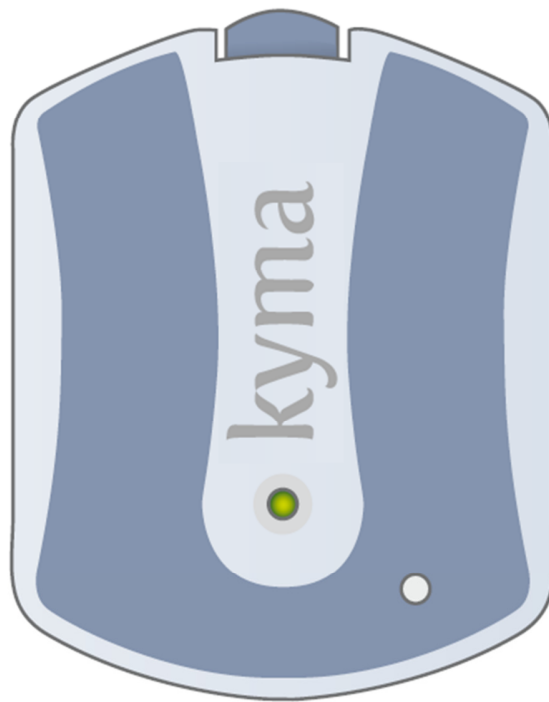


Instructions for Use

μCor 3.0 Monitoring System



Rx Only

ZOLL®



µCor 3.0 Monitoring System Instructions for Use

PLEASE READ THIS ENTIRE INSTRUCTIONS FOR USE
BEFORE OPERATING THE µCor 3.0 SYSTEM

For assistance with the µCor 3.0 System, please contact **ZOLL** at:

**121 Gamma Drive
Pittsburgh, PA 15238 USA
Phone toll free (USA) 1.888.592.3798**

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Disclaimer

Information, operation, specifications, and product appearance may change without notice.

Symbols Glossary

The symbols glossary is located in Section 9 of this Instructions for Use

RA-72-002-31-ENG

Revision 1 · January 2017



µCor 3.0 Monitoring System Instructions for Use

TABLE OF CONTENTS

Part I: General Information.....	5
1 Introduction.....	6
2 Indications for Use	6
3 General Warnings and Precautions	6
3.1 Warnings.....	Error! Bookmark not defined.
3.2 Precautions	Error! Bookmark not defined.
4 Detailed Description of the µCor 3.0 System	9
4.1 System Components.....	9
4.2 How µCor 3.0 System works	9
4.3 Prescription Duration and Measurement Scheduling.....	9
4.4 Patch.....	10
4.5 Sensor	10
4.6 Charger With Gateway	12
4.7 Server	12
4.8 Device (sensor + Patch) Placement Location	12
5 Directions for Use.....	13
5.1 Getting started.....	13
5.1.1 <i>Gather Supplies:</i>	13
5.1.2 <i>Charging the Sensor – First Use and Every 5 Days</i>	13
5.2 Preparing the Skin	14
5.3 Connecting the Sensor to the Patch.....	14
5.4 Applying the Device.....	15
5.4.1 <i>Side Location</i>	15
5.4.2 <i>Front Location</i>	16
5.5 Replacing the Patch.....	17
5.5.1 <i>Remove the Sensor from the Patch</i>	17
5.5.2 <i>Remove the Patch from the body</i>	17
5.6 Recharging the Sensor.....	18
5.7 Sensor and light Indicator statuses	18
6 Troubleshooting.....	19
7 Cleaning and Return of System	20
8 Maintenance.....	20
9 Symbols Glossary	20
Part II: Technical Specifications.....	22
10 Technical Specifications.....	23
10.1 Accuracies.....	23
10.2 Electrical (Power) Requirements	23
10.3 Wireless Transmission Specifications.....	24
10.4 Sensor Dimensions	25
10.5 Environmental & Other Specifications	25
11 Compliances.....	26



µCor 3.0 Monitoring System Instructions for Use

11.1	Electrical Safety.....	26
11.2	Electromagnetic compatibility (EMC).....	26
11.3	FCC Compliance Statement	29

Part I:

General

Information

1 INTRODUCTION

Once activated, the µCor 3.0 System periodically monitors thoracic impedance, ECG, heart rate, respiration rate, activity and posture. Data collected by the Sensor unit are automatically transmitted from the Sensor to the Gateway embedded within the Charger, and is then forwarded to the Server. Certified technicians at the ZOLL Monitoring Center review the data generated by the Server and prepare reports according to pre-defined criteria as requested by the prescribing physician. The µCor 3.0 System is designed for use in outpatient clinic and home settings for up to 30 days. The system will be returned to ZOLL when the monitoring period is over.

2 INDICATIONS FOR USE

The µCor 3.0 System is intended to record, store, and transmit the following physiological data to medical professionals:

i) Thoracic Impedance, ii) ECG; iii) Heart Rate; iv) Respiration Rate; v) Activity; and vi) Posture.

