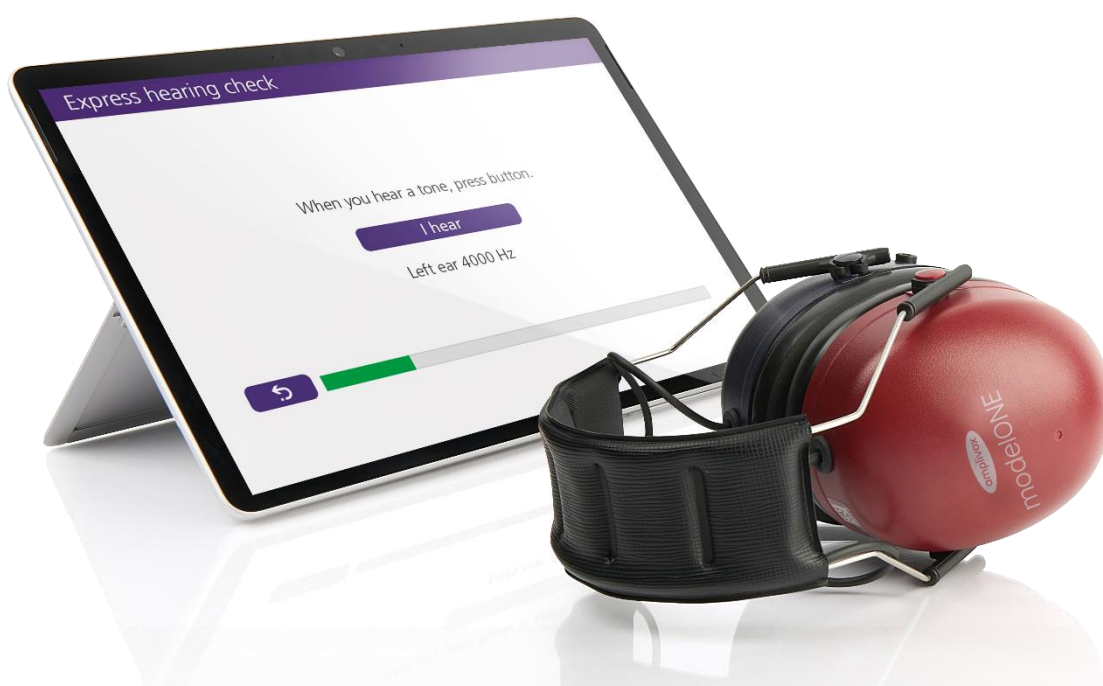# modelONE

INSTRUCTION FOR USE

ABOUT THIS MANUAL

READ THIS OPERATING MANUAL BEFORE ATTEMPTING TO USE THE INSTRUMENT.

This manual is valid for the modelONE with the software Amplisuite BEEP (from software version 1.3 onwards).

This product is manufactured by:
Amplivox Ltd
3800 Parkside, Solihull Parkway,
Birmingham Business Park, Birmingham,
West Midlands,
B37 7YG
www.amplivox.com

For all enquiries please contact us under:

Amplivox Ltd	Amplivox Ltd
10393 West 70th Street	3800 Parkside, Solihull Parkway,
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MN 55344	West Midlands,
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	United Kingdom
Tel: 888 941 4208	Tel: +44 (0)1865 880846
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CE 0123

EC | REP

DGS Diagnostics A/S
Audiometer Alle 1
5500 Middelfart, Denmark

TABLE OF CONTENTS

1. INTRODUCTION

1.1. THANK YOU

Thank you for purchasing modelONE with Amplisuite BEEP. Amplisuite BEEP is a software application that works as a self-referring automated hearing test kiosk. The client is guided effortlessly through the hearing test and the test results can be shared via email with the client and the kiosk owner.

This software works with the Amplivox modelONE audiometer.

1.2. INTENDED APPLICATIONS

The AmplisuiteBEEP application is intended to perform automated audiometry using the Amplivox modelONE audiometer. This includes presenting a test tone, defining test level and frequency, recording patient responses and using a built-in microphone to monitor environmental noise levels during the test performance.

Depending on the customised setup, the Amplisuite BEEP will ask for the client's basic personal information to send an e-mail with the completed test results.

Auto-test settings, such as test frequencies or starting level can be edited within the application. These special settings are accessible only by the Amplisuite BEEP owner and are locked via PIN code to prevent unqualified alterations.

The PC application is also intended to allow the owner to edit the basic design of the application, such as displayed logo, colours and to add extra text information to the printout. These basic changes may be done within the application settings, whereas more advanced changes can only be done using the provided editor software.

1.3. CONTRAINDICATIONS

As the tests are conducted by the client themselves, information about potential outer and external auditory canal abnormalities cannot be recorded and might have an impact on the test result.

Testing might be impacted if the following conditions are applicable:

1. The presence of other sensitivity to loud sounds when high intensity stimuli are used.
2. Recent outer ear surgery.
3. Tinnitus

1.4. STANDARD AND OPTIONAL ACCESSORIES

Shipping documentation will reference the stock number quoted below and images of the parts alongside the relevant stock numbers are available on the Amplivox website (www.amplivox.com). The required fitting instructions are supplied with each part.

STANDARD ACCESSORIES			
DD65v2A Diagnostic Audiometer (modelONE)	8531884	USB stick with manuals and software	8524375
USB A cable	8518617	Carry case	8531412
USB C cable	8518615		
USB-C to USB-A Adapter	8526453		

OPTIONAL ACCESSORIES			
Microsoft Surface Go2 10,5'' tablet (Standard in "Go Version")	8525258	Micro-USB cable	8518616
Bluetooth Logitech keyboard (Standard in "Go Version")	8527140	Stand for tablet	8527805
Additional patient response switch	8528431	Stand with headphones hook	8527959

* Please contact Amplivox for further information

1.5. GUARANTEE

All Amplivox instruments are guaranteed against faulty materials and manufacture. The instrument will be repaired free of charge for a period of two years from the date of dispatch if returned, carriage paid, to the Amplivox service department. Return carriage is free of charge for customers in the UK and chargeable for overseas customers.

1.6. WARNINGS

Throughout this manual, the following meanings of warnings and cautions apply:

⚠️ WARNING — The WARNING label identifies conditions or practices that may present danger to the patient and/or user.

⚠️ CAUTION — The CAUTION label identifies conditions or practices that could result in damage to the equipment.

2. UNPACKING AND INSTALLATION

2.1. GENERAL

Please check the contents of the shipping carton against the delivery note to make sure that all items ordered have been included. If anything is missing, please contact the distributor who supplied the audiometer or Amplivox if purchased directly.
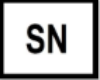
Please retain the carton and packaging as the instrument will need calibrating on an annual basis and should be returned to Amplivox in its original shipping carton.

⚠ CAUTION

For supply in US only: Federal Law restricts this device to sale by or on the order of a licensed medical professional.

2.2. MARKINGS

The following markings can be found:

Symbol	Explanation
	Refer to instruction manual.
	Definition: Type B applied part – an applied part providing protection against electric shock, particularly regarding allowable patient leakage current and patient auxiliary current. The applied parts are the left & right earphones, patient response switch and the associated cables.
	WEEE (EU-directive) This symbol indicates that when the end-user wishes to discard this product, it must be sent to appropriate collection facilities for recovery and recycling. Failing to do so may endanger the environment.
CE 0123	The CE-mark indicates that Amplivox Ltd meets the requirements of Annex II of the Medical Device Regulation 2017/745. TÜV Product Service, Identification No. 0123, has approved the quality system.
SN	Serial number.
	Date of manufacture.
	Definition: Class II equipment – equipment in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions such as double insulation or reinforced insulation are provided, there being no provision for protective earthing or reliance upon installation conditions.

MD	Medical Device.
🎤	Built-in microphone: Room monitor.
☂	Keep dry.
%	Transport and storage humidity range.
🌡	Transport and storage temperature range.
amplivox	Logo.

2.3.   SAFETY INSTRUCTIONS

2.3.1. GENERAL

The following safety precautions must be observed at all times. General safety precautions must be followed when operating electrical equipment. Failure to observe these precautions could result in damage to the equipment and injury to the operator or patient.

The employer should instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his or her work environment to control or eliminate any hazards or other exposure to illness or injury.

Amplivox Ltd is aware that safety rules within individual organizations vary. If a conflict exists between the instructions in this manual and the rules of the organization using this instrument, the more stringent rules should take precedence.

The modelONE is intended to be setup by hearing healthcare professionals i.e. ENT doctors, audiologists, nurses or technicians who have been trained in the proper use of the device, to ensure a proper used as a kiosk self-referral version. In general, audiometric equipment should always be used or supervised by trained personal.

2.3.2. CAUTIONS – GENERAL

⚠ CAUTION

If the system is not functioning properly, do not operate it until all necessary repairs are made and the unit is tested and calibrated for proper functioning in accordance with Amplivox's specifications.

Do not drop or in any other way cause undue impact to this device. If the instrument is damaged, return it to the manufacturer for repair and/or calibration. Do not use the instrument if any damage is suspected.

This product and its accessories will perform reliably only when operated and maintained in accordance with the instructions contained in this manual, accompanying labels, and/or inserts. A defective product should not be used. Make sure all connections to external accessories are secured properly. Parts which may be broken or missing or are visibly worn, distorted, or contaminated should be replaced immediately with clean, genuine replacement parts manufactured by or available from Amplivox Ltd.

Equipment is not user repairable. Repairs must be performed by an authorised service representative only. No modifications of the equipment are allowed by anyone other than a qualified Amplivox Ltd representative. Modification of the equipment could be hazardous.

Amplivox Ltd will make available, on request, component part lists, descriptions, calibration instructions, or other information that will assist authorised service personnel to repair those parts of this instrument that are designated by Amplivox Ltd as repairable by service personnel.

No parts of the equipment can be serviced or maintained while in use with the patient.

Connect only accessories purchased from Amplivox Ltd to the modelONE. Only accessories which have been stated by Amplivox Ltd to be compatible are allowed to be connected to the device.

2.3.3. ENVIRONMENTAL FACTORS

CAUTION

Use and store the instrument indoors only. It is recommended that the instrument be operated within an ambient temperature range of 15 °C / 59 °F to 35 °C / 95 °F and in relative humidity between 30% and 90% (non-condensing).

Do not use the device in the presence of fluid that can come into contact with any of the electronic components or wiring. Should the user suspect fluids have contacted the system components or accessories, the unit should not be used until deemed safe by an authorised service technician.

2.3.4. ELECTRICAL AND ELECTROSTATIC SAFETY

CAUTION

Before performing any service to the headphones or insert earphones you must remove the modelONE transducers from the patient.

WARNING

Do not touch the contacts on the back of the instrument and the patient at the same time. The consequence could be a leakage current to the patient.

Do not open, modify or service the case of the instrument. Refer servicing to qualified personnel.

This equipment is intended to be connected to other equipment thus forming a Medical Electrical System. External equipment intended for connection to signal input, signal output or other connectors must comply with the relevant product standard e.g. IEC 60950-1 for IT equipment and the IEC 60601-series for medical electrical equipment. In addition, all such combinations – Medical Electrical Systems – must comply with the safety requirements stated in the general standard IEC 60601-1, (edition 3.1), clause 16. Any equipment not complying with the leakage current

requirements in IEC 60601-1 must be kept outside the patient environment i.e. at least 1.5m from the patient support or must be supplied via a separation transformer to reduce the leakage currents. Any person who connects external equipment to signal input, signal output or other connectors has formed a Medical Electrical System and is therefore responsible for the system to comply with these requirements. If in doubt, contact a qualified medical technician or your local representative. When the instrument is connected to a PC, or other similar item, beware of not touching the PC and patient simultaneously.

A Separation Device (isolation device) is needed to isolate the equipment located outside the patient environment from the equipment located inside the patient environment. In particular, a Separation Device is required when a network connection is made. The requirement for the Separation Device is defined in IEC 60601-1 clause 16.

2.3.5. ELECTROMAGNETIC COMPATIBILITY (EMC)

CAUTION

Although the instrument fulfills the relevant EMC requirements, precautions should be taken to avoid unnecessary exposure to electromagnetic fields, e.g., from mobile phones, etc. If the device is used adjacent to other equipment it must be observed that no mutual disturbance appears. Please also refer to Section 7 regarding EMC.

2.3.6. EXPLOSION HAZARDS

WARNING

Risk of explosion.

Do NOT use in the presence of flammable anesthetics or other gases.

Do NOT use in the presence of flammable gaseous mixtures. Users should consider the possibility of explosions or fire when using this device in close proximity to flammable anesthetic gases.

Do NOT use the modelONE in a highly oxygen-enriched environment, such as a hyperbaric chamber, oxygen tent, etc.

2.3.7. MEASURING ACCURACY

To guarantee that the modelONE works properly, the instrument should be checked and calibrated at least once a year. The transducers supplied with the audiometer are specifically calibrated with it; if these transducers are changed recalibration will be required.

The service and calibration must be performed by an authorised service technician. If these checks are not performed, EU Medical Device Regulation (MDR) and other regulations may be violated and warranties may be void.

The use of non-calibrated devices can lead to incorrect test results and is not advisable.

2.3.8. MISCELLANEOUS

Please note: DO NOT connect the modelONE hardware to the computer before the software has been installed.

Storage in temperatures below 0°C /32°F and above 50°C /122°F may cause permanent damage to the instrument and its accessories.

Do not place the instrument next to a heat source of any kind.

Great care should be exercised when handling transducers, as rough handling, for example dropping onto a hard surface may break or damage the parts.

Within the European Union it is illegal to dispose of electrical and electronic waste as unsorted municipal waste. Electrical and electronic waste may contain hazardous substances and therefore have to be disposed of separately. Such products will be marked with the crossed-out wheelie-bin image shown to the left. User cooperation is important in order to ensure a high level of reuse and recycling of electrical and electronic waste. Failure to recycle such waste products in an appropriate way may endanger the environment and consequently the health of human beings.

Outside the European Union, local regulations should be followed when disposing of the product after its end of life.

2.3.9. USE OF EQUIPMENT AFTER TRANSPORT AND STORAGE

Please make sure that the instrument is functioning correctly before use. If the instrument has been stored in a cold environment (even for short period of time), please allow the instrument to become acclimatized. This can take a long time depending on the conditions (such as environmental humidity). You can reduce the condensation by storing the instrument in its original packaging. If the instrument is stored under warmer conditions than the actual use conditions no special precaution is required before use. Always ensure proper operation of the instrument by following routine check procedures for audiometric equipment.

2.3.10. USB OPERATION

The audiometer modelONE is powered from the USB connection, no extra power or batteries are needed. Ensure that the USB port can provide sufficient power to modelONE, e.g. you may need to disable power save schemes.

2.4. CONNECTIONS

Please note: Only connect the accessories supplied with the instrument or supplied by Amplivox or an Amplivox distributor. These parts have been tested for use with the Amplivox modelONE audiometer for compliance with the standards IEC 60601-1 and IEC 60601-1-2. The use of accessories other than those specified may compromise compliance with these standards.

2.5. HARDWARE INSTALLATION

2.5.1. POWER

The instrument is designed for continuous operation and is powered by the USB connector. Connect the USB output to the PC USB socket to power the device.

2.5.2. CHANGING THE USB CONNECTOR IN MODELONE

modelONE can be used with three different USB connection: USB type A and USB type C (standard delivery) and micro USB (optional).

The connector can be replaced in the field by the owner. Exchanging the lead does not influence product functionality nor the calibration of the audiometer.

To change the lead, follow the steps as listed below:

1. Disconnect modelONE from the PC or tablet.
2. Unscrew the two screws on the headphone input.

3. Disconnect connector.

4. Connect other connector.
5. Screw in both screws again.

3. AMPLISUITE BEEP INSTALLATION

3.1. PRE-INSTALLATION NOTES

3.1.1. PC AND SYSTEM REQUIREMENTS

The PC-requirements are as follows:
- Processor: 1 GHz or faster, one or multi-core
- RAM: 1 GB or more
- Available hard disk space: minimum 200 MB
- Resolution: minimum 1378 x 768
- Graphics device: DirectX 9 with WDDM 1.0 or higher driver
- Available 2.0 or 3.0 USB Port

3.1.2. OPERATION SYSTEM COMPATIBILITY

Amplisuite is supported on the following Microsoft Operating Systems:
- Windows 10
- Windows 11

Please note: Transfer of test data requires USB connection between the device and the PC or tablet. Sending an e-mail requires PC or tablet to be connected to internet.

Supported tablets are: Surface Go, Surface Go2, Surface Go3 and Surface Pro.

3.2. INSTALLATION

3.2.1. GENERAL

The installation of Amplisuite BEEP is a straightforward process, but the steps must be carried out in the correct order. To ensure you are familiar with the process please read this entire user manual before commencing installation.

