



**Cardiac Monitoring  
Service**

# ***WELCOME TO CARDIAC MONITORING SERVICE***

## ***Ambulatory Blood Pressure Service Manual***

You have received this Ambulatory Blood Pressure Service Kit from Cardiac Monitoring Service. The Mobile-O-Graph recorder and HMS Software will enable you to better treat your patients efficiently and accurately. Over the next few days, please take the time to review this Ambulatory Blood Pressure Service Manual. This manual will provide your office with instructions and information regarding our services, equipment, and billing procedures.

If you have any questions regarding our services, software, or equipment, please do not hesitate to call us toll-free at:

**(800) 267-5248**

Please make sure to keep this manual accessible for future reference by the various office personnel and/or the physician(s).

## **Mobile-O-Graph Ambulatory Blood Pressure Service Information and Procedures**

*Thank you for choosing CMS as your heart monitoring service.*

The service package that you have received from CMS contains the following items:

- Mobile-O-Graph Ambulatory Blood Pressure Monitor
- carrying case, small medium and large arm cuff's, AA batteries, washable white arm sleeves, postcard with software download QR code and USB connection cable
- Service Information Manual that contains all the information needed by your office to use our service

It is important that the appropriate persons read and/or make note of the information and procedures contained in this Service Information Manual.

If you have any questions or need help, please call CMS at (800) 267-5248.

# **Ambulatory Blood Pressure Service Manual**

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## **HMS Client Software Installation**

### **Installing Hypertension Management Software Client Server (HMS-cs)**

A postcard will be included in the package, you can follow these steps for download or have someone from the CMS Support Team manually pass and install this for you. Schedule installations with a Support Technician at (800) 267-5248.

## Pairing your Mobil-O-Graph to your Computer

You must pair your device prior to use for the HMS Program to recognize any Mobil-O-Graph recorder when plugged into a specific USB Port on your computer.

### Pairing via USB driver

- Make sure your Mobil-O-Graph is powered off
- Connect the USB connection cable into an available USB port in your computer, then insert the plug into the data port on the left-hand side of the recorder until it engages
- The red dot on the plug must align with the red dot on the data port – **DO NOT FORCE IT**
- Put the rechargeable batteries into the monitor
- Switch on the Mobil-O-Graph, you'll see 'co' on the display
- Open your new HMS Program
- At the top menu, click Settings then Port Settings
- Select the tab SerialNR\USB
- On your computer open Device Manager, you will see what COM Port you are connected to
- Ports (COM & LPT)
  - Prolific USB-to-Serial Comm Port (COM##)
- Back in your HMS Program, select Add Device
- Use the Interface drop down to choose the appropriate COM port
- Use the Type drop down to choose Mobil-O-Graph
- Click Save

### Pairing via Bluetooth

Your computer must have built-in Bluetooth, or you must use the Bluetooth adapter.

- Power the monitor on
- On the monitor, hold down the play button on the far left, as you hold that down press the day/night button in the middle, it will blink 'bt'. Hit the play button until you see 'PAIr' then hit the event button on the far right.
- Open the HMS Client-Server software
- Click on Settings
- Select the Bluetooth tab
- Select Add Device
- Select Search
- You'll see the Bluetooth devices, click on your serial number then hit Pairing
- You will now see your serial number listed
- Your computer will have a pop up asking to Allow the connection, select Allow and you will see a confirmation pop up
- The HMS Software will also confirm the 'coupling was successful', hit OK
- Hit Save to keep this serial number synced

## Mobile-O-Graph Pre-Hookup Enrollment

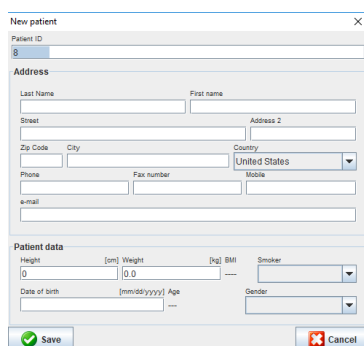
IMPORTANT!! Must be done prior to hooking up every patient.

Open HMS Client Software



Select New Patient

- Enter the Last Name then First Name
- None of these fields are mandatory
- When done, select Save



If you want to change the format for height and weight, go into Settings – Format and you can edit them here. You will restart the program to see the changes.

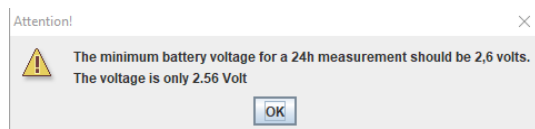
Put the provided rechargeable batteries into the recorder. Connect the recorder to the computer using the USB Connection Cable.