The µCor 3.0 System is indicated for patients who are 21 years of age or older:

i) with fluid-management problems; ii) taking diuretic medication; iii) living with heart failure; iv) living with end-stage renal disease; v) recovering from a coronary artery disease-related event; and/or vi) suffering from recurrent dehydration.

3 GENERAL WARNINGS AND PRECAUTIONS

- Do not use the µCor 3.0 System if you:
 - Have allergies or skin sensitivities to electrode hydrogel and/or acrylic based adhesives.
 - Are pregnant (the µCor 3.0 System has not been tested on pregnant women).
 - Have skin breakdown in areas where device (Patch + Sensor) placement is required.



µCor 3.0 Monitoring System Instructions for Use

- Remove the device (Patch + Sensor) from your body prior to an MRI scan, or any emergency medical procedure. The µCor 3.0 System is not compatible for use with MRI machines.
- If you have an implanted pacemaker or defibrillator, do not place the Sensor directly on top of the implanted device. Consult with your physician about the correct placement of the device for you.
- Sensor must be turned OFF prior to boarding an airplane. Remove Sensor from Patch and call ZOLL Cardiac Diagnostics at 1-888-592-3798 for further instructions.
- Do not wear the Patch for more than 5 days. Replace the Patch every 5 days, or more frequently when needed. The Patch is designed for a maximum of 5 days use only.
- No creams or lotions should be applied to the skin immediately prior to the application of the Patch.
- Do not re-use the Patch. Once the Patch is peeled off or removed, discard immediately. The Patch is designed for single use. Re-using the Patch may result in poor adhesion to the body and may affect measurements.
- Remove the device (Patch +Sensor) if any pain or discomfort occurs. If skin irritation, discomfort, redness, itching or rash persists after the device is removed, a topical, anti-inflammatory cream may be applied (in consultation with your health care provider).
- Do not submerge the Sensor in water by swimming or sitting in a tub. The Sensor is water-resistant, but not waterproof. Wearing the Sensor while showering is okay.
- Keep the Charger away from water.
- The power adapter connector should not be touched or manipulated when the Power Adapter is connected to power outlet.
- Do not change, modify, or disassemble any parts or components of the µCor 3.0 System. The system contains no user-serviceable components. Any changes, modification, or servicing of the µCor 3.0 System will only be performed by ZOLL.
- Connect the Charger to the AC adapter that is provided with the system in the original packaging. Using any other AC adapter may damage the Charger and may have electric hazards.
- Place the Sensor in the Charger when not in use.
- When using the µCor 3.0 System, use only cables and accessories provided by ZOLL. Using non-approved cables and accessories may affect the EMC performance



µCor 3.0 Monitoring System Instructions for Use

- Do not stack the µCor 3.0 system with other devices or equipment.
- Discontinue use and contact ZOLL if the µCor 3.0 System shows signs of damage or is not working correctly.
- Keep the µCor 3.0 System out of reach of children.

4 DETAILED DESCRIPTION OF THE µCOR 3.0 SYSTEM

4.1 SYSTEM COMPONENTS

The µCor 3.0 System consists of the following components:

- Patch
- Sensor
- Charger
- Gateway (embedded within the Charger)
- Server

Each component will be further described within this Section.

4.2 HOW µCOR 3.0 SYSTEM WORKS

Once activated, the wearable Sensor acquires Thoracic Impedance, ECG, Heart Rate, Respiration Rate, Activity, and Posture measurements. Data are automatically transmitted from the Sensor to the Gateway embedded within the Charger, and is then forwarded to the Server for analysis. Certified technicians at the ZOLL Monitoring Center review the data generated by the Server and prepare reports according to pre-defined criteria as requested by the prescribing physician. Data provided in the report will aid the prescribing physicians/clinicians as they diagnose and identify various clinical conditions, events and/or trends. The µCor 3.0 System is designed for use in outpatient clinic and home settings.

4.3 PRESCRIPTION DURATION AND MEASUREMENT SCHEDULING

The µCor 3.0 System is intended for up to 30 days of monitoring.

During the prescription period, the Sensor will automatically acquire your clinical measurements. The frequency and parameters of the measurements are determined by your physician; the µCor 3.0 System is programmed accordingly by the ZOLL Monitoring Center. As described previously, data acquired by the body-worn Sensor will be transmitted wirelessly to the Gateway, which will then be forwarded to the remote Server for data analysis, and subsequently to the ZOLL Monitoring Center for review and report generation. See **Figure 1** for a graphical illustration of the data transmission.

