

Wildtronics, LLC

Professional Universal

Parabolic Microphone

Instruction Manual

2015 Model

Thank you for purchasing the finest parabolic microphone available. Your new parabolic reflector kit was designed for years of service, ease of use, superior performance, and will allow you to install many different microphones. Depending on the shipping container used, your microphone may require minor assembly of the major components. Please review the instructions below on how to assemble, operate, and get the maximum performance from your Wildtronics Universal Parabolic Microphone.

Assembly:

Assembly and disassembly is easy. The Wildtronics Universal Parabolic Microphone is comprised of three major parts: the Parabolic Dish, the Handle Assembly, and the Microphone Mount. Also included are the Windscreen, Adapter Sleeves, and Front Microphone Cable.



Major components of the Parabolic Microphone

To assemble the parabolic microphone, insert the Microphone Mount into the dish center hole. This works best if you place the dish over the Microphone Mount with the microphone connector pointed up. Now, place the Handle Assembly onto the threaded stud of the Microphone Mount. Rotate the handle to align the connector with the opening. Slightly squeeze the assembly to keep it together, and rotate the four star hand knob clockwise three turns. Make sure the connector is still aligned with the hole in the back panel, then rotate the hand knob a couple more turns. Be sure not to over tighten this hand knob. If you reach the end stop, loosen by two turns. When tightened correctly, the dish will be able to slightly rotate, by hand, but hold it's position on it's own. The dish is mounted with a foam suspension system to reduce handling noise. If over tightened, this feature will no longer function well. You are now ready to mount your microphone into the Microphone Mount.



Place dish over Mic Mount.



Align and slightly tighten knob.

Mounting your microphone:

The Wildtronics Universal Parabolic kit allows you to mount many different microphones. Refer to the table later in this manual for recommended microphones. To adapt a variety of different diameter microphones, Wildtronics uses Adapter Sleeves that fit into the Microphone Mount. Measure your microphone's diameter or look at it's spec sheet to determine the diameter and use the sleeve from the table below. Insert the sleeve, if needed, until it is flush with the rear of the mount as shown in the photo. Place the slot in the adapter at the bottom of the mount, so it is between the thumbscrews. This will allow the thumbscrews to tighten the adapter optimally.



Center Handle onto stud.



Final tighten knob.

Sleeve Use Table				
Microphone Diameter	Sleeve Needed			
18 -19.5 mm	Thick - Clear			
19.5 - 22.5 mm	Thin - White			
22 - 26 mm	No Sleeve Needed			



Use Adapter Sleeves if needed.



Insert sleeve until flush.



Align slot in adapter as shown.



Insert your microphone.

If you need to use the Thin sleeve, it would be easier if you slide it over your microphone first, before inserting the microphone into the Mic Mount. Now, slide your microphone into the mount, so that the connector is facing outward, and the mic faces the Parabolic Dish. Note where the actual element of your microphone is in relation to the end of the microphone. Many microphones have a cover over the element. You may have to contact the manufacturer of your microphone to determine the distance of the element to the end of the mic. Insert your microphone so that the position of the actual element is 3/16"(5mm) inside the surface of the mounting block facing the dish, or 1 5/8"(41mm) from the outward facing end of the Mic Mount. These dimensions yield the exact focal point for your Parabolic Dish, resulting in optimal frequency response and gain for distant subjects. Once focused, tighten both thumbscrews. Once your microphone is inserted and focused, you can install the foam Windscreen. Note, that if you use a typical cardioid microphone, which is not recommended, the microphone end will stick out quite a bit from the plate surface, and may not allow the Windscreen to fit in place. Insert the foam Windscreen into the Windscreen holder as shown. Once you have it started, tuck in the sides of the Windscreen so the entire Windscreen is inside the Windscreen holder as shown. When fully seated, the sides of the Windscreen will make contact with the surface of the plate without air gaps.



Insert Windscreen into holder.



Tuck Windscreen into holder.

You may want to make a small mark on your microphone, flush with the back of the Mic Mount so you can quickly remove and reinstall your microphone in the correct position without removing the windscreen. You can now plug in the Front Microphone Cable, to connect your microphone to the front TA3M connector. If you have excess cable, you can spiral wrap the excess around the microphone as shown. This completes your assembly, and your microphone is ready for use. Plug in your XLR mic cable at the rear panel to connect your preamp or recorder.

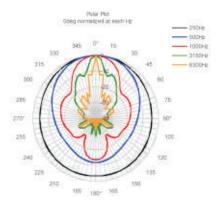


Install front mic cable and wrap.

