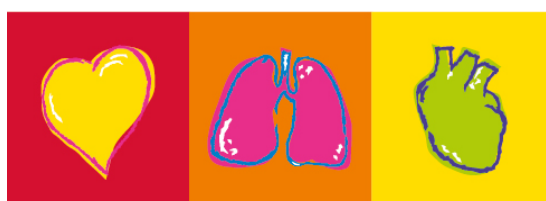


# FRED easyport plus TRAINER

Automated external defibrillator (AED)



## User Guide



**SCHILLER**

The Art of Saving Lives



### Sales and service information

The SCHILLER sales and service centre network is world-wide. For the address of your local distributor, contact your nearest SCHILLER subsidiary.

In case of difficulty, a complete list of all distributors and subsidiaries is provided on our internet site:

<http://www.schiller.ch>

Sales information can also be obtained from:

[sales@schiller.ch](mailto:sales@schiller.ch)



### Manufacturer and responsible for the CE marking

SCHILLER AG

Altgasse 68

CH-6341 Baar, Switzerland

Phone: +41 (0) 41 766 42 42

E-mail: [sales@schiller.ch](mailto:sales@schiller.ch)

Web: [www.schiller.ch](http://www.schiller.ch)



# Table of Contents

<b>1</b>	<b>Safety Notes .....</b>	<b>5</b>
1.1	Intended Purpose .....	5
1.2	Contraindication .....	5
1.3	Responsibility of the User .....	5
1.4	Safety-Conscious Operation .....	5
1.5	Maintenance and Cleaning .....	6
1.6	Additional Terms .....	6
1.6.1	Terms of Warranty .....	6
1.7	Symbols/Indicators .....	7
1.7.1	Symbols used in this user guide .....	7
1.7.2	Symbols used on the device .....	8
1.7.3	Symbols used on the training electrode packaging.....	9
<b>2</b>	<b>Components and Operation .....</b>	<b>10</b>
2.1	General Information .....	10
2.1.1	Configurations via Simulation App .....	11
2.1.2	Configurations on the <b>FRED easyport plus TRAINER</b> .....	12
2.2	Operating and Display Elements .....	15
2.2.1	Overview <b>FRED easyport plus TRAINER</b> .....	15
2.2.2	<b>FRED easyport plus TRAINER</b> with bag (optional).....	16
2.3	Inserting the batteries .....	17
2.3.1	Switching device On and Off.....	17
2.3.2	Device-smartphone pairing .....	18
<b>3</b>	<b>Training .....</b>	<b>19</b>
3.1	Training procedure semi automated AED.....	19
3.2	Training procedure fully automated AED.....	20
3.3	Training procedure manual AED mode .....	21
3.4	Training on thorax compressions (optional) .....	22
3.4.1	Setup of the sensor .....	23
3.5	Accessories and disposables .....	25
3.5.1	Order Information .....	25
3.5.2	Required accessories.....	25
3.6	Disposal information.....	26
3.6.1	Battery Disposal.....	26
3.6.2	Disposal at the end of its useful life.....	26
3.7	Troubleshooting .....	26
3.7.1	Troubleshooting .....	26
3.8	Preventing electromagnetic interferences.....	27
3.8.1	Measures to prevent electromagnetic interferences .....	27
<b>4</b>	<b>Technical Data .....</b>	<b>28</b>
4.1	System Specifications .....	28
<b>5</b>	<b>Appendix - Symbols .....</b>	<b>29</b>



# 1 Safety Notes

## 1.1 Intended Purpose

- ▲ The **FRED easyport plus TRAINER** is a training device designed to train the intended functions of the intended users in the intended environment of the **FRED easyport plus** device.
- Indication** ▲ The **FRED easyport plus TRAINER** is **ONLY** used for training and simulation **NOT** for the use on a patient.
- Intended user** ▲ The **FRED easyport plus TRAINER** is intended to be used for training purpose of the same intended users as the **FRED easyport plus** device.
- The following people may use the **FRED easyport plus TRAINER**:
- Anyone who wants to be trained in the application of an AED under supervision and with instructions of a trainer.

## 1.2 Contraindication



### Limitations

- ▲ No contraindications for the system known.

### Contraindication for the patient

- ▲ The **FRED easyport plus TRAINER** is **not** indicated to be use for patient treatment.

## 1.3 Responsibility of the User



- ▲ Damaged or missing components must be replaced immediately.
- ▲ Properly dispose of the packaging material and make sure it is out of children's reach.
- ▲ Do not store the training electrodes together with the normal electrodes or with the normal defibrillator.
- ▲ This user guide is only for the trainer and not for the trainee.

## 1.4 Safety-Conscious Operation



- ▲ Immediately report any changes that impair safety (including operating behaviour) to the responsible person.
- ▲ Only use original SCHILLER training electrodes.
- ▲ Immediately replace a damaged unit, or damaged cables and connections.
- ▲ Only operate the device in accordance with the specified technical data.

## 1.5 Maintenance and Cleaning



- ▲ Before cleaning, switch the unit off and remove the battery.
- ▲ Do not use aggressive or abrasive cleaners.
- ▲ Do not, under any circumstances, immerse the device or cable assemblies in liquid.

