



## **PM40T**

PIANO MICROPHONE SYSTEM FOR TOURING

For more information, please visit  
[www.earthworksaudio.com](http://www.earthworksaudio.com) or call 1-603-654-2433.

**EARTHWORKS AUDIO**

# Thank you for purchasing the Earthworks PM40T Touring PianoMic System!

---

## YOUR PURCHASE INCLUDES

**2 PianoMic™ Telescoping Bars with Attached Microphone Heads**

**1 Microphone Electronics Box**

**1 Leather Pouch for Electronics Box**

**2 Felt pads with Adhesive Backing**

**1 Carrying Case**

---

## GETTING STARTED

Before setting up the microphone, pull back all existing settings and EQ. By doing this, you will have a baseline understanding of how our microphones sound, and will then be able to adjust accordingly.

CAUTION – the microphone heads and goosenecks are permanently attached to the center section of the PianoMic™ telescoping tube and cannot be moved, or removed. The distance between the two goosenecks is fixed at 16 inches (one-third of the width of a piano keyboard).

## ASSEMBLING THE PM40T

1. Remove the two PianoMic™ telescoping bars from the case. Notice that on each of the two telescoping bars, there is a special XLR type connector. There is a rotating collar next to the special XLR type connector on the telescoping bar that has a cable coming out of one end.
2. Rotate the collar on the XLR connector so it is snug against the connector cover, but not too tight.
3. Next, rotate the collar two turns in the opposite direction (moving it away from the connector cover toward the connector pins).
4. Now, take the two PianoMic™ telescoping sections and mate the connectors just like you would mate a standard XLR connector (see Fig. 1-D). First mate the keyways and then push the connectors together until you hear a "click." If you do not hear a click, then change the position of the rotating collar and try to mate the two sections again.
5. Once you have heard the click when mating the two sections, rotate the collar until it is firmly positioned against the mating connector cover (finger tight). At this point two sections should be firmly attached and will not be loose or wiggle.

## DISASSEMBLING THE PM40T

1. To disassemble the PianoMic, rotate the collar between the XLR connectors the full distance from its mating half until it is snugly against the right connector body.
2. Then grab the two mating connectors (one with each hand) and pull the two sections apart.  
**Do not pull apart holding onto the telescoping tubes.**
3. Collapse the telescoping bars and place them in the carrying case along with the electronics box and leather pouch. Now you're ready to take your PianoMic™ to the next gig.

## SETTING UP

1. Check that all items are included with your PianoMic™ System by using the list of "Items Enclosed" on the first page of this manual.
  2. Remove the PianoMic™ telescoping bar from the case and loosen the two clutches on either side of the two microphone goosenecks.
  3. Extend both sides of the bar so that it is wider than the piano.
  4. If you desire a more snug fit with the lid closed or if vibration becomes an issue, install one of the enclosed felt pads on the support brackets.
  5. With the bar fully extended and the clutch adjusted where there is still a little friction, place the support bracket on the edge of the piano case opposite you. Then push on the bar until the PianoMic™ is the correct length to allow the support bracket to easily rest on the edge of the piano case nearest to you.
  6. Once you have positioned the PianoMic™ center section, tighten both clutches to insure that the PianoMic™ bar stays in place.
  7. With the PianoMic™ in place, you can move the flex arms attached to the microphone heads several inches to the left or to the right to achieve your desired placement.
  8. With the PianoMic™ placed inside the piano and the microphones properly positioned you are ready to connect the PianoMic™ cable to the electronics box. Notice that the top of each microphone head has a number. These numbers correspond to the numbers on the bottom of the electronics box. Depending upon how the PianoMic™ is placed in the piano the high strings will be indicated by either the number 1 or number 2. Once the PianoMic™ has been placed, identify the microphone numbers on the mic heads for both the high and low strings and remember that they correspond to the numbers on the bottom of the electronics box.
  9. There are two ways to mount the electronics box: (1) in a leather pouch strapped to the leg of the piano, or (2) attached to a bracket that screws onto a short microphone stand. The PianoMic™ System comes with the necessary hardware to install the electronics box in either of these two ways.
- Pouch Attached to Piano Leg: The enclosed leather pouch has Velcro straps that allow it to be attached to the leg of a piano. The pouch is open at the top and the bottom has a strap to prevent the electronics box from falling out of the bottom. There is an opening at the bottom of the pouch to conveniently attach the two standard XLR-3 microphone cables that go to your mixer preamp inputs.
  - Electronics Box Attached to Mic Stand Bracket: The electronics box has a threaded insert in the bottom of the box that will mate with the threads on a standard microphone stand. By this method, the electronics box can be mounted to a short mic stand to keep it above floor level, if desired.

