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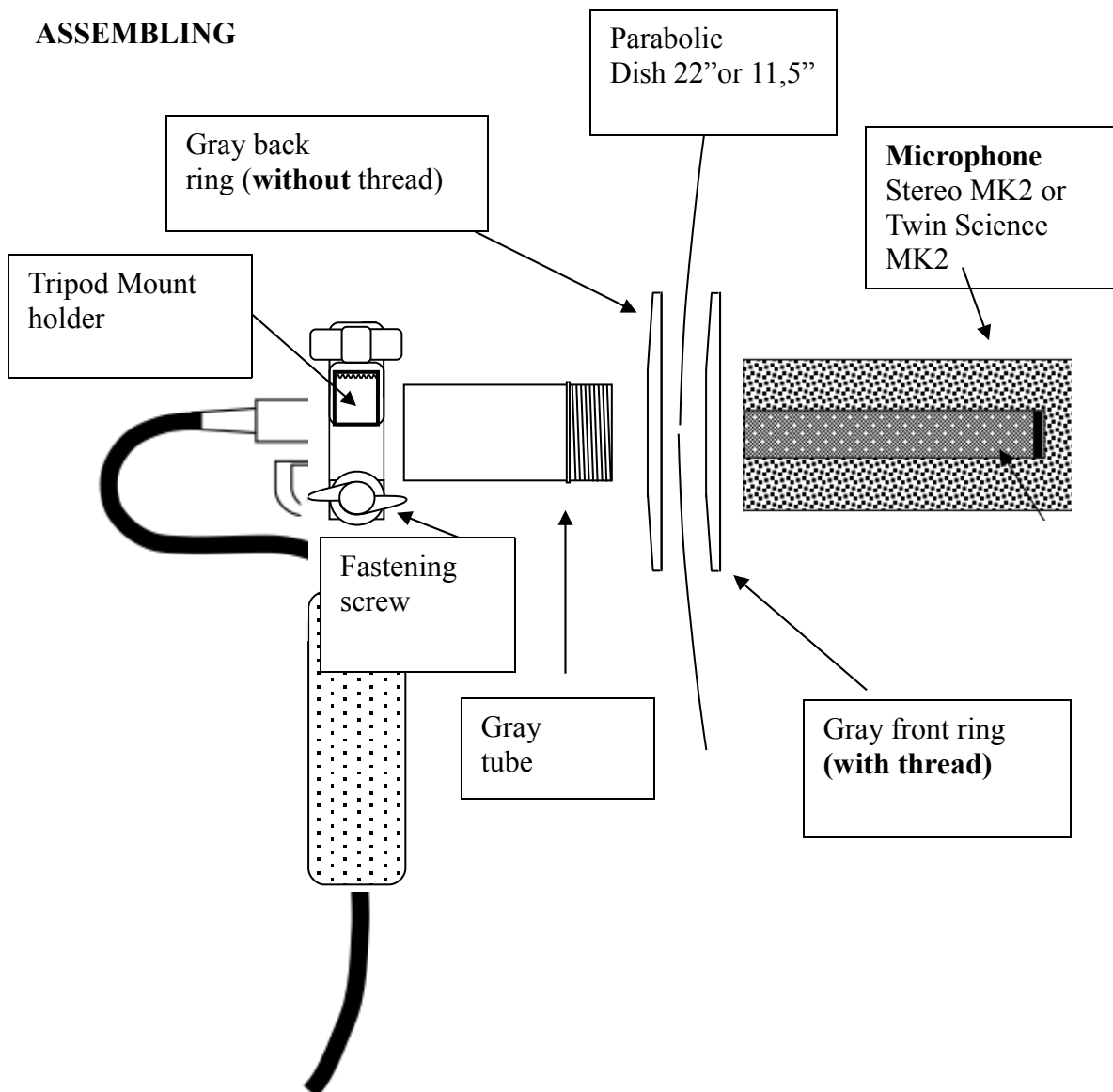
**Telinga PRO-8 MK2 / PRO-X System Manual**

## 1.1 Introduction

Thank you for purchasing a Telinga Parabolic System.

Telinga Microphones, Sweden, started manufacturing parabolic microphones in 1981. The initial goal was to complete the first **portable** parabolic reflector system capable of recording in mono *and* stereo - without using multiple cables or preamplifiers.

All our parabolic microphones are designed to be reliable, light-weight and very easy to use. Great care has been taken to solve the most common problems with parabolic dishes - wind and handling noise, as well as inherent noise from the microphone and amplifiers. Telinga designs are developed in co-operation with film makers, ornithologists and researchers in the field of bio-acoustics.



TELINGA Y-CABLE TUCHEL 7- POLE TO 3 PIN XLR (PRO-8 MK2) OR 3,5  
MINIJACK CABLE (PRO-X) TO RECORDER / PREAMP MIC INPUT L/R.

## **CAUTION!**

**NEVER CONNECT A TELINGA MICROPHONE DIRECTLY TO A RECORDER OR PREAMP SUPPLYING +48V PHANTOM POWER WITHOUT USING THE HANDLE.**

**ALWAYS CONNECT THE MICROPHONE TO THE TELINGA HANDLE CONNECTING TO THE RECORDER OR PREAMP (+48V)**

### **ASSEMBLING / INSTALLING (AS PICTURE ABOVE)**

**1.** Connect the microphone and it's mounting kit (gray tube with gray rings) to the handle, make sure the gray rings are positioned so that the back gray ring without thread is supporting **behind** the dish, and the gray ring with thread is securing **inside** the dish. **As assembling picture above.**

**IMPORTANT:** Make sure you fasten and secure the rings and tube properly (tight enough) inside the dish and handle, to avoid handling noise! Use the large handle knob to fasten the microphone inside the gray tube. The dish should not be able to move between the gray rings or handling noise will occur. Use a Telinga/or Rycote dish HWC (high wind cover) when recording in windy conditions, or side winds may cause turbulence inside the dish.

