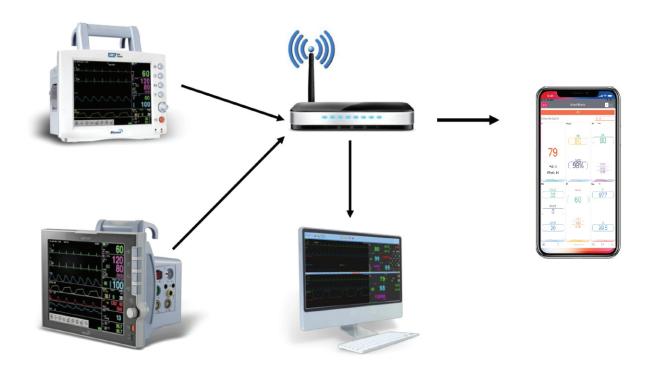


## BT-LINK MOBILE FOR IOS



BT-Link Mobile is a smartphone application that enables you to monitor one of the multiple Bionet patient monitors connected directly to an iOS smartphone or tablet in the same network and to receive alarms from the selected Bionet veterinary monitor including the BM3Vet Touch , BM7Vet, and BM7Vet Pro. The App receives all numeric parameters and waveforms while capturing the patient's numeric data and waveforms as images. In addition, the App can record and save numeric data to a PDF file.

Caution: BT-Link Mobile for iOS doesn't work in background mode.

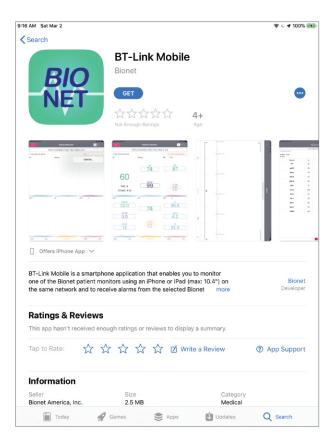
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### **INSTALLATION**

BT-Link Mobile can be installed through the Apple App Store. Please follow the procedure below:

- a In the App Store, type Bionet in the search window.
- **b** Select Bionet BT-Link Mobile and install the App.

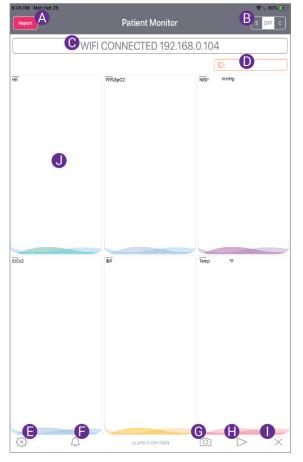


### START THE APP.

- a Connect your phone or tablet to the same WIFI network that Bionet patient monitors or BT-Link are connected to.
- \*\*Caution: BT-Link Mobile only works when the phone or tablet is connected to a WIFI network.
- **b** Touch BT-Link Mobile icon on your phone or tablet screen.



### **FUNCTION KEYS**



- A REPORT: Switch to PDF report list window.
- B Mode:
- \* Server mode (S): Receiving patient data from Bionet monitors directly through the network.
- \* Client mode (C): Receiving patient data from BT-Link software through the network.
- Message Window: Display phone's IP or tablet's IP address or display the alarm message received from patient monitor.
- D ID: Display the patient ID or Display a list of connected monitors if it is touched.
- Setting: Switch to Preferences window.
- Alarm On/Pause/Off switch.
- G Screen Capture.
- Start Recording: Start parameter recording.
- Fyit
- Numeric parameter window: Display numeric value or switch to Waveform mode if the window is touched.

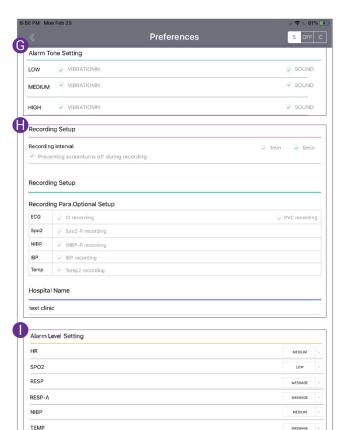
### **SETTING PREFERENCES**



- A Switch to the parameter window.
- B Mode Switch: S- Server mode, C Client Mode.
- O Unit Selection for Gas pressure and Temp.
- Parameter window setup.
- \* User can select a maximum of six parameters.
- \* Resp, EtCo2, and A.gas work exclusively.
- Ex) If user selects EtCo2, Resp and A.gas parameters are turned off automatically.
- Phone or tablet's IP address.
- Display / Connect to the patient monitors



- \* The list shows either a unit name (if the monitor has a unit name) or the monitor's IP address.
- \* Select a monitor which user wants to connect and press OK.



