

Device Web Manager

User manual

Rev. 00 - 21.02.2022

CARDIOLINE

All rights reserved © Cardioline SpA. CARDIOLINE® is a registered trademark of Cardioline SpA. This publication may not be reproduced, in whole or in part, in any form or manner, without prior written authorisation by:

Cardioline Spa Via Linz, 151 38121 Trento Italy

Contents

1.	GEN	NERAL INFORMATION	1
1	.1.	Other important information	1
1	.2.	Minimum System requirements	1
1	.3.	Licensing terms	2
2.	SAF	ETY INFORMATION	3
3.	EXP	LANATION OF SYMBOLS	4
4.	INTI	RODUCTION	5
4	.1.	Purpose of the manual	5
4	.2.	Recipients	5
4	.3.	Intended use	5
4	.4.	Description of the device	5
	4.4.	1. Features with Clickholter/Walk400h and Walk Free and with Walk200b	6
	4.4.	2. Features with the touchECG software application	6
	4.4.	3. Features with the ECGWebApp software application	6
4	.5.	General overview	6
4	.6.	Settings Panel	6
4	.7.	Test Acquisition Panel	8
4	.8.	Test Transmission Panel	9
4	.9.	Report download	10
5.	PRE	PARATION FOR USE	12
5	.1.	Installation	12
5	.2.	Log in	12
5	.3.	ECGWebApp configuration	14
5	.4.	General settings	15
5	.5.	Diary Events Glossary	16
5	.6.	Walk200b Device connection setting	17
6.	HΟ\	W TO USE THE APPLICATION	18
6	.1.	Use with recorders: Clickholter/Walk400h and Walk Free	18
	6.1.	1. Settings of the Clickholter/Walk400h and Walk Free recorders	19
	6.1.	2. Starting the recording	22
	6.1.	3. Starting the recording for Walk Free with Walk Free Live	23
	6.1.	4. Importing a test from Walk400h/Clickholter and from Walk Free	26

6.2.	Use	with the Walk200b recorder	30
6.2	.1.	Connecting the Walk200b recorder	32
6.2	.2.	Setting up the Walk200b recorder	33
6.2	.3.	Starting the recording	35
6.2	.4.	Setting up a test from Walk200b	36
6.3.	Use	with touchECG software	37
6.3	.1.	Setting up the electrocardiogram with touchECG	38
6.3	.2.	ECG test acquisition with touchECG and import	38
7. TRA	ANSMI	ITTING A TEST	41
7.1.	Uplo	bad panel	41
8. MA	INTEN	IANCE AND TROUBLESHOOTING	43
8.1.	Trou	ubleshooting table	43
8.2.	Mes	sages and solutions table	43
APPEND	IX A. C	Compatibility issues of the Walk200b device connection cable driver with Windows 11	49

1. GENERAL INFORMATION

This manual is an integral part of the device and should always be available as support material to the clinical practitioner or operator. Strict compliance with the information contained in this manual is an essential prerequisite for a proper and reliable use of the device.

Have the operator read the manual thoroughly as the information related to the different chapters is only described once.

1.1. Other important information

This manual was written with the utmost care. Should you find any details which do not correspond to those contained in this manual, please inform Cardioline SpA, who will proceed to correct such inconsistencies as soon as possible.

The information contained in this manual is subject to change without prior notice.

All changes will be made in compliance with the regulations governing the manufacturing of medical equipment.

All trademarks mentioned in this document are the property of their respective owners. Their protection is guaranteed.

No part of this manual may be reprinted, translated or copied without the manufacturer's written authorisation.

The codes relating to this manual are listed below.

Language	Code	
ENGLISH	36510702	

1.2. Minimum System requirements

Operating system	Windows 10 1709 Windows basic user
Processor	Intel Atom multi-core or higher Intel Core i5 or higher for the transfer of native Holter tests
RAM	4 GB memory (minimum);
Screen	Resolution: 1024 x 768 pixel (minimum);
Hard disk	At least 100 GB
Data connectivity	Internet connection, Bluetooth connection (for Walk200b)
USB	1 port for Clickholter/Walk400h, Walk Free or Walk200b (with USB option)

1

1.3. Licensing terms

By installing the software, the terms and conditions described below are accepted.

The object of this agreement is the concession of a licence for use of the software and operating manual. Cardioline SpA guarantees a personal, non-exclusive and non-transferable licence for use of the software and of the attached documents. The software and accompanying documents are protected by copyright. The user must comply with the provisions of the law on copyright.

All rights relative to the software are the property of Cardioline SpA. The transfer of software onto another computer by internet or data channel is not permitted.

The programs and the attached documents cannot be changed, copied, merged with other programs or made available to third parties.

The user is deemed responsible for any damage arising from non-compliance with the copyright, or from breach of the conditions set forth in this agreement.

2. SAFETY INFORMATION

Cardioline SpA shall be liable for the safety, reliability and functionality of the devices only if:

- 1. the assembly operations, modifications or repairs are carried out by Cardioline SpA or by one of its Authorised Service Centres;
- 2. the device is used in compliance with the instructions provided in the operating manual.

Always contact Cardioline SpA should you wish to connect any devices not mentioned in this manual.



- This manual provides important information on proper use and safety of the device. Failure to comply
 with the described operating procedure, improper use of the device, ignoring the specifications and
 recommendations supplied, may cause severe physical injuries to the operators, patients and
 bystanders, or may damage the device.
- Have the operator carefully read and understand the contents of the operator manual and the other annexed documents before using the device.



- The device exclusively works with compatible Cardioline devices.
- Thoroughly read the instruction manuals of any devices that will be used alongside the Device Web Manager.
- The device does not require any calibration or special instrumentation for correct use and maintenance.
- When it is required to dispose of the CD support and/or packaging material, adhere to local waste disposal regulations.



3. EXPLANATION OF SYMBOLS

Symbol	Description
li	Operating documentation in electronic format
20xx	Year of manufacture
X	Separate collection of waste electrical and electronic equipment

4. INTRODUCTION

4.1. Purpose of the manual

The manual represents a guide for the execution of the following operations:

- Use of the software to prepare the Clickholter/Walk400h and Walk Free recorders to save acquired tests and transmit them to ECGWebApp (Paragraph 6.1 and 7).
- Use of the software to prepare the Walk200b recorder to save acquired tests and transmit them to ECGWebApp (Paragraph 6.2 and 7).
- Use of the software to prepare and record resting ECG with the application touchECG and transmit them to ECGWebApp (Paragraph 6.3 and 7).
- Use of the web-based application ECGWebApp to receive worklists, to transmit the tests to be analysed and review and to receive the reports (Paragraph 4.9).
- Troubleshooting (Paragraph 8).

4.2. Recipients

This manual is intended for professional operators. Users are therefore expected to have basic knowledge on how to use the software and devices connected to it.

4.3. Intended use

Device Web Manager is a software application for transmitting over the internet to ECGWebApp tests performed with resting ECG (touchECG), cardiac Holter (Clickholter/Walk400h and Walk Free) and pressure Holter (Walk200b). Device Web Manager also makes it possible to manage the recorders Clickholter/Walk400h, Walk Free and Walk200b and the software application touchECG through: receipt of worklists, preparation of the test and saving the test acquired.

Device Web Manager has no clinical impact since it is not used to display tests and does not process them. Device Web Manager is intended for use by professional operators in a hospital and non-hospital setting.

4.4. Description of the device

Device Web Manager is a software application designed to interface with the following Cardioline devices:

- Clickholter/ Walk400h and Walk Free recorders
- Walk200b recorder
- Cardioline touchECG and ECGWebApp software applications.

Extremely easy to install and use, it has an intuitive and interactive user interface.

4.4.1. Features with Clickholter/Walk400h and Walk Free and with Walk200b

The main functions of Device Web Manager are as follows:

- Automatic detection of the recorder connection.
- Import of tests from the recorder and transmission of such tests to the ECGWebApp for reporting and reviewing.
- The possibility to program the recorders for subsequent tests with worklists imported from the ECGWebApp or entered manually.
- Management of the worklists with patient data.