## IMPORTANT NOTICES

The random incidence microphones in the PianoMic system do not work like conventional microphones. Therefore, microphone placement techniques that are used with conventional microphones will most likely not apply when using the PM40.

Start by placing the mic heads 2-3 inches above the strings and 2-3 inches in front of the dampers. Then listen! If you don't like what you hear, then experiment with other mic placements.

**Do not excessively bend the gooseneck beyond 90 degrees.** Doing so on a consistent basis will cause the wand portion to deteriorate and lose its ability to stay in the desired position.

**Do not twist the mic head more than 90° from pointing straight down at the strings.**

## TROUBLESHOOTING

If you encounter issues while using your Earthworks Audio microphone, please make sure that:

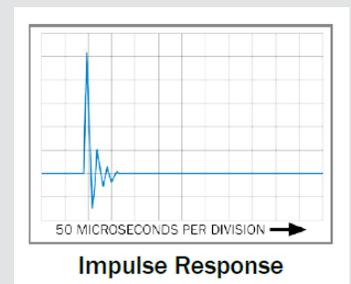
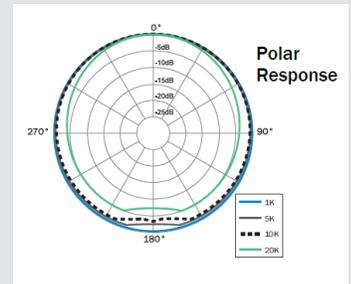
- The telescoping bar is secured onto the body of the piano.
- The electronics box is secure wherever you have placed it.
- The XLR connection from the telescoping bar to the electronics box is active and strong.
- The microphone heads are positioned at an appropriate distance from the sound source.
- External noise in your recording environment is kept to a minimum.
- Your recording space is at room temperature and free of dust.

If your issue persists after checking, please contact us via our website.

## SPECIFICATIONS



PM40T	
Frequency Response	9Hz - 40kHz
Polar Pattern	Omnidirectional (random-incidence)
Sensitivity	15mV/Pa (-36 dBV/Pa)
Power Requirements	24-48V Phantom, 10mA
Peak Acoustic Input	148dB SPL
Output	XLR3 (Pin 2+)
Minimum Output Load	600Ω, balanced between pins 2 & 3
Noise	20dB SPL (A weighted)
Mic Gooseneck Length	4.875 inches
Rod Length Assembled	64"(160cm) fully extended 46"(115cm) fully collapsed
Rod Length Separated	23"(58.4cm) fully collapsed
Carrying Case Dimensions	24.5"x 12.5"x4" (619 X 317 X 100 CM)
Weight	6 lbs. (2.7 kg)



## WARRANTY

All Earthworks® products carry a limited warranty (parts and labor). Please register your warranty at: [earthworksaudio.com/register](http://earthworksaudio.com/register). If you have any problems with your Earthworks products, please contact our warranty/repair department by email at: [service@earthworksaudio.com](mailto:service@earthworksaudio.com).

NOTE: This warranty only applies to Earthworks microphones purchased brand new. For microphones purchased/received second-hand, please contact us via our website.

## WE'RE HERE TO HELP

For anything else, we're a phone call or email away. Please feel free to contact us by email at [info@earthworksaudio.com](mailto:info@earthworksaudio.com), or by phone at (603)-654-2433.