

# Operation Manual

Name: Motif Twist  
Model MT-10.1-2  
Input: 500mA  
Voltage: 6V  
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*motif*  
TWIST  
DOUBLE ELECTRIC BREAST PUMP



Before using this product, please carefully read the user manual.

# Motif Twist Operation Manual

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## 1. Product Description

The Motif Twist double electric breast pump utilizes a vacuum to express breast milk. The motor is classified as a medium vacuum and intermittent suction device.

### 1.1



### 1.2 Product Warranty

Thank you for purchasing the Motif Twist. Please keep your receipt as proof of purchase for any warranty claims.

#### Warranty Details

- The Motif Twist comes with a 12 month manufacturer's warranty for the main pump and a 90 day warranty for the components.
- The warranty does not cover defects caused by misuse, abuse, improper storage, or alteration of the product or components.
- The warranty does not cover misplacement or theft of the breast pump or supplies.
- The warranty does not cover failure to comply with the operating instructions of the device or components supplied with the product or normal wear and tear.
- The user of this product assumes all responsibilities and risks for use of this product.

**WARNING:** No modification of this device or its components is allowed.

## 2. Important Safeguards

### 2.1 Intended Use

The Motif Twist Double Electric Breast Pump is intended for use by lactating women to express and collect breast milk. The Twist can be used as a single or double pump.

This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities unless they are under supervision or instruction by persons responsible for their safety.

**CAUTION:** Sharing a breast pump can cause health hazards.

### 2.2 Contraindications

There are no known contraindications for this breast pump.

### 2.3 Safety Information

- Read all instructions before use.
- When using the adaptor, always use the correct voltage (100v-240v, DC 5V, 1A).
- Only use the power adaptor that comes with your Motif Twist.
- If the supply cord is damaged, replace it immediately to avoid hazard.
- Do not immerse the main body in water or clean it with a wet cloth. Always use a clean, dry towel.
- Keep all small components out of the reach of children, as small parts can be a choking hazard.
- When the pump is not in use make sure it's unplugged from the outlet.
- The working life for this device and other accessories is 2 years.
- Store the device in a cool, dry place. Heating from a fireplace, radiant heater, or moisture could potentially cause problems.

When used in conjunction with the following words, symbols indicate:

 <b>WARNING</b>	<b>A hazard of serious injury or death.</b>
 <b>CAUTION</b>	<b>A hazard of minor injury or damage to the system.</b>

### 3. Included With Your Motif Twist

#### 3.1 User Manual

#### 3.2 Pump Components

\*Note: While unpacking the box, make sure all of the following components are enclosed.

Name	Shape	Quantity	Name	Shape	Quantity
User Manual		1	Membrane		2
Diaphragm Top		2	Storage Container		2
Diaphragm		2	Container Base		2
Connector		2	Pump		1
Massage Shield		2	Tubing		2
Hygiene Cover		2	Tubing Adaptor		2
Silicone Gasket		2	Power Adaptor		1
Valve		2			

#### 3.3 Pump Accessories Included

- 2 180 ml Milk Collection Container Kits.
- 2 Bottle Nipples

### 4. Sterilization and Cleaning

#### 4.1 Before Initial Use

Prior to using the pump for the first time, sanitize all parts

#### 4.2 After Each Use

1. Thoroughly wash your hands before handling each breast pump component.
2. Disassemble each part that comes into contact with breast milk including the: valve, connector, tubing, tubing connector, bottle, bottle nipple.
3. Rinse each part in cool water to remove milk residue.
4. Separately wash each part in the sink with a soft brush or clean dishcloth; OR soak each part in warm soapy water for 5 minutes and thoroughly rinse them; OR separate each part and wash them on the top rack of your dishwasher.
5. Dry each part with clean towel and/or allow them to completely air dry on a sanitary surface.
6. Wipe the main body with a dry, clean towel after each use.
7. Store parts after they completely dry in a clean bag or container. Do not store any damp parts.