4.4.2. Features with the touchECG software application

- Automatic detection of the ECG tests recorded by the touchECG software application.
- Import of tests and transmission of such tests to the ECGWebApp for reporting and reviewing.
- Management of worklists with the patients' data imported by the ECGWebApp or entered manually.

4.4.3. Features with the ECGWebApp software application

- Configuration with the associated ECGWebApp.
- Receiving worklists.
- Transmission of tests for reporting and reviewing.

4.5. General overview

The user interface consists of three main panels: **Settings**, **Test Acquisition** and **Test Transmission**, and of a **Report download** function key that makes it possible to connect to the ECGWebApp application.

4.6. Settings Panel

Organised in three sections:

- ECGWebApp configuration: contains the parameters for connection to the ECGWebApp (par. 5.3).
- **General settings**: choice of options regarding compliance with the GDPR, deletion of tests on the device, test transmission, localisation (par. 5.4).

- Diary events glossary: removal or creation of new events (par. 5.5).
- Devices: choice of Bluetooth or cable option for Walk200b (par. 5.6)

Settings				
ECGWebApp configurat	tion General settings	Diary events glossary	Devices	
Name	URL	-		
Enter name	Enter URL		Save	Add
Name	URL		Edit	Delete
test3	http://192.168.20.35:808	80/ECGWebAppTest/rest	1	Î
test2	http://192.168.20.35/EC	GWebAppTest/Ecg	Ĩ	
Back				

bar. The icon [1] is present in all the program's pages and always makes it possible to access the **Settings** panel.

It is possible to modify the settings, by accessing the panel through that same icon, even after login.



4.7. Test Acquisition Panel



Test Acquisition Panel

Panel that displays the icons of the various recorders:

- **TouchECG**: for the execution of resting ECG with touchECG,
- Walk200b: for the execution of pressure Holter tests with Walk200b,
- Clickholter/Walk400h: for the execution of cardiac Holter tests with the Clickholter and Walk400h recorders
- Walk Free: for the execution of cardiac Holter tests with the Walk Free recorder.

The panel is accessed by logging in (par. 5.2).

By selecting the desired device, the "Test Acquisition" panel makes it possible to plan the test, to import the test following execution and to further supplement certain data relating to the test before transmission to the associated ECGWebApp.

Please see chapter 6 for details of the features for the individual devices.

4.8. Test Transmission Panel

Connected user: testuser	Reference WebApp: webapp2.0							Do	wnload rep
Exams trans	mission							Exams ac	quisition
Patient last name	Patient name	Recording date	Exam type	Progress	Send date	ECGWebApp	Sending unit	Status	Delete
t4ersgs	r4ewt	02-15-2022	ABPM	0%		webapp2.0	883) testUnit 🗸		1
Leberecht von Blücher	Gebhard	02-15-2022	ECG	0%		webapp2.0	883) testUnit 🗸		1
Leberecht von Blücher	Gebhard	02-15-2022	ECG	100%	02-15-2022 10:00	webapp2.0	testUnit	×	1
Filippi	Andrea	02-14-2022	ECG	100%	02-14-2022 08:54	webapp2.0	testUnit	×	1
Gialli	Maria	02-11-2022	ECG	100%	02-11-2022 14:59	webapp2.0	testUnit	 Image: A second s	
Rossizz	Mario	02-11-2022	ECG	100%	02-11-2022 14:37	webapp2.0	Emergenza	×	Ê
Leberecht von Blücher	Gebhard	02-10-2022	ECG	100%	02-10-2022 09:59	webapp2.0	testUnit	 Image: A second s	
Gialli	Maria	02-08-2022	ECG	100%	02-08-2022 15:29	webapp2.0	testUnit	 Image: A second s	1
Rossi	Mario	02-08-2022	ECG	100%	02-08-2022 15:26	webapp2.0	testUnit	 Image: A second s	Ê
Gialli	Maria	02-08-2022	ECG	100%	02-08-2022 10:14	webapp2.0	testUnit	 Image: A second s	1
Rossi	Mario	02-08-2022	ECG	100%	02-08-2022 10:11	webapp2.0	Emergenza	~	. .

Panel that displays a list with the tests that have been transmitted or are to be transmitted to the associated ECGWebApp for analysis and reviewing.

Once login is completed, the panel is accessed:

- from the Test Acquisition panel, by selecting **Exams transmission** (1)

Exams acquisition			Exams transmission	(1)
TouchECG	Walk 200b	Clickholter/Walk 400h	WalkFree	

- once the import step of the test from a device has been concluded.

For the functions relating to this panel, please see chapter 07.

4.9. Report download

This feature makes it possible to download the reports of the tests transmitted from the associated ECGWebApp.

It is accessed by clicking the **Download reports** key that is present in all windows of the Device Web Manager program.



By clicking the **Download reports** (1) key, the URL connection to the reference ECGWebApp set opens in the browser installed on the system.

In this way, the user accesses the login page of the ECGWebApp, where, once they have entered their credentials (username and password), they view the page with the list of tests transmitted to the ECGWebApp; from there it is possible to download the reports, if any.

💠 Cardioline ECGWebApp -	EcgWi × +				- 8 ×
$\leftarrow \ \ \rightarrow \ \ C$	⑦ ▲ 192.168.20.35:8080/ECGW	ebAppTest/Account/Logi	n?ReturnUrl=%2FECGWebAppTest%2F		☆ ♡ ≡
	Cardioline ECGWebApp				CARDIOLINE
		Enter			
		User	1		
		Password			
			Remember		
			Enter		
	Cardioline ECGWebApp 2.7.2.1633				2021 - Copyright 2021 CARDIOLINE SpA
			ECGWebApp login pa	ge	

For more details on the features of the ECGWebApp, please see the corresponding user manual.

5. **PREPARATION FOR USE**

5.1. Installation

Software installation is possible via the supplied USB, following the procedure below:

- Connect the USB key to the PC and access the content.
- Execute the installation file **DeviceWebManagerSetup**.
- At the end of the installation, a link is created on the desktop; click the link to launch the program.



At the end of the installation, a folder called "Device Web Manager" is created. All the files required to ensure the application works correctly will be saved in it. By default, the folder is created inside the Windows user folder: Users\username\Documents\DeviceWebManager

5.2. Log in

When Device Web Manager starts, a Log In window appears where the user can input his/her credentials (Username and Password) and select the ECGWebApp of reference.

By checking the item "Save access data" it is possible to save the credentials entered for subsequent launches of Device Web Manager.

Credentials, if enabled, must be provided and managed by the server administrator and not by Cardioline.

Online mode

To access the online mode, after entering the credentials, click **Login**. Through an internet connection, the program is automatically connected to the ECGWebApp selected. By checking the box **Remember account details**, these settings will also be kept for subsequent accesses.

Offline mode

To access offline mode, click Work offline.

In this way it will be possible to connect the device, program it or import the recorded test; it will not be possible to transmit the test to the associated ECGWebApp and it will not be possible to update the worklist.

For a detailed explanation of these operations, please see the chapter that corresponds to the desired device.