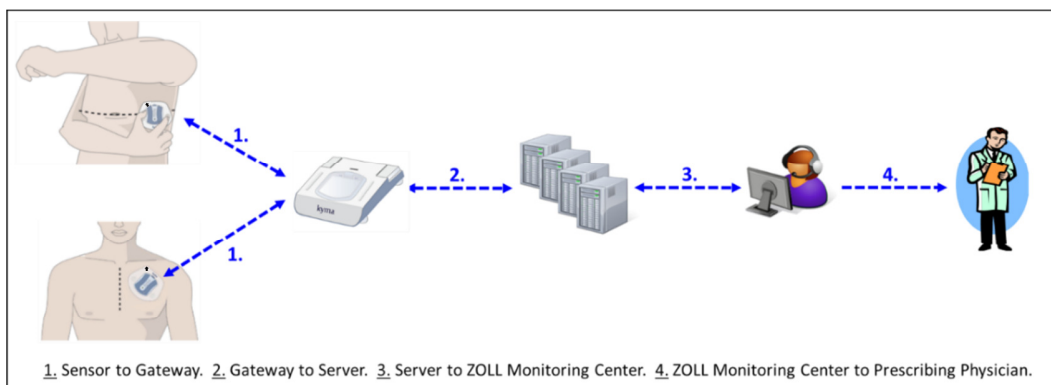


Figure 1: Data transmission of the μCor 3.0 System

4.4 PATCH

The Patch (as shown in **Figure 2**) consists of a plastic frame intended for housing the Sensor, and two ECG electrodes on each side of the frame. It is applied to your body.

The Patch is a single-use disposable item. As described in the *General Warnings and Precaution* Section, it should not be worn for more than 5 days. At the end of 5 days, it should be replaced with a new Patch.

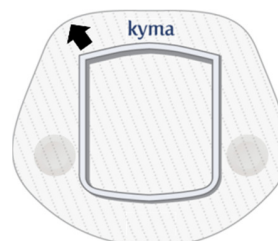


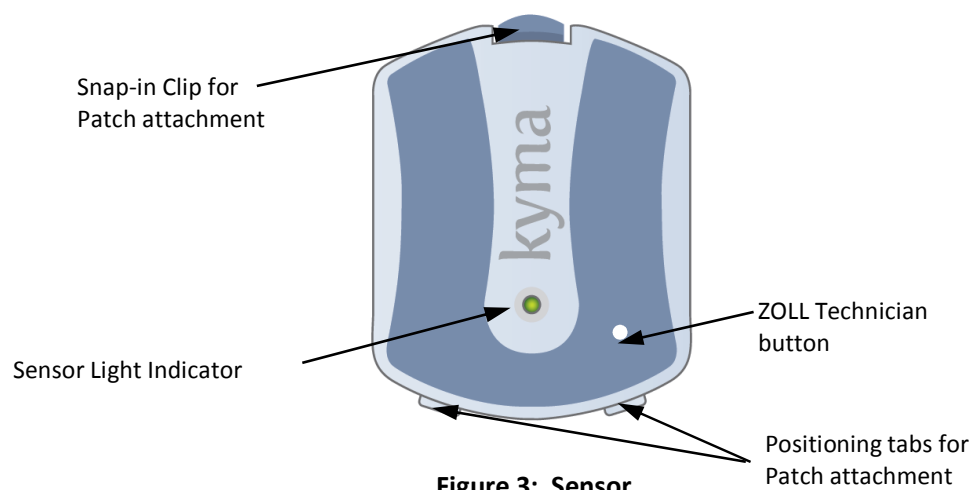
Figure 2: Patch

4.5 SENSOR

The Sensor (as shown in **Figure 3**) is a battery powered unit that acquires your measurements. The Sensor connects to the Patch via the snap-in clip and positioning tabs. Through the adhesive backing on the Patch, the device becomes wearable.

The Sensor is not disposable and needs to be returned to ZOLL upon the completion of the prescription.

As shown in **Figure 3**, a light indicator is located close to the center and serves to communicate the Sensor's status at different points of use. Please note that the technician button as illustrated in **Figure 3** is for ZOLL use only.



4.6 CHARGER WITH GATEWAY

A dedicated Charger (as shown in **Figure 4**) is supplied with the µCor 3.0 System for recharging the Sensor. Embedded within the Charger is a Gateway (not visible to the user) for data transmission from the Sensor to the Server for data analysis. A green light appears when the Charger is connected to an AC outlet.

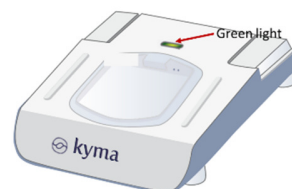


Figure 4: Charger with embedded Gateway

4.7 SERVER

The Server refers to the hardware and the processing software and resides in a remote cyber-secure location. The software analyzes the data received from the Sensor via the Gateway and processes the data into clinical values for presentation to your healthcare provider after review by certified technicians at the ZOLL Monitoring Center.

4.8 DEVICE (SENSOR + PATCH) PLACEMENT LOCATION

There are two potential locations for this device (Sensor + Patch) placement: (1) below left armpit (side location); and (2) upper left chest (front location). See **Figure 5**. Your prescribing physician will determine and inform you about the placement location for you – if you do not know or remember your device location information, please contact ZOLL at 1-888-592-3798.

