


# VET MC1 Haemodynamic Monitor App



**mAAbbu GmbH**  
Sparchner Straße 12  
6330 Kufstein / Austria

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Welcome to the mAbbu Family. With the App you advance your MC1 Monitor System while displaying the MC1 Monitor-Parameters on a larger Screen of a Device of your choice. Further you enrich your MC1 Monitoring functionality with Auto Blood Pressure Intervals, Alarm Limit settings, encrypted Patient Data storage and tracking, **You remain future prove through continues App updates.**

Install the MC1-App (  **APP image** ) on your device (Smart-Phone or Tablet)  
(Find the iOS APP on the Apple App Store or the Android App on the Google Play Store)

→ Ready to see & operate the MC1-Monitor on your Device

## 1. App good to know

### 1.1. Purpose of the MC1-Application

The application is software designed to display, store, and manage patient monitoring data from compatible MC1 monitoring systems. It enables users to configure alarm thresholds, remotely operates the NIBP measurement, and enhances data visibility through a structured and intuitive presentation of haemodynamic parameters on a tablet or smartphone.

The app is intended for the visualization of measurement data in animals, including parameters such as heart rate, oxygen saturation, blood pressure, and temperature.

The application does not perform any independent measurement or medical calculations. It exclusively displays and processes data received from the connected monitoring device.

### 1.2. Recommended Specifications of iOS or Android Devices

**Smartphones:** Screen >6inch, Resolution 1080x2400, Brightness >400nits, CPU >=2GHz  
RAM >4GB, Storage >= 64GB, Bluetooth >=5.0, Battery >4000mAh (5h),  
Speaker & Volume controls, USB-C charging, Ruggedness,  
Touchscreen with gloves response




**Tablets:** Screen >=10inch, Resolution 1920x1200, Brightness >400nits, CPU >=2GHz  
RAM >4GB, Storage >= 64GB, Bluetooth >=5.0, Battery >7000mAh (6h),  
Speaker & Volume controls, USB-C charging, Ruggedness,  
Touchscreen with gloves response



## 2. App Setup & Configuration

One Time “App Setup” menu  
to fill in user credentials  
and select measurement units.

Edits are feasible under Setup 

(See 5. Main Screen Overview & Operations)

Mandatoring filling:

Confirm the Privacy & User agreement and press Start

The home screen will appear.



### App Setup

Set up your profile and preferences to start using the app

Clinic name	Clinica Almontee
Vet name	Angela Cuesta
Clinic ID	00000000
Email	clinica.almontee@compio.com
Address	C/Juana Dolia,3
Location	Spain
Language	Auto
Temperature	<input checked="" type="radio"/> °C <input type="radio"/> °F
<input type="checkbox"/> I agree to the <a href="#">Privacy Policy</a>	
<input type="checkbox"/> I agree to the <a href="#">User agreement</a>	
<input type="button" value="Start"/>	

### 3. MC1-App Bluetooth Setup



1. Make sure your device (smart phone / tablet) has BlueTooth (📶) enabled.  
(enable 📶 under settings)
2. Open the MC1-App.
3. Switch on the MC1 Monitor  
Ensure 📶 is enabled - 📶 Symbol shows up on the main screen.  
In case no 📶 Symbol shows up, enable 📶 in the MC1 Setup.  
(How to open the MC1 Monitor Setup: Switch off the MC1 Monitor. Press and hold the “one bottom” until the MC1 Setup opens.)  
(MC1 Monitor “one bottom” operations within the Setup-Menu: Short bottom press to navigate through the menu topics, long bottom press to change options or confirm selected option)

Back on the main screen a blinking 📶 icon indicates the search for a 📶 device connection.

4. Press the 🏠 on the MC1-App home screen to start the 📶 connection with the MC1 Monitor.  
The green dot indicates a BlueTooth connection / red dot indicates that there is no connection



Device MC1-Monitor is connected



Device MC1-Monitor is not connected

### 4. Patient Setup & Start monitoring



#### 4.1. Quick Start

Press 🏠 and select “Quick Start”.

The home screen opens without entering patient info and a fast monitoring can start.