✓ Login Username Enter username Password Enter password Reference ECGWebApp test3 Work offline → Login →	🛃 Device Web Manager v. 2.0.0.612
✓ Login Username Enter username Password Enter password Enter password Reference ECGWebApp test3 Work offline → Login →	
Username Enter username Enter password Reference ECGWebApp test3 Remember account details 2 Vork offline → Login →	
Login Username Enter username Password Enter password Reference ECGWebApp test3 Vork offline → Login →	
Username Enter username Password Enter password Reference ECGWebApp test3 Vork offline → Login →	😁 Login
Username Enter username Password Enter password Reference ECGWebApp test3 ✓ Remember account details ■	
Enter username Password Enter password test3 Vork offline → Login →	Username
Password Enter password Reference ECGWebApp test3 Vork offline → Login →	Enter username
Enter password Reference ECGWebApp test3 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Password
Reference ECGWebApp test3	Enter password
test3 ✓ Remember account details ☑ Work offline → Login →	Reference ECGWebApp
Remember account details ☑ Work offline → Login →	test3 ~
Work offline → Login →	Remember account details 🗹
	$Work \; offline \to Login \to Login$
Copyright Cardioline SpA 2022	Copyright Cardioline SpA 2022

5.3. ECGWebApp configuration

Device Web Manager	v. 2.0.0.612		
Connected user: Referen	ce WebApp:	Dowr	nload reports
G Settings			
ECGWebApp configuration	General settings Diary even	its glossary Devices	
Name	URL		
Enter name	Enter URL	Save	Add
Name	URL	Edit	Delete
test3	http://192.168.20.35:8080/ECGWebAppT	lest/rest	
test2	http://192.168.20.35/ECGWebAppTest/E	cg 🧪	1
Back			
Convright Cardioline SpA 202)		

Settings: ECGWebApp configuration

On access, from the **Settings** panel (par. 4.6), by selecting the **ECGWebApp Configuration** window it is possible to enter one or more ECGWebApp.

By entering the **Name** of the ECGWebApp and the associated **URL** and by clicking **Save** the user adds the ECGWebApp to the list below.

From the ECGWebApp list it is possible to **Edit** or **Delete** the ECGWebApp entered.

The ECGWebApp with which the user wants to work can be selected on login (par. 5.2)

The association to an ECGWebApp makes it possible to transmit the tests to the ECGWebApp and download their reports, once they are ready.

The **Sending unit** from the Device Web Manager will be recognised by the ECGWebApp with the use of a unique name (par. 7.1).

If the address of the ECGWebApp of reference is changed while the user is connected, the user will be automatically disconnected and taken back to the login screen.

5.4. General settings

From the **Settings Panel** (par. 4.6), the **General settings** window makes it possible to set:

- (1) GDPR Compliance: compliance with certain procedures that make it possible to protect the confidentiality of patients' sensitive data entered in the Holter devices and that make it possible to encrypt the data of the recordings. This as per the European personal data protection regulation (GDPR).
- (2) HOLTER/ABPM: Delete or keep the cardiac or pressure Holter test after it has been downloaded from a device. This setting presets the choice to delete the test once it has been acquired from the device; however, while the test is being imported, it is possible to unselect this option (par.6.1.3 and par.6.2.4).
- (3) TEST TRANSMISSION: Manual or automatic test transmission mode at the end of the test's download from the device if the user is connected to a ECGWebApp.
- (4) TESTS TRANSMITTED: settings regarding the choice not to remove or to automatically remove from the transmission register the tests transmitted more than 7, 30, 90 or 365 days ago.

Device web Mana	iger v. 2.0.0.612		
Connected user: R admin t	keference WebApp: est3		Download rep
G Settings			
ECGWebApp configura	tion General settings Dia	iry events glossary Devices	
GDPR	(2) HOLTER/ABPM	(3) EXAMS TRANSMISSIO	N (4) SENT EXAMS
GDPR compliance	Delete exam after do device	wnload from O Automatically send ei Manually send exams	Automatically remove from transmission s log exams sent after: O 7 days O 30 days O 90 days O 365 days I Do not delete
LOCALIZATION			
User interface language:			
English (United States)	`		
Back			Sa

(5) LOCALISATION: possibility to choose between Italian or English for the user interface.

ATTENTION: selecting the GDPR COMPLIANCE option means that if the programming operations of the Holter device and the import on the computer of the recorded test are performed using different computers, the patient's data will not be recovered during the import of the recorded test and must be re-entered manually.

	5)		5)						C)	İ	9		r	y	/	l	E	١	/	e	2	n	I	t	S		(3		(0	5	5	S	ć	3	r	`\	/		
÷	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Device Web Manager v.	2.0.0.612			
Connected user: Reference admin test3	e WebApp:			Download re
Settings				
ECGWebApp configuration	General settings	Diary events glossary	Devices	
event description				
Enter event			(1) Add	
Event			(2) _{Delete}	*
Bicycle			1	
Car driving				
Carried weights				
Couch/Armchair				
			-	•
Back				
A				

Settings: Diary events glossary

From the **Settings** panel, by selecting the **Diary events glossary** window, the user can configure the glossary of terms to be used during the import of the Holter tests, during the compilation of the patient diary related to the test.

The user can:

- add an event by entering it in the Event description window and by clicking Add (1),
- delete the event by clicking the **Delete** (2) icon that corresponds to the pre-selected term.

ATTENTION: the program presents a list of pre-set events that it is possible to delete. This deletion will be saved in the program; when the program is re-opened, the deleted events will not be shown once more.

5.6. Walk200b Device connection setting

From the **Settings** panel, by selecting the **Devices** window, it is possible to select the connection of the device Walk200b (pressure Holter) with the computer:

- Bluetooth
- With cable: select the serial port connected from the drop-down menu.

ATTENTION: the serial port will appear in the drop-down menu only after the device has been connected via cable.

Device Web Manager v.	.0.0				
nected user: Reference WebA	pp:				
Settings					
ECGWebApp configuration	General settings	Diary events glossary	Devices		
ABPM					
Bluetooth					
OWith cable					
Back					Save
Copyright Cardioline SpA 2022					
		Settings	Devices		



6. HOW TO USE THE APPLICATION

6.1. Use with recorders: Clickholter/Walk400h and Walk Free

After launching the program by clicking the desktop icon and logging in, select from the **Test acquisition** (par. 4.7) the type of device used: Cickholter/ Walk400h or Walk Free and connect the recorder to the computer with a USB cable.

🗜 Exams acquisition			Exams transmission
TouchECG	Walk 200b	Clickholter/Walk 400h	WalkFree
	Choosing	the device	

ATTENTION: Before connecting the Walk400h to the computer via a USB cable, check the charging status by inserting the battery in the recorder, wait for the green light to come on (battery charged). Then remove the battery. This step must be carried out at every programming stage.

NOTE: The Clickholter/Walk400h and Walk Free recorders must be connected to the computer without their battery, using the USB cable supplied. The Device Web Memory program automatically recognises the device and its status (test present/not present in the memory).

After selecting the device, the window with keys related to the operations possible is displayed:

- **O1 Setup**: to set up the device in the step preceding the test. The patient's data are entered (manually or from an imported worklist), the settings of the recorder are confirmed or set, and the recording is launched.
- **O2 Download**: to download the Holter recording, confirm or modify the patient's data and the recording's data, enter the events diary, add medical background information relating to the patient and the reason for the test's execution, and, lastly, transmit the pre-selected test to the associated ECGWebApp.

Cardiac holter	
	02 DOWNLOAD
Start setting device	Download of exam Download recording
Cance	

Connected device with recordings

If the device is not connected, the **Start setting device** and **Download recording** keys will not be active (greyed out).

Cardiac holter	
01 SETUP Device setting	02 DOWNLOAD Download of exam
Start setting device	
	Cancel

Non-connected device

If the device is connected but there are no recordings, only the **Start setting device** key will not be active (greyed out), while the **Download recording** key will be active (orange)

6.1.1. Settings of the Clickholter/Walk400h and Walk Free recorders

The information regarding the patient and the recording's setup parameters are entered while the device is being set up. When device **Setup** is selected, a series of consecutive windows open that make it possible to define the following information:

- Patient details
- Recording settings.

ATTENTION: If recordings are already present in the device, when **Start setting device** is selected, a dialogue window opens that asks for confirmation on whether the programming operation should continue. If this is confirmed, the recordings present are deleted from the recorder.

Entering patient data with Clickholter/Walk400h and Walk Free

The patient's data may be entered:

- Manually, by filling out the specific fields in the work panel (1): Patient ID, Patient ID2, Last name, First name, Date of birth, Sex.
- By using the patient demographics imported from the ECGWebApp (when working in online mode, par. 5.2) by selecting one of the patients listed in the worklist (2).

The worklist can be updated with the **Load worklist** key (3).

It is possible to perform a patient search by typing in the search field the known text (search is possible by First name, Last name, identification code, sex or date of birth) and by clicking the "Search" icon (4).