Wildtronics Parabolic Microphone Operation:

Once you have your microphone assembled and connected to a recording or preamp device, you may start using the microphone by pointing it towards your subject. Experiment by moving the microphone to find the best signal, a pointing accuracy of 2 degrees is recommended for full frequency response and gain. Hold as still as possible to avoid handling noise, or use the tripod mount at the bottom of the handle. For more information, review <u>Parabolic Microphones</u> and <u>Audio Noise</u> located in the Articles section in the Wildtronics website.

Recommended microphones are omnidirectional and not cardioid microphones. Only an omnidirectional microphone will have a wide enough polar response angle at all frequencies to capture the entire dish reflection. Cardioid microphones can be used temporarily, but will result in less gain. Cardioid microphones, since they have more space between the element and the end of the microphone, may also not be able to use the supplied Windscreen. The list of recommended microphones are below. Those highlighted in yellow are most recommended due to their low noise and size. The MKH8020 is ideal since it is short. In general, microphones must have the following dimensions to work with the Wildtronics Universal Parabolic kit: A diameter of 18-26mm, and a length of 50-188mm (best under 155mm). The table also lists the approximate cost, noise level, and whether the Wildtronics Secondary Windscreen will fit. For reference, the microphone used in the Wildtronics Professional Mono and Mono-Stereo Parabolic Microphones, has a noise floor of 10dBA. Your typical polar response will be as shown below, with slight variation depending on your specific microphone.



Typical polar response using an omnidirectional microphone.

Recommended microphones for Wildtronics Universal					
Model	Cost	Self Noise	2nd'ary windsceen	Adapter Sleeve	
Sennheiser					
Me62- K6P	\$450	15dBA	Yes	none	
MKH20	\$1200	10dBA	Yes	none	
MKH8020	\$1200	10dBA	Yes	Thick	
Audio Technica					
At3032	\$300	16dBA	Yes	Thin	
At4022	\$350	13dBA	Yes	Thin	
At4049	\$600	16dBA	Yes	Thin	
DPA					
2006A	\$919	16dBA	No	Thick	
2006C	\$800	16dBA	Yes	Thick	
Neumann					
Km130	\$1350	16dBA	Yes	Thin	
Km131	\$1600	16dBA	Yes	Thin	
Km183	\$900	16dBA	Yes	Thin	
AKG					
CK61-ULS	\$1100	11dBA	No	Thin	

Care:

The Wildtronics Professional Universal Parabolic Microphone doesn't require much maintenance. When the dish is dirty, disassemble, blow off excess dirt with air, and clean with a mild dish detergent and water mixture and a microfiber or a very soft cloth. Other recommended cleaners are Novus No. 1, Plexus, Brillianize, or wipes used to clean flat screen TV's. Each microphone is cleaned with Novus No. 1 before it ships from the factory. You can use Novus No. 2, and 3 to polish out haze and scratches that may develop over time. Don't get your microphones wet though, and do not use any solvents. Avoid contact with DEET on any plastic products.

The most important warning is not to point the microphone at the sun, even if it is cloudy. The large perfect parabolic shape not only focuses sound, but also radiant heat from the sun, like a giant magnifying glass. Pointing the microphone towards the sun, even when it is cloudy, will quickly overheat and damage the microphone. The dish is made of nearly indestructible Polycarbonate, however we recommend a maximum storage temperature of 200/93° F/C to avoid permanent dish distortion. Auto interiors reach 180/82° F/C in warmer climates. Also avoid load or stress on the dish, such as setting the dish on it's side, or placing objects against the dish. Avoid any conditions that will bend, stress, or distort the parabolic dish for longer periods of time. If you really need to "roll" the parabolic dish to fit inside airline luggage, never roll tighter than 8 inches (preferably 12 inches) separating the edges. A slight permanent set of a non perfect parabolic shape may occur, that some think is okay, but we do not recommend in order to maintain full high frequency response. Bending in the opposite direction for a while should reset the parabolic shape, in most cases, if the above recommendations were followed. For storage, keep the parabolic dish away from any sunlight, in cool temperatures. If you need expendable parts such as windscreen replacements, contact Wildtronics, LLC for service parts.

Warranty:

The Wildtronics parabolic microphone is warranted for 1 year against manufacturer defects and limited operational problems when used under normal conditions. Wildtronics will try to resolve any problems. No part of the microphone will be covered under warranty if the microphone was pointed towards a heat source or the sun, or stored at over 200/93° F/C, as this is a user error that will cause damage to the microphone. This product has been manufactured and tested to the highest quality 7

standards by Wildtronics, LLC. This Limited Warranty offered by Wildtronics, LLC covers defects in material or workmanship in new Wildtronics, LLC products. This warranty extends to the original purchaser only and is non-transferable. Only consumers purchasing Wildtronics, LLC products from authorized Wildtronics, LLC retailers, Wildtronics, LLC distributors, or through the Wildtronics, LLC website may obtain coverage under our limited warranties.

