

## Wildtronics, LLC

# Professional

# **Parabolic Microphone**

## **Instruction Manual**

2015-18 Model

Thank you for purchasing the finest parabolic microphone available. Your new microphone was designed for years of service, ease of use, superior performance, and allows connection to a variety of recording and preamp devices without any custom cables. Depending on the shipping container used, your microphone may require minor assembly of the major components. If you have the Mono-Stereo Parabolic model, you will also need to attach the stereo separator plate to the front of the microphone unit with the enclosed thumbscrews. Please review the instructions below on how to assemble, operate, and get the maximum performance from your Wildtronics Parabolic Microphone.

## Assembly and 9-Volt Battery Installation:

Disassembly and assembly is easy. The Wildtronics Professional Parabolic Microphone is comprised of three major parts: the Parabolic Dish, the Handle, and the Microphone Unit.



Major components of the Parabolic Microphone

## **Battery Installation and Removal:**

If you always use phantom power and don't have an Amplified model, you will not need the battery. The battery is installed into the back of the microphone unit. To install and uninstall the 9-volt battery, the Microphone Unit must be removed from the Parabolic Dish and Handle. The battery is located beneath the power switch. There is a foam cushion covering the battery opening that is part of the dish's foam dampener. This foam collar slips over the microphone unit and covers the battery opening. Lift the foam collar to uncover the battery holder. Install the battery by placing the battery into the battery holder, with (+) being on the right side when viewing from the connector side, with the battery at the bottom (see label). Slide the battery into the holder, keep pushing the battery towards the center of the microphone unit until the battery snaps into place, and the battery is flat in the holder. To remove the battery, grab the end of the battery and pull up or pry up with a pen or small screwdriver to dislodge the battery from the battery snap mount. Once dislodged, it will easily pull out with your fingers. When you are finished with installing or removing the battery, be sure to place the foam collar back into place.



Foam cover over battery.



Move foam to access battery.



Insert battery into holder.



Seat battery into snap.



Push battery into place.



Pry up on battery to remove.

#### **Microphone Assembly**



Pull battery out with fingers.

To assemble the parabolic microphone, insert the Microphone Unit into the dish center hole. This works best if you place the dish over the Microphone Unit with the microphone connectors pointed up. Put the power switch in the center position. Now, place the Handle onto the threaded stud of the Microphone Unit. Rotate the handle to align the connectors with the opening. Slightly squeeze the assembly to keep it together, and rotate the four star hand knob clockwise three turns. Make sure the connectors are still aligned with the holes in the back panel, then rotate the hand knob until you feel a hard stop, but don't over tighten. 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. Finally, put the switch in it's normal position, power off is down. Disassembly is the opposite of assembly. To install and uninstall the stereo separator plate, if you have the Mono-Stereo model: Place the separator plate on the Microphone Unit's front facing booster plate, between the dual foam windscreens, and secure finger-tight with the 8-32 plastic thumbscrews. Note, if you have the Secondary Windscreen accessory, you can keep it on at all times when assembling and disassembling the microphone.



Place dish over mic unit.



Center Handle onto stud.



Align and slightly tighten knob.



You can assemble the Mic Unit onto the Handle for storage.





Final tighten knob.



Showing how the Mic Unit stud can be threaded into the Handle Base.

The Secondary Windscreen can stay on the Mic Unit while assembling and disassembling.

## Wildtronics Parabolic Microphone Operation:

The Wildtronics Professional Parabolic Microphone can connect to any recording or preamp device that can supply 11-53 volt phantom power, or you can use the internal 9-volt battery for devices without phantom power. You may find it useful to use the internal 9-volt battery to extend the battery life of your recorder by disabling it's phantom power. The 3.5mm microphone connectors may work with some equipment's Plug-in Power. The Plug-in Power must be 5 volts and have sufficient drive power is to listen to the mono microphone's output with and without the 9-volt battery power turned on. If you notice a difference in signal level, your

Plug-in Power can not adequately power the parabolic microphone. Switch on the 9-volt battery when you are not using phantom power, or when your Plug-in Power is insufficient to power the microphone. The 9volt power switch is located at the lower side of the connector panel. Up is power on, down is off. When using XLR phantom power, the 9-volt power switch is simply left off. The microphone is connected using standard XLR or 3.5mm cables. If you have a Mono-Stereo model microphone, there are three XLR connectors; one for mono, one for left, and one for the right channel, and two 3.5mm connectors; one for mono and one for L/R stereo. If you have a mono only model of the microphone, you will have only one XLR and one 3.5mm connector. The 3.5mm mono connector is a stereo connector, wired with the same signal on both tip and ring, so when you connect it to a stereo device there will be a signal on both channels.