00001FH	Secondary patient ID		vorklist (3)		Search	Q	
Last name		Name	Last name	ID	Gender	Date of birth	
Rossi		<u>Mario</u>	Rossi	00001FH	м	01-02-1952	
Name		Maria	Gialli	00002FH	F	06-07-2000	
Mario		Gebhard	Leberecht von Blücher	0000122HLM	м	03-19-1921	
Date of birth	Gender		von Clausewitz	0000133HOP	м	04-01-1931	
01/02/1952	Male			00001331101		01-01-1000	
		Andrea	Ешрі	000013390AAZ	I*I	01-01-1980	

Select **Continue** (5) to continue setting up the device.

Recording settings with Clickholter/Walk400h

It is possible to insert the following parameters:

- Sampling rate, type of patient cable used and duration of the test (choice from preset options) (1).
- Presence of a pacemaker: by defining the device type (unknown, atrial, ventricular, atrial-ventricular) and by setting the pacemaker's function frequency (2).

CARDIAC HOLTER Recording settings :			Patient :		
Sampling frequency:	● 250 Hz	○ 500 Hz	Patient ID : 00001FH	Patient ID2 :	
Patient cable:	○ 5 wires	O 7 wires	Last name : ROSSI		
() Recording duration:	24 hours	○ 48 hours	Name : MARIO		1
Pacemaker:	Device type:	Frequency (bpm):	Date of birth :	Gender :	റ്

Click the **Continue** key (3) to confirm the setup of the Holter recorder; a summary page with the data entered will be displayed.

Device preparation r	esult			
CARDIAC HOLTER				
	D	Device successfully prepared. isconnect device and start registration		
Recording settings :		Patient :		
Sampling frequency :	250	Patient ID : 00001FH	Patient ID2 :	
Patient cable :	7	ROSSI		
Recording duration :	24 hours	MARIO		2
Pacemaker :		Date of birth : 01-02-1952	Gender : M	o™
		Ok		

Summary page: Device setup result

Once **OK** has been clicked, the recorder is ready and set up to make the recording.

ATTENTION: Always disconnect the Holder recorder with Windows safe removal process for peripheral devices, located on the right-hand end of the Windows bar.

Recording settings with Walk Free

It is possible to insert the following parameters:

 Presence of a pacemaker: by defining the device type (unknown, atrial, ventricular, atrial-ventricular) and by setting the pacemaker's function frequency (1).

21

CARDIAC HOLTER Recording settings :			Patient :		
Pacemaker:	Device type: -	Frequency (bpm):	Patient ID : 0000122HLM	Patient ID2 : IC	
			Last name : LEBERECHT VON BLÜCHER		
			Name : GEBHARD		
			Date of birth : 03-19-1921	Gender : M	
Const					(2) Continu

Click the **Continue** key (2) to confirm the setup of the Holter recorder; a summary page with the data entered will be displayed.

Device preparation result	
CARDIAC HOLTER	
Disconn	Device successfully prepared. Lect device, insert battery and start registration.
Recording settings :	Patient :
Pacemaker :	Patient ID : 0000122HLM
	Last name : LEBERECHT VON BLÜCHER
View ECG preview ?	Name : GEBHARD
	Date of birth : 03-19-1921 M M
	Ok
Sur	mmary page: Device setup result

6.1.2. Starting the recording

The recording starts by various means depending on the device:

Clickholter/Walk400h

Once the setup step has been concluded, disconnect the device by safely removing the USB and go ahead and apply the recorder to the patient and launch the test as described in the user manual of the Clickholter/Walk400h device.

22

Walk Free

It is possible to launch the recording in two ways:

1. Once the device's setup has concluded, in the summary page **Device preparation result** described above (par. 6.1.1), click **OK**.

Device preparation result	
CARDIAC HOLTER	
Disconnect	Device successfully prepared. device, insert battery and start registration.
Recording settings :	Patient :
Pacemaker :	Patient ID : 0000122HLM
	Last name : LEBERECHT VON BLÜCHER
View ECG preview ?	Name : GEBHARD
	Date of birth : 03-19-1921 Gender : M

Summary page: Device setup result

disconnect the device by safely removing the USB, insert the battery, attach the three electrodes to the device and apply the recorder to the patient's chest. The recording will launch automatically 5 minutes after the battery has been inserted.

2. By using the Walk Free Live software (par. 6.1.3)

6.1.3. Starting the recording for Walk Free with Walk Free Live

The second method for launching the recording with the Walk Free device envisages the use of the Walk Free Live software which can be accessed from the summary page **Device preparation result** described above (par. 6.1.1).

DIAC HOLTER		
	Device successfully prepared.	
	Disconnect device, insert battery and start registration.	
ecording settings :	Patient :	
Pacemaker :	Patient ID : 0000122HLM	
	Last name : LEBERECHT VON BLÜCHER	
(1) View ECG preview	? Name : GEBHARD	
	Date of birth : 03-19-1921	Gender : M

Summary page: Walk Free device setup result

On this page:

- 1. disconnect the device by safely removing the USB, insert the battery, attach the three electrodes to the device and apply the recorder to the patient's chest,
- 2. click the **View ECG preview** (1)

In this mode, the user accesses a first Walk Free Live screen to search the **Bluetooth connection** with the Walk Free recorder (1):

- 1. wait until the recorder appears in the Bluetooth device list
- 2. select the Patient's name (2)
- 3. click the **Connect** key (3)

C Walkf	FreeLive			- 0
File	Options About			
*	Connected to: -			Clos
-1/- i	List of available devices:	(2)		
	Device-ID	Patient name		Last seen
	WalkFree 2727	Gebhard Leberecht von Blücher	09:57	
		Scanning for devices		
				(3) Conne

Walk Free Live: Bluetooth connection with recorder

Once the connection has been launched, a screen appears that displays the three traces detected by the device (1); in this window it is possible:

- 1. to check that the signal is correctly visible for all three channels (2),
- 2. launch the recording by clicking the **Start Rec** key. (3).



In this screen it is also possible, by clicking the icons:



6.1.4. Importing a test from Walk400h/Clickholter and from Walk Free

After performing the test, connect the recorder to the computer with the designated USB cable and launch the Device Web Manager program.

Select the Clickholter/Walk400h or Walk Free icon from the Test acquisition panel (par. 4.7) and then select Download recording.

If more than one tests are present in the recorder, the program displays the list of tests present in the recorder's memory.

26

The list of recordings provides the following information for each test: patient first and last name, Identification, Sex, Date of birth, Test type and Recording start.

Moreover, for every test it possible to listen to the Audio 🏓 if recorded on test launch, download the test

by clicking the **Download** icon or delete the test by clicking the **Delete** icon.

Device '	Web Manager	v. 1.0.0)						
Connecte testuser	d user: Refere Web	ence WebA <mark>App I</mark>	үрр:					D	ownload repo
Record	ings available	on devi	ice						
Name	Last name	ID	Gender	Date of birth	Exam type	Registration start	Audio	Download	Delete
			U	01-01-1900	HOL-24h	02-14-2020 10:04			1
			U	01-01-1900	HOL-24h	02-14-2020 10:04			1
					Cancel				

Tests List in the recorder's memory

By selecting **Download** from the list, the program displays a summary panel of the pre-selected test where it is possible to modify the following recording data:



	Recording data								
	CARDIAC HOLTER					(2)		Delete d	ata from device after download
	Device : HOL-48h					Patient :			
(1)	Registration start:	Date: 02/13/2019		Time: 12:53 PM)	Patient ID : 2	E	Patient ID2 :	E
	Rest period:	Start hour:		End hour: 07:00 AM)	Last name : Verdi			2
	R Pacemaker:	Device type: -	~	Frequency (bpm):		Name : Giuseppe			2
	크는 Registration info:	Sampling frequency: 500	LSB: 2.5	Registr 2d 00	ration duration: h 00m	Date of birth : 10/10/1990	₩	Gender : Male	~ ♂
	Information for sending exams :								
(3)	Sending unit:	Cardio (I)			~	(4) 🛃 Insert diary		(5)	() Listen audio
	Cancel								(6) Continue

- Recording data (1): Recording start, Resting period, Pacemaker.
- Patient data (2): Patient ID1, patient ID2, Last name, First name, Date of birth, Sex.