3.3. AMPLISUITE BEEP INSTALLATION PACKAGE

Run **Amplisuite BEEP Setup.exe**:

Amplisuite BEEP Setup

Select **Run** to any security warnings that are displayed:
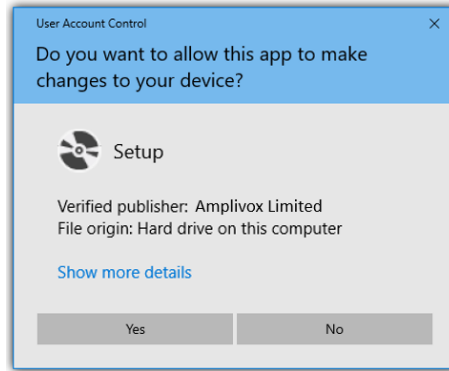
Select **Next** to proceed with the installation.
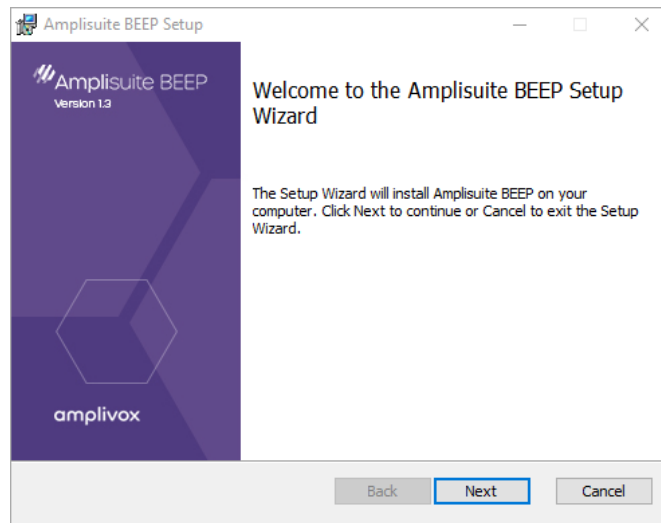
Read carefully the **end user license agreement**. If you agree with it, select checkbox next to "I accept terms in License Agreement" text and select **Next**.

If you don't agree with the Agreement, select **Cancel** to stop software installation. You can print End-User License Agreement using the Print Button.
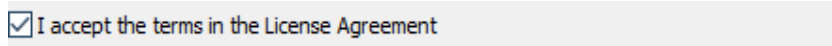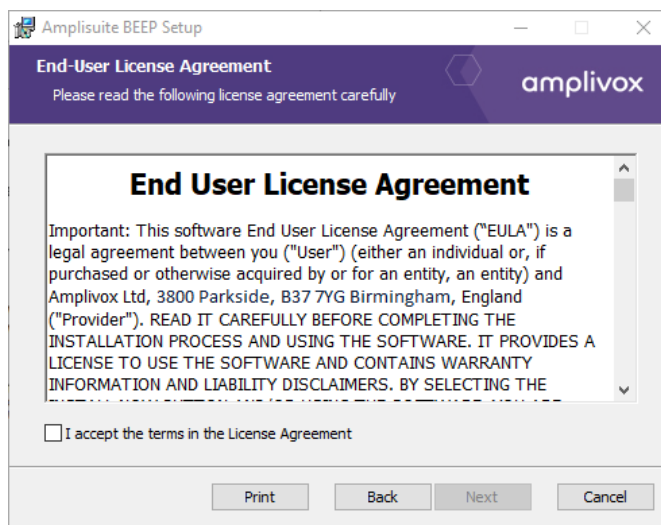
If desired, change the installation location by selecting **Change…** . Select **Next** to proceed.
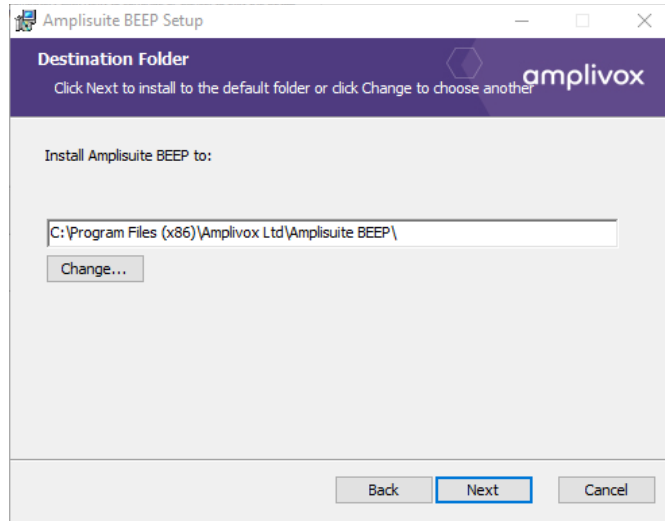
Select **Install** to proceed with the installation:
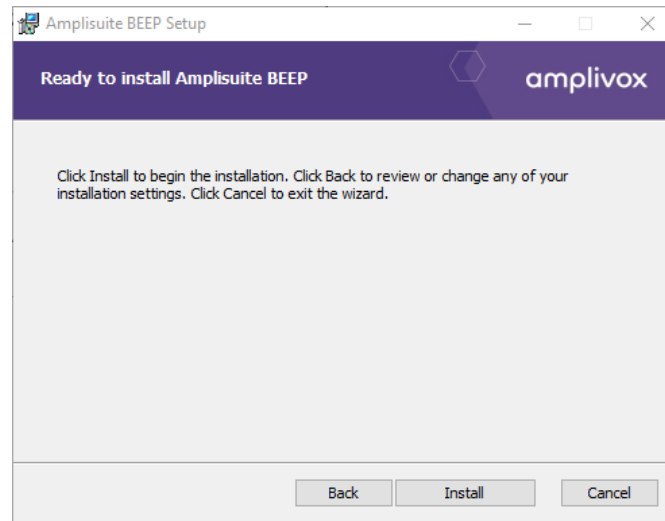
Amplisuite BEEP installation will then commence:

Amplisuite BEEP installation will continue until complete. Tick the box to install the USB drivers if you don't currently have the latest Amplivox USB drivers installed. Select **Finish**.

4. USING AMPLISUITE BEEP

4.1. GENERAL PRECAUTIONS

When operating the instrument, please observe the following general precautions:

CAUTION

1. Use this device only as described in this manual.
2. Be sure to use only stimulation intensities acceptable to the patient.
3. Clean the headphones and patient response switch regularly using a recognized disinfectant.
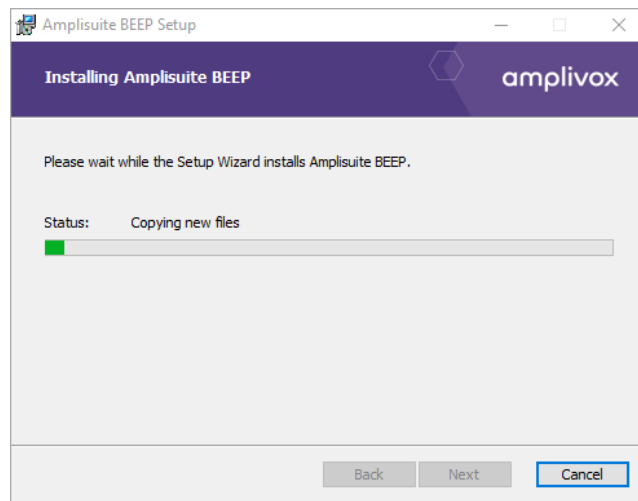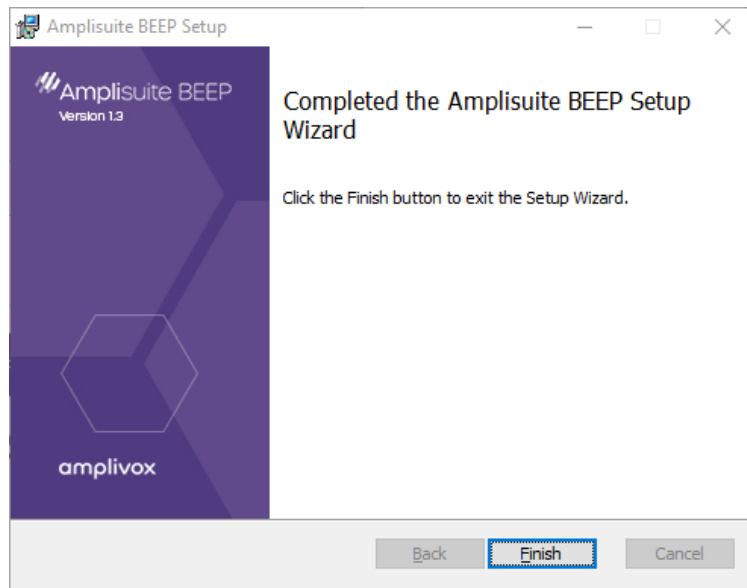4. The presence of tinnitus, hyperacusis or other sensitivity to loud sounds may contraindicate testing when high intensity stimuli are used.

Please note:

Careful handling of the instrument whenever in contact with a patient should be given high priority. Calm and stable positioning while testing is preferred for optimal accuracy.

1. Never clean the transducer housing with water or insert non-specified instruments into the transducer.
2. Do not drop and avoid other undue impact to this device. If the instrument is dropped or in any other way damaged, return it to the manufacturer for repair and/or calibration. Do not use the instrument if any damage is suspected.

4.2. CONNECTING MODELONE

Connect modelONE to the PC or the tablet's USB A or C port.

Please note: If modelONE is not connected, a not connection icon will be displayed at left bottom corner.

4.3. INITIAL START

4.3.1. STARTING AMPLISUITE BEEP

Open Amplisuite BEEP by double-clicking on the shortcut icon on the desktop.

Amplisuite BEEP will start up showing the title screen, as shown below. As indicated, the app is ready to be configured by upload a predefined workflow through the Amplisuite BEEP Editor (please refer to chapter 5) on how to use the editor), enter the settings from the Amplisuite BEEP start screen.

4.3.2. UPLOADING A DEFINITION VIA THE SETTINGS

In order to upload a pre-created definition of the test workflow, enter the Amplisuite BEEP settings by pressing the **GEAR** icon at the bottom right corner of start screen.
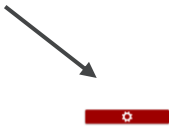
To proceed further, you will need to enter a four digits PIN code and then select **OK**. To go back to title screen press **Cancel**.

 Please note: The default PIN code is "**1234**". Amplivox highly advises to change the PIN code the first time the software is started to avoid the misuse of unauthorised personal. You can also change your PIN code using provided editor (refer to chapter 4.7).

A settings window will open with all available settings. Select **HELP** and then **Import App Designs** to upload your customised workflow. App designs can be created by using the Editor applications (please refer to chapter 5).

Restart the software for the changes to take effect.

Please note: Amplisuite BEEP only supports '.KAD' files generated by Amplisuite BEEP Editor(refer to chapter 5.1). The '.KAD'(Kiosk Application Definition) files are keeping Amplisuite BEEP workflow and design information only.

4.3.3. WORKFLOW TEMPLATES

Amplisuite BEEP also comes with four default workflows in English, French Portuguese and Spanish, pre-installed. These defaults contain a predefined workflow that would perform and guide user through the auto test. These can be found in the folder called **Workflow Templates** on the installation thumb drive.

Please note: These are included for quick start-up out of the box, but the best experience is found once the user creates and implements their own .kads and user flows(refer to chapter 5.4.

The templates are uploaded just like a regular project file.

In the **HELP** menu, select **Import app definition** to upload your preferred template.
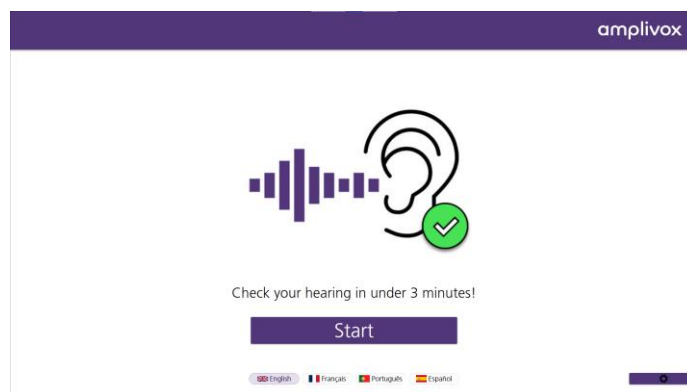
4.3.4. CHANGING THE LANGUAGE

Select **HELP** and find the language settings on the left-hand side.
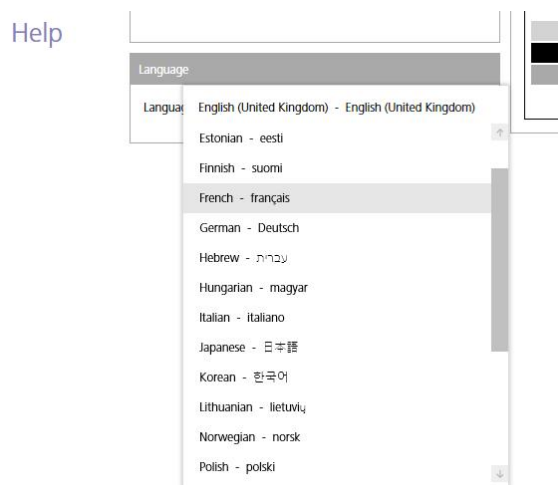
The following languages are available: Chinese (中文), English, Estonian (Eesti), Finnish (Suomalainen), French (Français), German (Deutsch), Hungarian (Magyar), Italian (italiano), Japanese (日本語), Korean (한국어), Lithuanian (Lietuvos), Norwegian (Norsk) Polish (polski), Portugese (português), Romanian (Română), Russian (Русский), Spanish (Español), Turkish (Türkçe), Ukrainian (Український) or Vietnamese (Tiếng Việt).

Select the language you would like to use and confirm the change by clicking **OK**. Restart the software for the changes to take effect.

4.3.5. EXITING THE SETTINGS

To confirm changes and close the settings press **OK**, at the bottom right corner. To go back to title screen press **Cancel**.

4.4. TEST SETTINGS

4.4.1. ABOUT THE SETTINGS

The settings can be defined in two different ways. An overall setting can be created within the Editor application (refer to chapter 5.12), to allow multi-stationary use of identical test setups on different PCs or tablets. If it is required to adjust the settings on the device directly, enter the settings via the Amplisuite BEEP application (refer to chapter 4.3.2). Changes performed via the Amplisuite BEEP application settings will not have an impact on the actual project file.

4.4.2. AUTO-TEST SETTINGS

ITEM	DESCRIPTION	DEFAULT
Selected Ears:	Select which ear will be tested during auto-test.	Both
Step Level:	Sets level steps by which the test tone will increase during the auto-test.	10dB
HW Test Method:	Change if hearing thresholds will be determined based on 2 out of 3 or 3 out of 5 method.	2of3
Stop If No Response Given:	Stops auto-test if patient does not give any response to one frequency of auto test.	No
Show Tested Frequency:	Displaying test frequency during a measurement.	Yes
Retesting 1 kHz:	Retest 1kHz in the middle of the test, to check if the results are consistent. Second result is shown on audiogram.	Yes
Test Starting Level:	Tone level that will be presented at the beginning of the test. Values are selectable between 0-70dB.	30dB
Repeat Frequency:	Number of retries for each test frequency if no threshold is determined.	1
Minimal Threshold:	Hearing threshold level that will stop the test.	0
Maximum Test Level	Test level that won't be exceeded during auto test	60dB

Acceptable Noise Level:	Level of environmental noise that will pause the test. Can be set to OFF.	85dB
Frequencies:	What frequencies will be tested during the auto-test.	0.25, 1, 2, 4, 8kHz
Pulse:	Select if auto test will be performed with continuous or pulse tone.	No

4.4.3. PASS AND REFER CONDITIONS

In auto-test settings you can set up your hearing test pass conditions. For each of the frequency used in a test you can set **Pass Level** between -10 and 70dB or set to **No limit**, if you don't want to use the frequency as Pass condition.

Additionally you can set how many passed frequencies is required to see test as pass.

4.5. MAILBOX

In the mailbox settings the e-mail address can be defined to be used to receive the client's test results. Depending on your email account, you will have to choose on how to enter your details.

REGULAR: This option requires the smallest amount of set up.

- In **E-mail address** enter e-mail address you would like to get test results on.

ℹ️ **Please note:** When using **REGULAR** option, both you and your patient will get test results from *yourBEEPresults@amplivox.com* email address.

PERSONALIZED: Use this setup if your e-mail address is using @outlook.com, @gmail.com, @yahoo.com or @aol.com.

- In **Username** enter your username and select the domain that is being used. In **Password** field enter password to your e-mail.
- Select **Delete**, if you want to delete the added e-mail. Select **Cancel** if you want to discard the changes. Select **OK** if you would like to confirm the changes. After pressing **OK,** the application will check if the entered e-mail and password are correct.

EXAMPLE:

If your e-mail address is Amplisuite@gmail.com and its password is "Amplivox", in **Username** field please enter "Amplisuite", then press on domain name to select @gmail.com as the domain. Below enter "Amplivox" as the password.

When using **PERSONALIZED** option your patient will get test results from your e-mail address.

ℹ️ **Please note:** Depending on your mailbox settings you may not be able to use your **regular password**! You will need to use **safe password** instead. For more information refer to **Appendix A – E-mail Safe Password Generation** .

PERSONALIZED ADVANCED: Use the advance settings if your e-mail address is using a domain that isn't listed in the simple mode.

- **Username** and **Password** fields work the same way as in the SIMPLE mode, as described above.
- In ADVANCED mode you also need to add the **Smtp server**, **Port** and select if you want to use **SSL**.
- **Delete**, **Cancel** and **OK** buttons work the same way as in SIMPLE mode, as described above.

When using **PERSONALIZED ADVANCED** option your patient will get test results from your e-mail address.