#### 4.3 Once Daily

1. Sanitize each component that comes into contact with breast milk.
2. Disassemble the breast pump after use.
3. Place each breast pump component in a pot of water and submerge any parts that come into contact with breast milk.
3. Bring water to a boil and allow parts to sanitize for 5 minutes.
4. Once the water has cooled, carefully remove each part. Use caution as they might be hot.
5. Place the sanitized parts on a clean surface or towel.
6. Allow them to completely dry.
7. Store parts after they completely dry in a clean bag or container. Do not store any damp parts

#### 4.4 Tubing

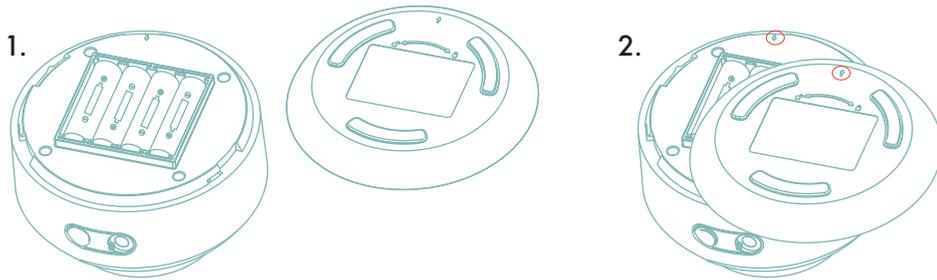
1. Tubing should be cleaned after coming into contact with breast milk.
2. Make sure the the breast pump is turned off and unplugged, then detach the tubing from the breast pump unit and breast shield.
3. Rinse the tube with cool water to remove any breast milk residue.
4. Wash the tubing in warm soapy water, then thoroughly rinse it with cool water.
5. Hang tubing and allow to air dry completely.

\*Note: Do not sterilize or wash the main body of the breast pump or the power adaptor. Make sure to allow parts to dry completely before your next pumping session.

## 5. Breast Pump Assembly (See Opposite Page)

1. Wash hands thoroughly and sterilize each breast pump component before assembly.
2. Snap the membrane into the valve until it lies completely flat.
3. Place the valve up into the connector and make sure the seal is tight.
4. Attach the massage pad onto the breastshield connector (optional).
5. Attach the diaphragm on top of the connector.
6. Connect the diaphragm top by attaching it to the top of the diaphragm.
7. Insert the tubing connector with the tubing attached into the diaphragm.
8. Screw the storage container onto the connector.
9. Insert the tubing connector into the tubing port on the breast pump.
10. Insert the DC connector on the power cord into the DC port on the pump, then insert the USB into the USB socket adaptor and plug it into a power outlet.
11. After pumping, store your breastmilk in the refrigerator and clean your pump. Make sure all electric components are dry.