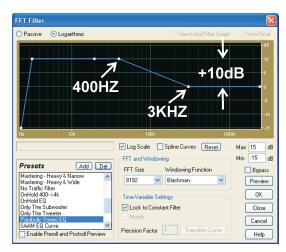
You may connect two recording devices to the microphone at once, but there are some limitations. The XLR connectors are balanced outputs, and if the 3.5mm outputs are connected at the same time, the XLR outputs will not be balanced perfectly. Depending on your equipment while using multiple outputs, the signal output levels will drop from 2-6dB due to extra loading. Also, with XLR and 3.5mm used together, XLR cables longer than 10 feet may pick up hum since they are now slightly unbalanced. In most conditions, you will have little trouble, and the advantages of easily connecting multiple equipment will outweigh the limitations.

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

If you have the Mono-Stereo model, you have the ability to record a wider stereo field as well as the very directional dish signal. With a three or more channel preamp/mixer, you can adjust the gain of the left, right, and center (directional) microphone signal to obtain the perfect blend of sounds. You may also record all channels separately, or use the mono or stereo mics alone for different projects/subjects. It is recommended to apply a post editing EQ, to obtain a flatter frequency response curve, for 5 the stereo pair microphones. The stereo pair microphones use a boundary effect principle to improve signal gain, which reduces the overall selfnoise. The boundary size would have to be larger than the dish itself to obtain a flat frequency response, so applying a post EQ is the preferred way to flatten the frequency response while retaining the benefits of the boundary effect. See the below graphic on the recommended EQ curve. The specific curve you develop will vary slightly depending on your audio editing software, but use the specific start and end frequencies and 10dB of gain. You may want to add a low cut filter at the same time to

reduce rumble. Usually a 200HZ rumble cut is recommended, depending on your subject.

Recommended post editing EQ curve for the stereo pair microphones. A linear curve starting at 3KHZ, achieving +10dB of gain by 400HZ.



You may connect the parabolic dish to most wireless transmitters. Please refer to your wireless transmitter's manufacture data sheet to see how their connections can match up to your Wildtronics Parabolic Microphone. A non XLR unit may need a special cable, as each wireless transmitter manufacturer has their own type of connector, and wiring method. In general, use our 9-Volt battery power, connect the signal lines, and open the non-signal lines from the wireless transmitter. A recommended XLR wireless transmitter is the Sennheiser SKP 100 G3 or equivalent, which just plugs into the XLR output.

## Care:

The Wildtronics 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 the 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 microphones, and start burning the windscreen material. The dish is made of nearly indestructible Polycarbonate, however we recommend a maximum storage temperature of 200/93° F/C. Exceeding 200/93° F/C may distort the parabolic dish permanently, also avoid load or stress on the dish, at higher temperatures, 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, and loosen the clamp plate wingnut. Do not keep the 9-volt battery in the microphone for extended periods of time, as some batteries still leak and could corrode the battery holder connections. If you need expendable parts such as windscreen replacements, contact Wildtronics, LLC for service part pricing and availability.

#### 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 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 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:<br>Please register your microphone to hear about updates and for us to<br>recognize your serial number if you purchased through a distributor. |                 |
|--|-----------------|
| Name:  |                 |
| Address:   |                 |
| Country:   |                 |
| Phone number:  | Email address:  |
| Model #:   | Serial #:       |
| Date of purchase:  | Purchased from: |
| 1  |                 |
| 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)

Wildtronics, LLC PO Box 376 Newton Falls, OH 44444 USA +1 (330)-577-8814 customersvc@wildtronics.com wildtronics.com