#### 4.2. Setup a new pet-patient profile

Press 🏠 and select “Add new pet-patient”

Fill in Pet-Patient and Owner info for a good orientation in the patient database.

Press “Save”. The home screen will open and the pet-patient info will show up in the info-bar of the home screen.

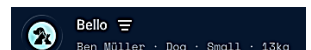
Patient data can be edited anytime (see details under 11. Patient Data Management)

New pet-patient	
Vet name	
Patient ID	
Pet name	
Owner name	
Save	

#### 4.3. Select an existing pet-patient profile

Press 🏠, search and select the existing pet-patient in the scroll down overview.

The home screen opens, and the selected pet-patient info will show up in the info-bar of the home screen.



## 5. Info Bar



### 5.1. Pet-Patient setup

See details in 4. Pet-Patient Setup & Start Monitoring

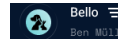
### 5.2. Info Bar with Pet Patient info

Shows all inserted Pet-Patient Info (Pet-Name, Owner-Name, Animal Type, Size, Weight)

### 5.3. Info Bar with Technical info

Displays Battery level, LTE & Wi-Fi Reception status from the device

Actual date and time, relevant for the Screen Shot capturing to realize a reliable documentation



## 6. MC1-Monitor – Parameter Display

### 6.1. HomeScreen displayed Info

1. Curves: ECG, PLETH and TEMP

- **ECG**: graphical representation of the heart's electrical activity over time, used to assess heart rate and rhythm.

- **PLETH**: Plethysmographic waveform representing peripheral pulse and perfusion derived from the SpO<sub>2</sub> sensor.

- **TEMP**: representing the temperature development over time

2. Values: HR (bpm), PULR (bpm), SpO<sub>2</sub> (%), NIBP (mmHg), TEMP (°C or °F)

3. Alarm Limits: Showing only the active set min & max Alarm Limits for each parameter

(See for Alarm Setting details under 7.6. Set Alarm Limits per Parameter)

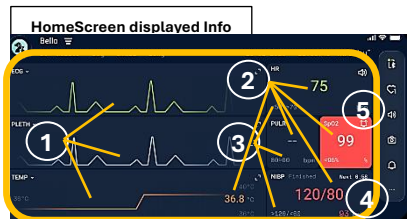
4. NIBP countdown

(See for Auto NIBP settings details under 7.2. NIBP (non-invasive blood pressure) operations)

5. Visual Alarm (red blinking) & Acoustic-Alarm (sound).

The Acoustic-Alarm can be put on Mute for 3minutes, while tapping on the Visual Alarm (red blinking Parameter HR, PULR, SpO<sub>2</sub> or NIBP).

The Acoustic Alarm will continue after 3minutes, in case the Parameter remains outside the set Alarm-Limits.



#### 6.1.1. Curve Zoom-In Level 1 & 2:

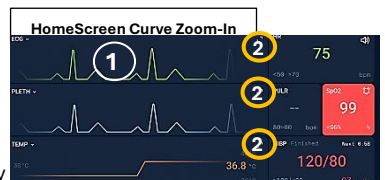
Zoom-In on ECG, PLETH or TEMP curve

##### 6.1.1.1. Curve 1<sup>st</sup> Zoom-In Level


Tap on a Curve (ECG, PLETH or TEMP) to open 1<sup>st</sup> Zoom-In Level.

1<sup>st</sup> Zoom-In Level is displaying the selected larger curve only and the related curve monitor parameter values.


Tap on the Curve again to return to the home Screen, showing all 3 curves.



### 6.1.1.2. Curve 2<sup>nd</sup> Zoom-In Level

Tap  to Zoom in the 2<sup>nd</sup> Zoom-In Level to display the enlarged Curve and its related values.

### 6.1.1.3. Return to Home-Screen (3 Curves)

Tap  to return to the 1<sup>st</sup> Zoom-In level.

Tap on the Curve to return to the home screen showing all Curves & Monitor Parameters.




**Zoom-In to Level 1 & 2 is possible for all 3 Curves.**

## 7. Home Screen Menu



### 7.1. Bluetooth connection

Tap  to manage & set up a Bluetooth connection from the App to the MC1 Monitor and follow the instructions given in the App.