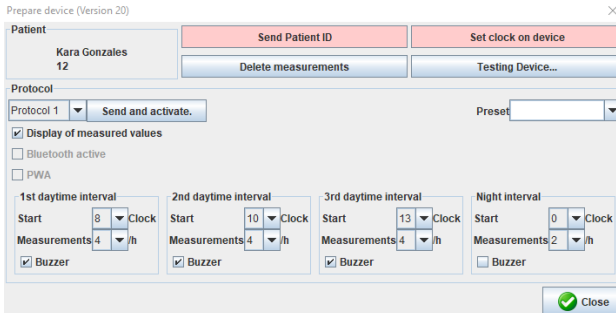
With your patients file up on the screen, power your recorder on, you will see 'co' on the display.

In your HMS Program, select Prepare Device. It will begin Searching For Device, this may take a few minutes.

If you get a pop up about the battery, select OK.



## Mobile-O-Graph Pre-Hookup Enrollment...continued



### Select Send Patient ID

- It will ask if it's Patient ID sent #, select yes if that is the correct ID

### Select Set Clock on Device

- It will connect to your computers date and time, to confirm select OK

Remove the check mark under Display Results so the patient doesn't see their results after each test.

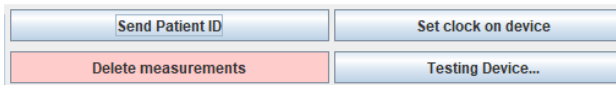
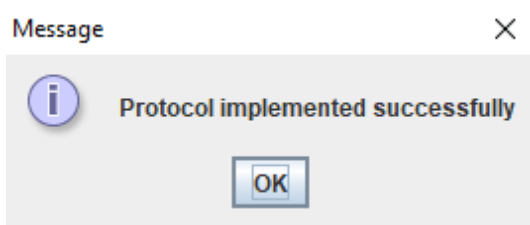
### Intervals

This allows you to change the testing times throughout the recording. Set the **1<sup>st</sup> Daytime Interval** for how many times an hour you want to test once they wake up. Then you will set the **Night Interval** for how many times an hour you want to test once they go to bed. If there are any changes to the testing in between you will use the 2<sup>nd</sup> and 3<sup>rd</sup> Daytime Intervals

- Buzzer – sound notification when a reading begins and ends

### Finally, select Send and Activate

- If you have previous measurements that need to be deleted, you will see Delete Measurements in red, you must clear the previous readings before setting up a new patient.

You'll see 'Protocol implemented successfully', Select OK then Close

Close out of the HMS Client Server Software

Disconnect the recorder from the computer and power it off

## Mobile-O-Graph Patient Hookup

Place the Mobile-O-Graph recorder into the blue pouch, close the pouch.

Select the appropriately sized arm cuff, use the tape measure to get an accurate measurement.

Connect the cuff's air tube to the recorder.

If needed, place the white sleeve on the patients left arm, above the elbow. Slide the arm cuff onto the patients left arm, over the white sleeve.

- Air Tube points out the top of the cuff
- ART with a down arrow is pointing down towards the patients inside elbow (Artery)
- The metal rod should line up with the elbow
- You should be able to fit a finger into the cuff with no problems

Power the recorder on, it will now display the current time in military hours.

You should take a Baseline Reading before the patient leaves; this will also help the patient understand how the testing starts and how to create a test if necessary.

- Press the play button on the far left of the recorder
- This will begin the first pressure reading
- If it didn't read, it will give an Error # and will try again in 3 minutes
  - Make sure the patient is sitting still, feet flat on the floor, arms at rest

Keep in mind, when selecting the Play/Stop feature, it will display the test reading on the display. The regularly scheduled tests will not display on the recorder if you've chosen to disable the Display.

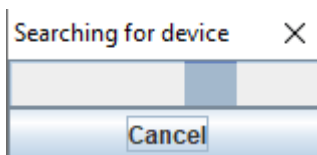


## HMS Client Software Uploading Patient Test

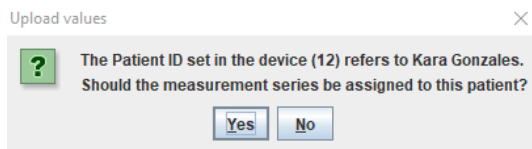
Power the recorder off and remove it from the blue pouch but keep the batteries in the recorder. Connect the recorder to the computer.



Open the HMS Client Software, select Upload Device.



Now power the recorder on, you should see 'co' on the recorder. The software will Search For Device, this may take a few minutes.



Once it locates the tests it will display 'The patient ID set in the device (#) refers to **Patient Name**. Should the measurements series be assigned to this patient?' If this is the correct patient, then select Yes.

Once it locates the monitor you will see Import Data %, it is uploading the test from the recorder into your HMS Program, this will take a few minutes.

## HMS Client Software Uploading Patient Test...continued

Measurement series

Please choose the starting times of the Day/Night intervals or type them in manually.