## 1.6 Additional Terms

### 1.6.1 Terms of Warranty

Your SCHILLER **FRED easyport plus TRAINER** is warranted against defects in material and manufacture according the general terms of condition. Excluded from this warranty is damage caused by an accident or as a result of improper handling. The warranty entitles to free replacement of the defective part. Any liability for subsequent damage is excluded. The warranty is void if unauthorised or unqualified persons attempt to make repairs.

In case of a defect, send the device to your dealer or directly to the manufacturer. The manufacturer can only be held responsible for the safety, reliability, and performance of the apparatus, and assume the warranty, if:

- assembly operations, extensions, readjustments, modifications, or repairs are carried out by persons authorised by him,
- spare parts used for assembly operations, extensions, readjustments, modifications or repairs are recommended or supplied by SCHILLER, and,
- the SCHILLER **FRED easyport plus TRAINER** and approved attached equipment is used in accordance with the manufacturer's instructions.



There are no express or implied warranties which extend beyond the warranties hereinabove set forth. SCHILLER makes no warranty of merchantability or fitness for a particular purpose with respect to the product or parts thereof.

## 1.7 Symbols/Indicators

### 1.7.1 Symbols used in this user guide

The safety levels are classified according to ANSI Z535.6. The following overview shows the safety symbols and pictograms used in this user guide.

The terms Danger, Warning, and Caution are used in this User Guide to point out potential dangers and to indicate risk levels. Familiarise yourself with their definitions and significance.



For a possibly dangerous situation which could lead to severe personal injury or to death.



For a possibly dangerous situation which could lead to personal injury. This symbol is also used to indicate possible damage to property.



For general safety notes as listed in this section.



Important or helpful user information.

### 1.7.2 Symbols used on the device

General used symbols see [5 Appendix - Symbols](#).



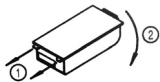
Reading the instruction for use is mandatory before using the device!



Dangerous voltage! Used for electrical dangers during defibrillation.

IP44

The enclosure is protected against foreign solid objects of  $\geq 1$  mm and splashing water from all directions



Cover battery housing replacement instruction



Bluetooth inside



Attention: non ionising electromagnetic radiation. Some of the devices contain an HF transmitter (Bluetooth).

The **FRED easyport plus TRAINER** radiates high-frequency electromagnetic energy and can disturb other devices if not installed and operated in accordance with the user guide. However, there is no guarantee that no interference can occur in certain installations. If the **FRED easyport plus TRAINER** causes interferences, these can be determined by switching the device off/on or by transmitting/not transmitting ECG data. The user can take the following measures to prevent electromagnetic interferences:

- Increase the distance between the disturbed device and the **FRED easyport plus TRAINER**. A minimum distance of 20 cm must be kept between the device and a pacemaker.
- Turn the device to change the angle of radiation.

For more details, see [page 27](#).



### 1.7.3 Symbols used on the training electrode packaging



- ▲ These electrodes are only intended for training, not for clinical use.
- ▲ Do not store these electrodes with your normal defibrillator.

General used symbols see [5 Appendix - Symbols](#).



Reading the instruction for use is mandatory before using the electrodes!



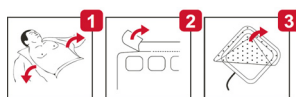
Do not bend packing



Don't use if the packaging is damaged



Disposable item; do not reuse

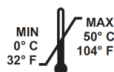


- Remove the patient's clothes
- Open the electrode packaging
- Peel off the protective foil

Adults /  
Children



Infants



Storage temperature for the electrodes



Expiry date of the electrodes



An open package cannot be conserved more than one day.



The product is intended to be used on patients weighing 25 kg or more.



The product is intended to be used on patients weighing less than 25 kg.

## 2 Components and Operation


### 2.1 General Information



The following instruction uses the Name **FRED easyport plus TRAINER** instead of the full name **FRED easyport plus TRAINER**

The **FRED easyport plus TRAINER** is a simple and cost-effective simulator of the **FRED easyport plus** that is designed to be used exclusively for training.

The **FRED easyport plus TRAINER** doesn't deliver any energy, it simply plays through the resuscitation process with different scenarios. It is powered by a standard 9 V battery

The **FRED easyport plus TRAINER** equipped with Bluetooth, identified by the symbol  on the device label, can be controlled and configured via your smart-phone/tablet PC with the "Defi training application" which can be downloaded from:



The **FRED easyport plus TRAINER** provides simulation that aim to help to familiarise with the **FRED easyport plus** and shows that the users have the knowledge required to use it if necessary.

#### Operating modes

The operating mode can be selected by configuration. One device is enough to train both the fully automatic, semi-automatic mode and Manual mode

- One scenario can be predefined and downloaded to the **FRED easyport plus TRAINER**.
- Scenario can be changed live by using the Defi training application.

#### Languages

All languages available on the **FRED easyport plus TRAINER** are also available on the Trainer.

Language selection as well as scenario selection is done by configuration.

#### Standard package

The **FRED easyport plus TRAINER** standard package includes:




- 1 **FRED easyport plus TRAINER**
- 1 set of training electrodes
- 1 training electrodes cable

Note: 9V battery not included. We recommend using 9V rechargeable Li-ion with minimum 1000mA.