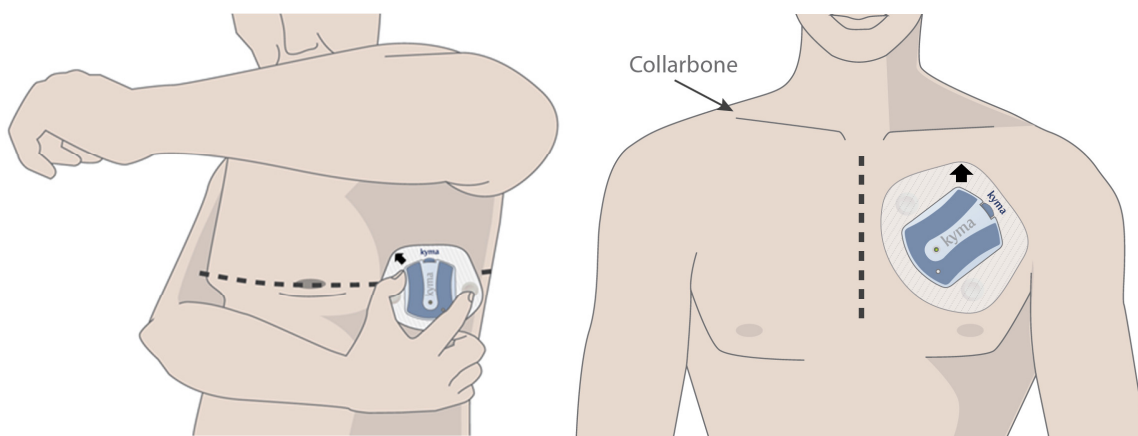


Figure 5: Device (Sensor + Patch) placement location

5 DIRECTIONS FOR USE

5.1 GETTING STARTED

Contact ZOLL Cardiac Diagnostics before using your device for the first time, to assist with set-up. Toll Free (USA): 1.888.592.3798. Available 24 hours a day, 7 days a week.

5.1.1 GATHER SUPPLIES:



Figure 6: Package configuration

5.1.2 CHARGING THE SENSOR – FIRST USE AND EVERY 5 DAYS

IMPORTANT: Set up Charger in bedroom or room where you sleep. This allows device to send data to ZOLL at least once a day.

1. Connect the Charger to a power outlet in your **bedroom**. A green light at the top means the Charger has power.
2. Place the Sensor on the Charger. Wait for a circular green light to appear on the Sensor.
3. The Sensor, typically, takes less than one hour to charge.

See **Figure 7**.

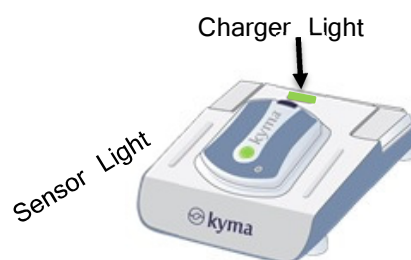


Figure 7: Charging the Sensor

5.2 PREPARING THE SKIN

IMPORTANT: This step ensures good adhesion to skin.

1. Remove your bra/ undershirt.
2. If hair is present, trim hair at the Patch location indicated by your physician. See images below.
3. Use provided Prep Wipes to clean area where Patch will be applied and allow skin to dry.

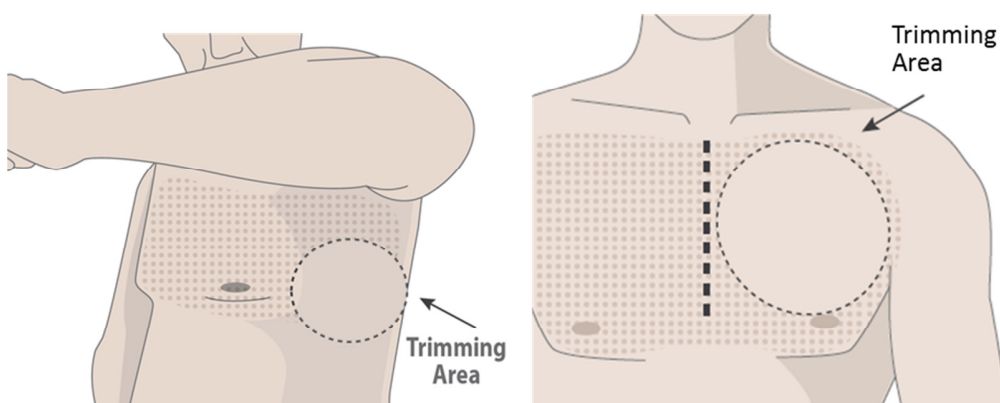


Figure 8: Trimming area

5.3 CONNECTING THE SENSOR TO THE PATCH

1. Remove the Sensor from the Charger.
2. Hold the Patch so that the word “Kyma” on the Patch is at the top.
3. Place the lower part of the Sensor on the bottom of the Patch frame, then press Sensor onto Patch until you hear / feel it snap in place.
4. See **Figure 9**.