- **6** This setting defines how the App notifies each alarm level to the user (High, Medium, Low).
- \* Sound tone option: User can set different sounding tones to each alarm level.
- \* Vibration option: User can activate the vibration of each alarm level.
- \* Low: Alarm repeats every 55 sec if there is an alarm from the patient monitor.
- \* Medium: Alarm repeats every 20 sec if there is an alarm from the patient monitor.
- \* High: Alarm repeats every 6 sec if there is an alarm from the patient monitor.
- Recording Setup
- \* Recording Interval: 1 min or 5 min
- \* Optional recording parameters
- \* Hospital Name
- Setting alarm notification level for each parameter.
- \*\* Caution: Alarm level setting in the App does not affect the patient monitor setting. The alarm level setting on the app is independent from the patient monitor's alarm level setting.

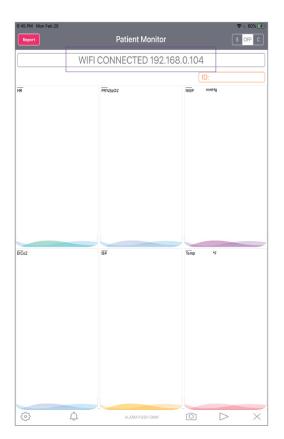


#### 5-1. Server Mode

The app receives patient data from the patient monitor in the same network. With this mode, the patient monitor sends data to the app directly through the network.

a Check the phone or tablet's IP address as follows

Go to the parameter window. The phone or tablet's IP address will be displayed in the message window. User can also check the phone or tablet's IP address from the App's setting (Preference) window.



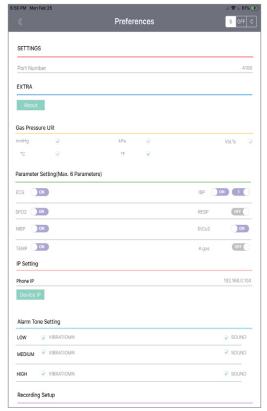


Figure 3.1
Phone or tablet's IP address in parameter window

Figure 3.2
Phone or tablet's IP address in Preference

- **b** Setup the phone or tablet's IP address to the patient monitors by following procedures:
- b1. Touch "Setup Icon" on BM3Vet Touch, BM7Vet, or BM7Vet Pro screen.



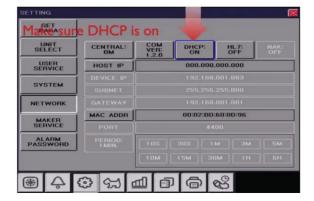
b2. Touch "Network" button from the menu on the left of the screen.



b3. Set "CENTRAL" to "BM" or "BT".

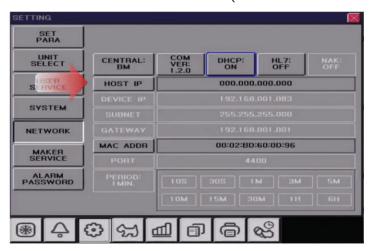


b4. Make sure "DHCP" is "ON".

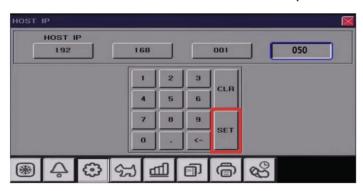


b5. Enter the phone or tablet's IP address to "HOST IP"

Note: If the App is set to Client mode, user must enter BT-Link server's IP address to "HOST IP" (Refer to 5-2 Client Mode).



\*\* Touch "HOST IP" button to enter IP setup screen.



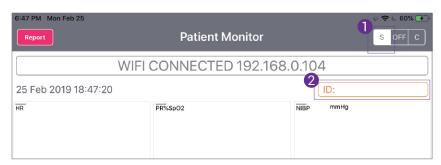
\*\* Caution: Make sure to press "SET" button once done modifying each IP section in order to save the value. (Example - Enter 192 and then press "SET", Enter 168 and then press....)