#### ARGUS LifePoint (optional)

CPR feedback sensor for additional training on chest compression

2.1.1 Configurations via Simulation App

Configuration		Values
Device	Normal	
Simulation of the following device types:		
Semi-automatic		
Manual		
Automatic	FEP+ Manual	
	FEP+ Auto	
Audio language	List of available language	

2.1.2 Configurations on the FRED easyport plus TRAINER

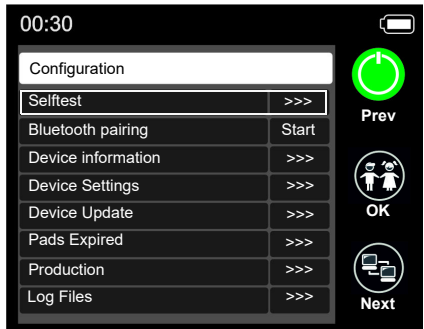
The following programming should be adapted for the organisation to be trained.

Note: This **bold** settings have been entered during the initial setting. The initial setting screen appears only after the device is set to factory default.

For all settings please refer to the user guide of the **FRED easyport plus**.

Configurable device parameters	Detail see cross reference below or Password required IFU of the FRED easyport plus	
• Selftest	-	No
• Bluetooth pairing	2.3.2 Device-smartphone pairing	No
• Device Settings >>>	Device Setting >>> CPR setting, page 13	Yes
– CPR settings >>>		
– CPR feedback >>>		
– Communication >>>		
– Transmission mode >>>		
– System settings >>>		Yes
- <b>Local settings &gt;&gt;&gt; Language, Country, Time, Date, Time-zone</b>	System Setting >>> Local setting, page 14	
- Volume settings		
- <b>ECG and HR display</b>		
– Restore Factory Defaults		
Second page		
– Import Settings		
– Export Settings		
– <b>Trainer Device Variant</b>		
– <b>First</b> (Normal)		
– Auto (FEP+ Auto),		
– Manual (FEP+ manual)		
This can be changed also via Simulation App but after power cycling it will start with the programmed mode.		
– <b>Restore Default Scenario</b>		
(Electrode not applied, shock/no shock/ shock)		

Access to the device setting menus:



To get access to the settings:

→ Press and hold the button  while switching the device on .

The Configuration menu appears.

→ Enter the password  ;  ;   for the Device setting menu.

Please note: This access code is only for the training organisation.

## Device Setting >>> CPR setting

Default settings are **bold**

Parameter	Values	Description
Start with Analysis	<ul style="list-style-type: none"> <li>No</li> <li><b>Yes</b></li> </ul>	<p>If Yes is set, the device starts with the analysis as soon as defibrillation electrodes are applied.</p> <p>If No is set, the device prompts the user to perform CPR before the analysis. Analysis will start once the 2-minute CPR interval has ended.</p>
Show CPR Timer	<ul style="list-style-type: none"> <li><b>No</b></li> <li>Yes</li> </ul>	Display of the CPR timer on the status line.
CPR Timer counting	<ul style="list-style-type: none"> <li><b>Up</b></li> <li>Down</li> </ul>	Timer counting up or down
Metronome AED	<ul style="list-style-type: none"> <li><b>On</b></li> <li>Off</li> <li>CPR</li> </ul>	Metronome default behaviour only for AED mode
Metronome Ratio	<ul style="list-style-type: none"> <li><b>30:2</b></li> <li>15:2</li> <li>Cont</li> </ul>	Metronome Setting
Metronome rate	<ul style="list-style-type: none"> <li><b>100 cpm</b></li> <li>100-120</li> </ul>	Sets the frequency of the metronome

## Additional settings for the AED MANUAL

Manual Settings >>>

Metronome MAN	<ul style="list-style-type: none"> <li>On / <b>Off</b> / CPR</li> </ul>	Metronome default behaviour in manual mode
Metronome Ratio	<ul style="list-style-type: none"> <li><b>30:2</b> / 15:2 / Cont</li> </ul>	Metronome Setting in Manual mode
CPR Voice Prompts	<ul style="list-style-type: none"> <li>Yes</li> <li><b>No</b></li> </ul>	Voice prompt in manual mode yes or no.

## Device Setting >>> CPR Feedback

Parameter	Values	Description
CPR Voice prompts	<ul style="list-style-type: none"> <li><b>Yes</b></li> <li>No</li> </ul>	Yes activates the voice prompt during CPR

## System Setting >>> CPR setting

Parameter	Values	Description
Volume	<ul style="list-style-type: none"> <li><b>Low (&gt;50)</b></li> <li>Mid (&gt;55)</li> <li>High (&gt;60)</li> </ul>	<p>Sets the volume of audio prompts and notifications.</p> <p><b>Caution:</b> ▲ Ensure that the environmental noise is below the set sound volume (Low/Mid/High)</p>
ECG and HR	<ul style="list-style-type: none"> <li><b>No</b></li> <li>Yes</li> </ul>	Display HR and ECG curve <i>(not displayed for the AED manual because it is standard activated)</i>

**System Setting >>> Local setting**

Note: This settings have been entered during the initial setting. The initial setting screen appears only after the device is set to factory default.