Start of daytime interval [HH:mm] 08:00

The Day/Night key was not pressed

Start night interval [HH:mm] 20:00

The Day/Night key was not pressed

Findings/Notes

Protocol 1 Transmission 07/28/2020 Serial number C31382

You will now enter the time the patient went to bed and what time they got up, then select Save.

Delete measurements

? Should the Patient ID and the measurements be deleted from the device?  
ATTENTION: If you do not delete the measurements, no new measurement series will be started, but the next measurements will be added to the existing series.

It will now ask if you want the measurements to be deleted, you should select **Yes** as the information has now been uploaded to the software.

- If you choose No, you will still have the ability to delete it when you go to enroll your next patient.

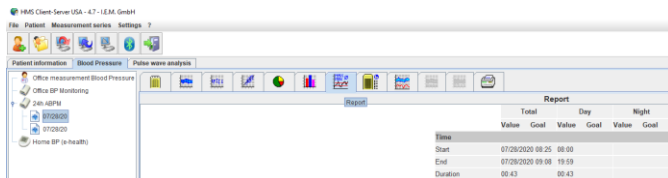
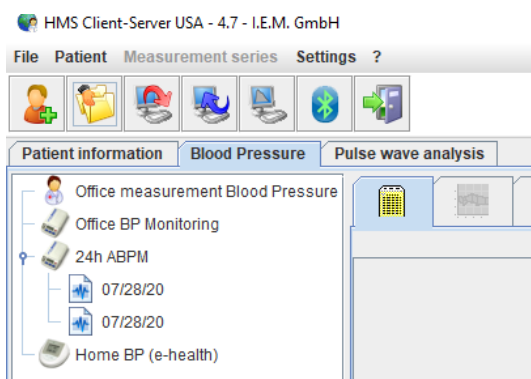
Once completed it will take you to the Patient Information Tab.

## Retrieving Ambulatory Blood Pressure Reports

Select Patient List, then highlight your patients name and select Open Patient. It will open in the Patient Information tab.

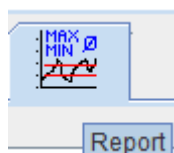
Select the Blood Pressure tab.

Under 24h ABPM you will see a report with the date of service, select that date file.



Each tab offers different report data:

- Table of Measurements
- BP Profile
- Bar Chart
- Correlation
- Values Above Limit
- Histogram
- Report
- Hourly Mean Values
- Blood Pressure Change
- 24h PWA
- Amplification
- Print



For a complete overview of your patient's test, select Report.

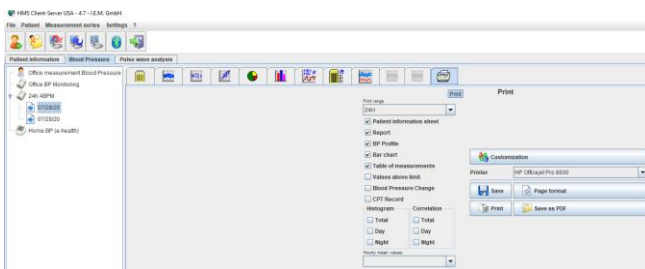
## Retrieving Ambulatory Blood Pressure Reports...continued

To Print your patients Reports

Select the Print option



Here you will select the different reports you want to have printed or saved as a PDF.



# Cardiac Monitoring Services, LLC.

Ambulatory Blood Pressure Monitoring (ABPM) service  
1300 Quail St Suite 209 · Newport Beach, California 92660 · (800) 267-5248 · Fax (949) 724-9778

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## Ambulatory Blood Pressure Monitor Billing

CMS offers this service as a lease with a monthly flat fee per device and provides unlimited use of the device and software. Our fees include the ABPM device, accessories and software to generate reports in your office.

ABPM CPT Codes used for this Model:

<u>CODE</u>	<u>PROCEDURE DEFINITION</u>
93788	Scanning
93780	Interpretation
93784	Global – 24 hours or longer; including recording, scanning analysis, interpretation and report

93784 Average Reimbursement (Privates and Medicare) \$85.00

Max Dr Revenue	\$1,667.30
Assumes 50% Utilization	\$833.65
CMS Fee for Device & S/W per month	TBD

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## Ambulatory Blood Pressure Monitor Billing

The following ICD-10-CM diagnosis codes have been identified by Medicare as meeting the above criteria for **ABPM**:

I10	Essential (primary) hypertension
I11.9	Hypertensive heart disease without heart failure
I20.8	Other Forms of Angina Pectoris
I95.1	Orthostatic Hypotension
<b>R03.0</b>	<b>Elevated blood pressure reading, without diagnosis of hypertension</b>
R55	Syncope and collapse
Z01.30	Encounter for examination of blood pressure without abnormal findings
Z01.31	Encounter for examination of blood pressure with abnormal findings