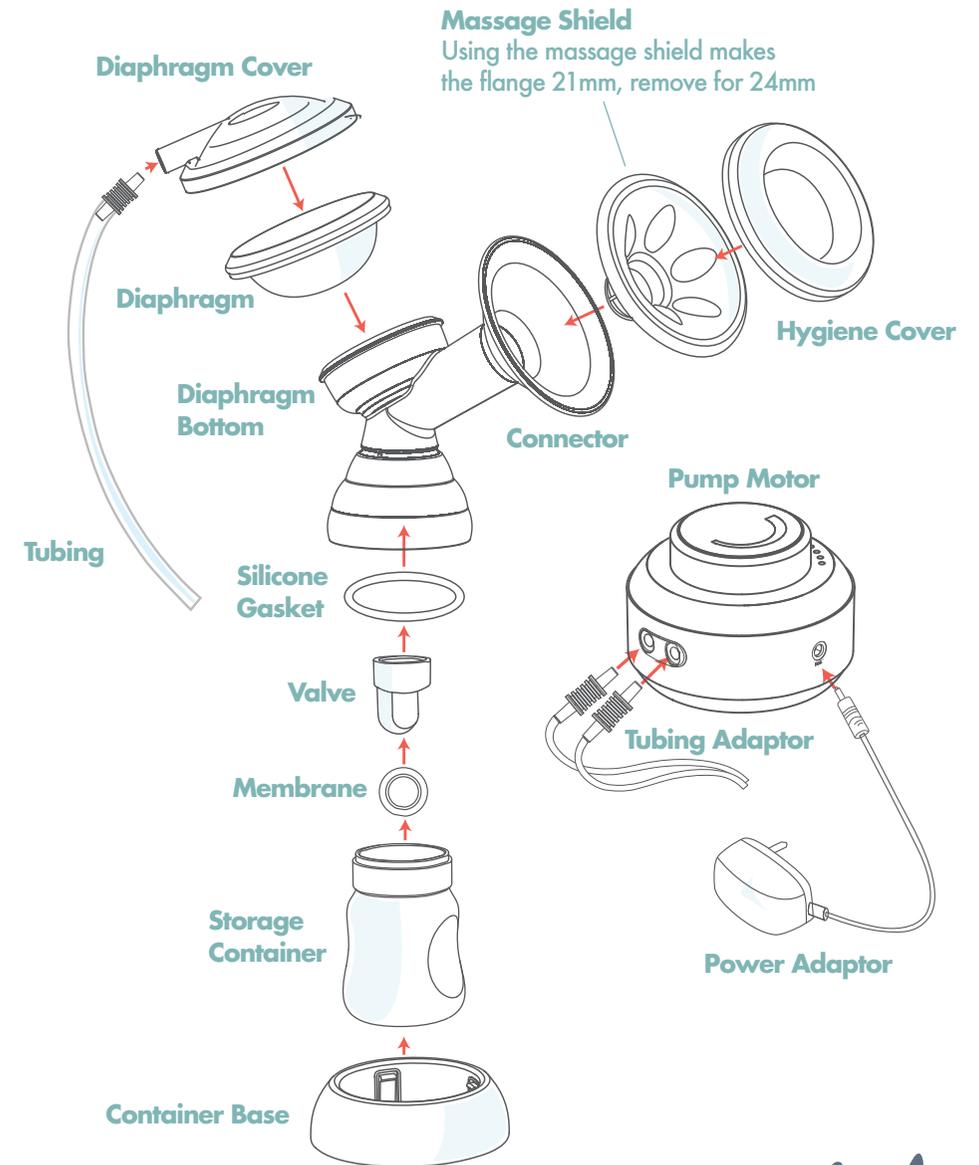
### 5.1 Battery Installation



1. Open the battery cover by rotating it to the left, and install four AA batteries and close the cover.
2. Align the battery cover arrow with the arrow on the base and twist it to the right to lock.

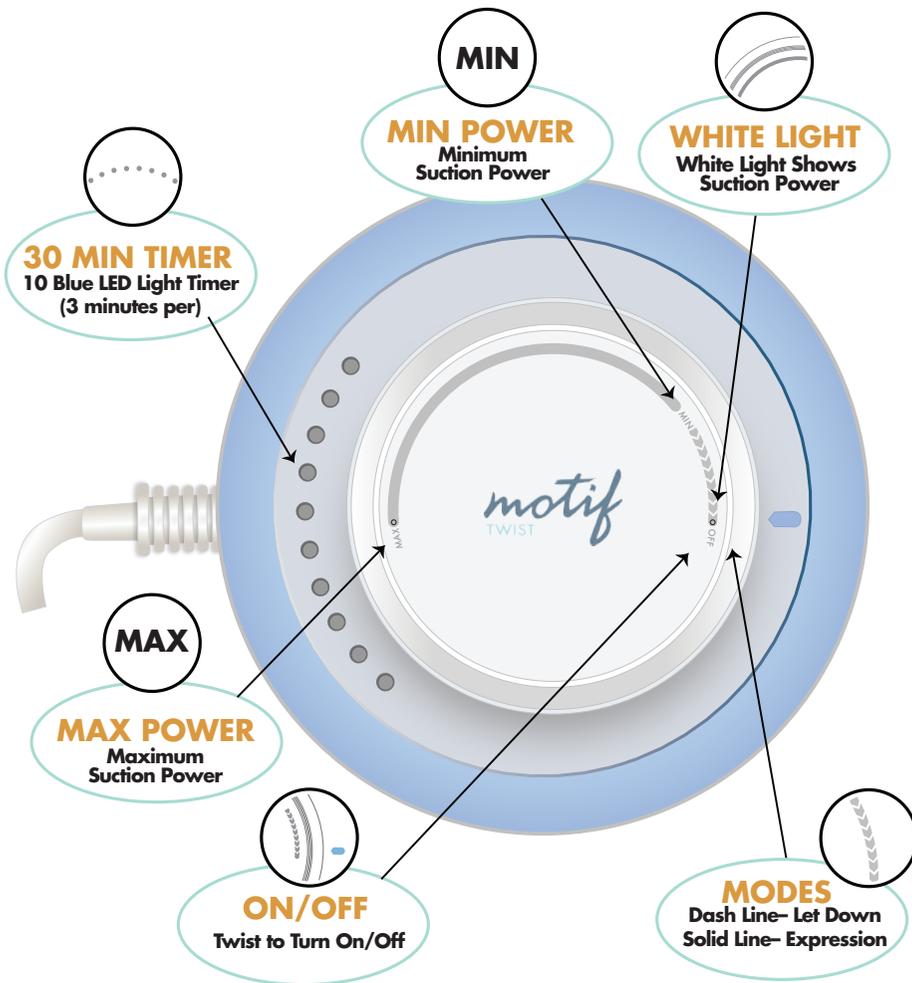
\*Note: Be sure to turn off the pump and disassemble the parts when not in use.