Parameter	Values	Description
Language	<ul style="list-style-type: none"><li>• <b>English*</b> German French Spanish Italian etc...</li></ul>	Sets of the language in which the device will always start by default.
Country	<ul style="list-style-type: none"><li>• <b>Other</b> • France, Germany, UK, USA...</li></ul>	-
Date	<ul style="list-style-type: none"><li>• -</li></ul>	Sets the date
Time	<ul style="list-style-type: none"><li>• -</li></ul>	Sets the time

## 2.2 Operating and Display Elements



The status LEDs are not active!

### 2.2.1 Overview FRED easyport plus TRAINER

The picture below shows the user interface for an AED with ECG and CPR feedback display.



**Fig. 2.1** Operating Elements

- (1) Green button to switch the device on/off and RTU LED (Ready -to-use LED)  
Additionally the button is used to "Pause" the algorithm.
- (2) Orange indicator lamp; lit as long as no electrodes are connected
- (3) Electrode connector
- (4) LCD screen
- (5) Switching to child mode when using adult electrodes (PATIENT button)
- (6) USB connector for Argus LifePoint sensor or USB memory stick
- (7) Orange button: key to trigger a defibrillation impulse (SHOCK button)
- (8) Battery at back
- (9) Loudspeaker
- (10) Data transfer/Confirm (COM) button
- (11) Ambient light sensor

### 2.2.2 FRED easyport plus TRAINER with bag (optional)



1



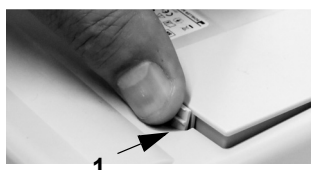
- (1) RTU LED (Ready -to-use LED) transparent window
- (2) Defibrillation electrode compartment
- (3) Scissor and razor compartment
- (4) Connection ARGUS LifePoint CPR feedback sensor (USB Port)
- (5) ARGUS LifePoint compartment



## 2.3 Inserting the batteries



- ▲ **Danger of explosion!** The battery must not be exposed to high temperatures or disposed of with household waste.
- ▲ Do not short-circuit, cut, destroy, burn or charge a battery.
- ▲ Replace the battery if the device indicates a battery problem. A defective battery must not be used.



1. Open the battery cover by pressing the locking mechanism in the direction of the arrow (1).
2. Lift up the battery, disconnect the cable and remove the battery
3. Insert the new battery into the device as shown on the picture (2) and connect the cable.
4. Close battery compartment with the battery cover.

### 2.3.1 Switching device On and Off



**Switching ON**

→ Press the "ON/OFF" (1) button



**Switching OFF**

→ Press the "ON/OFF" (1) button for 3 seconds.



#### Forced shutdown procedure

If the device cannot be switched off via the above procedure, remove the battery and insert it again.

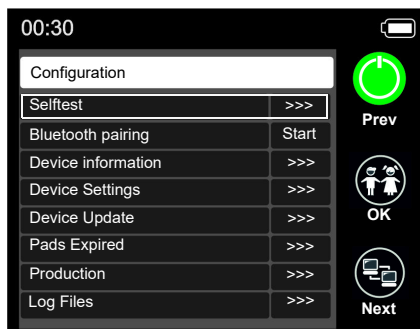




The running AED algorithm can be paused during CPR by the Green ON/OFF button (press 1 second) and continued by pressing again the ON/OFF button.

### 2.3.2 Device-smartphone pairing





Before the **FRED easyport plus TRAINER** can be selected from the device list on the App (Step 9), it must first be paired with the smart-phone



1. Press and hold the button  while switching the device on .
2. The configuration menu is displayed.
3. Start Bluetooth pairing. The blue message bar shows bluetooth discoverable (blinking Bluetooth icon).
4. Open on your smart-phone the menu Setting > Connected devices (bluetooth) and select paring new device. The Name FEP+Trainer 9010.xxxxxx is displayed.
5. To pair the device with your smart-phone select the name and confirm the pairing.
6. If successfully paired with the smart-phone "Bluetooth paired" is displayed on the device



7. Open the Schiller Defi training App on your smart-phone or tablet PC.
  8. Select the icon the Device list  of Defi training application. Select the device you want to use in the list.
- For additional information on the application, refer to the application: Settings  > Application > Help.

## 3 Training

### i

- As soon the **FRED easyport plus TRAINER** is switched on, the voice prompt starts.
- Advise the trainee to follow the instruction from the device.
- The running AED algorithm can be paused during CPR by the Green ON/OFF button (press 1 second) and continued by pressing again the ON/OFF button
- Depending on the configuration the **FRED easyport plus TRAINER** may start with Step 1 or 8 (see chapter 2.1.2 Menu Start with analysis Yes/No).
- When a scenario have been saved with the App the **FRED easyport plus TRAINER** start with Step 2, because the electrode status is set to electrode applied.

### 3.1 Training procedure semi automated AED

- The following instructions comply with the scenario "shock recommended" and then twice shock not recommended. The scenarios can be selected and saved.
- The following procedure should be checked by the trainer:
  - call emergency service dial number
  - use only if patient is unresponsive
  - remove clothes from upper body - cut if necessary
  - tear open electrode package located in device packaging
  - as shown on package peel off the packing and apply both electrodes to the upper body

**Trainee starts by switching on the device**

As soon the connection to the App is established, you can press the electrode button and then "Next Step on the App if the electrodes have been not right applied. This will cause that the trainer starts with step 1.