Please note: Amplivox Ltd. nor any of our partners will use or collect your e-mail data. Entered usernames and passwords will be only used to send test results to you and your patients.

4.5.1.1. ADDIONAL E-MAIL RECIEVERS
If your organization requires it you can add additional recipiens of client's test results.

To add new recipient enter his e-mail address and press **Add**. If additional e-mail recipient was added correctly, messege will be displayed.

If added e-mail will be incorect, additional reciepent won't be added and other message will be displayed.

List of all added reciepents will be dislpayed in table below.

To remove one of the additional recipients, press '-' button next to reciepent e-mail. If additional e-mail recipient was removed correctly, messege will be displayed.

Please note: Only e-mail address set in general mailbox setting(refer to chapter 4.4.3) will be used as e-mail sender and it will be only e-mail your customer will see.

4.6.   PDF SETTINGS

4.6.1. PRINTOUT SETTINGS

In the PDF settings the test results printout can be defined. These will be the PDFs shared with the client taking the test. Add and edit the printout header, upload a custom logo, and additional information, you would like to show on the printout towards your client.

Three different print out options are available: A **simple** printout to be send of the client, a **regular** one to be used by the professional and you can add your own **custom** PDF. Both printouts can be modified to a certain extent.

Advance printout:

The following information is given: customisable header, additional information and logo, as well as the full patients audiogram.
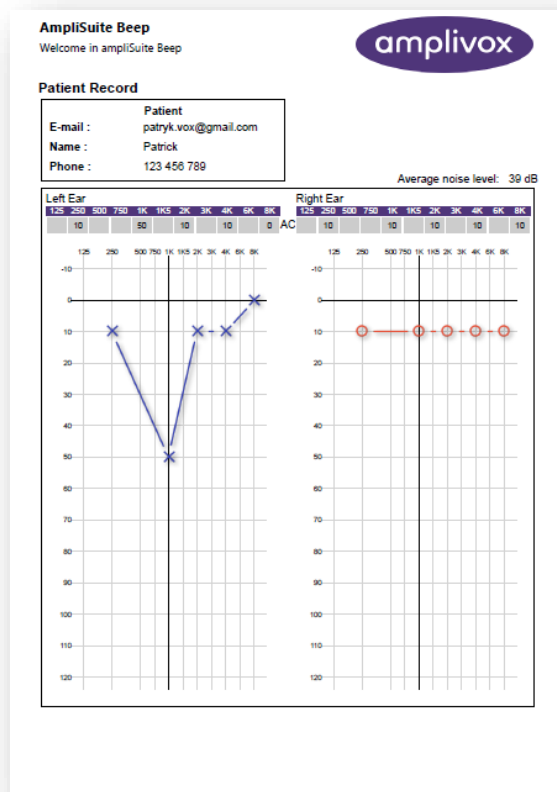
Simple printout: The following information is given: customisable header, additional information and logo and a short text summary. The text entered and shown on the summary is customisable depending on the overall outcome of the test (pass and refer).
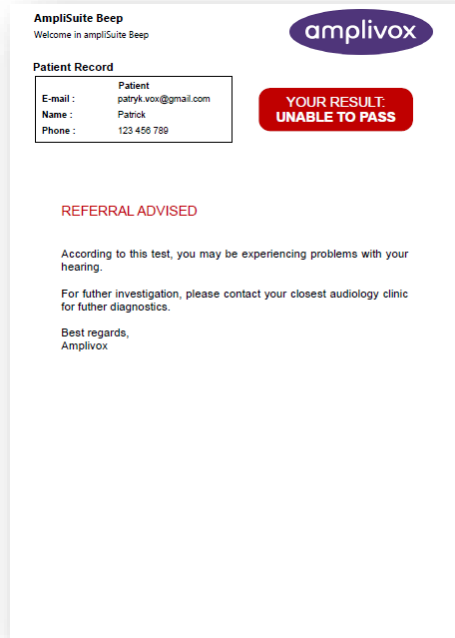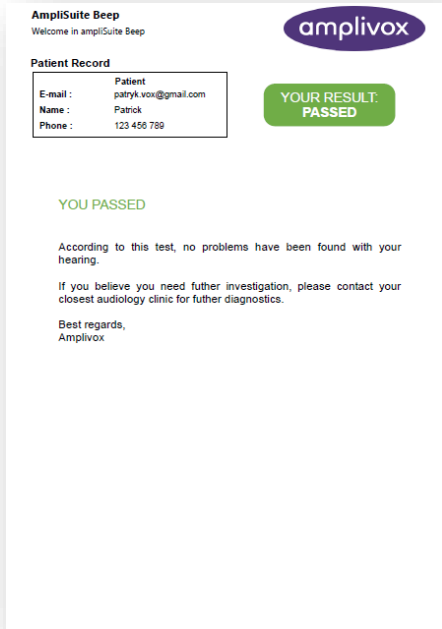
Custom printout: Using this option you can upload your own created PDF's that will be sent to the patient, depending on the test outcome (pass or refer).
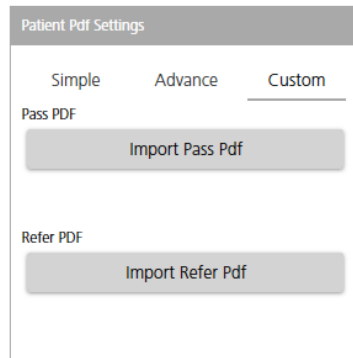
4.6.2. E-MAIL CONTENT SETTINGS

The E-mail containing the clients results shared with the test subject can be customised. Enter the PDF settings where the subject of the email can be defined as well as the body text of the email shared. If you set **Use custom contents** to OFF, the default e-mail will be sent to customer.
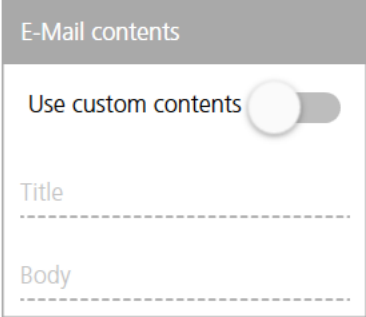
4.6.3. OTHER PDF SETTINGS

All additional PDF settings can be can be found under **Other**.
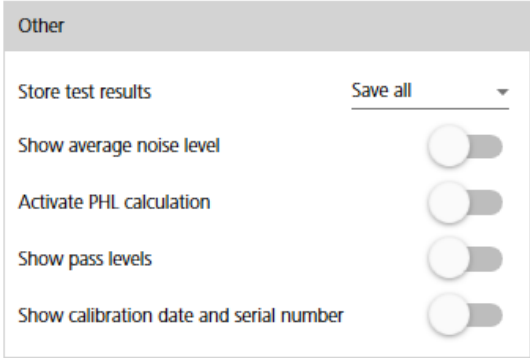
Please note: All described in this sub-chapter settings are only affecting Advance printout version unless stated otherwise.

4.6.3.1. STORING PDF

When a test is conducted, the test results are both shared with the client and the operator via email. In addition to this, the operator can decide what happens with the test files and if they should be stored on the PC or not. This is particularly important when no internet connection is present and the results are stored locally on the PC.

In the PDF settings you can select which PDFs will be stored. You can store **All**, **only un-send ones**, or **none.**

Other		Other	
Results Retention Method Save unsent ▽		Results Retention Metho	Don't save
			Save all
			Save unsent
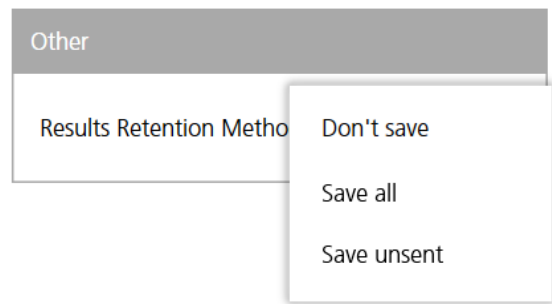
All created PDF's are stored in the **user documents** folder. The folder is called **Amplivox**. Inside the folder you will find the **advance printouts** (refer to chapter 4.6)of all performed tests. The test date and patient surname is used as the PDF name.

Please note: All PDF's are password protected(refer to chapter 4.7.5). The password is the PIN code which was used is identical to the settings PIN of your BEEP application. Please note that the PIN is related to the test date (refer to chapter 4.3.2), so if the PIN is changed afterwards, the older PIN used before is still valid for entering the test PDF's.

4.6.3.2. PERCENT HEARING LOSS
Select **Active PHL calculation** to have PHL displayed on your test results.
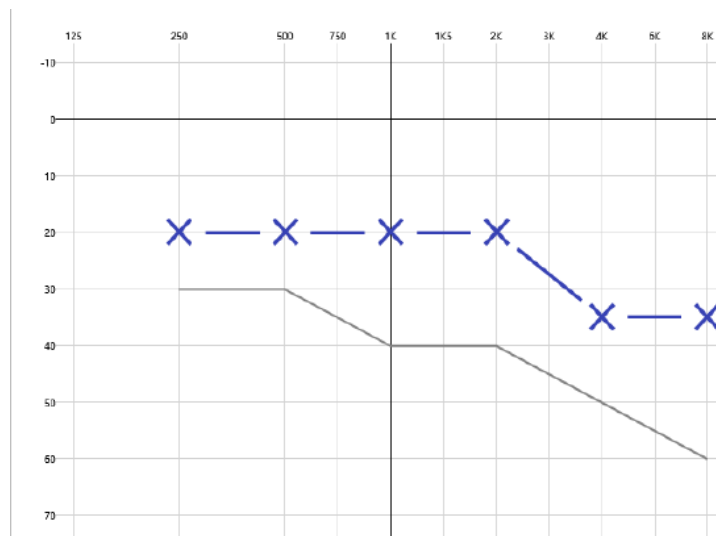
4.6.3.3. AVERAGE NOISE LEVEL
Select **Show avrage noise level** to have avrage noise level, detected during test displayed on your test results.

4.6.3.4. PASS LEVELS
Select **Show pass levels** to have auto test pass criteria displayed on your test results in form of gray line.

4.6.3.5. CALIBRATION DATE AND MODELONE SERIAL NUMBER

Select **Show calibration date and serial number** to have your modelONE information displayed on your test results header.

```
┌─────────────────────────────────────┐
│            Device info              │
├─────────────────────────────────────┤
│  Calibration date: 19.11.2020       │
│  Serial no: 352567321               │
└─────────────────────────────────────┘
```

Please note: ModelONE calibration date and serial number will not be shown on printout sent to patients, even if Advance option is selected(refer to chapter 4.6.1)

4.7.   HELP SETTINGS

4.7.1. LANGUAGE

In the **Help** menu the language can be changed, as described in chapter 4.3.4.

Also, the manual can be found here.
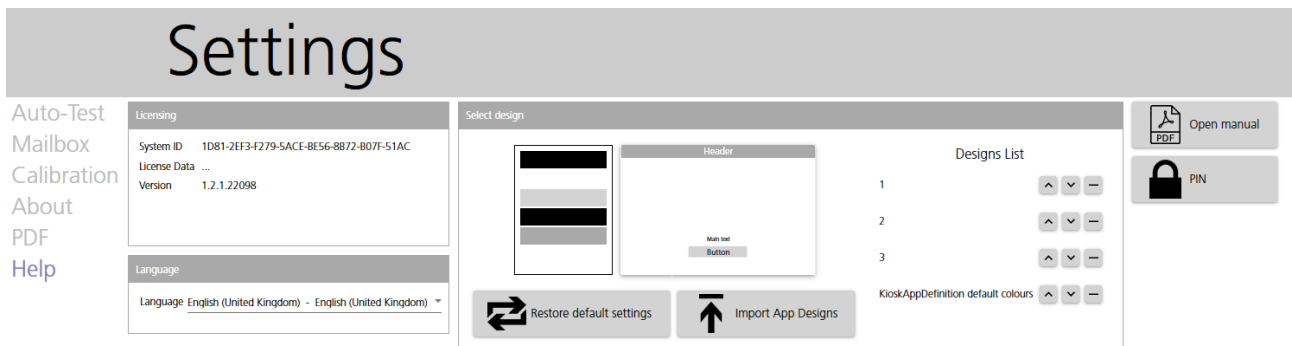
4.7.2. DEFAULT WORKFLOWS

Amplisuite BEEP comes with three different colour pallet workflows, pre-installed. To change the workflow and colour please select one of the numbers on **Designs list** menu in **HELP** menu.

Please note: These are only colour suggestions and will overwrite an already uploaded workflow. The three different workflows are described in chapter 4.3.3.

4.7.3. IMPORTING WORKLFOW DESIGNS

To upload new workflow designs select **Import App Designs** button. Then select your workflow from file manager. Selected workflow will be displayed on **Design List**.

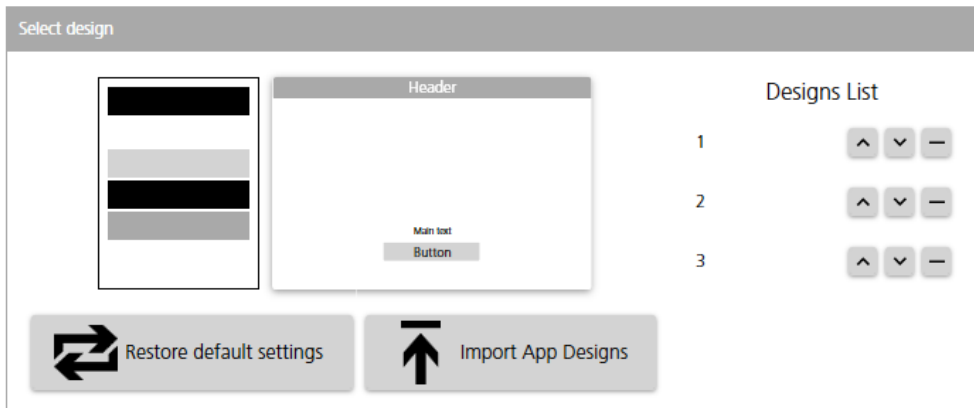**Please note:** Amplisuite BEEP only supports '.KAD' files generated by Amplisuite BEEP Editor(refer to chapter 5.1). The '.KAD'(Kiosk Application Definition) files are keeping Amplisuite BEEP workflow and design information only.

4.7.4. DESIGN LIST

With **Design List** you can manage your workflows. Use **arrow buttons** to select design workflows order. Use "-" to remove workflow.

All uploaded workflows will be selectable from main screen.

This hearing test will assess your hearing in under five minutes and give you an indication of how well you hear.

Check my hearing

Please note: You can adjust workflow name and add picture in Workflow Design Editor.

4.7.5. PIN SETTINGS

You can change PIN as well as select if it will be required to enter it when entering a settings or opening PDF.

4.7.6. RESTORING DEFAULT SETTINGS

All settings can be reset to default with **Restore default settings** button.
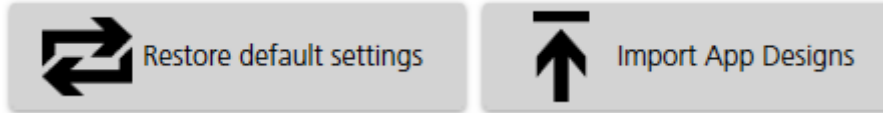
4.8. ABOUT

In the **About** section useful information about Amplivox can be found. You can contact Amplivox directly via email or access our website.

4.9. CALIBRATION

In **Calibration** section you can see your modelONE calibration date. You can also set calibration due date reminder.

4.10. CLOSING AMPLISUITE BEEP

To close Amplisuite BEEP enter the **SETTINGS**. The **EXIT** button is at the bottom left hand corner of the screen.

Settings

amplivox

Auto-Test
Mailbox
About
PDF
Help

Selected ears

Left   Right   Both

Step level

5 dB   10 dB

HW test method

2 of 3   3 of 5

Stop test when no response given

No   Yes

Show tested frequency

No   Yes

Retesting 1kHz

No   Yes

Test starting level

30

Repeat frequencies

Don't repeat

Minimal threshlod

10

Acceptable noise level

70

Import app definition

Frequencies

125
250   ✔
500   ✔
750
1000   ✔
1500
2000   ✔
3000
4000   ✔
6000
8000   ✔

Exit

Ok   Cancel

After pressing the **EXIT** button, a popup window will appear. Press **EXIT** to close Amplisuite BEEP without saving the changes or **SAVE & EXIT** to close Amplisuite BEEP with all changes saved. Press **CANCEL** to return to the **SETTINGS**.

Do you want exit and save settings?

Exit   Save & Exit   Cancel

5. USING THE EDITOR

5.1. ABOUT THE EDITOR

Amplisuite BEEP editor allows you to customise the graphical design of the application to your needs and create your preferred workflow of your self-referral application.
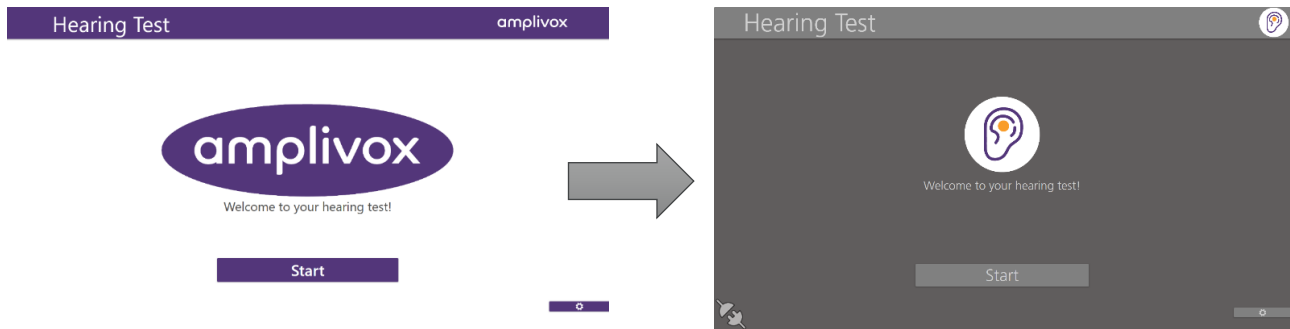

5.2. OPEN THE EDITOR

To start work with the editor, please double click editor icon called **Amplisuite BEEP Editor** on the installation thumb drive. You can now create a new customised design, or update/change an already existing design.

