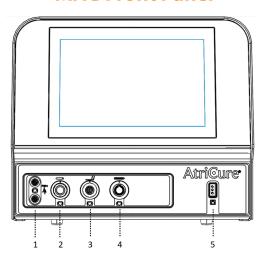
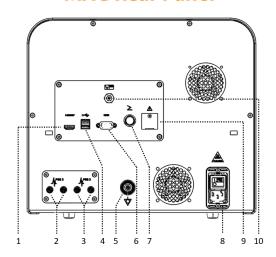
# MAG Quick Start Guide

## **MAG Front Panel**



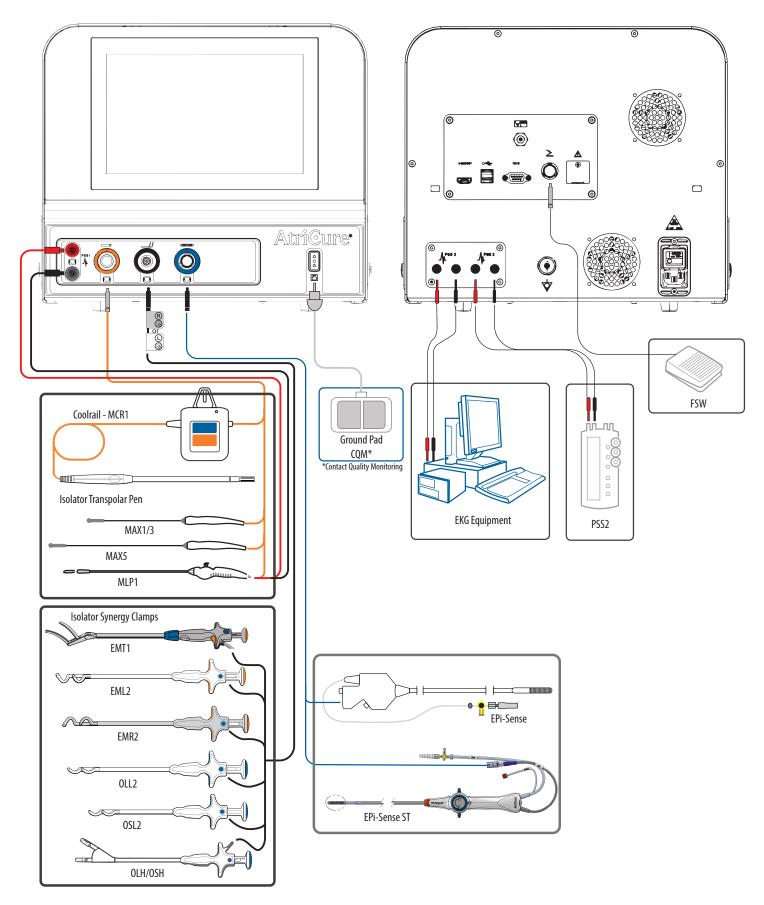
- 1. Sense-Pace Input (MLP)
- 2. Pens Receptacle
- 3. Clamp Receptacle
- 4. EPi-Sense Receptacle
- 5. Return Electrode Receptacle

## **MAG Rear Panel**



- 1. HDMI Port
- 2. PSS Port (EKG)
- 3. PSS Port (EKG)
- 4. USB Port
  - . Equipotential Connector
- 6. RS-232 Port (Future Use)
- 7. Footswitch Receptacle
- 8. Power Switch
- 9. Service port (ATRC Only)
- 10. Vacuum Port

## **MAG Connections**



#### **POWERING UP THE MAG**

## $\triangle$ WARNING $\triangle$

CONNECT ACCESSORIES TO THE MAG ONLY WHEN RF ENERGY IS OFF. FAILURE TO DO SO MAY RESULT IN AN INJURY OR ELECTRICAL SHOCK TO THE PATIENT OR OPERATING ROOM PERSONNEL.

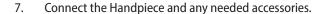
#### **USE GLOVES WHEN OPERATING THE MAG**

- 1. Connect the provided power cord to the rear of the MAG.
  - Make sure that power cord is fully seated in the receptacle.
- 2. Plug the MAG into a grounded power outlet.
  - Do not use multiple-outlet sockets, extension cords or three-prong to two-prong adapters. Periodically check the power cord assembly for damaged insulation or connectors.
  - Ensure that access to the power cord outlet is maintained, so that the power cord can be quickly removed in the event of an emergency.



- 3. If using the footswitch, make sure that it is connected.
  - Pens and Clamp Handpieces: To start RF energy (to perform ablations), press and hold the footswitch. To stop RF energy, release
    the footswitch.
  - EPi-Sense Handpieces: To start RF energy (to perform ablations), press and release the footswitch. To stop RF energy, press and release the footswitch.
- 4. If using an external pacing system for emergency pacing, make sure that it is available and powered up.
- 5. Turn the power on using the ON/OFF switch located on the rear panel.
  - After it has been powered up, the MAG performs System Self-Tests. The Self-Tests generate two quick beeps at startup.
- 6. Verify that the beeps are generated.
  - If all Self-Tests pass, the MAG transitions to the STANDBY mode.
  - If any Self-Test fails, the MAG will emit a constant audible tone and will go into the FAULT mode.