**Trainer has to confirm correct performance with the button on the device or via Defi training application**



2 x



1 x

1. Check that electrodes connector is correctly fitted in machine<sup>a</sup>
- Trainer confirms that the above procedure was correctly performed by the trainee. Otherwise, the instructions step 1 is repeated. After the third repetition, the instructions jump to step 8.
2. Do not touch the patient analysis will begin
3. Do not touch the patient analysing
4. Shock advised
5. Stand clear of patient
6. Press orange button - now (if shock button is not pressed within 20 seconds it jumps to 8.)
7. Shock delivered
8. Advise to do chest compression: according to configuration
9. Repeat until next instruction (the next instruction starts with step 2)
  - After the instruction "no shock advised" (step 4), it jumps to step 8.
- To finish the resuscitation process and switch the device to standby mode, press the Green ON/OFF button (press 3 second).

**Finishing resuscitation process**

a. If **FRED easyport plus TRAINER** start with Step 8, check configuration, if it starts with Step 2 set the Scenario to Default in the Menu **Device Setting > Restore Default Scenario**.

## 3.2 Training procedure fully automated AED



- The following instructions comply with the scenario “shock recommended” and then shock not recommended.
- Depending on the configuration the **FRED easyport plus TRAINER** may start with Step 1 or 11 (see chapter 2.1.2 Start with analysis Yes/No).
- When a scenario have been saved with the App the **FRED easyport plus TRAINER** jumps from Step 1 direct to Step 5, because the electrode status is set to electrode applied.
- The following not advices procedure from the device should be checked by the trainer:
  - call emergency service dial number
  - remove clothes from upper body - cut if necessary
  - tear open electrode package located in device packaging
  - as shown on package peel off the packing and apply both electrodes to the upper body

### Trainee starts by switching on the device

As soon the connection to the App is established, you can press the electrode button on the App if the electrodes have been not right applied. This will cause that the trainer follows up with step 2.

1. Make sure the patient is unresponsive
2. Plug and apply the electrodes (repeated 3 times)
3. Check that electrodes connector is correctly fitted in machine

### Trainer has to confirm correct performance with the button on the device or via Defi training application



2 x



1 x

- Trainer confirms that the above procedure was correctly performed by the trainee. Otherwise, the instructions step 3 is repeated. After the third repetition, the instructions jump to step 10.
4. make sure the patient is unresponsive
  5. Do not touch the patient analysis will begin<sup>b</sup>
  6. Do not touch the patient analysing
  7. Shock advised
  8. Warning! Shock will be delivered
  9. 3-2-1
  10. Shock delivered
  11. Advise to do chest compression: according to configuration<sup>c</sup>
  12. Repeat until next instruction (the next instruction starts with step 4
    - After the instruction “no shock advised” (step 7), it jumps to step 11.

### Finishing resuscitation process

- To finish the resuscitation process and switch the device to standby mode, press the Green ON/OFF button (press 3 second).

b. If **FRED easyport plus TRAINER** jumps from Step 1 direct to Step 5, set scenario to Default in the Menu **Device Setting > Restore Default Scenario**.  
c. If **FRED easyport plus TRAINER** start with Step 11, check configuration.

### 3.3 Training procedure manual AED mode



- The **FRED easyport plus** version including the manual option is clearly labelled with a red foil. If the user does not activate the manual mode, the unit will run in the semi-automatic mode.
- The **FRED easyport plus TRAINER** is only available with the dark grey foil and the indication to press simultaneously the Data transfer (COM) button and the shock button is not shown on this foil. Please advise the trainee accordingly.
- The device cannot be switched over to the manual mode during the defibrillation process (analysis, charging, shock release).
- To operate the **FRED easyport plus TRAINER** in semi-automatic mode again, it must be shut off and on again.
- Depending on the configuration the **FRED easyport plus TRAINER** may start with Step 1 or 8 (see chapter 2.1.2 Menu Start with analysis Yes/No).
- When a scenario have been saved with the App the **FRED easyport plus TRAINER** start with Step 2, because the electrode status is set to electrode applied.
- The following instructions comply with the scenario "shock recommended" and then twice shock not recommended. The scenarios can be selected and saved.
- The following procedure should be checked by the trainer:
  - call emergency service dial number
  - use only if patient is unresponsive
  - remove clothes from upper body - cut if necessary
  - tear open electrode package located in device packaging
  - as shown on package peel off the packing and apply both electrodes to the upper body.

**Trainee starts by switching on the device**

As soon the connection to the App is established, you can press the electrode button and then "Next Step on the App if the electrodes have been not right applied. This will cause that the trainer starts with step 1.

→ *before the connection to the patient is established (before step 2) you can switch to manual mode by simultaneously pressing the Data transfer (COM) button and the shock button, press Orange (Shock) button to charge the energy. Release shock by the Orange (Shock) button*

1. Check that electrodes connector is correctly fitted in machine<sup>d</sup>

→ Trainer confirms that the above procedure was correctly performed by the trainee. Otherwise, the instructions step 1 is repeated. After the third repetition, the instructions jump to step 8.

