Getting Started

This guide instructs you how to set up and operate your TytoPro product. Please follow the instructions below to start your examination process. Please note the following instructions are also explained and demonstrated in video tutorials in the Tyto mobile App, which walk you through your first steps in the Tyto exam.

Please view carefully all the video tutorials before use, as they are critical for successful and safe operation and examination.

For complete instructions, please refer to the User Manual, which is available through the Tyto App either through the About screen before login, or through the Menu icon at the top-right corner after login. Please read carefully before use the enclosed operation manual, detailing warnings and precautions concerning the operation of this device.

Product Overview

- Turn on Tyto Device
  - LCD Touch Screen
  - Charging Indicator
  - Built-in Illumination
  - Infrared Thermometer
  - Connector to tip

- Camera
  - Blue dot guiding insertion direction

- Otoscope

- Stethoscope
  - Stethoscope Headphones Socket
  - Tongue Depressor Holder

- Tongue Depressor Blade
Setting Up TytoPro™ For First Time Use:

1. Make sure your iPhone/iPad is connected to a Wi-Fi network with internet connection.
2. On your iPhone/iPad, open the App Store, search for TytoCare and download the Tyto App.
3. Open Tyto App and log in, using your username and password.
   a. if you’re a healthcare professional, contact your system administrator to obtain your username and password.
   b. If you’re a patient, press Sign up to register as a new user.
4. Perform the following Pairing process, which connects the Tyto device to the Tyto mobile App:
   a. The Device Pairing screen will be displayed in the Tyto App.
      II. If it is not displayed automatically, press the red pairing icon.
   c. Enter your Wi-Fi password and press Next. A barcode will be displayed.
   d. Turn on the Tyto device, using the button on the top of the device. Press I have the App and Scan Barcode in the device.
      i. If you’re not using TytoCare for the first time, to access pairing, swipe down the device screen, and choose Pairing in the menu.
      ii. Confirm the two messages displayed in Tyto device, explaining pairing.
   d. When the device camera is on, scan the barcode as shown in figure 1.
   e. A confirmation message should be displayed. Pairing status is indicated on the Tyto App:
      - Device is paired;
      - Device is disconnected.
      i. If pairing is unsuccessful, make sure the Wi-Fi password is correct and try scanning the barcode again.
2. If you’re a patient, you should add your family members as patients by pressing Add a new patient.

![Figure 1 - Pairing]
1. Place your iPhone/iPad on a stand to allow easier operation of both Tyto device and App.
   b. If an iPhone is used, use the stand supplied in the top compartment of the carrying case, as shown on Figure 2:

3. Log in to the Tyto App and make sure the Tyto device is paired.
   a. If not paired automatically, follow step #4 in Setting up TytoPro for first time use.

2. Patient Selection:
   c. If you’re a healthcare professional, type the patient’s name or ID in the search box. Select the desired patient from the list, and press Select patient.
      iv. If the patient is not yet defined in the system, press Add new patient.
   e. If you’re a patient, select the name of the patient.

f. Unidentified Visit:
   vii. Healthcare professionals have the option to start the examination immediately, without identifying the patient in advance.
   viii. Unidentified mode allows occasional use of TytoCare without the App or a network.
      ix. Press Start Unidentified Visit in the device, before or after login, to use this mode.
      x. This icon indicates you’re in unidentified mode.
      xi. To save the visit or send it, you’ll have to identify the patient at the end of the visit.

4. Select the type of visit you would like to perform online or exam-and-forward (offline).

5. See below further instructions on how to perform exams, based on the type of visit you chose (online or offline).

6. After the visit has ended, Tyto App will notify you when the clinician’s notes are ready. Then log in, select patient and select Inbox to view the notes.
Starting an Online Virtual Visit with a Clinician:

1. Following login and patient selection (see instructions above), select **See a Clinician Online**.
2. A list of clinicians is displayed. Select your preferred clinician that has status **Available**.
3. Add the patient's symptoms and complete the short questionnaire, to let the clinician know your main complaints.
4. Wait until the clinician starts the online visit. Do not exit this screen.
5. Once the clinician starts the visit, you'll be asked to join. Press **Join** to start the video conference with the clinician.
6. The video conference with the clinician starts. During the online visit, the clinician controls your device remotely, and will guide you through the examinations.
7. When the clinician performs exams, you will need to connect the tips to the device as follows:
   a. Stethoscope - for Heart, Lungs or Heart Rate exam.
   b. Otoscope - for Ears exam.
   c. Tongue Depressor – may be needed for Throat exam.
   d. For other exams, such as Temperature or Skin, no tip is required.
8. When the clinician ends the online visit, you may close the application.