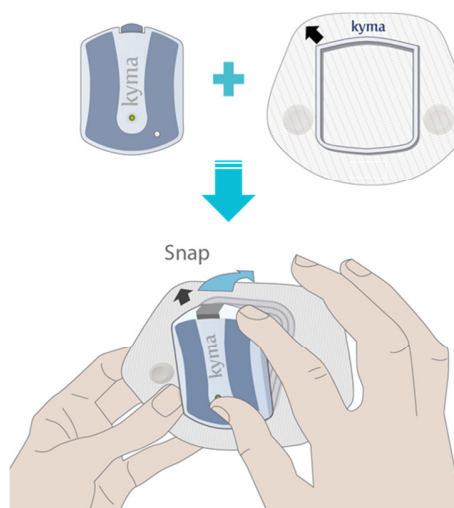


Figure 7: Sensor Patch attachment

5.4 APPLYING THE DEVICE

The device can be applied to either of the two locations detailed below. Once you wear the device in one location, you will continue to wear the device at the same location for the entire duration of your prescription.

5.4.1 SIDE LOCATION

1. Stand in front of a mirror.
2. Remove both parts of the Patch liner.
3. Turn the Patch so that the word “Kyma” on the Patch is at the top.
4. Raise the left arm to shoulder height.
5. If needed, slightly move the breast aside when applying the Patch.
6. Place the Patch below the left arm pit with the nipple aligned anywhere between the top and middle of the Sensor. See **Figure 10**.
7. Ensure the Patch is completely adhered to the skin.

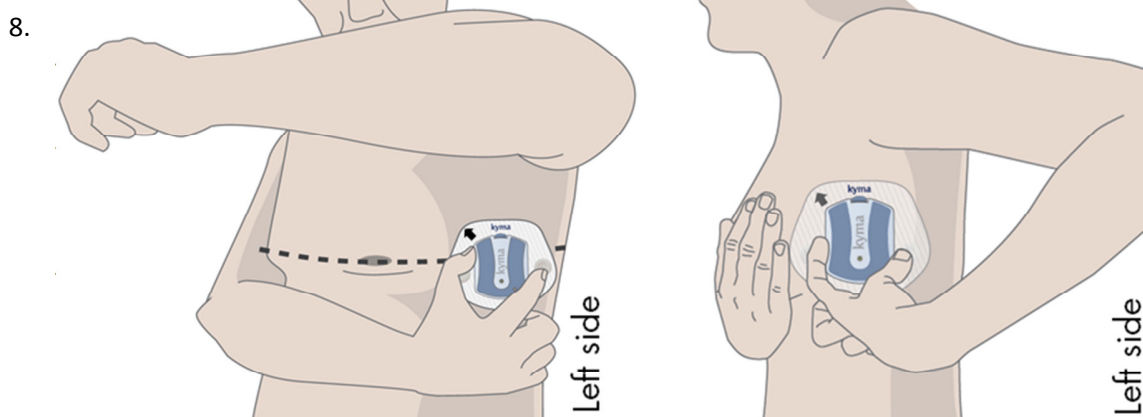
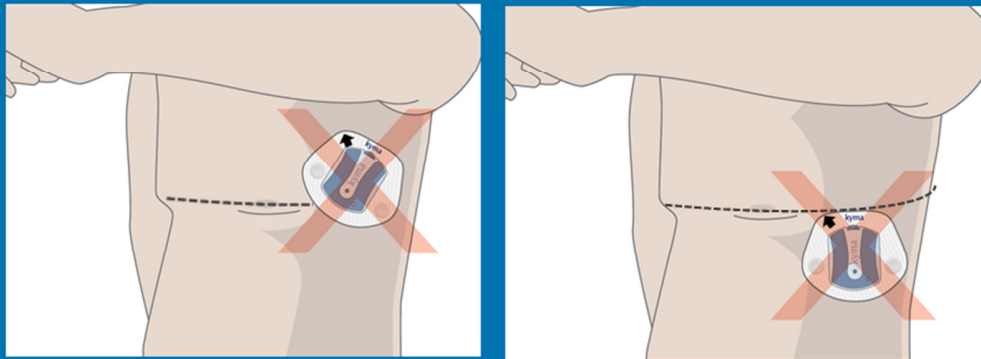


Figure 8: Device (Sensor + Patch) applied to side location

a
and wait for a green light to appear on the Sensor, which signals it is ready to monitor. Note that the green light will last for several seconds, after which the light indicator will remain off. **Figure 11** illustrates examples of incorrect device placements for the side locations.

IMPORTANT: You will be required to use another Patch if it is applied incorrectly (examples below)



Not in a straight line

Too low

Figure 9: Side location incorrect placement

5.4.2 FRONT LOCATION

1. Stand in front of a mirror.
2. Remove both parts of the Patch liner.
3. Position the Patch on the upper left chest, just below the collarbone, and angle the device towards the nipple. The arrow on the Patch should point up (↑). See **Figure 12**.