2. Do not touch the patient analysis will begin

3. Do not touch the patient analysing

4. Shock advised

5. Stand clear of patient

6. Press orange button - now (if shock button is not pressed within 20 seconds it jumps to 8.)

7. Shock delivered

→ *After shock delivered /no shock advises message you can switch to manual mode by simultaneously pressing the Data transfer (COM) button and the shock button.*

8. Advise to do chest compression: according to configuration.

9. repeat until next instruction (the next instruction starts with step 2)

– After the instruction "no shock advised" (step 4), it jumps to step 8.

→ To finish the resuscitation process and switch the device to standby mode, press the Green ON/OFF button (press 3 second)

**Trainer has to confirm correct performance with the button on the device or via Defi training application**



2 x



1 x

**Finishing resuscitation process**

- d. If **FRED easyport plus TRAINER** start with Step 8, check configuration, if it starts with Step 2 set the Scenario to default in the Menu **Device Setting > Restore Default Scenario**.

## 3.4 Training on thorax compressions (optional)

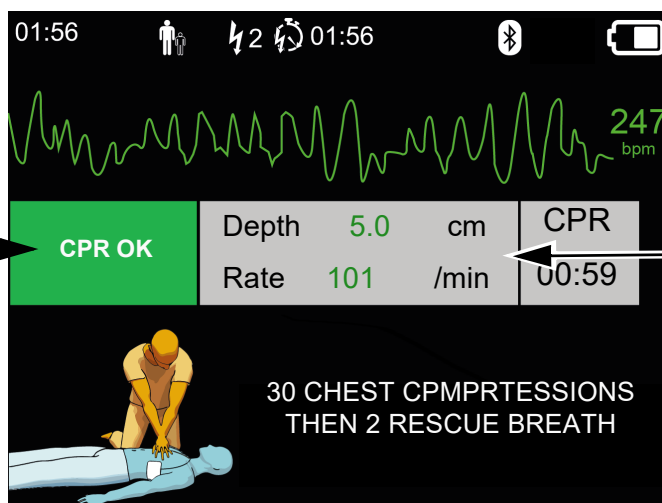


This training is only available with the ARGUS LifePoint CPR feedback sensor.



▲ The training with the Argus LifePoint sensor is only allowed on a chest manikin.

Text and voice advice  
to improve the CPR  
quality



Measured value from ARGUS  
LifePoint sensor

Metronome speed [ /min ]	Press Faster	CPR OK	Press Slower
100	≤ 90	CPR OK	≥ 120
110	≤ 100	CPR OK	≥ 130
120	≤ 110	CPR OK	≥ 140

Depth [mm]	Press Deeper	CPR OK	Press Shallower
1-127	≤ 45	CPR OK	≥ 62

### 3.4.1 Setup of the sensor

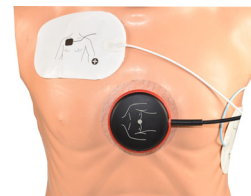
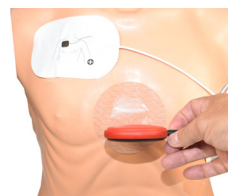
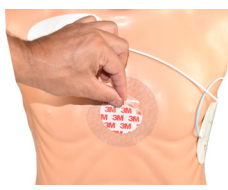
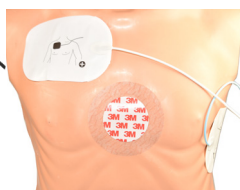
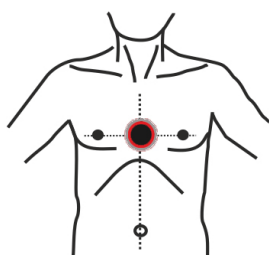


The recommended securing pads during real CPR keeps the LifePoint sensor in position. It is not always needed for training purpose.



1. Connect the LifePoint USB cable to the USB connector.
2. Switch on the device.

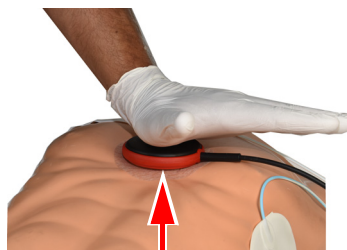
3. Attach the adhesive securing pad on the patient's chest and peel off the foil.
4. Place the LifePoint on the patient chest and start CPR.



hour glass sensor



5. Place your hand on the sensor so that the heel of your hand (**1**) is in the middle of the sensor.



1

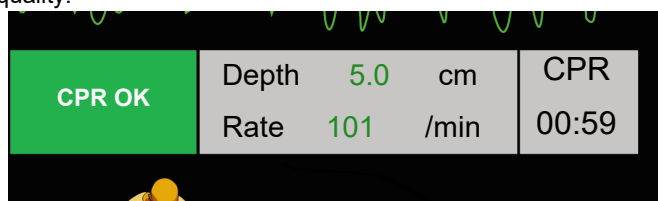
hour glass sensor



1

6. Start with CPR and monitor the compression quality on the device and follow the instructions given by the device (see page before).

7. The displayed measurements in the middle of the screen informs you about your CPR quality.



The following limits are set for speed and depth:

Metronome speed [/min]	Press faster	Press slower
100	$\leq 90$	$\geq 120$
110	$\leq 100$	$\geq 130$
120	$\leq 110$	$\geq 140$

Depth [mm]	Press deeper	Press shallower
1 to 127	$\leq 45$	$\geq 62$



## 3.5 Accessories and disposables



Risk to Persons, Equipment Damage — Always use SCHILLER replacement parts and disposables, or products approved by SCHILLER. Failure to do so may endanger life and/or invalidate the warranty.