\*\*\* After finishing the IP address setup, press x on the top right of the screen to exit the screen.

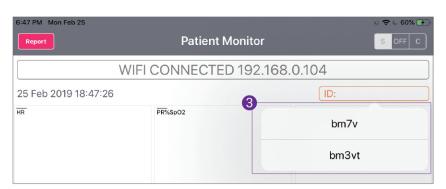
b6. To Apply the changes, power cycle the unit.



- Connecting a patient monitor to the App.
- c1. Turn on BT-Link Mobile server (1) first. Wait about  $10 \sim 20$ sec and touch "ID" (2) in the picture below.



**c2**. A device list window (3) will pop up under ID. Select a monitor in the list to connect.





\*\* Once the selected monitor connects to the App successfully, the Patient ID (if it was entered in the patient monitor) and parameter values will be displayed.

#### 5-2. Client Mode

Client Mode receives the patient data from BT-Link (computer software).
BT-Link is computer software which receives patient data from the connected patient monitors and sends the same data to BT-Link Mobile (if it is in Client Mode).

a Connecting the App to BT-Link (computer software).



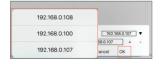
- a1. Select or add a new computer's IP address where BT-Link installed and connecting to BT-Link.
- 1 Turn on Client Mode.
- 2 Saved server IP List.
- \* Click down arrow button. Server IP list will pop up.



- 3 Add a new server to the server list.
- \* Enter computer's IP address where BT-Link is installed.
- \* Click "+" to save the IP address.



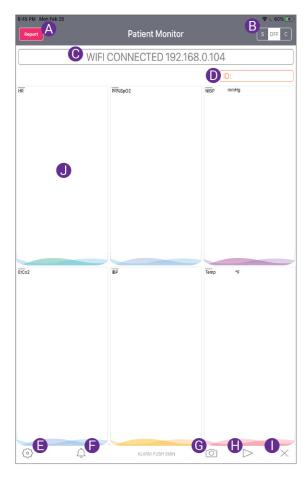
- \* Click "OK" to finish the saving.
- 4 Select a server from the server IP list in #2. Select the target server IP that you want to connect to and then click "OK".
- \*\* The picture below shows that multiple BT-Link exist in the same network.





- **a2**. Connecting a patient monitor (After connecting to BT-Link).
- 1 A monitor list window will pop up if Client Mode connection was successful.
- \* This window displays the unit name of the Bionet patient monitors which is connected to BT-Link.
- \* If the monitor doesn't have a unit name, the monitor will not be connected to BT-Link Mobile.
- 2 Select target monitor.

### PARAMETER WINDOW



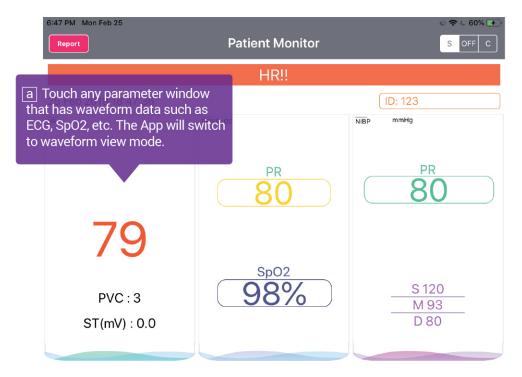
- A REPORT: Switch to the PDF report window
- **B** Mode:
- \* S Server Mode: Receives patient data from a Bionet monitor directly through the network.
- \* C Client Mode: Receives patient data from BT-Link software through the network.
- Message Window: Displays phone or tablet's IP address or displays an alarm message received from the patient monitor. (Ex: HR!!! - High alarm message for HR, SPo2!! - Medium alarm message of SPo2, etc.)
- Patient ID Multifunctional
- \* Function1: Displays the patient ID.
- \* Function2: Displays a list of connected monitors if it is touched.
- Setting: Switches to Preferences window.
- Alarm On/Pause/Off switch
- **6** Screen Capture
- Recording: Start parameter recording.