### 5.2 Breast Pump Assembly Diagram



*motif*  
TWIST

## 6. Breast Pump Features



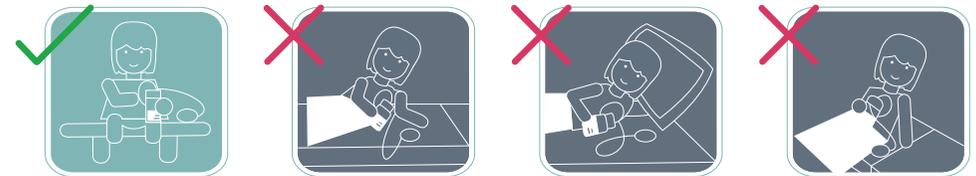
## 7. Using Your Motif Twist

### 7.1 Preparing to Pump

1. Thoroughly wash your hands with soap and water before touching any pump parts.
2. Check each component for wear or damage before use and replace parts when/if necessary.
3. Make sure that all components that come into contact with breast milk are properly sanitized.
4. Assemble the breast shield, diaphragm, and bottle according to the instructions and connect to the pump body via the tubing.
5. Ensure tubing is tightly connected to prevent air leakage.
6. Check battery level before use to ensure the device is fully charged.
7. Massage the breast for about 5 minutes with a warm towel to promote expression.

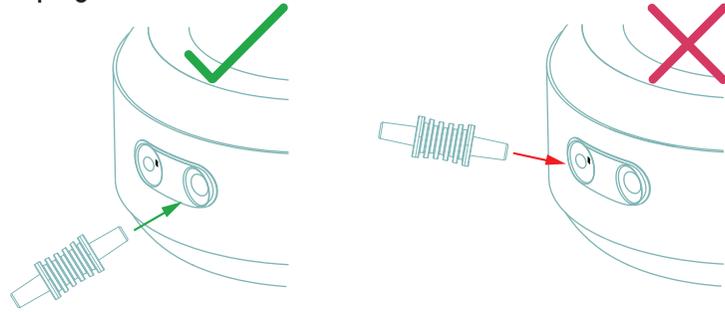
### 7.2 Pumping

While using your Motif Twist maintain an upright position to prevent milk from back flowing.



1. Place the breast shield on your breast so that your nipple is centered within it. (Refer to the troubleshooting section to learn more about finding the correct breast shield size).
2. Turn the breast pump on to begin pumping.
3. Ensuring proper let down is vital to successful expression. To achieve let down, begin pumping with the dial set between "Min" and the midpoint of the dial.
4. Once let down is achieved, increase suction by turning dial to any point between the midpoint and "Max," this will allow you to transition to expression mode.
5. Normal pumping durations last between 15 to 30 minutes, but vary between individual moms.
6. After your pumping session, turn off the power and slide a finger between your breast and the breast shield to separate them.