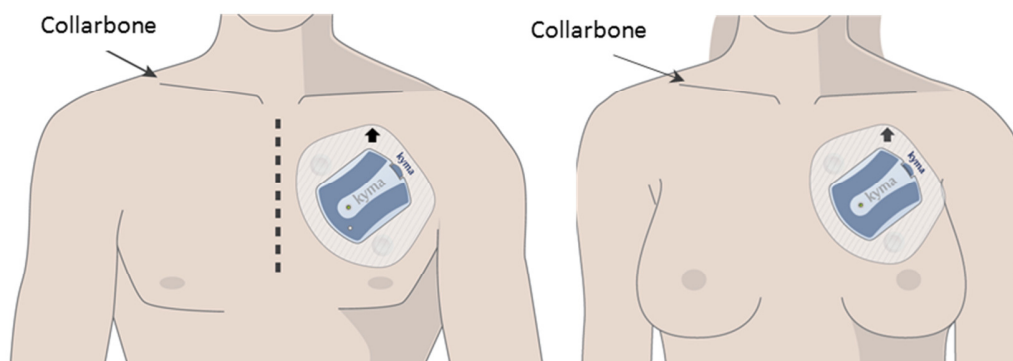


Figure 10: Device (Sensor + Patch) applied to front

4. Ensure the Patch is completely adhered to the skin.
5. Stay still and wait for a green light to appear on the Sensor, which signals it is ready to monitor. Note that the green light will last for several seconds, after which the light indicator will remain off.
6. **Figure 13** illustrates examples of incorrect device placements for the front location.

IMPORTANT: You will be required to use another Patch if it is applied incorrectly (examples below)

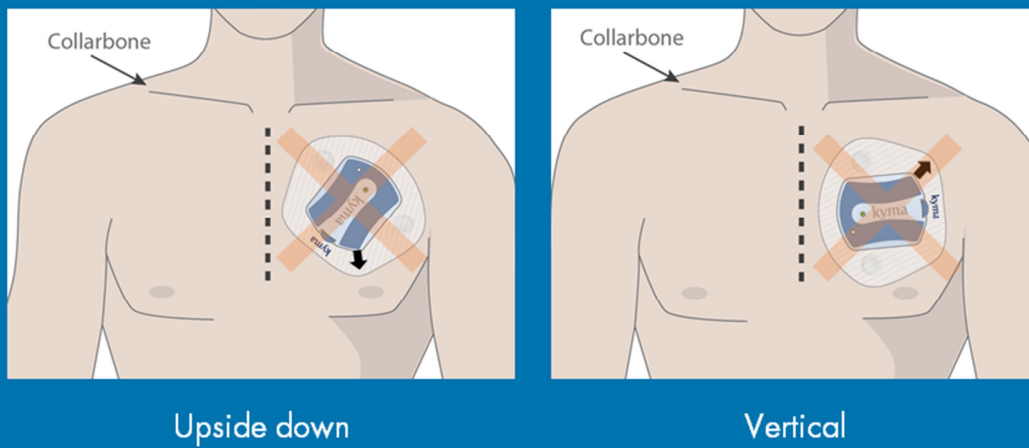


Figure 11: Front location incorrect placement

5.5 REPLACING THE PATCH

5.5.1 REMOVE THE SENSOR FROM THE PATCH

1. Press the blue upper snap-in clip.
2. Tilt and remove the Sensor from the Patch while pressing the clip.
3. Place the Sensor in the Charger. Whenever the Sensor is not on the body, it should be kept in the Charger.

5.5.2 REMOVE THE PATCH FROM THE BODY

1. Hold the skin with one hand while using the other to gently peel-off the Patch. You may use a wet cloth to assist you in the process
2. Discard the Patch immediately. Do not reuse.
3. If required, replace the Patch with a new one according to the instructions in **Sections 5.2 to 5.4**. The Patch should be replaced at least once every five days. Make sure to

place the new Patch on the same spot (or as closely as possible to the location) of the previous Patch).

5.6 RECHARGING THE SENSOR

1. The Sensor should be charged with every replacement of the Patch, or every five days.
2. Place the Sensor in the Charger. See **Figure 14**. The color of the light indicator on the Sensor will be amber when being charged. It will turn green when the Sensor is fully charged and ready to go.

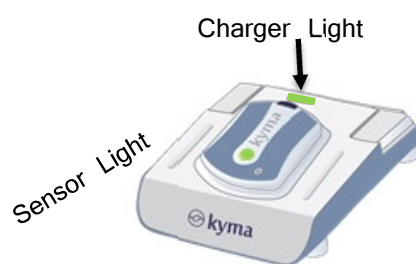


Figure 12: Sensor Charging

5.7 SENSOR AND LIGHT INDICATOR STATUSES

The following is a summary of the light indicator statuses of the Sensor:

Sensor Position	Light Color	Meaning
Sensor in Charger	Solid green ●	Battery is fully charged and is ready for use. The solid green light will continue until the Sensor is removed from the Charger.
	Solid amber ●	Battery is not full and is being charged. The light will change to green once battery is charged and Sensor is ready for use.
Sensor on the body	Solid green ●	Sensor is ready for monitoring. This solid green light will last for several seconds, after which it will disappear.