5.3. STARTING A NEW PROJECT

When the editor opens an empty screen will be shown. To start a new project, select **FILE**, then select **NEW**.
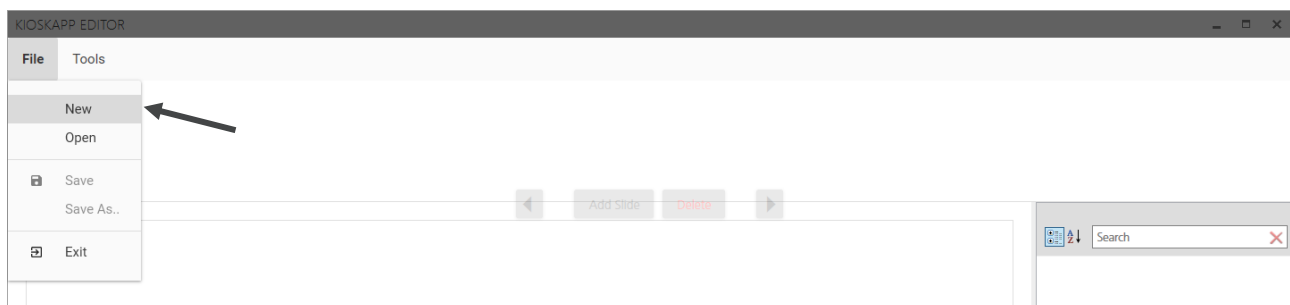
5.4. EDITING EXISTING PROJECTS

To open one of the already existing projects, select **FILE**, then select **OPEN**.

Please note: You can find some prepared by Amplivox default (see design suggestions in chapter 4.3.3) projects in the **Workflow Templates** folder on the installation thumb drive. You can find more projects on the Amplivox website.

5.5.   SLIDE TYPES

Start Slide: Will always be set as a first slide. You can add your company logo and short text in the middle on the screen. Contains one editable button and the **SETTINGS** button.

Please note: The Start Slide will be automatically added to every project and cannot be moved around.
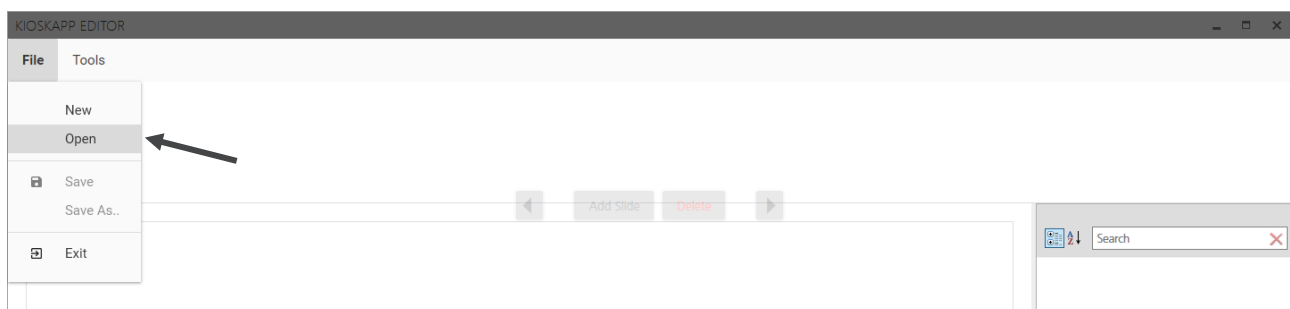
Text Slide: Is used to provide information to the client. Longer text can be edited there. Contains one editable button.

Picture Slide: Is also used to provide information to the client. You can add picture and text there. You align picture to be shown on left, centre or right side of the screen.

HeaderLeftText HeaderMiddleText

amplivox   MainText

↩   ButtonForwardText
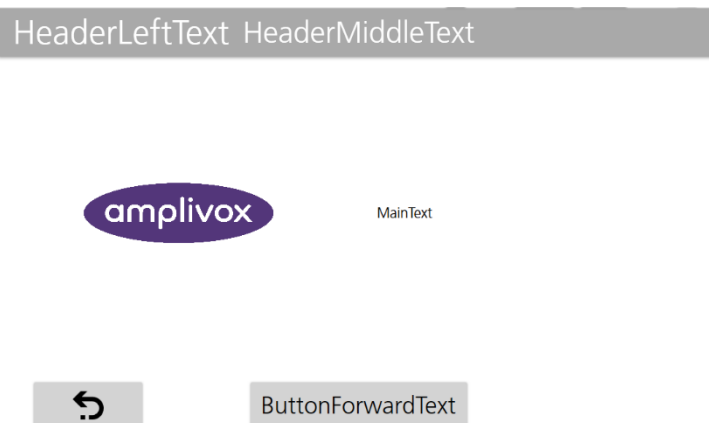
Patient Form Slide: Is used to gather patient information. To change what data is gathered, please refer to chapter 5.9.

HeaderLeftText HeaderMiddleText

MainText

Name _____

Surname _____

E-mail _____
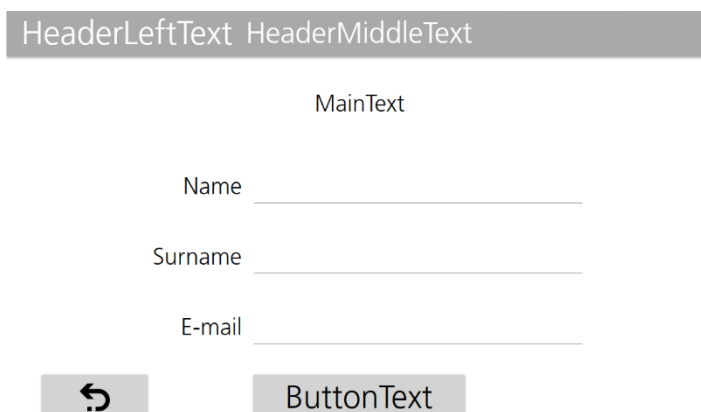
↩   ButtonText

Questionnaire Slide: Is used to ask patient predetermined questions. You can add up question and up to three answer containing buttons. All questions and patient answers will be printed on test results.

HeaderLeftText HeaderMiddleText

Question

| Answer1 | Answer2 | Answer3 |

↩

Test Slide: Is used to perform the audiometric test (refer to chapter 6). You can add short text and edit the **patient response** button. This slide also contains information about the tested ear and frequency (if specified in the settings, refer to chapter 4.4) and the auto test progress bar.

HeaderLeftText HeaderMiddleText

Press button when you hear a tone

I can hear

Left Ear

↩

Please note: It is strongly suggested to add only one Test Slide to the project.

Audiogram Slide: Is used to show test results to the patient in form of audiogram. Contains one editable button.

Please note: Since you need test data to present audiogram, you can't add Audiogram Slide until you add Test Slide. Similarly you can't move it to be presented before Test Slide.
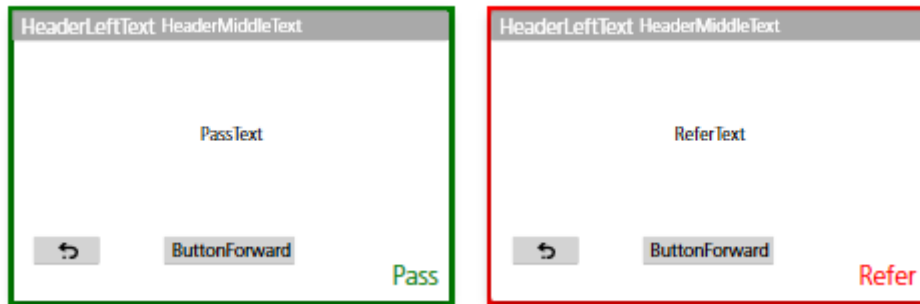
HeaderLeftText HeaderMiddleText

Question

| Answer1 | Answer2 | Answer3 |

↩

Pass/Refer Slide: Is used to show patient message dependently if the test is passed or not. When selecting two slides will be added. Pass slide will be only displayed if the test is passed, refer slide only if not(refer to chapter 4.4.3).

Please note: Since you need test data to determine if the test is passed, you can't add Pass/Refer Slide until you add Test Slide. Similarly you can't move it to be presented before Test Slide.

End Slide: This slide will always be set as the last slide. You can add text to the middle of the screen. The slide also contains the editable test finish button.

Please note: The End Slide will be automatically added to every project and cannot be moved around.
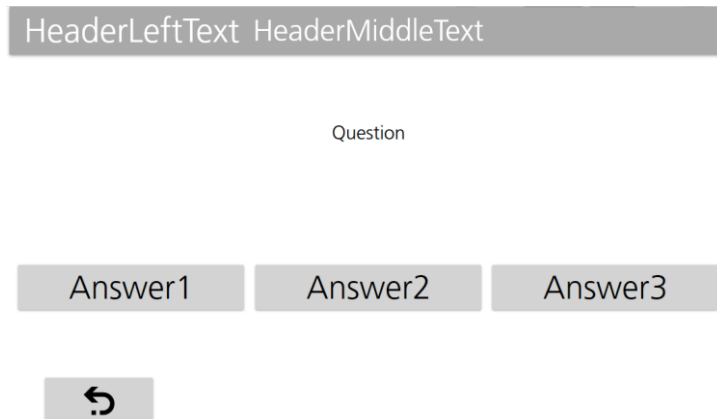
5.6. ADDING A NEW SLIDE

To add a new screen, please select **ADD SLIDE** on the top bar, then choose which kind of slide to add. As a selection is made, a new preview slide will appear in the top navigation bar behind the currently selected slide.
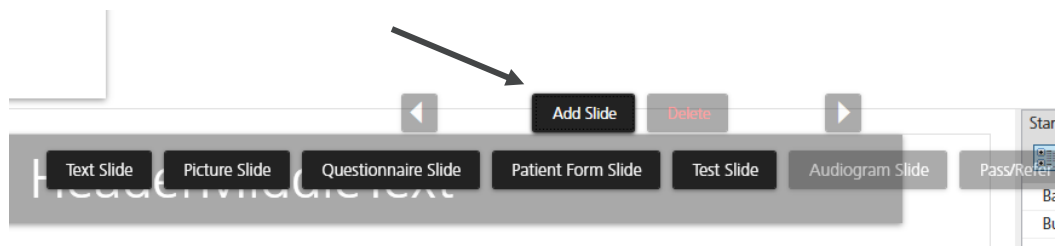
Please note: Start Slide and End Slide will be automatically added to every project and cannot be moved.

5.7.   SELECTING A SLIDE

To select the slide you would like to work on, please click on one of the small preview screens in the top navigation bar. The selected slide will be highlighted by a light grey frame. The selected slide will then show in the editor area.
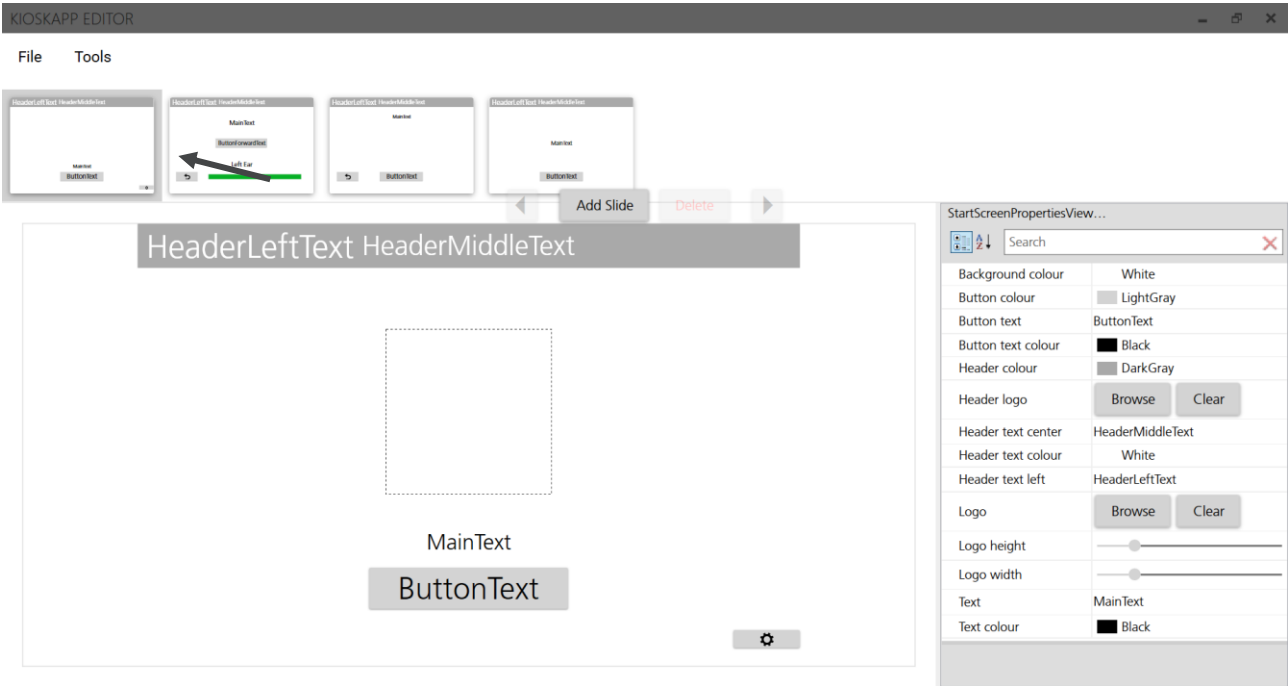
5.8.   EDITING A SELECTED SLIDE (PROPERTIES TABLE)

To edit the current selected slide please use the **PROPERTIES TABLE** at the right side of the screen.

Depending on the slide selected you can change the following settings:

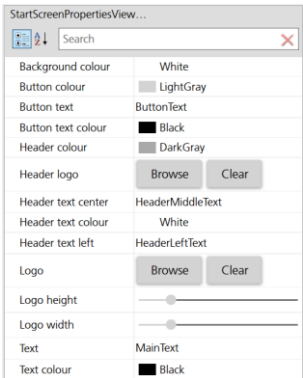| ITEM	DESCRIPTION
Text colour:	Changes the main screen text colour.
Button text:	Changes the text on the screen button.
Header text left:	Changes the text on the left side of the header.
Header logo:	Selecting the logo that will appear in the header.
Header text center:	Changes the text at the centre of the header.
Logo:	Selecting the logo that will appear on the main screen.
Logo height/width	Changing area where logo will appear.
Text:	Changes the text on the main screen.
Background colour:	Changes the colour of the main screen.
Button colour:	Changes the colour of the buttons.
Button text colour:	Changes the colour of the button text.
Header colour:	Changes the colour of the header.
Header text colour:	Changes the colour of the header text.

Please note: Colour changes will be applied to every slide in the project. Text changes are adjusted only on the selected slide.