Figure 3 - Select Clinician  Figure 4 - Online Heart Exam
Performing an Offline Exam and Forward - For Healthcare Professionals:

1. Following login and patient selection (see instructions above), select Exam and Forward.
2. On the Tyto device, select the type of exam you would like to perform (see figure 5)
3. Stethoscope Exams (Heart, Lungs, Heart Rate):
   a. Connect Stethoscope tip to the device. Follow blue dots for correct positioning.
   b. Connect Headphones, either to the socket on the stethoscope or to the socket at the bottom of the device behind the rubber band (see figure 6):
   c. Select Heart, Lungs or Heart Rate exam.
   d. Sound recording starts automatically, indicated by the red dot.
   e. Every time you position the stethoscope on an auscultation point, select the relevant area on the device. The currently selected area is marked in blue. Previously marked areas will be in green.
   f. In Lungs, use the Switch Side button to switch between front and back (see figure 7).
   g. You can adjust the Volume and Audio Filters applied by swiping down the device's screen.
   h. Heart Rate – Place the stethoscope on the Heart area for 20 seconds.
   i. When finished, press Done.
4. Ears Exam:
   a. Connect the Otoscope tip to the device. Follow blue dots for correct positioning.
   b. Connect disposable speculum. Two sizes are provided: adults (4mm) and small children (3mm).
   c. Select the Ears exam. Select the first ear you're about to examine, left or right.
      i. Make sure not to confuse left and right, as patient's sides are mirrored.
   b. Video Recording starts automatically, indicated by the red dot.
   c. You can adjust the illumination strength by swiping down the device screen during the recording.
   d. When one eardrum was recorded, end the exam, either by pressing Left Ear (or Right Ear) to continue recording the next ear, or Done to finish the exam.
5. Throat Exam:
   a. Make sure the tongue depressor holder is disinfected using 70% isopropyl alcohol
   b. Select Throat exam.
   c. Video Recording starts automatically, indicated by the red dot.
   d. You can adjust the illumination strength by swiping down the device’s screen during recording.
   e. If you cannot get a view of tonsils, use the Tongue Depressor (TD):
      i. Attach the TD holder to the device, following the blue dots.
      ii. Insert the disposable TD blade into the holder until you hear a locking click.
      iii. To detach the TD blade, press the locking latch at the bottom of the TD.
   f. Once pharynx and tonsils are captured, press Done to finish the exam.

6. Temperature Exam:
   a. Press Temp exam.
   b. Aim Tyto device at the center of the forehead, just between the eyebrows.
   c. Make sure the device is close to skin, not exceeding 2 inch (5 cm), no hair interferes and no sweat on forehead.
   d. Temperature result will be displayed on the screen. Press Done to finish.

7. Skin Exam:
   a. Swipe left the device screen to access the second exams selection screen. Then, press Skin Exam.
   b. Point the camera towards the skin and press to take picture.
   c. Leave enough distance (1.5-2 inches (4-5cm)) from skin to allow the camera to focus.
   d. Auto-focus is applied automatically when taking pictures. You can also press the screen at the point of interest, to activate local focus.
   e. When finished taking the skin images, press Done.
   f. You can then review the skin images using the App:
      i. Press the Skin exam line in the App.
      ii. Review images and optionally tag the body part where the image was taken, by pressing tag body part and typing in the name of the relevant body part.
      iii. If an image is unsatisfactory, you can delete it. Press on the bottom-right corner to delete the selected image.

8. Use the Tyto App to review the recorded exams (figure 9). Press each exam line to watch or listen to the recording.
9. When all required exams are recorded, press Save Visit to send the recordings to the Tyto App.
   j. If you wish to delete the recordings, press Discard Visit.
11. Use the App to decide whether to send the recordings to a clinician for offline diagnosis (Send to Clinician); to initiate an online visit, where the recordings can be reviewed before the visit begins (See a Clinician Online); or to just save the recordings and end the visit (Save and Exit).