### 7.3 Single Pumping



While single pumping make sure to insert the tubing connector into the port on the right side. *Do not use the port on the left with a black button or you may experience suction loss.*

### 7.4 Double Pumping

Plug both of the tubing connectors into the ports and make sure that the black button in the left port is completely held down by the tubing connector, as this will allow suction on both sides of the pump.

## 8. Troubleshooting

### 8.1 Common Issues

No or Low Suction	<ul style="list-style-type: none"> <li>• Make sure the breastshields are properly sealed around the breast.</li> <li>• Make sure each part has a tight and secure seal.</li> <li>• Check the white valve membrane to make sure it's lying flat against the membrane head. Make sure the valve and membrane are not damaged.</li> <li>• Check the ends of the tubing to make sure they are securely placed in the breast shield and breast pump port.</li> <li>• Make sure the power cord is properly plugged into an outlet.</li> </ul>
Battery Not Operating	<ul style="list-style-type: none"> <li>• Replace the batteries with new fully charges ones.</li> </ul>
Does Not Power On	<ul style="list-style-type: none"> <li>• Inspect the power knob and pump exterior for any foreign objects.</li> <li>• Make sure the power adaptor is properly plugged in.</li> <li>• Replace the batteries.</li> </ul>
Main Body Becomes Wet	<ul style="list-style-type: none"> <li>• Turn the power off.</li> <li>• Unplug the power adaptor from the socket.</li> <li>• Wipe the main body with a clean dry cloth and store it in a warm area to dry for about 12 hours.</li> </ul>
Breast Milk in Tubing	<ul style="list-style-type: none"> <li>• Turn off the breast pump.</li> <li>• Disconnect the tubing from the diaphragm and main body.</li> <li>• Clean the tubing by rinsing it with cool water and hang it up to fully dry</li> </ul>

### 8.2 Breastshield Sizing

#### 1. Understanding size

Pumping should not hurt. This guide is a starting point to help determine your optimal size based on your nipple diameter.



#### Step 1:

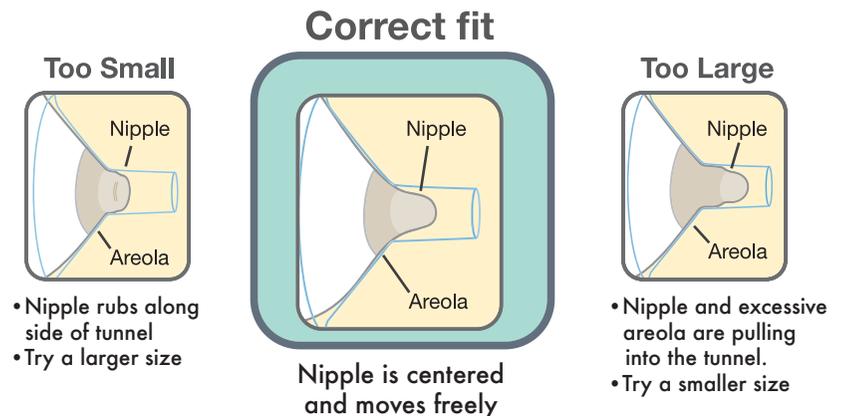
Using a ruler or measuring tape measure the diameter of your nipple at base (across middle) in millimeters (mm). \* 1 cm = 10 mm. Do not include areola.

#### Step 2:

Based on your measurement, determine your breastshield size. \*Example: If your nipple size measures 16 mm in diameter, the recommended breastshield size is 21 mm.

#### 2. Test your breastshield size

1. Start with the 24 mm that came with your pump, or the size determined by measuring.
2. Center nipple and gently hold breastshield against your breast.
3. Adjust to achieve optimum suction level.
4. Refer to images while pumping in expression.



#### 3. Should you try a new size?

Does your nipple rub sides of tunnel, to the point of causing discomfort? Do you see excessive areola being pulled into tunnel? Do you see any redness? Is your nipple or areola turning white? Do you feel unexpressed milk after pumping?

If you answered "YES" to any of these questions, consider trying a new size by following the measuring instructions above. If you are still unsure if you selected the correct size, see a lactation consultant, or breastfeeding specialist for assistance in choosing the right size breastshield.