5.9.   ADDING AND EDITING PATIENT INFORMATION DATA

To add/edit what data will be gathered from the patient, please select **Patient Form Slide**. Then select the **Patient information** field from **PROPERTIES TABLE**.
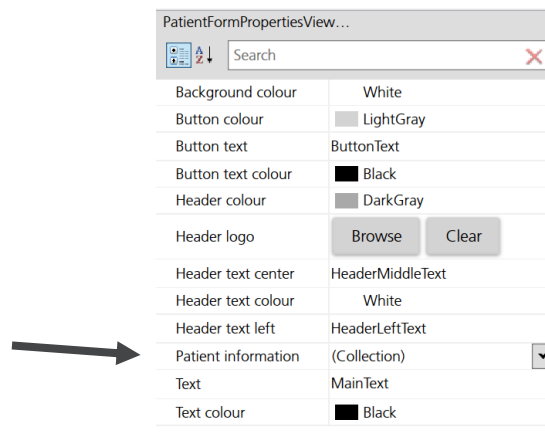
If the **Patient information** field is selected, a new window will open called **Collection Control**.
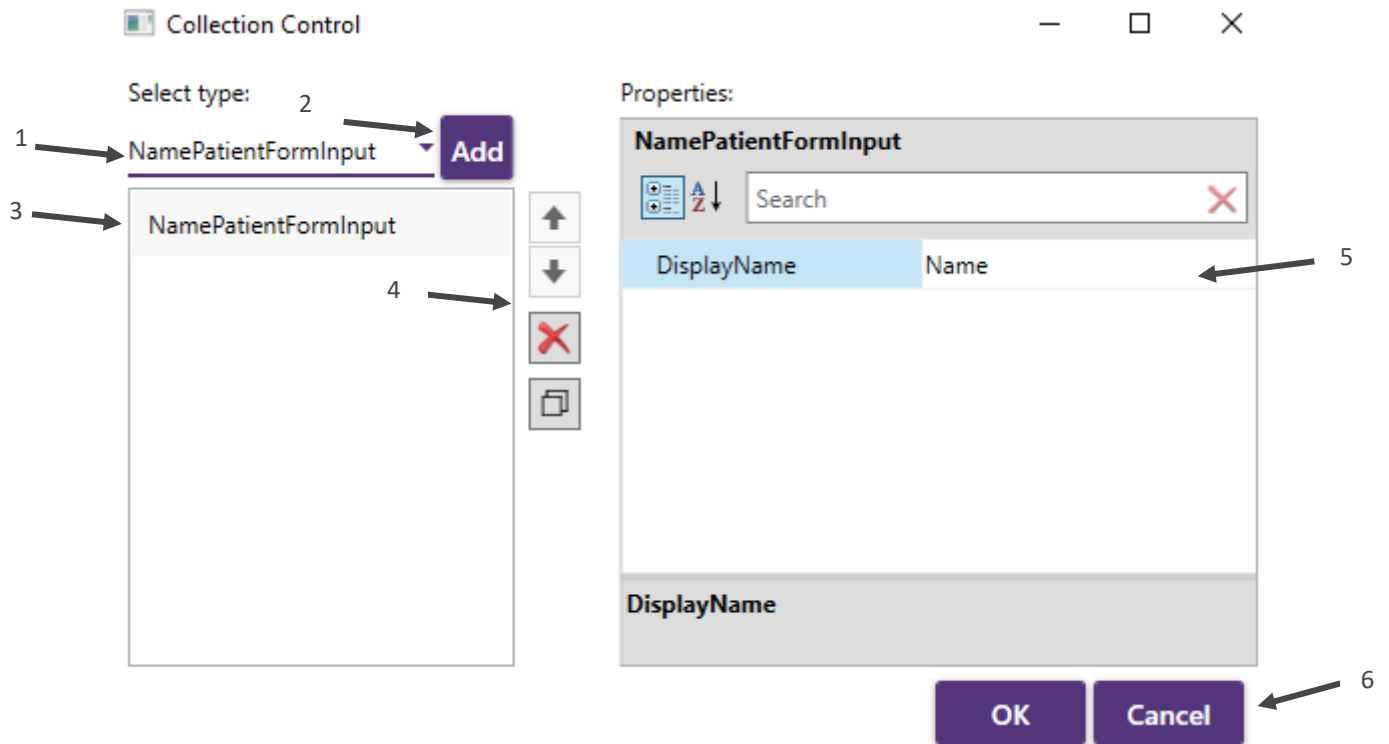
1. Select the type of field you want to add. Selectable fields are:

   Name: Data entered here will be displayed as name on the **PDF** created (refer to chapter 4.6).

   Surname: Data entered here will be displayed as surname on the **printout** (refer to chapter 4.6).

   Phone: Data entered here will be displayed as phone number on the **printout** (refer to chapter 4.6).

   Mail: Printout will be sent to email address added here.

   Custom: Field that can be fully customised. Will not be displayed on the printout.

2. Adding selected field.
3. Selecting added field.
4. Changing field order, deleting and copying fields.
5. Editing field description, displayed on the slide.
6. Press OK to confirm changes, Cancel to edit further.

When **MailPatientFormInput** is selected you can also edit **Help Message**, that will be displayed when the **"?"** button is pressed (refer to chapter 5.9).

Please note: It is strongly suggested to add only one **NamePatientFormInput**, **SurnamePatientFormInput**, **PhonePatientFormInput**, **MailPatientFormInput** to the slide.

5.10. DELETING A SLIDE

To delete one of the slides, please select the slide you want to delete, then press **DELETE** button on the top bar and confirm by pressing **Delete** again, or press **Cancel** to cancel the operation.
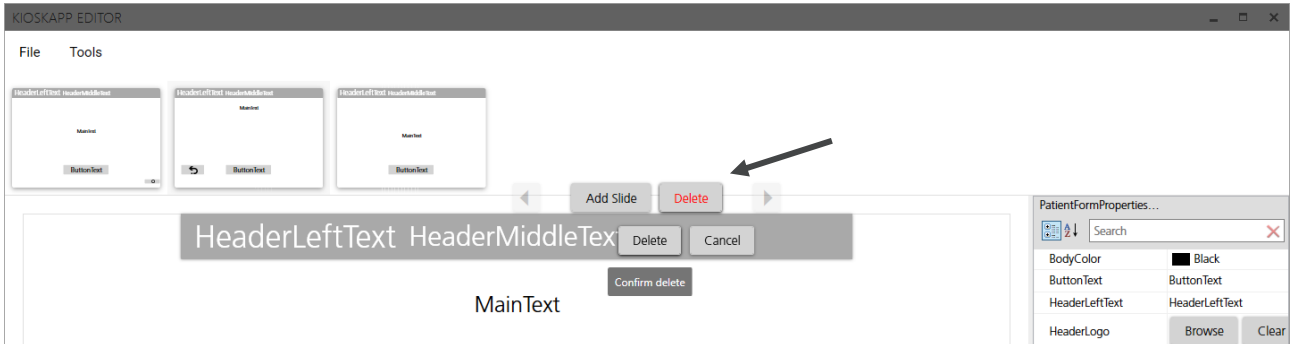
Please note: You cannot delete a Start or End Slide.

5.11. CHANGING THE SLIDE ORDER

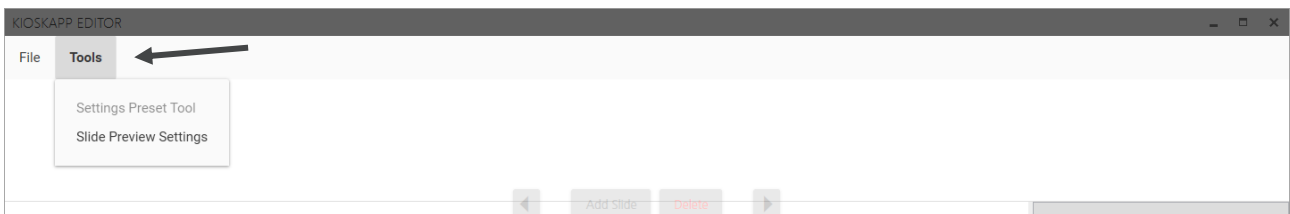To change the order of the slides, please select the slide you want to move, then press on one of the arrow keys on the top bar.
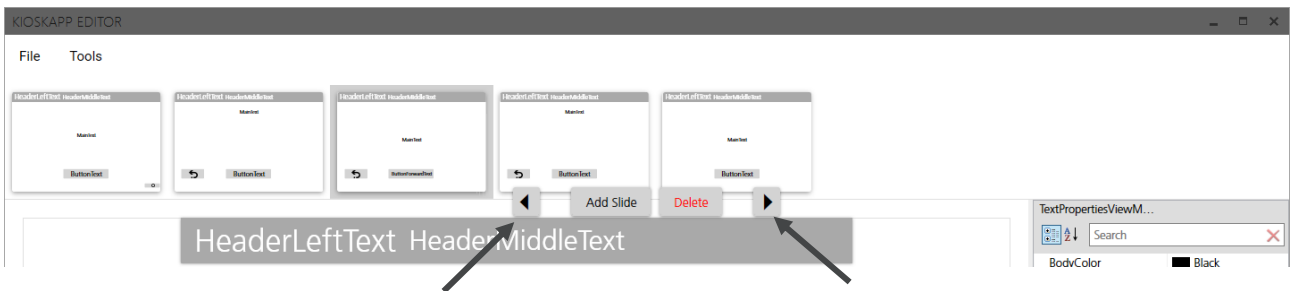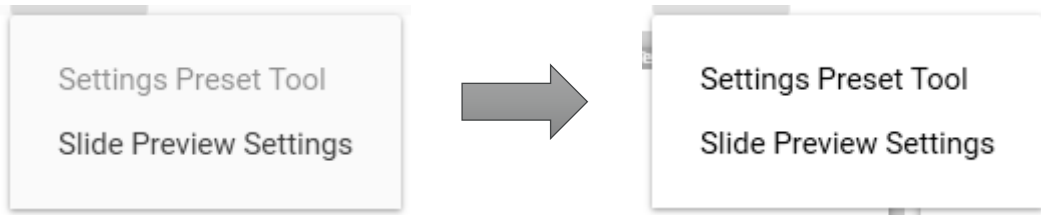

5.12. TOOLS MENU

To access tools menu please select **TOOLS** in the top bar. From here you can define the test settings and the resolution of the Amplisuite BEEP application.

Please note: You can't enter the Settings Preset Tool, until you start or load project.

Settings Preset Tool: Allows you to set the overall default settings for the customized hearing test which will be stored in the created application design. The created file can then easily be uploaded to any tablet running the Amplisuite BEEP application and thereby allow a multi-stational use of the specifically created hearing test workflow.

Please note: It is possible to modify the test settings directly in the Amplisuite BEEP application as well (refer to chapter 4.4). These changes however will only impact the specific device the application is run on and not the created project files.
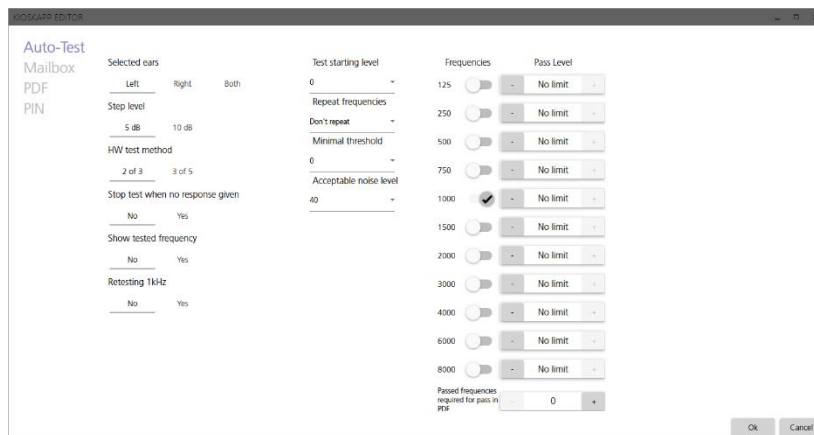
PIN settings: In PIN settings you will be allowed to change workflow PIN, select if it should be required when entering settings or opening received PDFs, but also add picture and name to your workflow, that will be displayed on main screen button(refer to chapter 4.7.4).

Slide Preview Settings – Allows you to change the resolution of the Amplisuite BEEP application. The settings defined here will also have an impact on the preview function in the Editor application.

5.13. SAVING THE PROJECT

To save changes to the project select **FILE**, then select **SAVE** or **SAVE AS..**

SAVE: Will update changes to the currently selected project.

SAVE AS..: Will save changes as a new project.

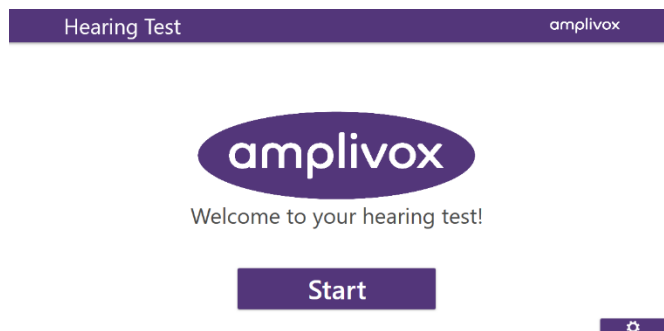**Please note:** Project will be saved as '.KAD' file. The '.KAD'(Kiosk Application Definition) files are keeping Amplisuite BEEP workflow and design information only.

5.14. CLOSING THE EDITOR

To save changes to the project select **FILE**, then select **EXIT** or press "**X**" symbol in top right corner.

6. CONDUCTING A TEST (EXAMPLE)

To start an auto-test press **START** on the home screen.

On the next screen add your data and press **NEXT**.

Press the "**?**" button to get additional information about personal data usage.

Please note: Entered data will only be used to send an e-mail with the test results to the client, as well as the owner of Amplisuite BEEP. Amplivox Ltd. nor any of our partners will use or collect client data.

On the next screen get acquainted with the information, put the headphones on and press **Understand**.

Hearing test	amplivox
Name	
Surname	
E-mail	
Phone	
ButtonText	

Hearing Test	amplivox

Please put the headphones on, with blue phone on your left ear and red one on your right ear.

Understand

If you are ready press the **START** button to start auto test.

Hearing Test	amplivox

Click start to begin test

START

During the test press "I can hear" button, if you hear a tone. The ear currently being tested will be displayed on the screen. A progress bar will show how much test is remaining.

Hearing Test	amplivox

Click start to begin test

I can hear

Left Ear 0 Hz

To end a test press **FINISH.** The results as well as the contact information will be sent to the entered e-mail addresses.

Hearing Test

Thank you for taking a test. You will get results on your mail.

Finish

7. TROUBLESHOOTING

Please note: Refer to the installation & operating instructions provided with your instrument for details of the data transfer operation and errors that could possibly occur. If a fault cannot be fixed, the operator is cautioned against repeatedly restarting the instrument.

PROBLE,	CAUSE	SOLUTION(S)
Instrument doesn't connect.	• USB connection unstable	• Disconnect and then connect back the instrument • Check USB connection in both instrument and PC • Ensure cable is in good working order
Calibration error "Cal Error #16"	• You are using an uncalibrated modelONE • Calibration data expired	• Contact your modelONE distributor

8. ROUTINE MAINTENANCE

8.1.   GENERAL MAINTENANCE PROCEDURES

The performance and safety of the instrument will be maintained if the following recommendations for care and maintenance are observed:

1. It is recommended that the instrument go through at least one annual service, to ensure that the acoustical, electrical and mechanical properties are correct. This should be carried out by an authorised service centre in order to guarantee proper service and repair.
2. Observe that no damage is present to the insulation of the connectors and that it is not exposed to any kind of mechanical load that could involve damage.
3. To ensure that the reliability of the instrument is maintained, we recommend that the operator, at short intervals, for instance once a day, performs a test on a person with known data.
4. If the surface of the instrument or parts of it are contaminated, it can be cleaned using a soft cloth moistened with a mild solution of water and detergent or similar. Always disconnect the mains power adaptor during the cleaning process and be careful that no fluid enters the inside of the instrument or accessories.
5. After each patient examination, ensure that there has been no contamination to the parts touching the patient. General precautions must be observed in order to avoid cross-contamination of disease from one patient to another. Water should be used for frequent cleaning, but in the case of severe contamination it may be necessary to use a disinfectant.

⚠️ CAUTION

- Before cleaning always switch off and disconnect from the power supply
- Use a soft cloth lightly dampened with cleaning solution to clean all exposed surfaces
- Do not allow liquid to come in contact with the metal parts inside the earphones/headphones
- Do not autoclave, sterilise or immerse the instrument or accessories in any fluid
- Do not use hard or pointed objects to clean any part of the instrument or accessories
- Do not let parts that have been in contact with fluids dry before cleaning
- Rubber ear-tips or foam ear-tips are single use accessories

Recommended cleaning and disinfection solutions:

- Warm water with mild, nonabrasive cleaning solution (soap)
- 70% isopropyl alcohol only on hard cover surfaces

8.2.   CLEANING THE MODELONE

⚠️ CAUTION

- Use caution while cleaning.
- Before cleaning, remove the modelONE from the computer or tablet.
- Do not allow any liquid to enter any part of the instrument or accessories.
- Do not autoclave or sterilise the instrument or any accessories.

- Do not use hard, sharp or pointed objects to clean any part of the instrument or an accessories.
- If parts have been in contact with fluids do not allow them to dry before cleaning.
- Follow local best practice and safety guidelines if available.
- Clean the instrument by wiping the outer case with a lint free cloth lightly dampened with cleaning solution. Recommended cleaning and disinfection solutions are warm water with mild, nonabrasive cleaning solution (soap) and/or Clinical wipes (for example Clinell Universal).
- If disinfection is required, use a disinfectant wipe rather than a spray product. Make sure that excess liquid from the wipe does not seep into any sensitive areas such as connectors and seams where plastic pieces connect on the modelONE. Follow the instructions on the disinfection product.

8.3. CLEANING THE ACCESSORIES

8.3.1. TRANSDUCER MAINTENANCE

Before use check the transducer cables and connectors for signs of wear and/or damage. If you find any, please replace the item immediately by contacting Amplivox or your Amplivox distributor, requesting the relevant part number.

Handle the audiometric headset and other accessories with care. For parts that are in direct contact with the patient it is recommended that replacement parts are used or the parts are subjected to a standard disinfecting procedure between patients.

This includes physically cleaning and use of a recognised disinfectant. The specific manufacturer's instructions should be followed for use of this disinfecting agent to provide an appropriated level of cleanliness.

During the cleaning process do not allow moisture to enter the headphone or microphone etc. For specific accessories refer to the sections below.

8.3.2. EARPHONES

Clean the ear cushions with a recognised disinfectant, e.g. a "Mediswab" or "Clinell".

8.4. ACCESSORIES/REPLACEMENT PARTS

Some reusable accessories are subject to wear with use over time. We recommend that you keep stock of these replacement parts.