Green indicates MC1-Monitor connected



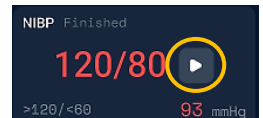
Red indicates MC1-Monitor not connected

### 7.2. NIBP (non-invasive blood pressure) operations

Tap the  icon to select between 4 options of the NIBP measurement activation.


Select  for **Manual NIBP measurement**.


Start the NIBP measurement manually while tapping 

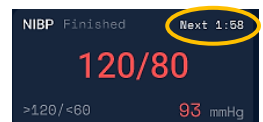


#### Auto NIBP measurement

Select  for 1 minute interval auto NIBP measurement


Select  for 2 minutes interval auto NIBP measurement

Select  for 3 minutes interval auto NIBP measurement




Auto measurement is indicated through a countdown, showing when next NIBP measurement will start automatically.

### 7.3. Mute the Heart (HR & PULR) “beep”

Tap the  icon on the Home Screen menu to mute / unmute the HR or PULR “beep”


### 7.4. Screen Print

Tap the  icon to capture the actual App Monitor data on display.

This screen print will automatically be saved as jpg to the active pet-patient profile.

(See **11. Patient Data Management** for details about patient date history / screen print review)

## 7.5. Activate Alarm

Tap the  icon on the Home-Screen Menu to activate and deactivate the different alarm settings per parameter.



If the Monitor Parameters reach the set min or max Alarm limits, an acoustic and visual alarm will start.

(See details under 7. Alarm Settings & Management)

### The user is responsible for setting correct alarm limits.

- Be aware – the MC1 monitor can have a separate Alarm if not muted.
- Set alarm limits appropriate to the pet-patient.
- Verify alarms are enabled and audible.
- Default or previous settings may be inappropriate
- Device (Tablet) must be unmuted

## 7.6. Set Alarm limits per Parameter

Activating Alarms in the upper right corner will activate the Alarms for all Parameters with standard alarm limits. Switch on / off Alarms per Parameter.

The Haemodynamic Parameters can individually be activated / deactivated.

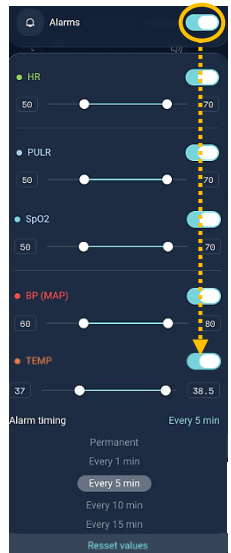
Limit Setting	min		max
• HR (ECG Heart Rate)	24bpm	-	325 bpm
• PULR (SpO2 Puls Rate)	24bpm	-	325 bpm
• SpO2 (Oxygen Saturation)	80%	-	100%
• MAP (Mean Arterial Pressure)	55mmHg	-	145mmHg
• TEMP (Temperature)	20°C 68°F	-	43°C 109,4°F

Set a **TEMP-Alarm-Interval**: Permanent, 1min up to 15min.

The interval will allow TEMP alarms starting with the set interval.

Permanent = immediate Alarm start with the measured TEMP outside the set Limits

Every 5min = Alarm start with the TEMP outside the measured TEMP Limits for longer than 5min



### WARNING:

The alarm settings remain unchanged until they are manually adjusted or switched off.

To avoid incorrect alarm settings, verify and set new limits for each patient or disable the alarms with every new pet patient.

Tapping “Reset values” restores all alarm limits to the default settings.

## 7.7. Setup

Tap the **...** Setup-icon in the Home Screen menu to check or edit the MC1-App settings.

Check & Edit:

- App Language
- Units of measurement (weight, length, temperature)
- Personal Information (User info: Clinic name, Vet name, Clinic ID, email, address)

Check Info:

- Terms of “use and privacy policy”
- Link to the APP “Quick Guide”
- “Feedback” will open an email to share your comments & feedback with mAAbbu

Tapping “Demo” will simulate Monitor Parameters (Curves & Values) at the home screen.

Tapping “**Restart app**” will delete all settings (and patient data?) and start the App Setup Screen.

Tap “Log out” to close the MC1-App.

Showing the actual MC1-App Version at the bottom.

