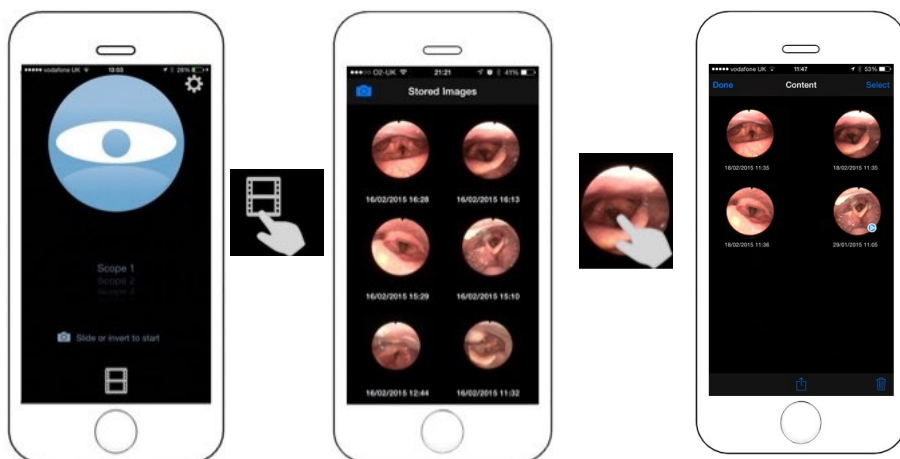
continue video recording, use a long press. To stop video and audio recording, tap the record button.

Image Library

By default images are stored inside the app. See the settings section for storing images in the iPhone camera roll.


Videos and pictures are grouped together for convenience in a session folder. A new folder is created each time the camera mode is selected and a file is saved.

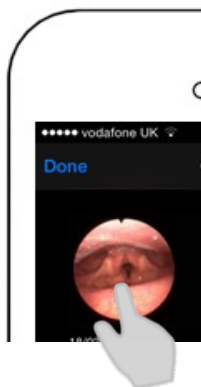
Images and videos can be accessed through the library icon.



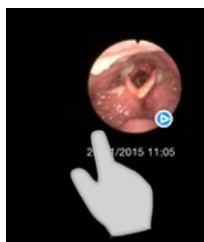
In internal library, pictures and videos are grouped together. Tapping on an image will present the grouped content.



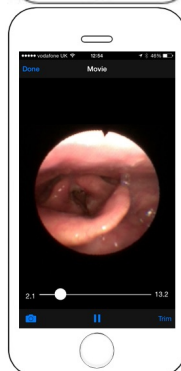
Videos are marked with . Tap on the image or video thumbnail to view them.



View
Photo

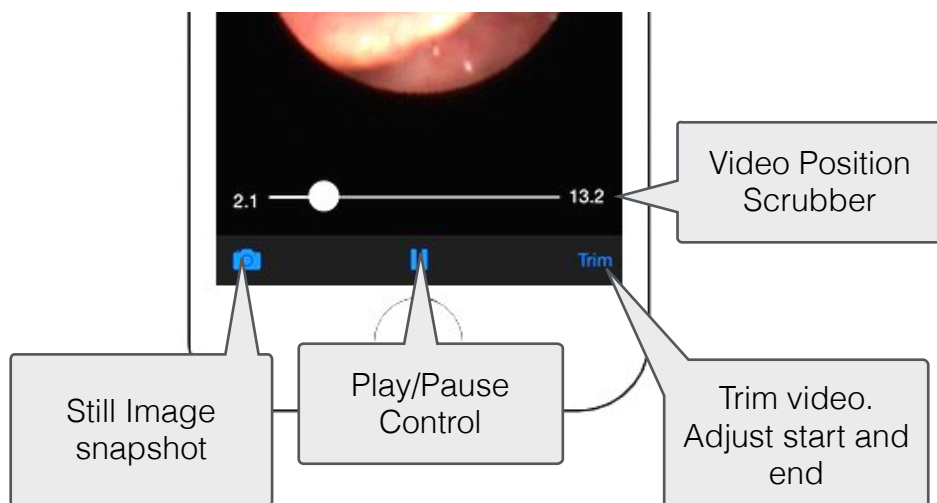


View
Movie





Video Playback



Still Images from Video

Still images are stored in the same content folder as the video. The last still image stored becomes the thumbnail for the internal grouped folder.

Still images can be taken during playback and whilst video is paused.

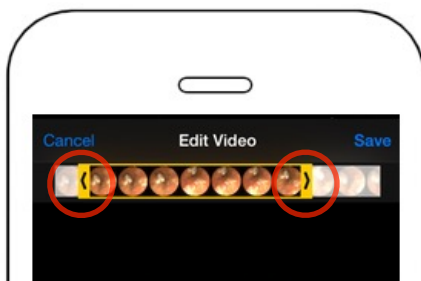


Trimming Videos

Selecting the Trim function allows the video start and end to be adjusted.



Adjust the start and end points of the video to suit.




Preview the video with the  button.

Tap **Save** to replace original video with trimmed version.

Tap **Cancel** to discard the trimmed video.

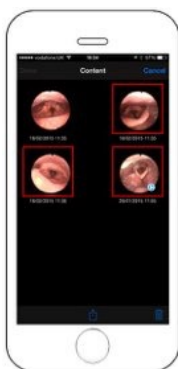


Transferring Images

Use the share button  to transfer images and videos via email, photo library or other services installed on phone.

Single images are automatically selected. For grouped folder items, all items are selected by default.

To send selected images, tap **Select**, highlight the images required



Then tap the share  button.






Select the service required (email, save photo etc) and complete the sending.

Tap **Cancel**, then **Done** to exit content folder.