8.5. REPAIR

Amplivox Ltd is only considered to be responsible for the validity of the CE marking, effects on safety, reliability and performance of the equipment if:

- assembly operations, extensions, readjustments, modifications or repairs are carried out by authorised persons
- a 1 year service interval is maintained
- the electrical installation of the relevant room complies with the appropriate requirements, and
- the equipment is used by authorised personnel in accordance with the documentation supplied by Amplivox Ltd.

It is important that the customer (distributor) fills out a returns form and emails it to support@amplivox.com.

This should be done every time an instrument is returned to Amplivox Ltd.

When packing the instrument for shipping, please use the original shipping carton and packing materials. Place the instrument parts in plastic bags before packing to prevent dirt ingress.

8.6. WARRANTY

Amplivox gives the purchaser the following warranty;
If within 3 years from the date of dispatch, any defect in respect of material or workmanship within our control is discovered, we will make good the defect without charge, subject to the following conditions;

- Notice of the fault is given to Amplivox within the warranty period.
- The instrument is forwarded, carriage paid, to Amplivox Limited at the address on the returns form or as otherwise directed.
- Return carriage is free of charge for customers in the UK and chargeable for overseas customers.
- The responsibility of Amplivox under this warranty is strictly limited to making good the defect in the instrument itself.
- No attempt has been made to affect a repair or adjust the calibration or alter the instrument from the original build standard.
- Defects caused by abnormal conditions of use, accident or neglect are expressly excluded.
- Earphones, bone vibrator and other transducers may go out of calibration due to rough handling or impact (dropping). The life of the leads is also dependent upon conditions of use. These parts are only guaranteed against faulty materials or manufacture.

If any product requires service during the applicable warranty period, the purchaser should communicate directly with the local Amplivox Ltd service centre to determine the appropriate repair facility. Repair or replacement will be carried out at Amplivox's expense, subject to the terms of this warranty. The product requiring service should be returned promptly, properly packed, and postage prepaid. Loss or damage in return shipment to Amplivox Ltd shall be at purchaser's risk.

In no event shall Amplivox Ltd be liable for any incidental, indirect or consequential damages in connection with the purchase or use of any Amplivox Ltd product.

This shall apply solely to the original purchaser. This warranty shall not apply to any subsequent owner or holder of the product. Furthermore, this warranty shall not apply to, and Amplivox Ltd shall not be responsible for, any loss arising in connection with the purchase or use of any Amplivox Ltd product that has been:
- repaired by anyone other than an authorised Amplivox Ltd service representative;
- altered in any way so as, in Amplivox Ltd opinion, to affect its stability or reliability;
- subject to misuse or negligence or accident, or that has had the serial or lot number altered; defaced or removed; or
- improperly maintained or used in any manner other than in accordance with the instructions provided by Amplivox Ltd.

This warranty is in lieu of all other warranties, express or implied, and of all other obligations or liabilities of Amplivox Ltd. Amplivox Ltd does not give or grant, directly or indirectly, the authority to any representative or other person to assume on behalf of Amplivox Ltd any other liability in connection with the sale of Amplivox Ltd products.

AMPLIVOX LTD DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FOR FUNCTION OF FITNESS FOR A PARTICULAR PURPOSE OR APPLICATION.

8.7. CALIBRATION AND RETURN OF THE INSTRUMENT

Amplivox recommends that the modelONE is calibrated annually.

Please contact Amplivox or the designated distributor for details of calibration services.

9. TECHNICAL SPECIFICATION

9.1. STANDARD AND REGULATORY

Medical CE mark	The CE mark indicates that Amplivox Ltd meets the requirements of Annex II of the Medical Device Regulation.	
Class	The modelONE Audiometer is classified as a Class IIa device under Annex VIII of the EU Medical Device Regulation.	
Standards and Conformance	Safety:	BS/EN/IEC 60645-1: Electroacoustics – Audiological Equipment – Part1: Pure-tone Audiometers BS/EN/IEC 60601-1-2: Medical Electrical Equipment – Electromagnetic Compatibiieclity: Requirements and Tests BS/EN/IEC 60601-1 and A1 2012 ANSI/AAMI ES60601-1:2005/(R)2012: Medical Electrical Equipment – General requirements for basic safety and essential performance
	Performance:	Type 4 (IEC 60645-1:2017 & ANSI S3.6:2018)
Physical	Display:	No
	Dimensions (base unit):	W x D X H: 19.1 x 9.3 x 13.4 cm/ 7.5 x 3.6 x 5.3 inch (excluding connections)
	Weight (Headphones):	389g / 0.86 lbs
Power Supply	Mains power:	15V, 0.5A
	Warm-up period:	None at room temperature
Environmental	Operating temperature:	+15°C to +35°C / + 59°F to +95°F
	Operating humidity:	30 % to 90 % RH (non-condensing)
	Operating atmospheric pressure:	700 hPa to 1060 hPa
	Transport: storage temperature:	-20°C to +70°C / -4°F to +94°F
	Transport and storage humidity:	10 % to 90 % RH (non-condensing)
	Transport and storage atmospheric pressure:	500 hPa to 1060 hPa
Equipment Classification	Type of protection against electric shock:	Powered via SELV Class II mains adapter
	Degree of protection against electric shock:	Type B applied part
	Degree of protection against ingress of water:	Not protected
	Mode of operation:	Continuous operation
	Equipment mobility:	Portable

9.2. AUDIOMETRY

Transducer	Outputs:	USB A or USB C
	Transducer types and reference levels:	DD65v2A: ISO 389-1, Table 3
	Static headband tension:	Headphones: 10 +/-0.5 N

Test Signals	Sound attenuation characteristics:	ISO8253-1, Table 3
	Frequency:	AC: 125Hz, 250Hz, 500Hz, 750Hz, 1kHz, 1.5kHz, 2kHz, 3kHz, 4kHz, 6kHz, 8kHz
	Frequency accuracy:	< 1 %
	Distortion:	< 2 %
	Output level range:	AC: -10dBHL to 120dBHL maximum
	Level step size:	5 or 10dB
	Tone present:	Continuous

9.3. MAXIMUM HEARING LEVELS PROVIDED BY EACH FREQUENCY

FREQUENCY [HZ]	AIR CONDUCTION [DB HL]
125	85
250	105
500	115
750	115
1000	120
1500	120
2000	120
3000	120
4000	120
6000	105
8000	100

9.4. EARPHONE SOUND ATTENUATION CHARACTERISTICS

FREQ [HZ]	125	250	500	1000	2000	4000	8000
ATTENUATION [DB]	8.3	15.5	26.1	32.4	43.6	43.8	45.6

10. EMC GUIDANCE & MANUFACTURER'S DECLARATION

⚠️ CAUTION

- This instrument is suitable in hospital environments except for near active HF surgical equipment and RF shielded rooms of systems for magnetic resonance imaging, where the intensity of electromagnetic disturbance is high
- Use of this instrument adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this instrument and the other equipment should be observed to verify that they are operating normally
- Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation. The list of accessories, transducers and cables are listed in chapter 1.4.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of this instrument, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result

NOTICE

- ESSENTIAL PERFORMANCE for this instrument is defined by the manufacturer as:
  This instrument does not have an ESSENTIAL PERFORMANCE. Absence or loss of cannot lead to any unacceptable immediate risk.
- Final diagnosis shall always be based on clinical knowledge
- There are no deviations from the collateral standard and allowances uses
- This instrument is in compliance with IEC60601-1-2:2014, emission class B group 1
  NOTICE: There are no deviations from the collateral standard and allowances uses
  NOTICE: All necessary instruction for maintaining compliance with regard to EMC can be found in the general maintenance section in this instruction. No further steps required.

Guidance and manufacturer's declaration – electromagnetic emissions		
The modelONE Audiometer is intended for use in the electromagnetic environment specified below. The customer or user of the modelONE Audiometer should assure that it is used in such an environment.		
Emissions test	**Compliance**	**Electromagnetic environment – guidance**
RF emissions CISPR 11	Group 1	The modelONE Audiometer uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The modelONE Audiometer is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacturer's declaration – electromagnetic immunity (1)			
The modelONE Audiometer is intended for use in the electromagnetic environment specified below. The customer or user of the modelONE Audiometer should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment – guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the modelONE Audiometer requires continued operation during power mains interruptions, it is recommended that the modelONE Audiometer be powered from an uninterruptible power supply or a battery
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE U_T is the a.c. mains voltage prior to the application of the test level			

| Guidance and manufacturer's declaration – electromagnetic immunity (2)			
The modelONE Audiometer is intended for use in the electromagnetic environment specified below. The customer or user of the modelONE Audiometer should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the modelONE Audiometer, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended separation distance
			$d = 1.2\sqrt{P}$
			$d = 1.2\sqrt{P}$ 80MHz to 800MHz
			$d = 2.3\sqrt{P}$ 800MHz to 2.5GHz
			where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).
Conducted RF IEC 61000-4-6	3 Vrms 150kHz to 80MHz	3 Vrms	Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range. [b]
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2.5GHz	3 V/m	Interference may occur in the vicinity of equipment marked with the following symbol:
NOTE 1 At 80MHz and 800MHz, the higher frequency range applies.			
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
a Field strengths from fixed transmitters, such stations for radio (cellular as base /cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the modelONE Audiometer is used exceeds the applicable RF compliance level above, the modelONE Audiometer should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the modelONE Audiometer.			
b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Recommended separation distances between portable and mobile RF communications equipment and the modelONE Audiometer			
The modelONE Audiometer is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the modelONE Audiometer can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the modelONE Audiometer as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = 1.2\sqrt{P}$	80 MHz to 800 MHz $d = 1.2\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer. NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

APPENDIX A – E-MAIL SAFE PASSWORD GENERATION

USING YAHOO.COM/AOL.COM

1. **In Yahoo:** Sign in to your account. Select your username from the top right corner and then select **Account info.**
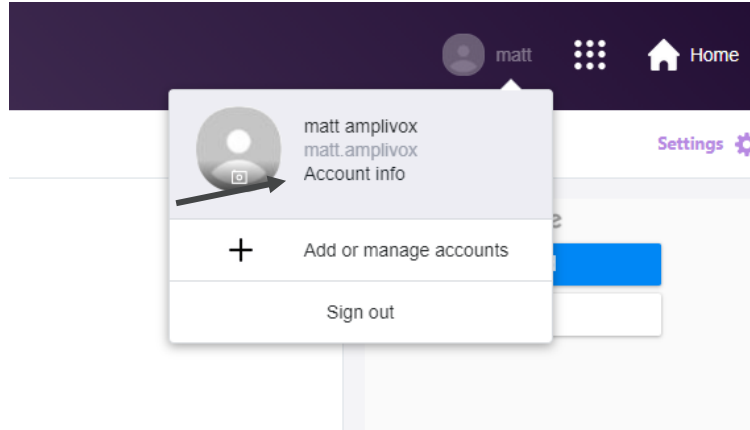
In AOL: Sign in to your account. Select **Options** from the top right corner and then select **Account info.**
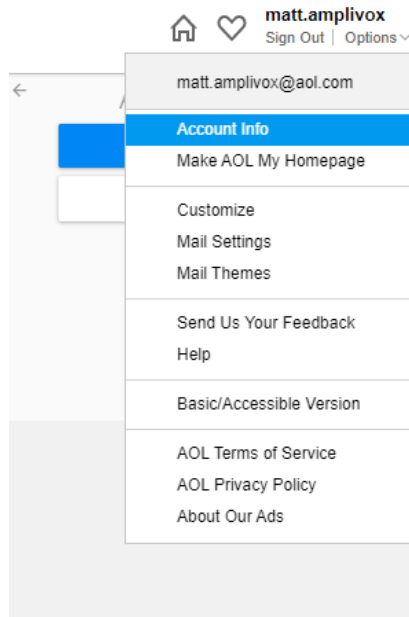
2. Select **Account security** tab from the left side bar.
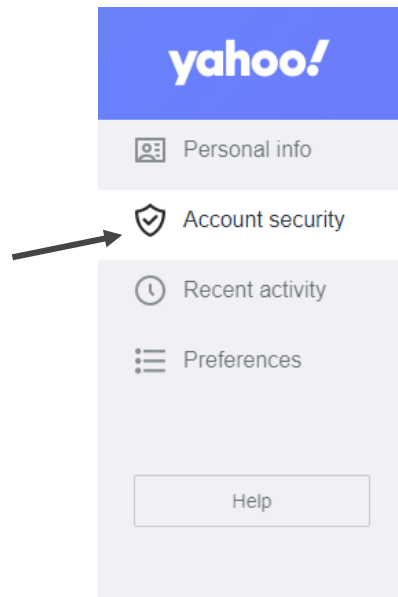
3. Select **Generate app password** at the bottom of the screen.

Add recovery email address

Two-step verification
Protect your account by enabling an additional security step using your personal device.

Security key BETA
Sign in by tapping on your personal security key.

Phone number
Sign in by verifying the code sent to your phone.

Generate app password
Create a single-use password to sign in. This is often used for older third-party apps.

4. From the drop down box, select **Other app**.
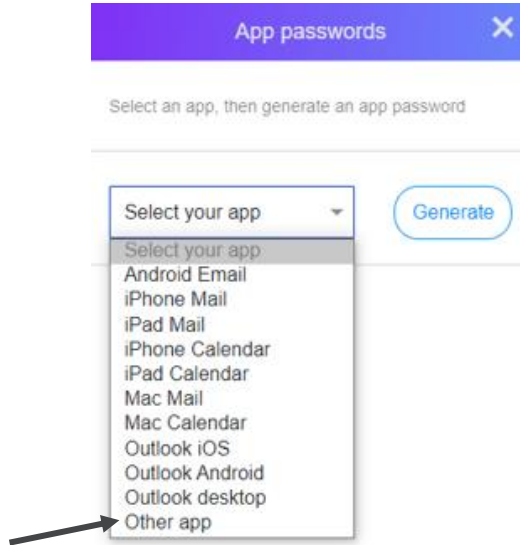
5. Add **Amplisuite BEEP** as a name and press **Generate.**
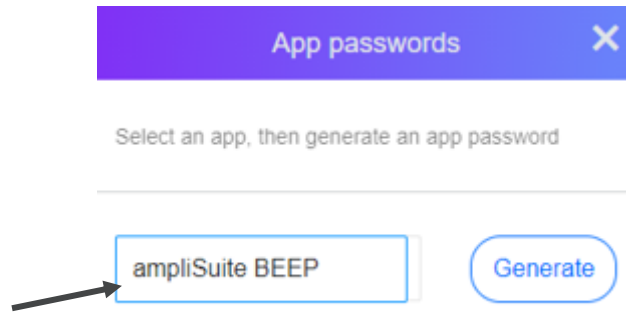
6. Copy the generated code to **Amplisuite BEEP** (refer to chapter 4.4) and select **Done**.
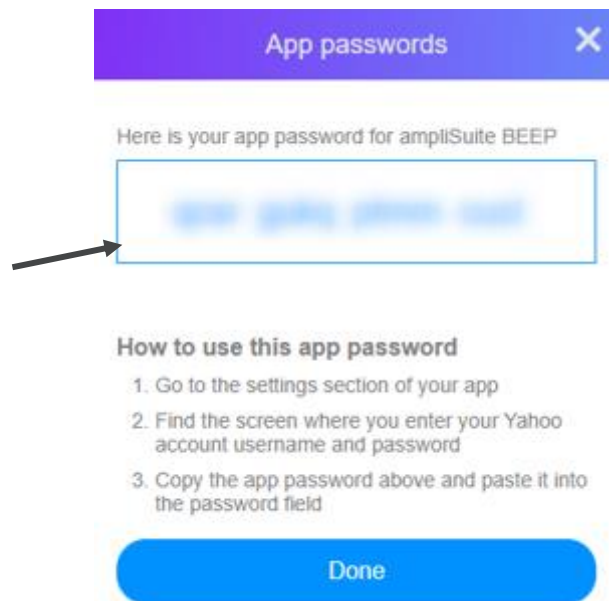
USING GMAIL.COM

1. Sign in to your account. Select your username from the top right corner and then select **Manage yourGoogle Account.**
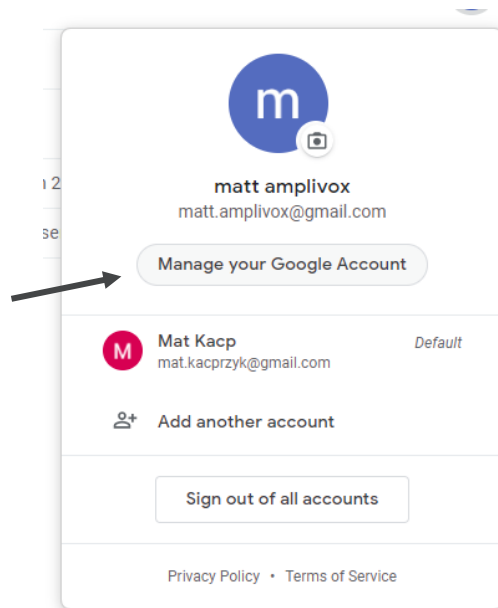
2. Select the **Security** tab from left side bar.
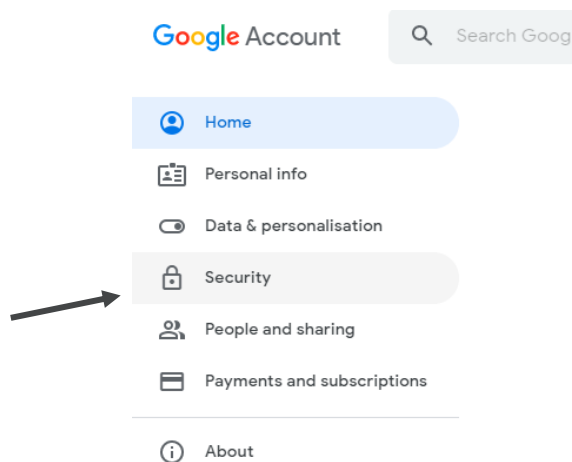
3. Select **App passwords** from the **Signing to Google** box.
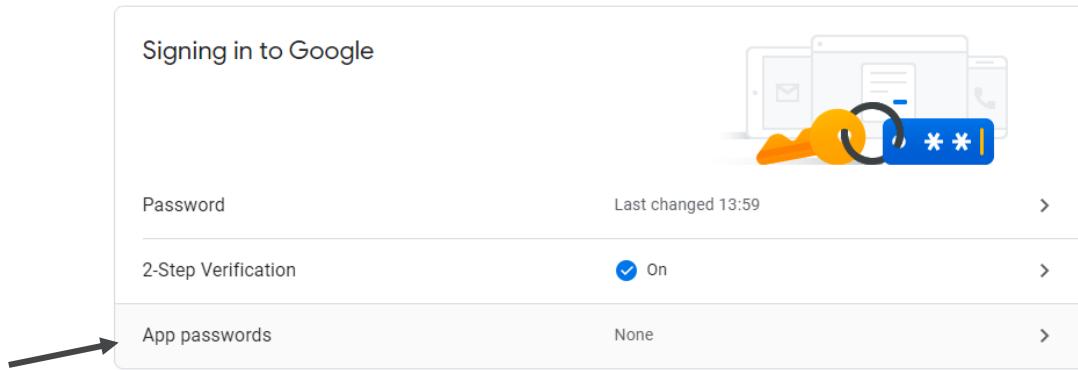
Please note: You need to have the **2-Step Verification** activated to use the **App password** feature. To activate it please select the **2-Step Verification**, then follow information displayed on the screen.