Performing an Offline Exam and Forward - For Caregivers or Patients:

1. Following login and patient selection (see instructions above), select Exam and Forward.
2. Select in the Tyto device the type of exam you would like to perform:
3. Stethoscope exams (Heart, Lungs and Heart Rate):
   a. Connect Stethoscope to the device. Follow blue dots for correct positioning.
   b. Choose Heart, Lungs or Heart Rate exams.
   c. Note: When placing the stethoscope on the chest, make sure not to confuse the left and right sides – the patient’s right side is on your left.
   d. Place the stethoscope in the correct position, as indicated on the device and App.
   e. Press Start to begin recording each point of the heart or lungs.
   f. Avoid unnecessary noise during recording, make sure the stethoscope is in full contact with the patient's skin and don't move it during recording.
   g. Observe the signal strength bar and keep it in the green zone.
   h. If the bar indicates red None or yellow Low, it means the sound quality is poor. This could be due to not having full contact with skin, not pressing the stethoscope firmly enough, or if the patient doesn't breathe deeply enough (in Lungs). If the bar indicates red Noisy, it means there is loud external noise or you're moving the stethoscope on the body.
i. To repeat an already recorded point, press on the body image in the device and then press ✔️ at the desired point.

j. Follow the instructions on the App and record all required points as guided by the system.

k. When finished recording all points successfully, press Done to end the exam.

4. Other exams:
   Please read the instructions described above, under the section for healthcare professionals. The operation is the same, except the following:
   a. After choosing an exam, a short animation will be displayed, reminding you of the most important instructions for performing a successful and safe exam. Once you are ready to start the exam, press Start. Video recording will then start automatically. When finished performing the exam, press Stop.
   b. The recorded video will be displayed on the App, allowing you to review it, and to decide if it is satisfactory. If OK, press Done on the device to finish the exam. Otherwise, press Add to repeat the exam.
   c. On the Ears exam, after recording the first ear, press the Right/Left Ear button on the device to record the next ear.
   d. On the Skin exam, after each image is taken, review it in the App, and optionally tag the relevant body part, as described above. Then, either press Add to take another image, or Done to finish.

5. When all required exams are recorded, press Submit to send the recordings to the Tyto App.

6. Review the recorded exams on the App by pressing each exam line. Press Continue when finished.

7. Select Send to Clinician for an offline review.
   a. If you want to start an online visit with a clinician and allow him to review the recorded exams before the visit, press See a Clinician Online.

2. Select the clinician that you would like to review your recorded exams.

3. Add the patient’s symptoms and complete the short questionnaire, to let the clinician know the patient’s main complaints.

4. You’ll be notified on the App once the clinician has reviewed your exams and sent you the notes.
General Operation

1. Shutdown the device:
   a. Swipe down the device’s screen, and select Shutdown.
   b. If the device is unresponsive due to an unexpected error, or you encounter a blue screen, press the top button continuously for 10 seconds to force shutdown.

2. Charging the device:
   a. Remove the rubber band at the bottom of the device, and connect the charger cable to the smaller charging outlet (larger outlet is used for headphones).
   b. The Tyto device should be fully charged after each use.
   c. Charging is indicated by an orange light on the device. When fully charged, it will turn green.
   d. For safety reasons, examinations are disabled while the device is charging.

3. Power Saving:
   a. Tyto device features an automatic battery saving mechanism.
   b. If the device is not in use for 1 minute when performing an exam, it will exit the exam.
   c. If the device is not in use for 1 minute when not performing an exam, it will switch to sleep mode, indicated by a blinking green indicator.
   d. If the device is in sleep mode for 3 minutes, it will shut down.
   e. When turning on the device, it will return automatically to the same state as before.

4. Wi-Fi Network:
   a. Make sure you have an internet connection before logging in to the Tyto App.
   b. For security reasons, a Wi-Fi password is mandatory.
   c. TytoPro supports IEEE 802.11 N standard (recommended) or G.
   d. The following Wi-Fi configurations are not supported:
      i. WPA-Enterprise using a RADIUS authentication server (802.1x)
      ii. HTTP proxy server authentication
      iii. WEP
      iv. 5GHz frequency band
   e. If you experience poor video or sound quality, make sure your internet connection meets the minimum requirements: 5 Mbps download, 2 Mbps upload. The following network speed is recommended: 20 Mbps download, 5 Mbps upload.
      i. In addition, it may be helpful to perform the Tyto Exam closer to the Wi-Fi router.
For any question, please contact us at:

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