#### **FAULT MODES**

- If the MAG fails a Self-Test after it is powered up or if a non-recoverable error condition is detected at any time, the MAG enters FAULT mode. A Fault code number will be displayed on screen.
- The MAG is inoperable in the FAULT mode. RF energy is disabled during the Fault Mode.
- To clear the FAULT Mode, turn the MAG power OFF and then ON again. Cycling power will clear a fault condition and restore RF power output capability.
- Recoverable error messages will stay on the LCD display until RF energy is initiated by the footswitch, or the message is cleared from the screen. Other messages will stay on the LCD display until the error is corrected (e.g., until an expired Handpiece is removed).



## **TROUBLESHOOTING ERROR CODES**

# **Recoverable Error Messages**

NUMBER	CAUSE	REMEDY
1	Power measurement problem	<ul><li>Clear error and continue.</li><li>If problem persists, contact AtriCure Customer Service</li></ul>
5	High impedance problem	<ul> <li>Check handpiece.</li> <li>For EPi-Sense devices check the vacuum and Return Electrode.</li> <li>If problem persists, contact AtriCure Customer Service</li> </ul>
4	• Low impedance problem	Check handpiece
6		<ul> <li>For CoolRail devices, Possible cooling problem if the LED is illuminated.</li> <li>If LED is illuminated there may be a problem with the cooling system</li> <li>If problem persists, contact AtriCure Customer Service</li> </ul>
8	Cooling fan problem	<ul><li>Cycle power off and back on</li><li>If problem persists, contact AtriCure Customer Service</li></ul>
13	• Invalid or expired handpiece	Reconnect or replace handpiece
14		If problem persists, contact AtriCure Customer Service
15	• Relay problem	<ul><li>Clear error and continue</li><li>If problem persists, contact AtriCure Customer Service</li></ul>
16	Active device removed	<ul><li>Reconnect handpiece</li><li>If problem persists, contact AtriCure Customer Service</li></ul>
18 & 21	Return electrode current problem	Check return electrode     If problem persists, contact AtriCure Customer Service
23	Current measurement problem	<ul> <li>Check handpiece</li> <li>For CoolRail devices, Possible cooling problem if the LED is illuminated.</li> <li>If LED is illuminated there may be a problem with the cooling system</li> <li>If problem persists, contact AtriCure Customer Service</li> </ul>
24	Return electrode contact problem	Check return electrode     If problem persists, contact AtriCure Customer Service
25	Power measurement problem	Clear error and continue
26		If problem persists, contact AtriCure Customer Service
27	Voltage measurement problem	<ul><li>Cycle power off and back on</li><li>If problem persists, contact AtriCure Customer Service</li></ul>
29	Footswitch disconnected	Reconnect or replace footswitch     If problem persists, contact AtriCure Customer Service
30	Invalid or expired handpiece	Reconnect or replace handpiece     If problem persists, contact AtriCure Customer Service
32	• Incorrect Return Electrode	Replace solid return electrode with a split return electrode     If problem persists, contact AtriCure Customer Service

# **Warning Messages**

NUMBER	CAUSE	REMEDY
1	Handpiece close to expiration	• Less than 1 hour remaining
2	Return electrode detaching from patient	Re-apply or replace the return electrode
3	Footswitch connected during an ablation	Restart ablation
4	Ablation attempted while in sense more	Switch to ablate mode before attempting an ablation

# **Non-Recoverable Error Messages**

NUMBER	CAUSE	REMEDY
1	• Internal RF Problem	Cycle power off and back on
2		If problem persists, contact AtriCure Customer Service
3	Internal temperature problem	Cycle power off and back on
4		If problem persists, contact AtriCure Customer Service
5	• 24V power problem	Cycle power off and back on     If problem persists, contact AtriCure Customer Service
6	Footswitch Self-Test problem	Disconnect Footswitch, cycle power off and back on     If problem persists, contact AtriCure Customer Service
7	Measurement system problem	Cycle power off and back on     If problem persists, contact AtriCure Customer Service
8	High lesion temperature detected	Cycle power off and back on     If problem persists, contact AtriCure Customer Service
10-18	Internal communication problem	Cycle power off and back on     If problem persists, contact AtriCure Customer Service.
19	Real time clock problem	Cycle power off and back on     If problem persists, contact AtriCure Customer Service

For other concerns, consult the Multifunctional Ablation Generator (MAG) Instructions for Use or contact the AtriCure Customer Service Hotline at (866) 349-2342.

For detailed information, please consult the Instructions for Use.



For other concerns, consult the Multifunctional Ablation Generator (MAG) Instructions for Use or contact the AtriCure Customer Service Hotline at (866) 349-2342. For detailed information, please consult the Instructions for Use. ATRICURE, INC. 7555 Innovation Way Mason, Ohio 45040 USA www.AtriCure.com

IFU-0012.B