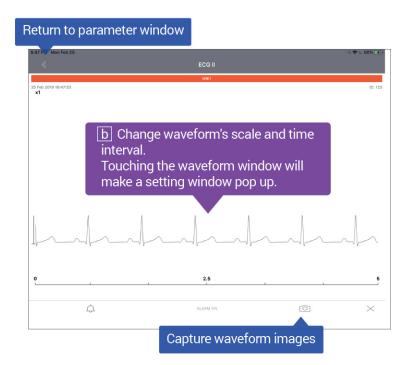
Caution: Patient ID must be entered into the patient monitor in order to start recording.

- Exit
- Parameter Window Multifunctional
- \* Function1: Displays numeric value
- \* Function2: Switches to Waveform mode if the window is touched.
- \*\*\* Displays a maximum of six parameters which is selected in the preference (E).

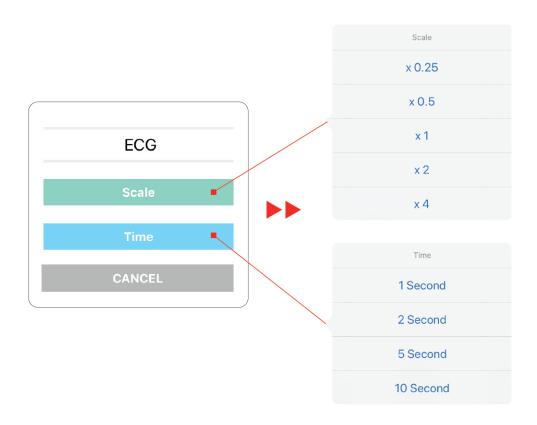
### **WAVEFORM WINDOW**

BT-Link Mobile has a waveform view mode where the user can capture the waveform image of the selected parameter. Parameters which have a waveform view are ECG, SPo2, Resp, EtCo2, IBP, and Anesthetic gas.





Change waveform setting and then click OK.



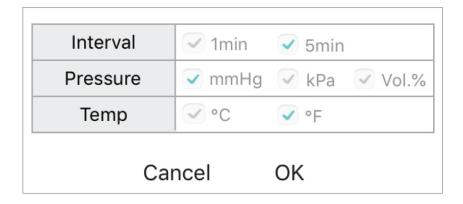


### RECORDING PARAMETERS

This function will record selected parameter values in preference and save to a PDF file.

Caution: The patient monitor must have a patient ID in order to start recording.

- a Press recording button at the bottom of the App screen. Recording Setup window will pop up.
- **b** Select recording option and press OK.



c Recording Window.



- A Surgery start and end time.
- B List of parameters:
- \*\* If user touches a parameter which has waveform data, it will switch to waveform mode.
- \*\* While the app is in waveform mode, parameters will be recorded continuously.
- Recorded timestamp since surgery started.
- D Recorded parameter values.
- Stop recording and save.

### d Saving as a PDF file.

Press stop recording button and then enter monitor's name and press OK.

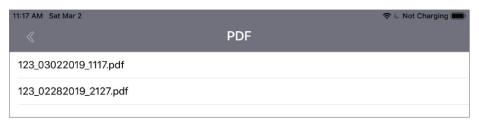


#### e Saved PDF

File name format: patient ID\_mmddyyyy\_hhmm.pdf

Patient ID	123						Unit	Name	bm7v	/					
SX Start	19:23 <b>TEMP</b> °F						Date		02/2	02/28/2019					
SX END	21:27		Pressure		mmHg		Mon	itored b	y test3						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	
HR	79	79	79	79	79	79	79	79	79	79	79	79	79	79	
spo2%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
nibp-s	120	120	120	120	120	120	120	120	120	120	120	120	120	120	
nibp-d	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
nibp-m	93	93	93	93	93	93	93	93	93	93	93	93	93	93	
awrr	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
etco2	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
fico2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ibp-s	117	117	117	117	117	117	117	117	117	117	117	117	117	117	
ibp-d	78	78	78	78	78	78	78	78	78	78	78	78	78	78	
ibp-m	90	90	90	90	90	90	90	90	90	90	90	90	90	90	
TEMP1	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	

### f Report List View



### **BACKGROUND MODE**

BT-Link Mobile (iOS version) doesn't support background mode. The app will be automatically terminated if the app entered to background mode.