μCor 3.0 Monitoring System Instructions for Use

6 TROUBLESHOOTING

The following table lists the recommended actions for potential issues with the μCor 3.0 System. Please call ZOLL at 1.888.592.3798 if you need assistance with any of these instructions.

Signs	Possible Causes	Actions
Sensor light indicator is not on while sitting in the Charger for charging.	The Sensor does not sit properly in the Charger.	Remove the Sensor from the Charger and reinsert back to the Charger.
	The Charger is not connected to the power outlet.	Plug in the Charger to the power outlet using the power cable provided in the μCor 3.0 packaging. When properly connected, the light indicator on the Charger should be on and is green.
Charger light indicator is not on.	The Charger is not connected to the power outlet.	Plug in the Charger to the power outlet using the power cable provided in the μCor 3.0 packaging. When properly connected, the light indicator on the Charger should be on and is green.










7 CLEANING AND RETURN OF SYSTEM



Users are not required to clean the μCor 3.0 System. When the monitoring period is over, use the box provided in the original packaging to return the μCor 3.0 System (Sensor, Charger, power cable, and any unused Patches) to ZOLL.

8 MAINTENANCE

Users are not required to perform any maintenance for the μCor 3.0 System.

9 SYMBOLS GLOSSARY

Symbol	Title and designation # of the Standard	Title of Symbol	Symbol Ref #	Explanatory Text
	ANSI/AAMI/ISO 15223-1:2012, Medical devices – Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements	Manufacturer	5.1.1	Device's manufacturer.
		Catalogue number	5.1.6	Product catalogue number.
		Date of manufacturer	5.1.3	Date when the device was made.
		Batch code	5.1.5	Batch or lot number for device traceability.
		Serial number	5.1.7	Serial number for device traceability.
		Use-by date	5.1.4	Date after which the device is not to be used.
		Temperature limit	5.3.7	Storage temperature limits to which the device can be safely exposed.
		Do not re-use	5.4.2	The device is for single use only and not to be re-used.
		Non-sterile	5.2.7	The device is not sterile.

	ANSI/AAMI ES60601-1:2005/(R)2012 and A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012, Medical electrical equipment – Part 1: General requirements for basic safety and essential performance	Refer to instruction manual/booklet	#10 (Table D.2)	See Instructions For Use.
		Type BF applied part	#19 (Table D.1)	Device intended to deliver electrophysiological signal to or from the patient.
		Ingress protection	#2 (Table D.3)	Indicates that Sensor is protected from light dust and against the effects of temporary immersion in water.
		Ingress protection	#2 (Table D.3)	Indicates that the Charger and Power Adaptor are protected against solid foreign objects of 12.5mm or greater, and against vertically falling water drops.
		Direct current	#5 (Table D.1)	Direct current.
		No-ionizing radiation		Emits non-ionizing radiation
	ASTM F2503-13, Standard practice for marking medical devices and other items for safety in the magnetic resonance environment	MR Unsafe	Figure 9	Indicates that the device may cause unacceptable risks to the patients, medical staff or other persons within the MR environment. The device should be removed prior to any MR scanning procedure.

Part II:

Technical

Specifications

10 TECHNICAL SPECIFICATIONS

10.1 ACCURACIES

Parameter	Measurement Accuracy
Thoracic Impedance*	Error of less than 50cc fluid at a confidence level of 90%
HR	Accuracy higher than ± 2 bpm or $\pm 2\%$, the higher of the two
RR	Maximum error of ± 2 bpm 10% , the higher of the two
Activity	Activity classification accuracy > 90%**
Posture	Posture classification accuracy > 90%

* As measured in experiments conducted in the laboratory

** resting vs. active > 90% & walking (vs. non-walking) > 90%

Heart Rate Calculation

The µCor 3.0 system algorithm detects the peak of each R-wave and calculates the time interval between successive R peaks known as the RR interval. Heart Rate is calculated based on a 60 second moving average time window. For each window where valid ECG was detected, Heart Rate is computed in bpm as 60 divided by the average RR interval.

10.2 ELECTRICAL (POWER) REQUIREMENTS

Sensor	
Max Power Consumption	0.85W
Nominal Power Consumption	0.02W
Max Rating	4.2V, 0.2A
Nominal Rating	3.7V, 0.005A
Battery Type	Li-Pol, 3.7V, 370mAh

Charger	
Consumption during charging	10W
- Input (plug)	5VDC, 2A
Adapter	
- Part Number	UE24WCP1-050300SPA
- Input	100 to 240 VAC at 50/60Hz; 0.8A
- Output	5VDC; 3A

10.3 WIRELESS TRANSMISSION SPECIFICATIONS

Data Transmission	
Sensor to Gateway	Bluetooth (BT) 802.15, class 2
- BT Transmission Range	30 feet
Gateway to Server	Internet