Your local representative stocks all the consumables and accessories for the **FRED easyport plus TRAINER**. A full list of all SCHILLER representatives can be found on the SCHILLER website ([www.schiller.ch](http://www.schiller.ch)). In case of difficulty, contact SCHILLER. Our staff will be pleased to help process your order or to provide details for all SCHILLER products.

### 3.5.1 Order Information

#### Devices

Part No.	Description
3.940069	<b>FRED easyport plus TRAINER</b>
2.230366/0-21-0019	1 Reusable training electrodes cable
2.230398/0-21-0031	1 Training electrode

#### Accessories/Disposable

Part No.	Description
2.230325/0-21-0031	Set of 10 training electrodes

#### Optional Accessories

Part No.	Description
2.100860	CPR Feedback Sensor ARGUS LifePoint
2.100870	CPR Feedback Sensor ARGUS LifePoint (hour glass)
2.100519	CPR Feedback Sensor Securing Pads (5x)
2.310420	USB A 90-90 Adapter
2.156095	Carrying Bag red

### 3.5.2 Required accessories

- User Guide
- 1 set of training electrodes
- 1 training electrodes cable
- 9 V alkaline battery

## 3.6 Disposal information

### 3.6.1 Battery Disposal

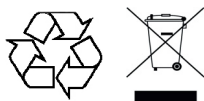


- ▲ Danger of explosion! The battery must not be incinerated, exposed to high temperatures or disposed of with household waste.
- ▲ Do not expose the battery to chemicals that could dissolve ABS, polypropylene, polyvinyl chloride, nickel, mylar or steel.
- ▲ Do not cut, destroy, or incinerate the battery.
- ▲ Danger of acid burns! Do not open or heat up the battery.



The battery is to be disposed of in municipally approved areas or sent back to SCHILLER.

### 3.6.2 Disposal at the end of its useful life



At the end of their service life, the device and its accessories must be recycled in compliance with local regulations. Apart from the internal and plug-in batteries, the device does not contain hazardous material and can be recycled like any other piece of electronic equipment. In accordance with national law, the battery must be disposed of at an appropriate waste disposal station or returned to SCHILLER.

According to European legislation, this device is considered as electronic waste equipment. It can be returned to the distributor or manufacturer where the device will be disposed of in compliance with legal requirements. The customer must bear the shipping costs. This unit must be disposed of in a municipally approved collection point or recycling centre when no longer used.

If no such collection point or recycling centre is available, you can return the unit to your distributor or the manufacturer for proper disposal. In this way, you contribute to the recycling and other forms of utilisation of old electrical and electronic equipment. Improper disposal harms the environment and human health due to the presence of dangerous substances in electrical and electronic equipment.

## 3.7 Troubleshooting

### 3.7.1 Troubleshooting

Problem	Possible causes	Remedy
The ON/OFF LED is off and the device cannot be turned on.	• Battery depleted or inserted with the wrong polarity.	→ Replace the battery. → Insert the battery correctly.
	• Device defective.	→ Have the device repaired.

### 3.8 Preventing electromagnetic interferences



"Non ionising electromagnetic radiation"

The user can help avoid electromagnetic disturbances by keeping the minimum distance between **portable** and **mobile** HF telecommunication devices (transmitters) and the **FRED easyport plus TRAINER**. The minimum distance of 0.3 m has been tested according to IEC 60601-1-2 for a wide range of telecommunication equipment, as shown in the following table:

HF source Wireless communications devices	Transmitter frequency [MHz]	Testing frequency [MHz]	Max. power P [W]	Distance d [m]
Various radio services (TETRA 400)	380-390	385	1.8	0.3
- Walkie-talkies (FRS)	430-470	450	2	0.3
- Rescue service, police, fire brigade, servicing (GMRS)				
LTE band 13/17	704-787	710/745/780	0.2	0.3
- GSM800/900	800-960	810/870/930	2	0.3
- LTE band 5				
- Radio telephone (microcellular) CT1+, CT2, CT3				
- GSM1800/1900	1700-1990	1720/1845/1970	2	0.3
- DECT (radio telephone)				
- LTE Band 1/3/4/25				
- UMTS				
- Bluetooth, WLAN 802.11b/g/n	2400-2570	2450	2	0.3
- LTE Band 7				
- RFID 2450 (active and passive transponders and reading devices)				
WLAN 802.11a/n	5100-5800	5240/5500/5785	0.2	0.3



- ▲ **Portable** HF telecommunication devices must not be used within a radius of 0.3 m from the **FRED easyport plus TRAINER** and its cables.
- ▲ Do not place the **FRED easyport plus TRAINER** on top of other electric/electronic devices - i.e. maintain a sufficient distance to other devices (this includes the patient cables).