This information corresponds to that entered during the device's setup only if the test is imported on the same computer on which the setup was carried out.

- Information for uploading the test to ECGWebApp (3): by selecting the sending structure from which the test is transferred (drop-down menu). This field is only active if the user is working in online mode (par. 5.2).
- Insert Diary (4).

When **Insert diary** is selected, a window opens in which it is possible to select the date and time of the event within the recording interval (a), select the type of event from a drop-down menu or type a new event (b) and click **Create new** (c) to confirm it and insert it in the list of events associated to the test.

NOTE: The changes to the preset events list are specific only for the recording on which the user is working and do not affect the events glossary set (par. 5.5).

Diario			×
(a) (b) Event date/time 02/13/2019 12:53 PM 📰	Event description	(C) Create new	
Date and time Event	Bicycle Car driving Carried weights Couch/Armchair Dizziness Dyspnea on exertion Fast walk Lunch/Dinner Precordial pain	lete	
Cancel		Save	
Copyright Cardioline SpA 2	022		

Diary Window

To save the events list created and close the window, click **Save**; you will be taken back to the test's summary panel.

• Listen to audio (5): it makes it possible to listen to the audio recording, if made on application of the device to the patient.

When **Continue** (6) is selected, a second panel opens in which it is possible to enter or modify additional information relating to the patient and to the test:

	L Information regarding patient and exam	
(7)	Anamnestic data: Weight (kg) ATA Height (cm)	
	Known pathologies	0
	Pharmacological therapy	Ø
(8)	Exam data:	
	Reason for study	Ň
	Cancel	Je

- Medical background data (7): weight, height, known conditions, pharmacological therapy,
- Test data (8): the reason behind the test.

At this point, the test that has possibly been supplemented or certain information of which has been modified is ready to be uploaded to the associated ECGWebApp.

Click **Continue** to confirm and proceed to transmit the test to the associated ECGWebApp (chapter 7).

Use with the Walk200b recorder 6.2.

After launching the program by clicking the desktop icon and logging in, select from the Exams acquisition (par. 4.7) the type of device used: Walk200b and connect the recorder to the computer over Bluetooth or via USB (par. 6.2.1).



After selecting the device, the window showing the keys related to the operations possible is displayed:

- 01 Setup: to set up the device in the step preceding the test. The patient's data are entered (manually • or from an imported worklist), the settings of the recorder are confirmed or set, and then the recording can be launched.
- **02** Download: to download the recording, confirm or modify the patient's data and the recording's data, enter the events diary, add medical background information relating to the patient and the reason for the test's execution, and, lastly, transmit the pre-selected test to the associated ECGWebApp.

Pressure holter (ABPM)	
0 SETUP	02 DOWNLOAD
Device setting Start setting device	Download of exam Download recording
	Cancel

Connected device with recordings

If the device is not connected, the Start setting device and Download recording keys will not be active (greyed out).

Pressure holter (ABPM)	
0 SETUP Device setting	02 DOWNLOAD Download of exam
Start setting device	Download recording
Cancel	

Non-connected device

If the device is connected but the recording is not there, only the **Download recording** key will not be active (greyed out), while the **Start setting device** key will be active (orange).

6.2.1. Connecting the Walk200b recorder

Launch the Device Web Manager program, select the **Walk200b** icon from the **Test acquisition** panel (par. 4.7).

If the device is equipped with a USB connection:

- Open the recorder's battery door and put in the batteries, then close the door.
- Connect the device to the PC using the USB cable supplied. Press the key U to turn on the recorder, wait for CO to appear on the screen.
- Go to **Settings** > **Devices** (par. 4.6), select the **With cable** option and select the corresponding COM port from the drop-down menu (par.5.6).

ATTENTION: it may be necessary to install a driver for the device to be recognised.

If the device is equipped with a Bluetooth connection:

- Check that the Bluetooth option is selected in **Settings > Devices** (par. 4.6).
- Open the recorder's battery door, put in the batteries and close the door once more.
- Press the key U to turn on the recorder, wait for the clock to appear on the screen.



- Press the key to launch the pairing.
- On the PC, click the Bluetooth icon and select "Add new Bluetooth device"; once this is done, the device's screen displays "PAIrEnd".

NOTE: If a pairing PIN is requested, type in the code 6624.

NOTE: If the Bluetooth icon is not visible on the PC, you can access the screen by pressing the combination of the Win + I keys and selecting the "Devices" icon.

ATTENTION: If the Bluetooth receiver (USB stick) is inserted in another USB port of the same PC, it may be necessary to repeat the pairing procedure (par. 5.6) after removing the previous instance from the device by selecting and pressing Remove device.

Carry out these steps for every Walk200b recorder you want to connect to the PC.

6.2.2. Setting up the Walk200b recorder

The information regarding the patient and the recording's setup parameters are entered when the device is being set up. When **Start setting device** is selected, a series of consecutive windows open that make it possible to define the following information:

- Patient data
- Recording settings.

ATTENTION: If recordings are already present in the device, when **Start setting device** is selected, a dialogue window opens that asks for confirmation on whether the programming operation should continue. If this is confirmed, the recording present in the recorder is deleted. If the set up is cancelled, the recording remains in the recorder but the setup cannot go ahead.

ATTENTION: If the programming procedure is not completed, the previous recording present in the recorder will not be deleted.

Patient data

The patient's data may be entered:

- Manually, by filling out the specific fields in the work panel (1): Identification code, Last name, First name, Date of birth, Sex.
- By using the patient demographics imported from the ECGWebApp (when working in online mode, par. 5.2) by selecting one of the patients listed in the worklist (2).

The worklist can be updated with the Load worklist key (3).

It is possible to perform a patient search by typing in the search field part of a known text (search is possible by first name, last name, identification code, sex or date of birth) and by clicking the "Search" icon (4).

Patient ID 00001FH		Patient ID2 Secondary patient ID	Loa	d worklist (3)		Search	Q	
Last name			Name	Last name	ID	Gender	Date of birth	١
Rossi			Mario	Rossi	00001FH	Μ	01-02-1952	
Name			Maria	Gialli	00002FH	F	06-07-2000	1
Mario Date of birth		Gender	Gebhar	d Leberecht von Blücher	0000122HLM	М	03-19-1921	
01/02/1952	📼 📥	Male	✓ ♂ Carl	von Clausewitz	0000133HOP	Μ	04-01-1931	
			Andrea	Filippi	000013390AAZ	Μ	01-01-1980	J

Select **Continue** (5) to continue setting up the device.

Recording settings

(

It is possible to insert the following parameters:

- Recording profile (1): it defines the time intervals in which the data are detected, divided into day and night intervals (e.g., 10:00-20:00, every 10 minutes during the day - on every tenth minute from the hour -, every 20 minutes during the night - one every twentieth minute from the hour).
- Resting period (2): indicates the time interval which it is presumed that the patient will dedicate to rest. This field may be corrected later.
- Application arm (3): the arm on which the cuff is applied.
- Cuff size (4): dimensions of the cuff that is applied to the patient

PRESSURE HOLTER (A) ABPM recording settings :	BPM)			Patient :		
1) 🗘 Recording profile:	10-20	○ 15-30	○ 30-60	Patient ID : 0000122HLM	Patie IC	ent ID2 :
2) 🛤 Rest period:	Start hour: 03:00 PM	End	hour: :00 AM ()	Last name : LEBERECHT VON BLÜCH	ER	
3) C Application arm:	○ right	left		Name : GEBHARD		-
4) Cuff size:	○ small	medium	○ large	Date of birth : 03-19-1921	Gen M	ider : der
Cancel				03-17-1721		(5) Continu

Click the **Continue** key (5) to confirm the setup of the Holter recorder; a waiting screen and a subsequent summary page with the data entered will be displayed.