4. From the drop down box, select **Other app**.
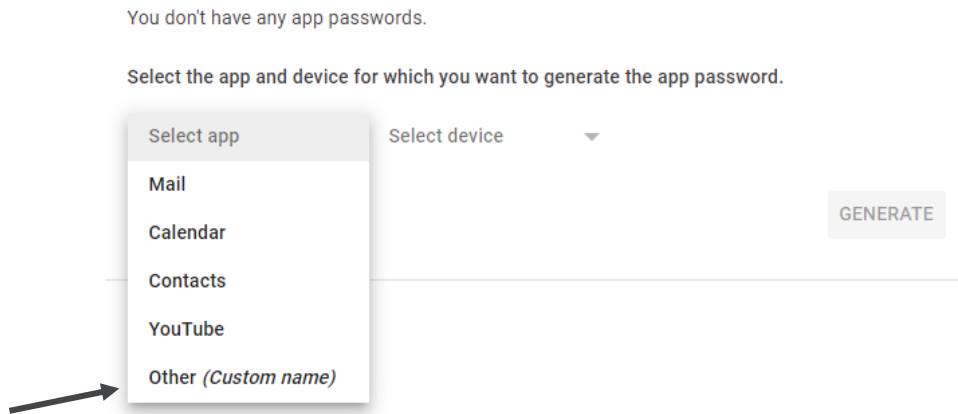
5. Add **Amplisuite BEEP** as a name and press **Generate.**
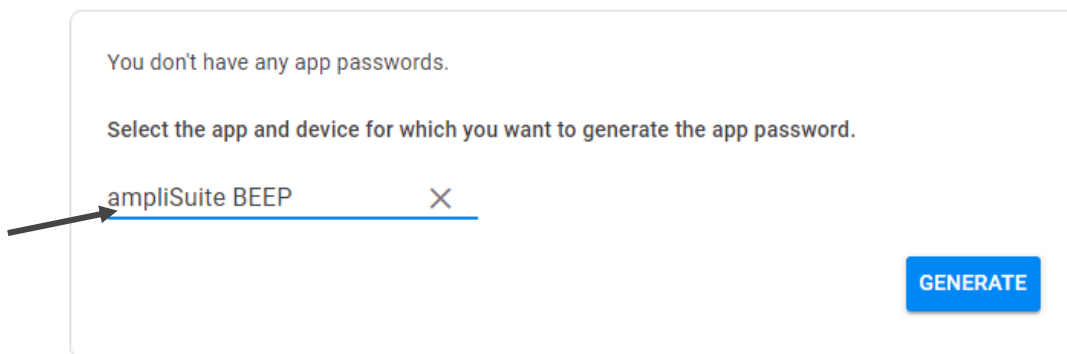
6. Copy generated code for **Amplisuite BEEP** (refer to chapter 4.4) and select **Done**.

USING OUTLOOK.COM

1. Sign in to your Microsoft account. Select your username from the top right corner and then select **My Microsof account**.

2. Select **Security** tab from top bar.

3. Select **More security options**.
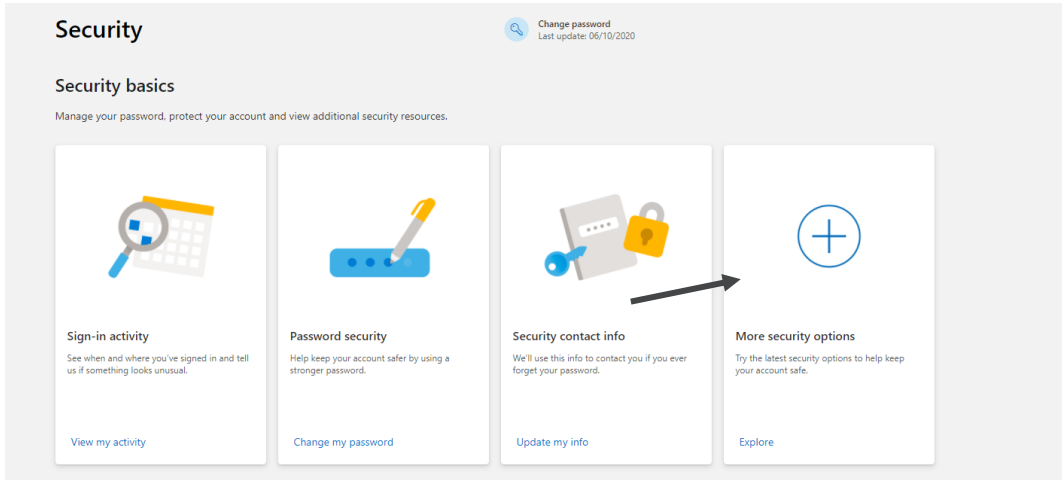
4. Select **Create new app password** from the **App passwords** menu.
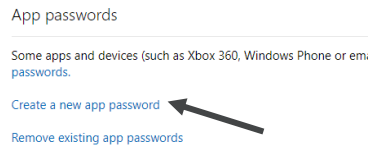
 Please note: You need to have the **2-Step Verification** activated to use the **App passwords** feature. To activate it please select the **2-Step Verification** form menu above, then follow information displayed on the screen.

5. Copy generated code to the **Amplisuite BEEP** (refer to chapter 4.4) and select **Done**.

APPENDIX B – ADJUSTING TABLET SETTINGS

To ensure system settings won't be available for unauthorized people we suggest **turning system notification off** and **running system in guest mode**.

You can do it manually following steps below or automatically with use of prepared by Amplivox scripts(please refer to Appendix C).

TURNING OFF SYSTEM NOTIFICATION

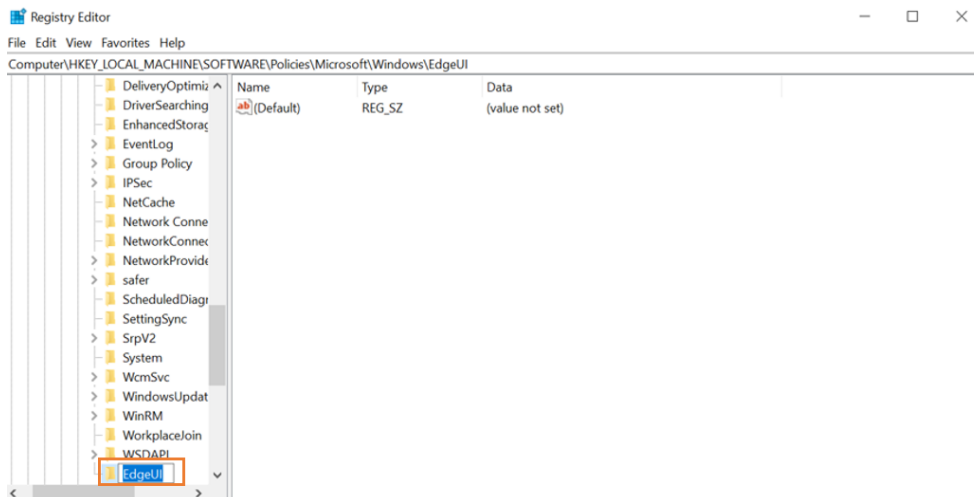1. Press window key, enter **registry editor** and press Enter key, to open Registry Editor.
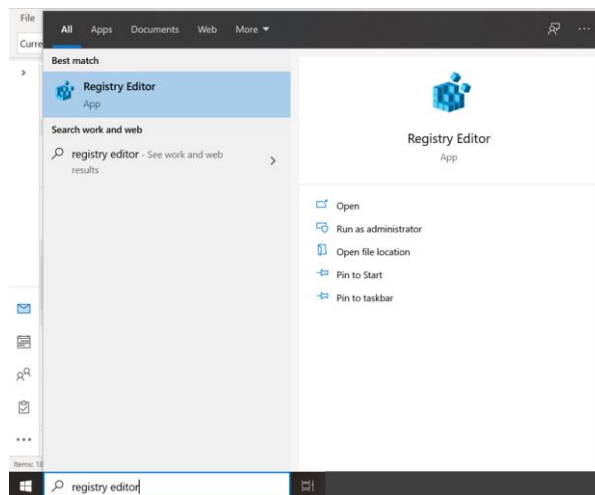
2. Follow this path: **HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows** (you can copy **BOLDED** text to command bar, as shown in the picture below)
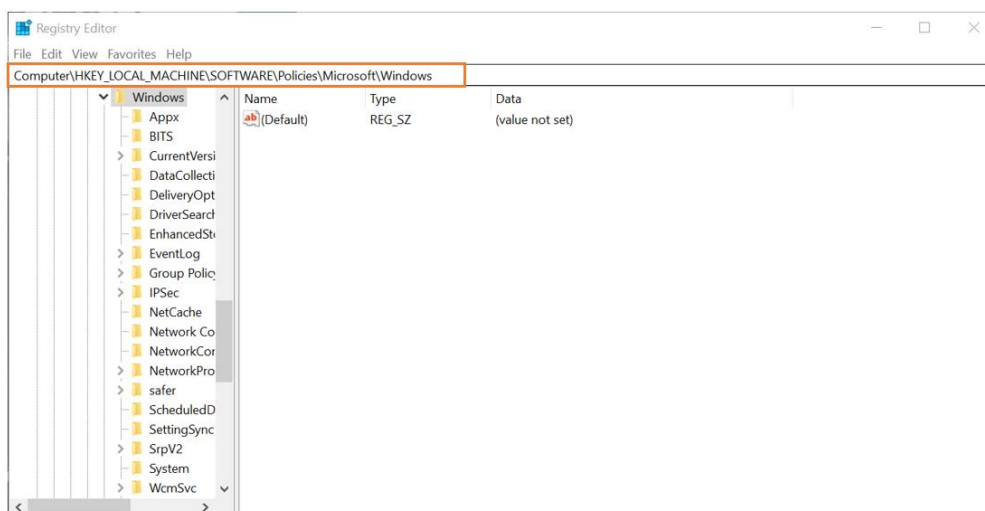
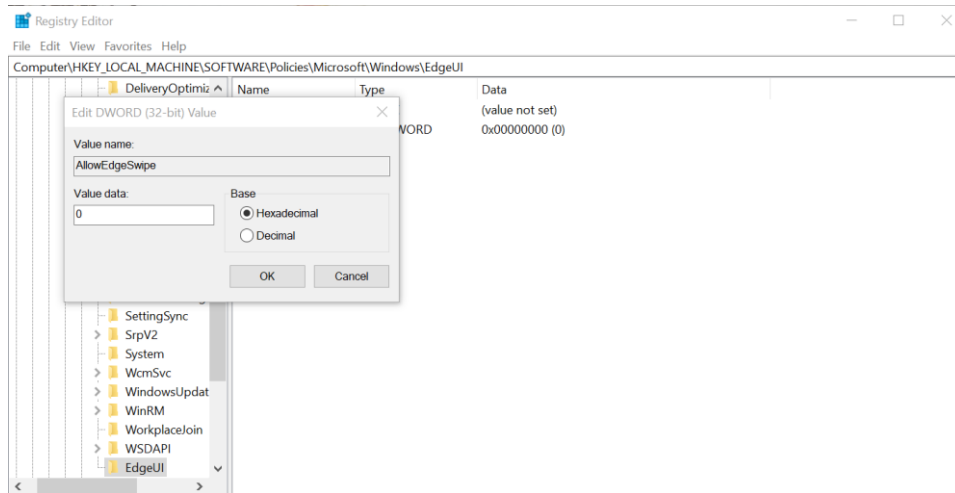3. Right click on the screen and select **New->Key**.
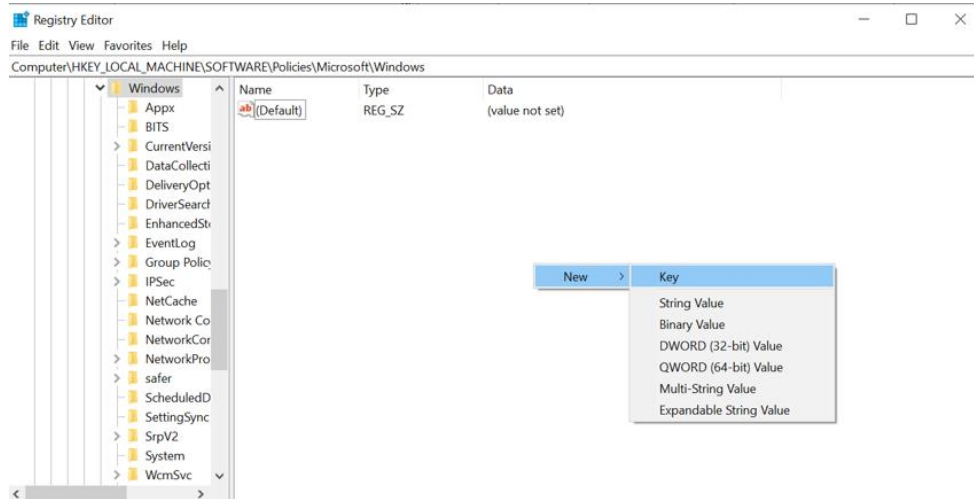
4. Name the new key **EdgeUI**.

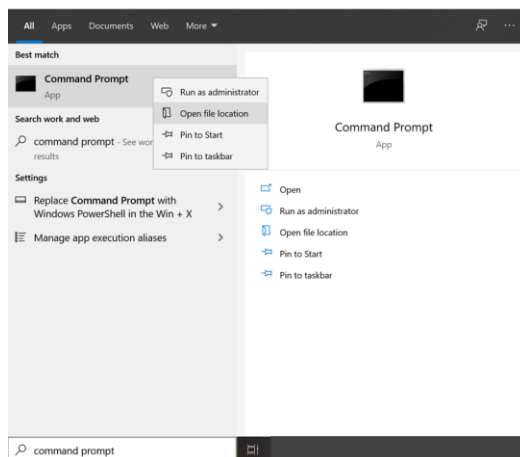5. Right click on **EdgeUI** and create a new 32-bit DWORD named "**AllowEdgeSwipe**".
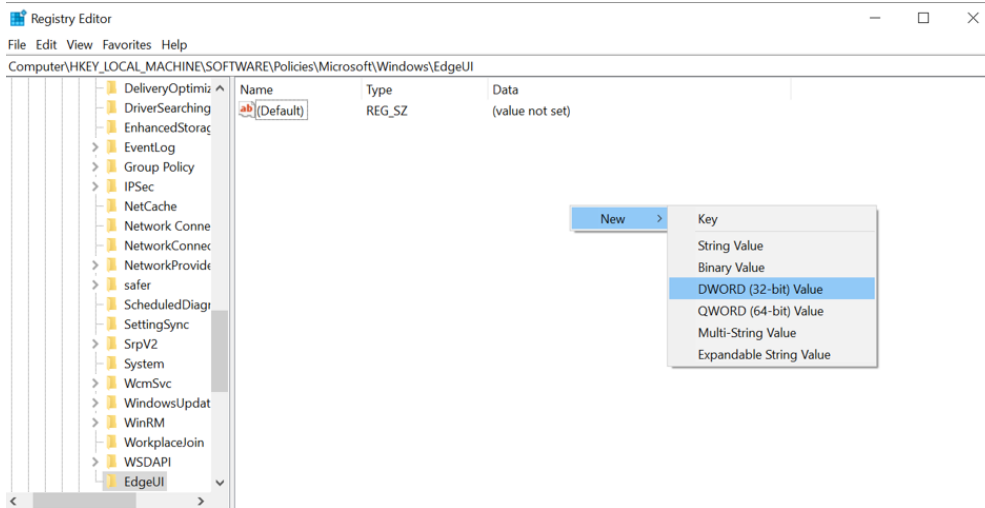
6. Double click on **AllowEdgeSwipe** and ensure its value is set to **0** and close Registry Editor.
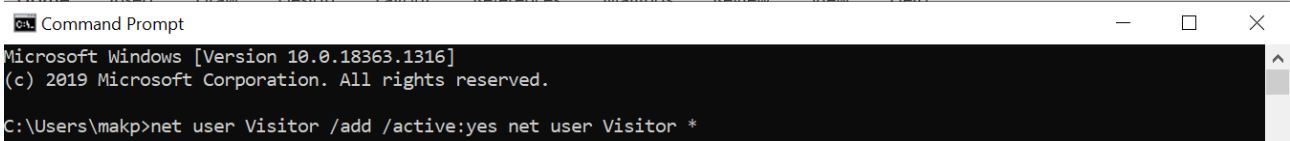

RUNNING SYSTEM IN GUEST MODE

1. Press the window key, enter **command prompt,** right click on the icon and select Run as administrator, to open Command Prompt.