BT Transmission	
Frequency range	2400-2483.5 MHz
Modulation	GFSK; PSK
PEAK OUTPUT POWER	9 dBm

RF Sensor	
Frequency range	0.5-2.5 GHz
Modulation	CW
PEAK OUTPUT POWER	-10 dBm max. and below CISPR 11 levels



μCor 3.0 Monitoring System Instructions for Use

10.4 SENSOR DIMENSIONS

Sensor	
Height	69 mm (2.72")
Width	53.44 mm (2.10")
Depth	12 mm (0.47")
Weight	48 gram (0.11 lb)

10.5 ENVIRONMENTAL & OTHER SPECIFICATIONS

Operating Conditions for the μCor 3.0 System	
Temperature	0°C and 40°C (or 32°F and 104°F)
Relative humidity	5%-93%% non-condensing
Pressure	700hPa to 1060hPa

Storage Conditions for the μCor 3.0 System	
Temperature	15°C to 25°C (or 59°F to 77°F)
Relative Humidity	5%-93%, non-condensing

Shipping and Transport Conditions for the μCor 3.0 System	
Temperature	-30°C to 60°C (or -22°F to 140°F)
Relative Humidity [RH%]	5%-93%
Pressure	700hPa to 1060hPa

Patch Shelf Life	1 year
Sensor Battery Life	2 years or 300 charging cycles
Sensor Battery Operation Time	5 days average

11 COMPLIANCES

11.1 ELECTRICAL SAFETY

- The device complies with IEC/EN 60601-1, Edition 3.1 for general requirements of medical electrical equipment safety:
 - Mode of operation: spot measurement
 - Degree of mobility: portable
- The device complies with IEC 60601-1-11.
- The device complies with IEC 60601-2-47.
- The device complies with EC 57.

11.2 ELECTROMAGNETIC COMPATIBILITY (EMC)


The device complies with IEC 60601-1-2, Edition 4, Class B.

Guidance and Manufacturer's Declaration – Electromagnetic Compatibility

Guidance and manufacturer's declaration- electromagnetic emissions		
The µCor 3.0 is intended for use in the electromagnetic environment specified below. The customer or the user of the µCor 3.0 should assure that it is used in such an environment.		
Emissions Test	Compliance	Electromagnetic environment-guidance
RF emissions CISPR11	Class B	The µCor 3.0 isn't suitable for interconnection with other equipment. The µCor 3.0 is suitable for use in all establishments other than domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.
Conducted Emissions from AC main CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Class B	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Class B	

Guidance and manufacturer's declaration- electromagnetic immunity			
The µCor 3.0 is intended for use in the electromagnetic environment specified below. The customer or the user of the µCor 3.0 should assure that it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic environment-guidance
Electrostatic discharge IEC 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Immunity to Magnetic Field IEC 61000-4-8	30 A/m , 50Hz/60Hz	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Electrical fast transient/burst IEC 61000-4-4	±2 kV, 100 kHz Repetition frequency	±2 kV	Mains power quality should be that of a typical commercial or hospital environment.
Conductive Surges IEC 61000-4-5	±1 kV line to line	±0.5, ±1	Mains power quality should be that of a typical commercial or hospital environment.
Conducted Disturbances IEC 61000-4-6	3V frequency 0.15MHz-80MHz 6V in ISM and amateur radio bands between 0.15MHz and 80MHz	3V 6V	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips and Short Interruptions IEC 61000-4-11	0 % UT; 0,5 cycle At 0° , 45° , 90° , 135° , 180° , 225° , 270° and 315° .0 % UT; 1 cycle and 70 % UT;	0 % UT; 0,5 cycle At 0° , 45° , 90° , 135° , 180° , 225° , 270° and 315° .0 % UT; 1 cycle and 70 % UT; 25/30	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power source.

	25/30 cycles Single phase: at 0°	cycles Single phase: at 0°	
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Guidance and manufacturer's declaration- electromagnetic immunity			
The µCor 3.0 is intended for use in the electromagnetic environment specified below. The customer or the user of the µCor 3.0 should assure that it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic environment- guidance
Radiated Immunity IEC 61000-4-3	10 V/m, frequency 80MHz-2500 MHz 358-5800MHz PM 18Hz, 217Hz	10 V/m 9-28 V/m	<p>Portable and mobile RF communications equipment should be used no closer to any part of the ZOLL µCor 3.0 including cables, than the recommended separation distance calculated from the equation appropriate to the frequency of the transmitter.</p> <p>Recommend separation distance $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 2.5 GHz</p> <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters as determined by an electromagnetic site survey,^a should be less than the compliance level in each frequency range.^b Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.			
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			



µCor 3.0 Monitoring System Instructions for Use

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the µCor 3.0 is used exceeds the applicable RF compliance level above, the µCor 3.0 System should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the µCor 3.0.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

11.3 FCC COMPLIANCE STATEMENT

FCC ID: 2ABHFUCOR30

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician.

Changes or modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.