Device preparation result								
PRESSURE HOLTER (ABPM)								
		Device succes	ssfully set up.					
		Disconnect device a	nd start registration					
ABPM recording settings :			Patient :					
Recording profile :	10-20	0	Patient ID : 0000122HLM	E.	Patient ID2 : IC	E		
Rest period :	15:00 - 07:00		Last name : LEBERECHT VON BLÜCHER			2		
Application arm :	Left	Ь	Name : GEBHARD			2		
Cuff size :	Medium	Jak Participation and the second s	Date of birth : 03-19-1921	*	Gender : M	ď		
		0	k					
		_						

Summary page: Device setup result

The selection page of the planned test is displayed by clicking OK.

6.2.3. Starting the recording

Once the recorder has been programmed, apply the sleeve to the patient's arm, connect the sleeve to the

device and launch the first measurement by pressing the play/stop

key on the recorder.



Walk200b - top view

This is how the reliability of the values of the first measurement is ascertained, so that subsequent correct measurements can be made, and the correct cuff positioning is checked. If this measurement is found to be valid, the device will launch the test; otherwise it will be necessary to resolve the problem indicated by the error code shown on the device's display. In this case, it will not be necessary to re-program, but once the problem has been resolved, launch a manual measurement once more. For further information refer to the user manual of the Walk200b recorder.

6.2.4. Setting up a test from Walk200b

After the test has been carried out, launch the Device Web Manager program, select the **Walk200b** icon from the **Test acquisition** panel (par. 4.7), connect the recorder to the computer over or via USB (par.6.2.1) and then select **Download recording**.

The program displays a summary panel of the pre-selected test where it is possible to modify the following data:

	🌣 Recording data				
	PRESSURE HOLTER (ABPM)		(2)	
	Device : Walk200b			Patient :	
(1)	Registration start:	Date: 02/15/2022	Time: 11:15 AM	Patient ID : 53434	Patient ID2 : 7675
	Rest period:	Start hour: 10:00 PM	End hour: 07:00 AM	Last name : luca	2
	L Application arm:	⊖right		Name : pedrotti	.
	y ^{yyy} Cuff size:	⊖ small	m O large	Date of birth : 05/04/2000 :::	Gender :
	Information for sending exams :				(1)
(3)	Sending unit:	testUnit (883)		~	(4) □ Delete data from device after download
	Cancel				(5) Continue

- Recording data (1): recording start, resting period. The data set during programming are confirmed or those actually performed by the patient are set.
- Patient data (2): Patient ID1, patient ID2, Last name, First name, Date of birth, Sex. This information corresponds to that entered during the device's setup only if the test is imported on the same computer on which the setup was carried out.
- Information for uploading the test to the ECGWebApp (3): by selecting the sending structure from which the test is transferred (drop-down menu). This field is only active if the user is working in online mode (par. 5.2).
- Delete recording once the data have been downloaded (4): by flagging the box, the recorder's recording is deleted once the data have been downloaded. If this feature has already been preset in the "General settings" section (par.5.4), the box will have already been selected.

When **Continue** (5) is selected, a second panel **Information relating to the patient and to the test** opens in which it is possible to enter or modify additional information relating to the patient and to the test:

	品 Information regarding patient and exam	
(6)	Anamnestic data:	
(-)	Weight (kg) 4	
	Known pathologies	
	Pharmacological therapy	Ø
(7)	Exam data:	
	Reason for study	×
	Cancel	Continue

- Medical background data (6): weight, height, known conditions, pharmacological therapy,
- Test data (7): the reason behind the test.

At this point, the test that has possibly been supplemented or certain information of which has been modified is ready to be uploaded to the associated ECGWebApp.

Click **Continue** to confirm and proceed to transmit the test to the associated ECGWebApp (chapter7).

6.3. Use with touchECG software

After launching the program by clicking the desktop icon and logging in, select from the **Test acquisition** (par. 4.7) the type of device used: **TouchECG.** Device Web Manager will interface with the touchECG software that has been pre-installed on the computer and will thus make it possible to manage resting ECG tests.

🛱 Exams acquisition			Exams transmission
TouchECG	Walk 200b	Clickholter/Walk 400h	WalkFree
	Test Acqu	isition Panel	

6.3.1. Setting up the electrocardiogram with touchECG

When the TouchECG icon has been selected, the **Patient** window opens where it is possible to set the information regarding the patient's data.

Last name Rossi Name Mario Mario Date of birth Gender 01/02/1952 Male Name Last name ID Gender Outo01EH Maria Gialli 0000122HLM Male Carl von Clausewitz 0000133HOP Morio 01-01-1980	Patient ID 00001FH	E	Patient ID2 Secondary patient ID	Load	worklist (3)		Search	Q
Rossi Mario Rossi 00001FH M 01-02-1952 Name Mario Gender Maria Gialli 00002FH F 06-07-2000 Date of birth Gender Male OT Carl von Clausewitz 0000133HOP M 04-01-1931 Andrea Filippi 000013390AAZ M 01-01-1980	Last name			Name	Last name	ID	Gender	Date of birth
Name Maria Gialli 00002FH F 06-07-2000 Date of birth Gender Gebhard Leberecht von Blücher 0000122HLM M 03-19-1921 D1/02/1952 Male O Carl von Clausewitz 0000133HOP M 04-01-1931 Andrea Filippi 000013390AAZ M 01-01-1980 M	Rossi			Mario	Rossi	00001FH	м	01-02-1952
Mare Gebhard Leberecht von Blücher 0000122HLM M 03-19-1921 01/02/1952 Image: Carl von Clausewitz 0000133HOP M 04-01-1931 Andrea Filippi 000013390AAZ M 01-01-1980	Name			Maria	Gialli	00002FH	F	06-07-2000
01/02/1952 Image Carl von Clausewitz 0000133HOP M 04-01-1931 Andrea Filippi 000013390AAZ M 01-01-1980 M	Date of birth		Gender	Gebhard	Leberecht von Blücher	0000122HLM	М	03-19-1921
Andrea Filippi 000013390AAZ M 01-01-1980	01/02/1952	📼 📥	Male	 ✓ ✓ Carl 	von Clausewitz	0000133HOP	М	04-01-1931
				Andrea	Filippi	000013390AAZ	м	01-01-1980

The patient's data may be entered:

- Manually, by filling out the specific fields in the work panel (1): Patient ID, patient ID2, Last name, First name, Date of birth, Sex, Ethnicity.
- By using the patient demographics imported from the ECGWebApp (when working in online mode, par. 5.2) by selecting one of the patients listed in the worklist (2).

The worklist can be updated with the **Load worklist** key (3). It is possible to perform a patient search by typing in the search field the known text (search is possible by first name, last name, identification code, sex or date of birth) and by clicking the "Search" icon (4).

Select **Continue** (5) to launch the test's acquisition on touchECG.

6.3.2. ECG test acquisition with touchECG and import

Once the patient's data have been entered and the command **Continue** has been selected, the program activates the touchECG software to proceed with the acquisition of the ECG.



Activating the touchECG Software

Please see the related user manuals for the use of the touchECG software and of the HD+ unit.

Once the test has been performed, close touchECG.

The Device Web Manager program recognises the test performed and opens a second panel: Information relating to the patient and to the test.

	品 Information regarding patient and exam			
(2)	Anamnestic data: Weight (kg)	(3)	(1)	Sending data Sending unit: Cardio (1)
	Known pathologies	Pharmacological therapy I. 3.	 2. 4. 	<i>₽</i>
(4	Exam data:	5.	6.	
	Reason for study			2
	Cancel			(5) Continue

Information relating to the patient and to the test panel

In this panel it is possible to enter or modify the following information relating to the patient and to the test:

• Sending data (1): drop-down menu to select the sending unit to the associated ECGWebApp.

- Medical background data (2): weight, height, known conditions.
- Pharmacological therapy (3): it is possible to enter the list of medications taken by the patient.
- Test data (4): the reason behind the test.

At this point, the test that has possibly been supplemented or certain information of which has been modified is ready to be uploaded to the associated ECGWebApp.