## 9. Storing and Using Breast Milk

The following information is referenced from the Office of Women's Health.

Store your breast milk in clean glass or hard BPA-free plastic bottles with tight-fitting lids. You can also use milk storage bags, which are specifically made for freezing human milk. Do not use disposable bottle liners or other plastic bags to store breast milk.

### 9.1 After Each Pumping Session

- Label the date on the milk storage container. Include your child's name if you are giving the milk to a childcare provider.
- If cream rises to the top of the bottles, gently swirl them to mix the cream with the rest of the milk. Do not shake the milk, as it could cause some of the milk nutrients to break down.
- Refrigerate or chill breast milk immediately after expression. You can refrigerate breast milk in a cooler or insulated cooler pack, or freeze the milk in small (2 to 4 ounce/60 to 110 g) batches.

### 9.2 Freezing Breast Milk

- If using BPA-free plastic or glass bottles, wait until milk is completely frozen to tighten bottle caps or lids.
- Try to leave an inch or so from the milk to the top of the container, as it will expand when freezing.
- Store milk in the back of the freezer, away from the freezer door.

### 9.3 Thawing and Warming Milk

- Clearly label milk containers with the date the milk was expressed. Use oldest stored milk first.
- Thaw the bottle or bag of frozen milk by putting it in the refrigerator overnight, holding it under warm running water, or by placing it in a container full of warm water for several minutes.
- Never put a bottle or bag of breast milk in the microwave. Microwaving breast milk creates hotspots that could burn or damage the milk.
- Swirl the milk, and test the temperature by placing a few drops on your wrist. The milk should be comfortably warm, not hot.

- Use thawed breast milk within 24 hours. Never refreeze thawed breast milk.

### 9.4 Storing Fresh Breast Milk

Storage Method	Temperature	Longevity	Tips
Countertop or Table	Room temperature (up to 77°F or 25°C)	Ideally, use within 3-5 hours.	Containers should be covered and kept as cool as possible. Discard leftover milk within 1 to 2 hours after your baby is finished feeding.
Refrigerator	39° F (4° C) or colder	Use within 3-5 days.	Store milk in the back of the main body of the refrigerator. Use an insulated bag to store milk in the back of the refrigerator while at work.
Freezer	0° F (4° C) or colder.	Use within 3 to 6 months is best.	Store the milk in the back of the freezer where the temperature will remain the most consistent.

### 9.5 Storing Thawed Breast Milk

#### Thawed Breast Milk

1 to 2 hours is best, do not store for over 4 hours.  
24 hours.  
Do NOT refreeze.

## 10. Electro Magnetic Compatibility (EMC)

1. This equipment has been tested and found to comply with the limits for medical devices in EN601-1-2. These limits are designed to provide reasonable protections against harmful interference in a typical medical installation.
2. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used according to the instructions may cause harmful interference to other devices nearby. However, there is no guarantee that interference will not occur in a particular installation.
3. If this equipment does not cause harmful interference to other devices, which can be determined the equipment off and on, the user is encouraged to try and correct the interference by one of the following measures:
  - Reorient or relocate the receiving device.
  - Increase the separation between the equipment.
  - Connect the equipment into an outlet on a circuit different from one that has other devices connected.
  - Consult the manufacturer or field service technician below. Our contact information is listed on the last page.

## EMC Guidelines

Cable information is provided below for EMC reference.

Cable	Max. cable length, Shielded/unshielded		Number	Cable classification
	Shielded	Unshielded		
DC Power Line	5.9 ft	Nonshielded	1 Set	DC Power

Important information regarding Electromagnetic Compatibility.

Double electric breast pumps need special precautions regarding EMC and need to be put into service according to the EMC information provided in the user manual and other documents.

This double electric breast pump conforms to this EN 60601-1-2:2007+AC:2010/IEC 60601-1-2:2007 standard for both immunity and emissions.

The use of accessories and other cables other than those specified, with the exception of accessories and cables sold by Motif Medical, LLC of the double electric breast pump as replacement parts for internal components may result in increased EMISSIONS and decreased IMMUNITY or decreased LIFESPAN of the double electric breast pump.