Deleting Images

To delete images use the trash button .

Images can be deleted selectively using **Select** or the whole folder.

The folder will be removed automatically if there is no content.

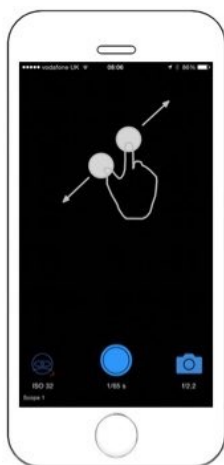


Advanced Controls

Adjusting Focus and Exposure

The controls to adjust focus (sharpness) or exposure (brightness) are accessed by enabling the slider calliper menu.

Enable Slider Adjustment



Two finger spread
to
Enable Sliders



Disable Slider Adjustment



Two finger pinch
to
Disable Sliders



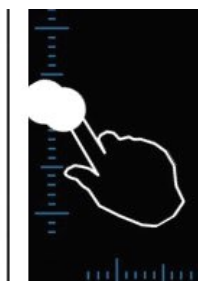


Adjusting Focus



Focus is adjusted by moving the slider up to focus nearer ($F \rightarrow 0.0$) and down to focus further away ($F \rightarrow 1.0$).

Double tap to reset slider to default position ($F=0.7$).



Adjusting Exposure



Exposure is adjusted by moving the slider left to brighten ($E \rightarrow 1.0$) the image and right to darken ($E \rightarrow 0.0$) the image.

Double tap to reset slider to default position ($E=0.29$).





Additional Image Controls

To access the additional menu for Colour Temperature and ISO settings use a long press gesture in the image area.



Long press
activates
additional image
menu



Repeat long press gesture to remove the menu and access the camera controls.

Cycle between menus using left or right swipe:



Colour Temperature



Compensate for light source colour temperature by moving the slider left or right to achieve the desired colour balance.

Double tap the scale to return to the default colour balance.

ISO



We recommend leaving the ISO setting at 0.0 giving the fastest exposure your phone can perform (ISO 32 or 40).

If your images are too dark and adjusting the exposure produces slow motion blur then raising the ISO value will allow a faster exposure to be set.

The final menu display shows the values used for focus, exposure, colour temperature, ISO and tint.

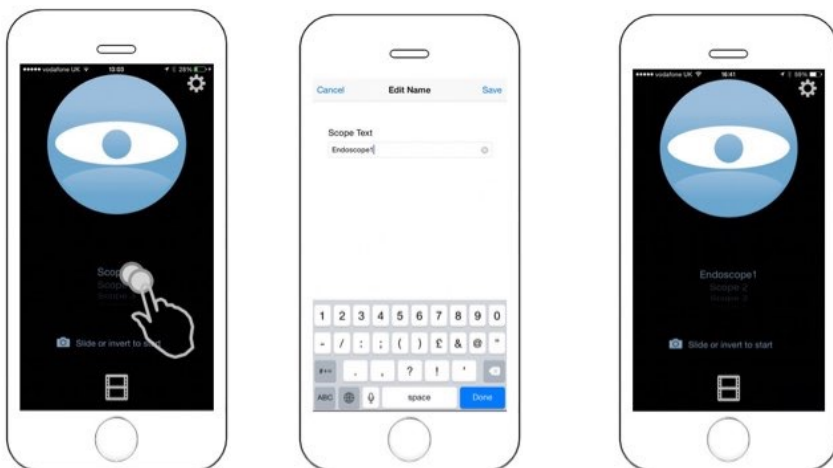
All these values are stored under the scope setting selected.



Changing Scope Menu Text


There are five 'scope' menus on the main screen. All adjustments in the camera display are stored under the selected menu.

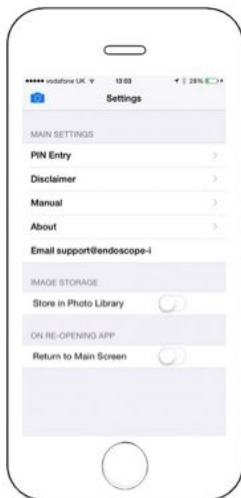
To change the name of a menu item, double tap on it when it is selected.



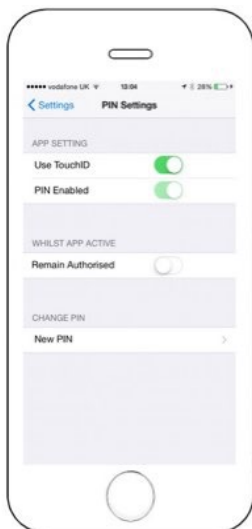


System Settings

Access the system settings by tapping the settings icon  on the main app screen.



PIN Entry



To protect the system settings and image library, enable and set a PIN code.

If device supports TouchID it can be used as well as the PIN.

Selecting “Remain Authorised” forces the app to request your PIN code only once whilst the app is active. If app loses focus (i.e. return to home screen or phone sleeps) then PIN will be requested again.

Change the PIN with NEW PIN if required.



Disclaimer

Disable the disclaimer here. If you reset the app, this option will be re-enabled.

Manual

Displays this manual.

About

Presents version information for the app.

Email Support

If you require assistance with the app, use this option to send an email.

Email support@endoscope-i

The email created will give us details on the e-i Pro app you are using, your phone type and iOS version. Fill in the blanks to help us to help you.

Store In Photo Library

Select this option to use the phone camera roll to store images. The grouped image folder facility will be disabled.

This mode is useful for syncing images to a PC using the sync cable.

IMAGE STORAGE

Store in Photo Library





Return to Main Screen

Select this option to force app to start at main screen each time its accessed.

ON RE-OPENING APP

Return to Main Screen