Click **Continue** (5) to confirm and proceed to transmit the test to the associated ECGWebApp (chapter 7).

7. TRANSMITTING A TEST

The test transmission step makes it possible to upload the test to the associated ECGWebApp following recording with Clickholter/Walk400h, Walk Free, Walk200b, touchECG and to subsequently import it on a computer.

The transmission step is accessed:

- once the import step of the test has been concluded,
- from the Test Acquisition panel, by selecting "Test transmission" (par. 4.8).

7.1. Upload panel

The program displays the **Test Transmission** panel that provides the tools for uploading the test to the associated ECGWebApp. This panel shows the list of the recordings downloaded on the computer with the following information:

- Patient data: Last name, First name, Recording date, Test type
- **Progress**: the test transmission progress
- Send date: date on which the test was sent to the associated ECGWebApp
- **ECGWebApp**: indicates the associated ECGWebApp
- Sending unit: drop-down menu to select the unit from which the recording is being sent
- Status: if the recording has already been sent to the associated ECGWebApp \checkmark , if it has not yet

been sent 🤷 , if the program is preparing the transmission date 🔤 , if the transmission is ongoing

🖊 or if there is an error in transmission 🐣

Delete: to delete a test on this list. By clicking the symbol on the corresponding row the test is deleted; this feature is active both for tests that have already been transmitted and for tests that are yet to be transmitted to the ECGWebApp.

■ Exams transn	nission							Exams ac	quisition
Patient last name	Patient name	Recording date	Exam type	Progress	Send date	ECGWebApp	Sending unit	Status	Delete
t4ersgs	r4ewt	02-15-2022	ABPM	0%		webapp2.0	883) testUnit 🗸		Î
Leberecht von Blücher	Gebhard	02-15-2022	ECG	0%		webapp2.0	883) testUnit 🗸		1
Leberecht von Blücher	Gebhard	02-15-2022	ECG	100%	02-15-2022 10:00	webapp2.0	testUnit	×	1
Filippi	Andrea	02-14-2022	ECG	100%	02-14-2022 08:54	webapp2.0	testUnit	×	1
Gialli	Maria	02-11-2022	ECG	100%	02-11-2022 14:59	webapp2.0	testUnit	 Image: A start of the start of	
Rossizz	Mario	02-11-2022	ECG	100%	02-11-2022 14:37	webapp2.0	Emergenza	×	1
Leberecht von Blücher	Gebhard	02-10-2022	ECG	100%	02-10-2022 09:59	webapp2.0	testUnit	 Image: A second s	
Gialli	Maria	02-08-2022	ECG	100%	02-08-2022 15:29	webapp2.0	testUnit	×	1
Rossi	Mario	02-08-2022	ECG	100%	02-08-2022 15:26	webapp2.0	testUnit	 Image: A second s	
Gialli	Maria	02-08-2022	ECG	100%	02-08-2022 10:14	webapp2.0	testUnit	×	Î
Rossi	Mario	02-08-2022	ECG	100%	02-08-2022 10:11	webapp2.0	Emergenza	 Image: A second s	1

Test Transmission Panel

To confirm the upload of the recording to the ECGWebApp, select the Sending unit from the drop-down menu,

next to the pre-selected test, and in the **Status** column click the icon ^{••}. This launches the transmission: it will be possible to monitor the upload percentage in the **Progress** column,

while the **Status** column will first show the icon 🔤 with which the program reports that the data to be

uploaded are being prepared and will subsequently be replaced by the icon \bigotimes indicating the progress of the test's transmission.

It is possible to interrupt the upload of the recording by clicking the icon S. A window will appear asking whether the interruption of the upload is confirmed or not.

Once the recording has been successfully uploaded to the ECGWebApp, the icon 💙 will appear in the Status column.

NOTE: The recordings transmitted stay in the list of the **Test Transmission** panel as history. If one of the automatic deletion options has been set (par. 5.4), the recordings will be removed automatically once the period set has elapsed.

8. MAINTENANCE AND TROUBLESHOOTING

8.1. Troubleshooting table

Problem	Cause	Solution
Device Web Manager	Possible corruption of	Try restarting the computer; if this does not work, uninstall and reinstall the software. If the problem persists, contact Cardioline's technical
		service.
Log in doos not work	The user is not recognised.	Make sure that the username and password are correct.
	There is no internet connection.	Make sure that the computer is connected to the internet.
Walk200b does not	There is no Bluetooth module on the computer.	Add a Bluetooth module on the computer.
connect	Bluetooth inactive.	Activate the computer's BT, check the pairing, and, if needed, repeat the setup.

8.2. Messages and solutions table

Message	Cause	Solution
Certain prerequisites for the operation of this software are missing or do not work, this software may not have installed correctly, repeat the installation.	The installation of the software is corrupted.	Reinstall the software.
The data have not been deleted from the device.	There was a request to delete the recorder on the Holter ABPM but the program was unable to complete the operation.	Try the procedure for the deletion of the data from the device once more.
The device is empty	There was a request to download a test from a device without recorded tests.	Make a recording with the device before downloading it.
No device connected.	The device was disconnected during an operation.	Do not disconnect the devices while preparation or import

Device Web Manager 8. MAINTENANCE AND TROUBLESHOOTING

		operations are being
Diary events are outside the recording range	Diary events outside the recording time range	Re-open the diary and check the validity of the events' dates
No ECG was acquired and saved	At the end of the TouchECG performance, no ECG saved by TouchECG was found.	Repeat the acquisition of the ECG trace making sure to save it at the end.
The address of the server specified in the configuration is not valid.	An invalid ECGWebApp URL is being entered during Configuration.	Check the URL.
Communication error with the ECGWebApp, check the settings and network connectivity and try again.	Error during login.	Check username and password, the configuration of the WebApp and the computer's network conditions.
There is no current connection to any server.	An operation that requires login was performed while working offline.	Log in.
It is necessary to indicate the address of the server specified in the configuration.	The user is trying to log in without having configured a valid URL for the ECGWebApp.	Configure the URL for the ECGWebApp.
The user does not have the rights required.	The rights does not have the required rights on the ECGWebApp.	Use a user who has been granted the necessary rights or ask an ECGWebApp administrator to change them.
The test was imported correctly. A copy is still on the device.	Once the test was imported, it was not possible to delete it from the device.	The test will remain on the device until it is prepared once more.
It is not possible to set a future date as test start date.	A future date was set as test start date during the setup of a test that has already been carried out.	Correct the test start date.

A required software component was not found, the software may be unable to operate correctly, try reinstalling it. If the problem persists, contact support. A required software component was loaded incorrectly, the software may be unable to operate correctly, try reinstalling it. If the problem persists,	A software component required for correct operation is missing. It was not possible to load a software component needed for the correct	Reinstall the software and try again. If the problem persists, contact support. Reinstall the software and try again. If the problem persists,
A required software component is not functioning properly, try installing the software. If the problem persists, contact support.	A loaded software component does not function as it should and may affect the correct operation of the software.	Reinstall the software and try again. If the problem persists, contact support.
An invalid password was specified.	Invalid Password entered.	Enter correct Password.
An invalid username was specified.	Invalid Username entered.	Enter correct Username.
Please check the patient's date of birth.	A date of birth was entered in an invalid format.	Enter the date based on the international settings selected.
The patient's date of birth cannot be in the future.	Invalid date of birth entered. The date is in the future.	Enter correct date of birth.
The date of birth is not valid, select a date after 1st January 1900.	Invalid date of birth entered. The date entered cannot be earlier than 01/01/1900.	Enter correct date of birth.
Please check the patient's ID.	Invalid patient Identification Code entered.	Enter correct patient Identification Code.
Please check the patient's name.	An invalid patient name was entered.	Enter a valid name.
Please check the patient's last name.	An invalid patient last name was entered.	Enter a correct last name.
The screen resolution is lower than 1024 x 768 and that could affect the correct operation of the software.	The screen resolution is lower than 1024 x 768 pixel. It is possible to continue but the program graphics may be hard to use.	Adjust the resolution of the computer to the requirements.