What is covered? Wildtronics, LLC warrants this product against defects in material or workmanship as follows: Wildtronics, LLC will replace at no charge parts, or at its option, replace any assembly of the product that proves defective because of improper workmanship and/or material, under normal use, service and maintenance. If repair is not practical, with consensual agreement, Wildtronics, LLC may elect to refund the purchase price in exchange for the return of the product.

How Long Does The Coverage Last? Our warranty period is 1 year from the documented date of purchase.

What Our Warranty Does Not Cover? Our warranties do not cover any problem that is caused by:

A. Conditions, malfunctions or damage not resulting from defects in material or workmanship.

B. Conditions, malfunctions or damage resulting from normal wear and tear, improper installation, improper maintenance, misuse, abuse, negligence, accident or alteration. In the specific case of the Parabolic Dish Microphone, damage caused by pointing towards the sun or storing above 200/93° F/C causing heat destruction will not be covered.

C. Accessories, connected materials and products, or related products not manufactured by Wildtronics, LLC, or problems that are caused by connecting products not manufactured by Wildtronics, LLC.

Our limited warranties are void if a product is returned with removed, damaged or tampered labels or any alterations (including removal of any component or external cover).

How to File a Claim? Wildtronics, LLC will not provide any warranty coverage unless claims are made in compliance with all terms of the warranty statement included with your Wildtronics, LLC product and you 8

follow proper return procedure. To request warranty service, you will need to provide:

1. The sales receipt or other evidence of the date and place of purchase.

2. A description of the problem.

3. Obtain a RMA number by contacting Wildtronics, LLC for shipping information. You are responsible for the shipping to us, and we will ship the unit back to you (non-expedited) at our cost.

Product Registration:

Please register your microphone to hear about updates and for us to recognize your serial number if you purchased through a distributor.

Name: Address: Country: Phone number: Model #: Date of purchase:

Email address: Serial #: Purchased from:

Email to customersvc@wildtronics.com or mail to Wildtronics, LLC, PO Box 376, Newton Falls, OH 44444, USA.

<u>Accessories</u> are available to enhance the usefulness and performance of your microphone. Visit the Wildtronics.com website to purchase the accessories and check for new accessory availability.

Secondary Windscreen: \$40 USD

We highly recommend using the Secondary Windscreen for all outdoor applications. The Secondary Windscreen will give protection up to 20MPH winds, where the primary windscreens, that come with the microphone, are good to about 12MPH winds. The Secondary Windscreen stretches over the microphone assembly, attaches without clips, and still allows you to see through the clear dish.

Mini-Accessory Bar: \$40 USD

The Mini-Accessory Bar mounts on the accessory mount located on the handle. This very lightweight bar allows mounting smaller hand-held recorders directly to your microphone for quick, easy use, without dangling/tangling cables.

Accessory Bar-1 Kit: \$99 USD

The Wildtronics Accessory Bar-1 Kit is designed to allow many mounting options for mounting equipment to the Wildtronics Parabolic Microphones. The bar attaches to the accessory mount on the back of the parabolic microphone's handle. With all your equipment attached to the accessory bar, everything you need is organized and ready to go in an instant. 1/4-20, semi-captive allen head screws are included for attachments. The center of the high strength bar can also be connected directly to a tripod, with the camera and dish at opposite ends for audio/video tracking. There are multiple threaded holes in the bar to mount equipment in different ways. A universal, 1/4-20 threaded plate mount is included for holding items without a tripod mount by using velcro or double stick foam tape. Mount cameras, recorders, pre-amps, wireless microphone transmitters, and more. If you need a special mount, you can drill almost anywhere to customize your needs. The bar is made of solid, 5/8-inch, lightweight, aluminum alloy, and powder coated for durability. Two handles are included that can be mounted at the ends of the bar. Two-handed grip will help you reduce fatigue during long recording sessions, as well as offering perfect front to back balance of the microphone. The handles have comfortable, foam grips. Smaller foam segments are also included that can be slid on the bar to provide comfortable rest stops for the top of your grip.

Included in the kit:

- 1- accessory bar
- 1- plate mount
- 1- rubber camera mounting washer
- 2- accessory handles
- 2- foam segments

1- plastic washer (place between parabolic microphone accessory mount and mounting bar)

- 1- 3/16-inch allen wrench
- 1-1 1/4-inch allen bolt (for mounting to the parabolic microphone)
- 2- 7/8-inch allen bolts (for mounting to plate mount and other equipment)
- 3- 1-inch allen bolts (for handle and camera mounting)

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