2. Type **net user Visitor /add /active:yes net user Visitor *** and press Enter key (you can copy **BOLD** text and paste is in the console pressing **alt+V**).
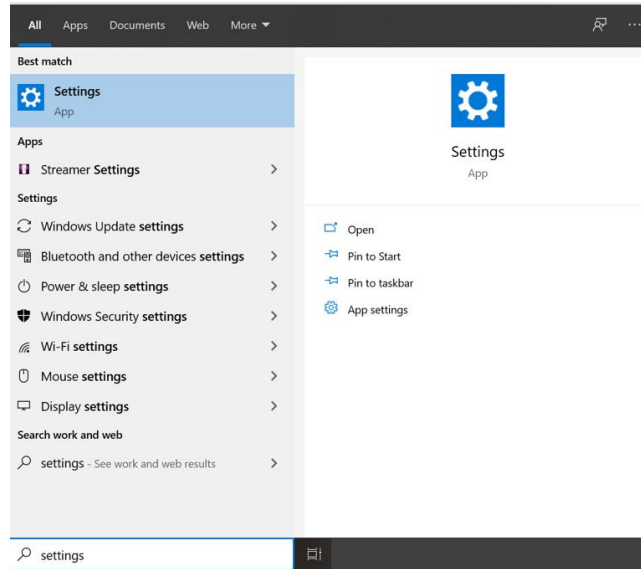

3. Press enter if you don't want to have a password. If not, type your password.
4. Confirm you don't wish to set a password pressing enter again or reenter your password to confirm.
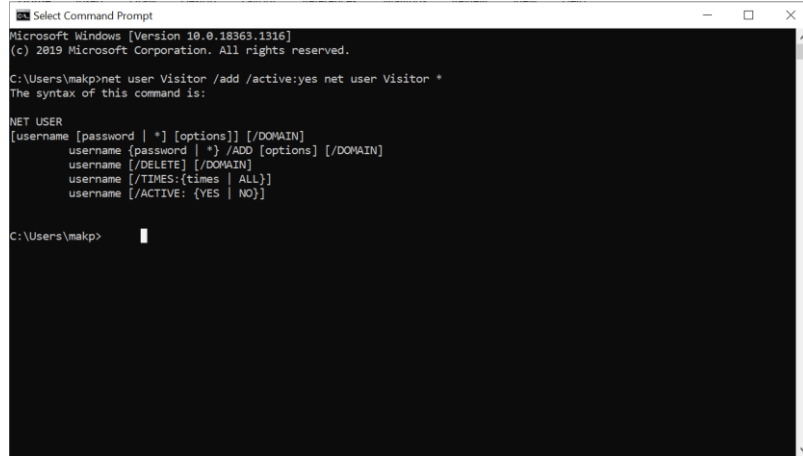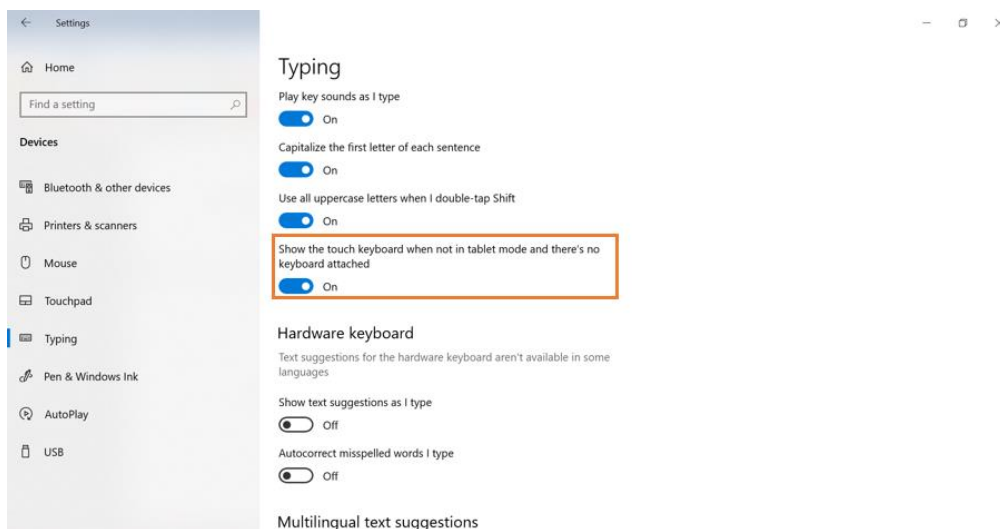

5. Close Command Prompt and restart your PC.
6. Log back in as a Visitor account.

7. Press the window key, enter **settings** and press Enter key, to open Settings menu.

8. Go to **Devices** menu and select the **Typing** tab. In the Touch keyboard area make sure that "Show the touch keyboard when not in tablet mode and there's no keyboard attached" is on.


9. Log out form the Visitor account and sign back to main account.
10. Open Command Prompt again (as in the step 1.)
11. Type **net localgroup users Visitor /delete** and press the Enter Key (you can copy **BOLD** text and paste in the console by pressing **alt+V**).
12. Type **net localgroup guests Visitor /add** and press the Enter Key (you can copy **BOLD** text and paste in the console pressing **alt+V**).
13. Close Command Prompt window and restart your PC.

APPENDIX C – ADJUSTING TABLET SETTINGS AUTOMATICALLY

To ensure system settings won't be available for unauthorized people we suggest **turning system notification off** and **running system in guest mode**.

All steps described in Appendix B can be done automatically with use of prepared by Amplivox scripts.

1. Open **„Tablet set up"** folder on your BEEP USB bundle stick and double click on **STEP_1** file.
    This step will set up virtual keyboard that will be used by patients to add their data.
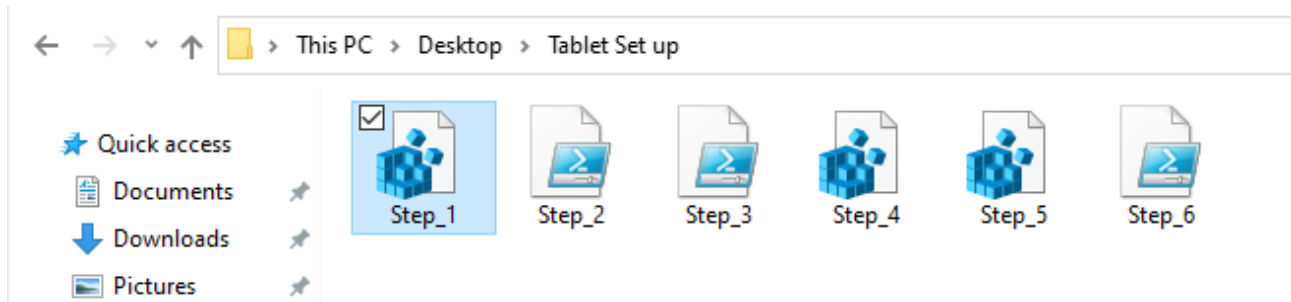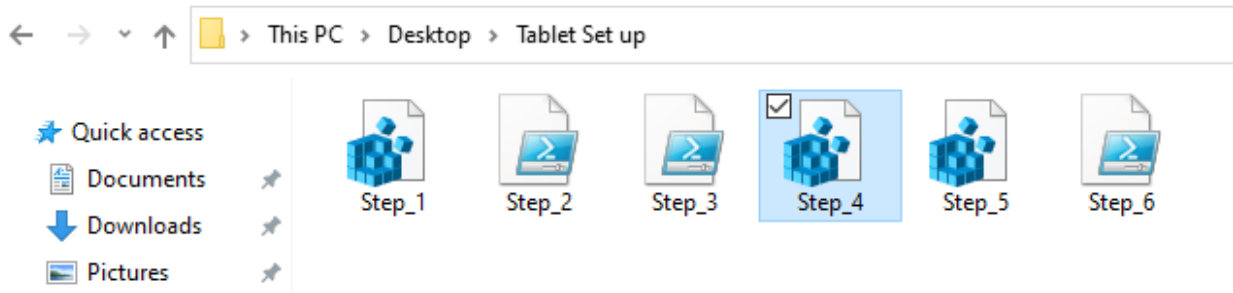

2. Right mouse button click on **STEP_2** file and select "Run with PowerShell".
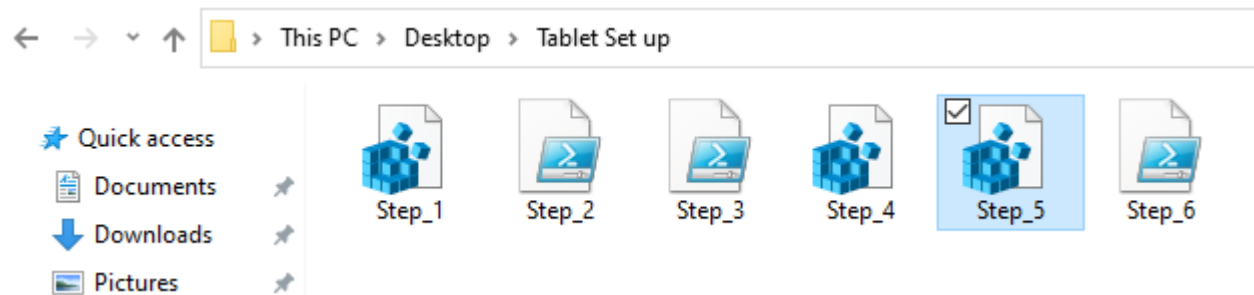   This step will restart Explorer.exe process, to prepare system for next steps.

3. Back in the **„Tablet set up"** folder right mouse button click on **STEP_3** and select "Run with PowerShell".
    This step will create **Guest account** with password (when password is not required password field should be left empty), turn OFF changing screen position and gestures, changing power mode to "Best performance" and **restart the tablet**. This script checking if is use windows 11
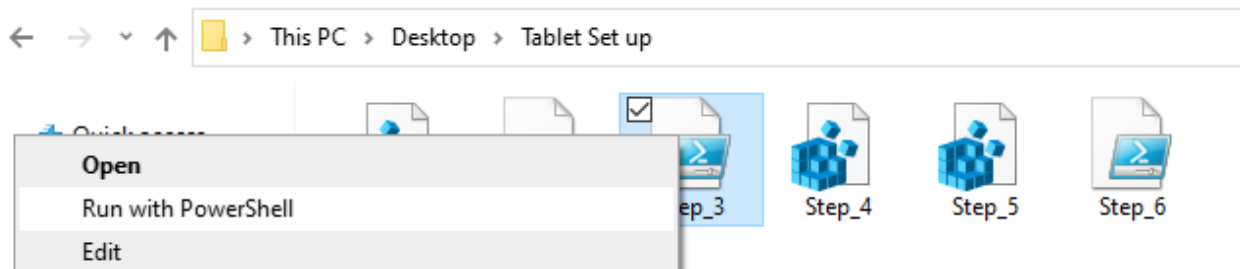
4. After system restarts, enter **Guest** account and back in the **„Tablet set up"** folder, double click on **STEP_4** file.
    This step will set up virtual keyboard but on the Guest account.

5. Double click on **STEP_5** file.
    This step will turn OFF changing screen position, so users won't be able to close BEEP app, in not intended way.

6. Log off from Guest account. Log back in your main account. Back in the **„Tablet set up"** folder right mouse button click on **STEP_6** and select "Run with PowerShell".
    This step will change **Guest** account rights from **Admin** to **Visitor**.

APPENDIX D – USE WITH NON-MEDICAL ELECTRICAL EQUIPMENT

Any person who connects external equipment to signal input, signal output or other connectors has created a medical electrical system and is therefore responsible for the system complying with the requirements of clause 16 of IEC 60601-1:2005 *(General requirements for basic safety and essential performance).*

Please note that if connections are made to standard equipment like printers and networks, special precautions must be taken in order to maintain medical safety. The following notes are provided for guidance in making such connections to ensure that the general requirements of clause 16 of IEC 60601-1:2005 are met.

The following signal inputs and outputs on the modelONE audiometer are electrically isolated to the requirements of IEC 60601-1 in order to reduce any potential hazard associated with the use of mains-powered equipment connected to these inputs and outputs:

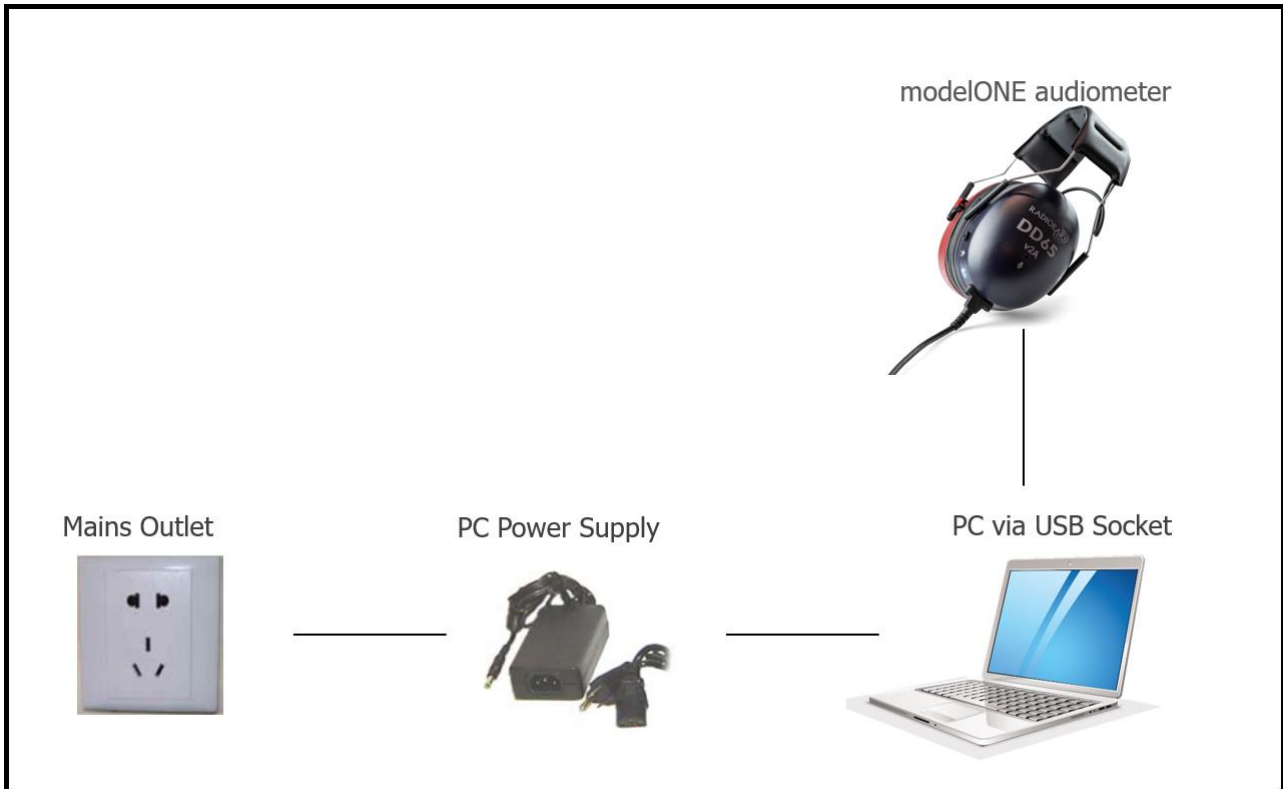| SOCKET	SOCKET TYPE	TYPICAL CONNECTION
USB socket	USB A, C or micro	Computer, laptop or tablet

External equipment intended for connection to signal input, signal output or other connectors, shall comply with the relevant IEC or international standards (e.g. IEC 60950, CISPR 22 & CISPR 24 for IT equipment, and the IEC 60601 series for medical electrical equipment).

Equipment not complying with IEC 60601 shall be kept outside the patient environment, as defined in IEC 60601-1 (at least 1.5m from the patient).

The operator must not touch the connected equipment and the patient at the same time as this would result in an unacceptable hazard.

Refer to Diagram 1 below for typical configurations of connected peripheral equipment. Refer to Amplivox Limited at the address given on the front of this user manual if advice is required regarding the use of peripheral equipment.

Diagram 1: modelONE used with the PC