Device Web Manager 8. MAINTENANCE AND TROUBLESHOOTING

It is necessary to have Windows 10 or higher for the correct operation of this software.	The Windows 10 versions are not supported, it is possible to continue using the program but there may be malfunctions.	Update Windows to version 10.
The Bluetooth connectivity may not work properly on Windows 10 version earlier than 1709 "Fall Creators Update".	Versions of Windows 10 earlier than 1709 have issues with Bluetooth connections, it is possible to continue but there may be problems when the Bluetooth connectivity is used.	Update Windows 10 to at least version 1709.
The Holder device is not connected.	The connection to the device was lost during the programming or test import operations.	Make sure that the device is not disconnected, moved away from the computer or switched off while operations are being carried out.
The screen resolution is insufficient for executing this software, please use a screen with a resolution of at least 1024 x 768 pixel.	The computer in use has a resolution lower than 800 x 600 and it is not possible to continue.	Adjust the resolution of the computer to the requirements.
TouchECG application not found, please check installation.	The touchECG software is not installed correctly on the computer or is not installed.	Check the installation of the touchECG software on the computer.
It was not possible to add the event to the glossary.	An empty text is being entered in the events glossary.	Check the text to be entered in the events glossary.
It is not possible to add a duplicated event in the glossary.	A text that has already been entered is being entered in the events glossary.	Check the text to be entered in the events glossary.
It was not possible to acquire the test from the device.	Importing a test from a device failed.	Check the device's status: if it is switched off, disconnected, or if the connection has been lost.

Device Web Manager 8. MAINTENANCE AND TROUBLESHOOTING

It was not possible to prepare the device.	Scheduling a test from a device failed.	Check the device's status: if it is switched off, disconnected, or if the connection has been lost.
Upload session interrupted by the server.	The destination server has interrupted the data upload session.	Start a new data upload session. If the error persists, contact the service provider.
An error occurred during data compression.	The preparation step of the data packet to be sent ended unsuccessfully.	Relaunch the data upload session.
Cannot upload recording.	Test data upload failed.	Try again. If the error persists, contact the service provider.
The start of the data sending session was interrupted.	The server refused the request to launch the Holter data upload session.	Try again. If the error persists, contact the service provider.
The test start date is not valid, select a date after 1st	Invalid test start date	Select a date after 1
No active compatible Bluetooth 2.1 devices present, install and/or enable a Bluetooth 2.1 or later version device.	To communicate with a device, the software requires that a Bluetooth module version 2.1 or later be installed on the computer.	If no Bluetooth device is installed on the computer, install one. If the device is present but not enabled, activate it from the System settings. If the message continues to appear, make sure that the device supports Bluetooth version 2.1 or later
Access impossible: the user has been temporarily disabled for having made too many failed access attempts.	When accessing the ECGWebApp, the user has been temporarily disabled	Wait until the temporary block expires, then check username and

	for numerous failed	password and try
	access attempts.	again.
Access impossible: the username or password are incorrect.	Incorrect username or password have been entered when accessing the ECGWebApp.	Enter correct username and password.
Access impossible: the user has been disabled.	When accessing the ECGWebApp the user has been disabled.	Contact the administrator of the ECGWebApp and request the reactivation of the user's account or the allocation of new credentials.
Access impossible: the user's password has expired.	When accessing the ECGWebApp, the password has expired.	The password has expired, open the ECGWebApp of reference in a web browser and log in to update the password.

APPENDIX A. Compatibility issues of the Walk200b device connection cable driver with Windows 11

If it is not possible to prepare the device or download a test from the device using the cable for connection to a PC on which Windows 11 have been installed, it is possible that the driver of the connection cable is incompatible.

To verify this, with the device connected to the computer, proceed as follows:

- 1. call up the **Run** dialogue window by using the Win + R key combination,
- 2. in the text box, type the command **devmgmt.msc** and confirm by clicking **OK**.

	Type the name resource, and V	of a progra Vindows wi	m, folder, docu Il open it for yo	ment, or Internet u.	
<u>O</u> pen:	devmgmt.msc	d		~	-
		ок	Cancel	Browse	

NOTES: Alternatively, it is possible to use the **start** command search to search for the "Device manager" application.

3. Once the "Device manager" application has been launched, expand the node "Ports (COM and LPT)" to show its contents.



4. One of the ports listed should show the error message:

"Please install corresponding PL2303 driver to support Windows 11 and further OS."

or

"PL2303TA DO NOT SUPPORT WINDOWS 11 OR LATER, PLEASE CONTACT YOUR SUPPLIER".

In both cases, right-click with the mouse on the words and select the item "Uninstall device" from the drop-down menu that will appear.



5. The application will show a dialogue window asking you to confirm the operation.



ATTENTION: It is important that, in this window, you check the field "**Attempt to remove the device's** *driver*".

Once set, proceed by clicking the Uninstall key.

The system will then uninstall the device and remove the related driver.

6. At this point it is necessary to install the correct driver for this device, by executing the software PL2303_Prolific_DriverInstaller_v1.12.0.exe supplied with the Device Web Manager setup and available on the user's computer in the folder:

C:\Programs (x86)\Cardioline\DeviceWebManager\support

NOTES: The driver is also available to download from the manufacturer's site at the address: <u>http://www.prolific.com.tw/UserFiles/files/PL2303_Prolific_DriverInstaller_v1_12_0.zip</u>



ATTENTION: Based on the security settings, the operating system could ask for confirmation of the execution of this program; in that case, confirm by clicking the "**Yes**" key.

7. Once the program has been launched, proceed by pressing the "Next >" key and at the end of the installation execution exit the program by pressing the "Finish" key.



8. Execute the Microsoft tool "wushowhide", available for free to download at the following address:

http://download.microsoft.com/download/f/2/2/f22d5fdb-59cd-4275-8c95-1be17bf70b21/wushowhide.diagcab



Once the program has downloaded, execute it by double clicking, proceed using the **Next** key and wait for the search to be finished.

	×
The show or hide updates	
Troubleshoot and help prevent computer problems	
Show or hide updates Select the updates that Windows will install automatically	
Apply repairs automatically	
Publisher: Microsoft Corporation	
Privacy statement	
	Next Cancel
	 Show or hide updates Troubleshoot and help prevent computer problems Show or hide updates Select the updates that Windows will install automatically Apply repairs automatically Publisher: Microsoft Corporation Privacy statement

The options available will be shown at the end. Select the option "Hide updates" and select by checking, all updates from the list for the Prolific ports, then click **Next**.



After processing, the program will show the result of the operations.

Troubleshooting has completed		
The troubleshooter made some changes to your to do before.	system. Try attempting the task you	were try
Problems found		
Prolific - Ports - 3.8.40.0	Fixed	(
Prolific - Ports - 3.8.41.0	Fixed	
Did we fix your problem?		
Yes No		
View detailed information		

Lastly, close the window by clicking the "Close" key.

9. Go back to the application **Device manager** and check that the port functions normally once more and is identified as "Prolific USB-to-Serial Comm Port" and that a name has been assigned to the port.



NOTES: It may be necessary to disconnect and reconnect the cable to the computer so that the port can be identified.

10. Lastly, check the configuration of the Device Web Manager software by going to the configuration screen **Settings**, accessing the **Devices** tab and then selecting the port after having checked the option "Via cable".

Cardioline Device Man	ager v. 2.0.0.539			
Connected user: Reference	ce WebApp:		(Download reports
ECGWebApp configuration	General settings	Diary events glossary	Devices	
ABPM				
Bluetooth With cable - Salact COM part				
Select serial port.	~			
Select serial port. Porta di comunicazione (COM1) Prolific USB-to-Serial Comm Po	rt (COM3)			
				Save
Back				

11. If needed, save the configuration by clicking **Save** and use the device.

NOTES: Repeat these operations if problems should appear once more in the future following the release by Prolific of a new version of the driver through the Microsoft Windows Update driver distribution channel.



Cardioline S.p.A. Headquarters Via Linz, 151 38121 Trento Italy Tel. +39 0461 96821