The double electric breast pump should not be used adjacent to or stacked with other equipment. In case adjacent or stacked use is necessary, the breast pump should be observed to evaluate normal operation in the configuration in which it will be used.

Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT and ME SYSTEM – for ME EQUIPMENT and ME SYSTEM that are not LIFE-SUPPORTING.

Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT and ME SYSTEM			
The MT-10.1-2 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the MT-10.1-2 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the MT-10.1-2 as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter		
	150kHz to 80 MHz $d = \left[ \frac{3.5}{E_1} \right] \sqrt{P}$	80MHz to 800MHz $d = \left[ \frac{3.5}{E_1} \right] \sqrt{P}$	800MHz to 2.5GHz $d = \left[ \frac{7}{E_1} \right] \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

## EMC Information

Guidance and manufacturer's declaration - electromagnetic emissions - for all ME EQUIPMENT and ME SYSTEM.

Table 1: Guidance and manufacturer's declaration – electromagnetic emissions		
The MT-10.1-2 is intended for use in the electromagnetic environment specified below. The customer or user of the MT-10.1-2 should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The MT-10.1-2 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment
RF emissions CISPR 11	Class B	The MT-10.1-2 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ Flicker emissions IEC 61000-3-3	Compliance	

Guidance and manufacturer's declaration - electromagnetic immunity - for all ME EQUIPMENT and ME SYSTEM.

Table 2: Guidance and manufacturer's declaration – electromagnetic immunity			
The MT-10.1-2 is intended for use in the electromagnetic environment specified below. The customer or the user of the MT-10.1-2 should assure that it is used in such an environment.			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment - guidance
Electrostatic Discharge(ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 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%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment
Surge IEC 61000-4-5	±1 kV lines to lines ±2 kV lines to earth	±1 kV lines to lines ±2 kV lines to earth	Mains power quality should be that of a typical commercial or hospital environment.

Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% UT (>95% dip in UT) For 0,5 cycle 40% UT (60% dip in UT) For 5 cycle 70% UT (30% dip in UT) For 25 cycle <5% UT (>95% dip in UT) For 5 cycle	<5% UT (>95% dip in UT) For 0,5 cycle 40% UT (60% dip in UT) For 5 cycle 70% UT (30% dip in UT) For 25 cycle <5% UT (>95% dip in UT) For 5 cycle	Mains power quality should be that of a typical commercial or hospital environment. If the user of MT-10.1-2 requires continued operation during power mains interruptions, it is recommended that the MT-10.1-2 be powered from an uninterruptible power supply or a battery.
		For 5 cycle	
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment
Note: UT is the a.c. mains voltage prior to application of the test level.			

### Guidance and manufacturer's declaration – electromagnetic immunity for ME EQUIPMENT and ME SYSTEM that are not LIFE-SUPPORTING.

Table 3: Guidance and manufacturer's declaration – electromagnetic immunity			
The MT-10.1-2 is intended for use in the electromagnetic environment specified below. The customer or the user of the MT-10.1-2 should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80MHz	V1=3V	Portable and mobile RF communications equipment should be used no closer to any part of the SYSTEM, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  Recommended separation distance 80MHz to 800MHz 800MHz to 2.5GHz
Radiated RF IEC 61000-4-3	3 Vrms 80MHz to 2.5GHz	E1=3V/m	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, should be less than the compliance level in each frequency range.  Interference may occur in the vicinity of equipment marked with the following symbol:  
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Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT and ME SYSTEM – for ME EQUIPMENT and ME SYSTEM that are not LIFE-SUPPORTING

Recommended separation distances between portable and mobile RF communications equipment and the MT-10.1-2			
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Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150kHz to 80 MHz $d = \left[ \frac{3.5}{V_1} \right] \sqrt{P}$	80MHz to 800MHz $d = \left[ \frac{3.5}{E_1} \right] \sqrt{P}$	800MHz to 2.5GHz $d = \left[ \frac{7}{E_1} \right] \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.73
1	1.2	1.2	2.3
10	3.7	3.7	7.3
100	12	12	23