*d = recommended minimum distance in meters*

*P = transmitting power in Watts*

For permanent HF telecommunication devices (e.g. radio and TV), the recommended distance can be calculated using the following formula :  $d = 1.2 \times \sqrt{P}$  for 150 kHz to 800 MHz and  $d = 2.3 \times \sqrt{P}$  for 800 MHz to 2.7 GHz

#### 3.8.1 Measures to prevent electromagnetic interferences

Further measures to prevent electromagnetic interferences:

The user can take the following measures to prevent electromagnetic interferences:

- Increase distance to the source of interference.
- Turn the device to change the angle of radiation.
- Only use original accessories (especially patient cables)
- The device should not be used adjacent to or stacked with other equipment.



- ▲ However, there is no guarantee that no interference can occur in certain installations. If the **FRED easyport plus TRAINER** causes interferences, these can be prevented by switching off the device.

## 4 Technical Data







### 4.1 System Specifications


















<b>Manufactured by</b>	SCHILLER
<b>Device name</b>	<b>FRED easyport plus TRAINER</b>
<b>Dimensions</b>	46 x 150 x 143 mm (h x l x w)
<b>Weight</b>	Approx. 0.44 kg with battery
<b>Protection class of the device housing</b>	IP44 (The enclosure is protected against foreign solid objects of $\geq 1$ mm and splashing water from all directions)
<b>Power supply</b>	
Voltage	9 V
with battery type	9 V alkaline or rechargeable Li-ion battery with min. 1000 mA
Power consumption	max. 3 W
Runtime	approx. 2 hours (with alkaline) depending of the used battery quality
<b>Environmental conditions</b>	
<b>Device</b>	
Operation	<ul style="list-style-type: none"><li>• 0...40 °C at a relative humidity of 30 to 95% (no condensation)</li><li>• 0...40 °C with the battery inserted</li></ul>
Storage before use	<ul style="list-style-type: none"><li>• Atmospheric pressure 700 to 1060 hPa / 0 to 3000 m</li></ul>
Storage and transport	<ul style="list-style-type: none"><li>• -10 to 50°C/+5 to 50°C, humidity 10 to 95% (non-condensing), pressure 500 to 1060 hPa.</li></ul>
<b>Module</b>	NORAW36600B
<b>FCC ID</b>	XPYNORAW3
<b>IC ID</b>	8595A-NORAW3
<b>Transmission standards</b>	Combined 2.4 GHz / 5 GHz Wi-Fi 802.11a/b/g/n 2.4 GHz Bluetooth
<b>Frequency range</b>	2412 - 2484 MHz WiFi (not used) 5158 - 5825 MHz WiFi (not used) 2400 - 2483.5 MHz Bluetooth
<b>Max. power output</b>	+21 dBm
<b>Conformity</b>	Hereby, SCHILLER AG declares that the radio equipment type <b>FRED easyport plus TRAINER</b> is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <a href="https://www.schiller.ch/en/conformity">https://www.schiller.ch/en/conformity</a>










## 5 Appendix - Symbols

This appendix lists all general symbols that may be present on the device, label and accessories. Not all of those symbols are necessarily present on your device.

This appendix has its own article number, which is independent of the user guide's article number.

	Identification of the manufacturer
	Identification of the manufacturing date
	Identification of the distributor
	Identification of the importer
<b>MD</b>	Medical device
<b>SN</b>	Serial number
<b>REF</b>	Reference number
<b>LOT</b>	Batch code
<b>GTIN</b>	Global Trade Item Number
<b>CAT</b>	Catalogue number
<b>QTY</b>	Quantity
<b>UDI</b>	UDI: unique device identification as QR code machine readable and human readable as number (e.g.  (01) 0 761 3365 00210 2 (21)xxxx.xxxxxx )
	Number of pieces in the packaging
<b>EU REP</b> <b>EC REP</b>	European Authorised representative (EU REP = ISO 15223-1:2025)
<b>CE</b> XXXX	Notified body (e.g. <b>CE</b> 0123 marking notified body TÜV SÜD)

	UKCA marking (UK Conformity Assessed)
	CE marking, affirms its conformity with European standards
	NRTL symbol (Nationally Recognised Testing Laboratory) TÜV SÜD as accredited NRTL certification provider
	Regulatory Compliance Mark for the Australian standards
	The device is recyclable
	Symbol for the recognition of electrical and electronic equipment. Device must not be disposed of in the household waste.
	Symbol for the recognition of a battery. Battery must not be disposed of in the household waste.
	The packaging is made in low density polyethylene and can be recycled.
	Federal law (USA) restricts this device to sale by or on the order of a physician
	Non ionising electromagnetic radiation. To indicate that the device contains a Radio Frequency (RF) transmitter to transmit data (e.g Bluetooth or WiFi)
	Contains a Bluetooth module
	Do not reuse
	Latex-free
	Use-by date (expiry date of battery, electrodes or other consumables)
	Temperature range for storage or transport, respectively
	Pressure range for storage or transport, respectively
	Humidity range for storage or transport, respectively

	Consult instruction for use (indicates the need for the user to consult the instructions for use)
	Use within X days after opening (electrodes or other consumables)
	Keep dry (store in a dry location)
	Keep away from sunlight (protect from direct sunlight)
	Fragile, handle with care
	Transport upwards (this way up)
	Do not use hooks
	EIP = electronic information product (does not contain any toxic and hazardous substances or elements above the maximum concentration values (product can be recycled and re-used)).
 eifu.schiller.ch	The symbol indicates that the instructions for use are available in electronic form on the manufacturer's website.

Blank page