**2.** Connect the XLR-connectors (PRO-8 MK2) or your 3,5 minijack connector (PRO-X) going from the bottom of the handle to the recorder or preamp microphone inputs. REMEMBER: The cable will always be the weakest link, treat it with love and care!

**3.** Connect your quality (!) headphones to your recorder. For reference we use Beyer DT-990 headphones. Make sure the input and outputs are not set to high: acoustical feedback may occur! Enable the "**REC**" position or "**MONITOR**" with the **+48 V Phantom Power (PRO-8 MK2) or Plug In Power (PRO-X) ENABLED: ON**

**IMPORTANT:** Your Telinga is designed for **outdoor use mainly**, connected to battery powered equipment only. If you use it indoors, connected to mains operated equipment, "hum", or acoustical feedback from reflections may occur. If you wish to use the PRO-8 MK2 or PRO-X system inside, the 11,5" MINI DISH is recommended – **THE MINI DISH IS NOT FOLDABLE.**



### **RECOMMENDED MICROPHONE / DISH FOCUS POSITIONS**

**TELINGA STEREO MK2:** Set the microphone 1-2 CM / 0.4-0.8 INCHES inside the dish (from dish edge) The microphone should not be pointing OUTSIDE of the dish. The focus globe inside the parabolic dish is large (APRX. 3.4 CM / 1.4 INCHES) at 10 KHz, setting the Stereo MK2 microphone out of focus inside the dish is not possible, as long as the mic is not pointing outside of the dish.

Experiment with different mic positions, learning how the microphone works with the dish at closer and longer distances.

### **TELINGA TWIN SCIENCE MK2:**

**Two factory set focus positions** makes it easy to adjust each capsule for **maximum performance:**

- 1) **Omni track:** by positioning the Twin Science MK2 all the way in - towards the dish, until stop
- 2) **Cardioid track:** by positioning the Twin Science with the mic connector placed side to side with the included mounting kit. At this position the microphone is close to dish edge (not outside)

### **Result (TWIN SCIENCE MK2):**

- **Omni microphone** track (Ch.1): very low noise aprx. 12 dB-A with great tolerance to handling and wind noise. A soft frequency response in the higher spectrum with a transparent and wide pickup for a "warm" sound.
- **Cardioid microphone** track (Ch.2): greater frequency response with maximum attenuation of surrounding sounds, resulting in a very "focused" sound. Since the cardioid microphone faces towards the dish, it optimizes the reflected sound of the distant subject and suppresses the background, thereby improving the directivity by concentrating on the sound reflected by the dish.

TWIN SCIENCE MK2 MICROPHONE (BOTH) CHANNELS IN FOCUS: TO HAVE BOTH CAPSULES WORKING INSIDE THE FOCUS GLOBE PLACE THE TWIN SCIENCE MK2 APRX. 1-2 CM / 0.4-0.8 INCHES INSIDE / AWAY FROM THE DISH EDGE (GRAY RIM) THIS ALLOWS A BLEND OF BOTH CAPSULES - **NEVER** PLACE THE TWIN SCIENCE MICROPHONE WITH IT`S SURROUNDING BLACK WIND COVER POINTING OUTSIDE THE DISH!

### **Recommended (Stereo MK2 & Twin Science MK2 users)**

Place a constant sound source, *such as a small FM-radio*, a portable speaker system or such at medium distance 30 meters / 100 feet or so, away from the parabola - now use your Telinga as a "radar", move it side to side and learn how it performs by using your ears!

It is important to understand that depending on the "*sound*" you are looking for, it might not always be precisely "in focus" of the dish where you will find the "sweet spot" of your recording.

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(photo: POS.2 = middle position)

## THE TELINGA PRO-8 MK2 HANDLE TOGGLE SWITCH

### **POS. 1** "NORMAL" POSITION / NO FILTERING

Toggle switch positioned **TOWARDS** you. Recommended during light or no wind, and when no traffic noise is audible. At this position you get the full frequency range from the microphone and dish. Stereo = to L/R channels (**Stereo MK2**)

**Twin Science MK2 microphone users:** omni and cardioid in separate channels, NO FILTERING active.

### **POS. 2** LOWCUT - "TRAFFIC FILTER" ACTIVE (12 dB/oct 3dB knee at 270 Hz.)

Toggle switch set to **MIDDLE** position (photo above) Very effective to avoid heavy wind/or traffic noise. Also great for suppressing handling noise. Stereo = to L/R channels (**Stereo MK2**)

**Twin Science MK2 microphone users:** omni and cardioid in separate channels, filtering ACTIVE.

**POS. 3** MONO / LOWCUT - "TRAFFIC FILTER" ACTIVE (12 dB/oct 3dB knee at 270 Hz). **Toggle switch set TOWARDS DISH (LAST POSITION) MONO ENABLED** with both channels connected, lowcut filtering activated. The last position is used to record in MONO with the Stereo MK2 microphone, and with FILTERING ACTIVE. For Twin Science MK2 microphone users: omni and cardioid channels connected to L/R. No separate channels.

**REMEMBER:** IF YOU LEAVE THE TOGGLE SWITCH IN LAST POSITION (POS.3) = BOTH CHANNELS ARE CONNECTED = **MONO**





## TELINGA STEREO MK2 MICROPHONE

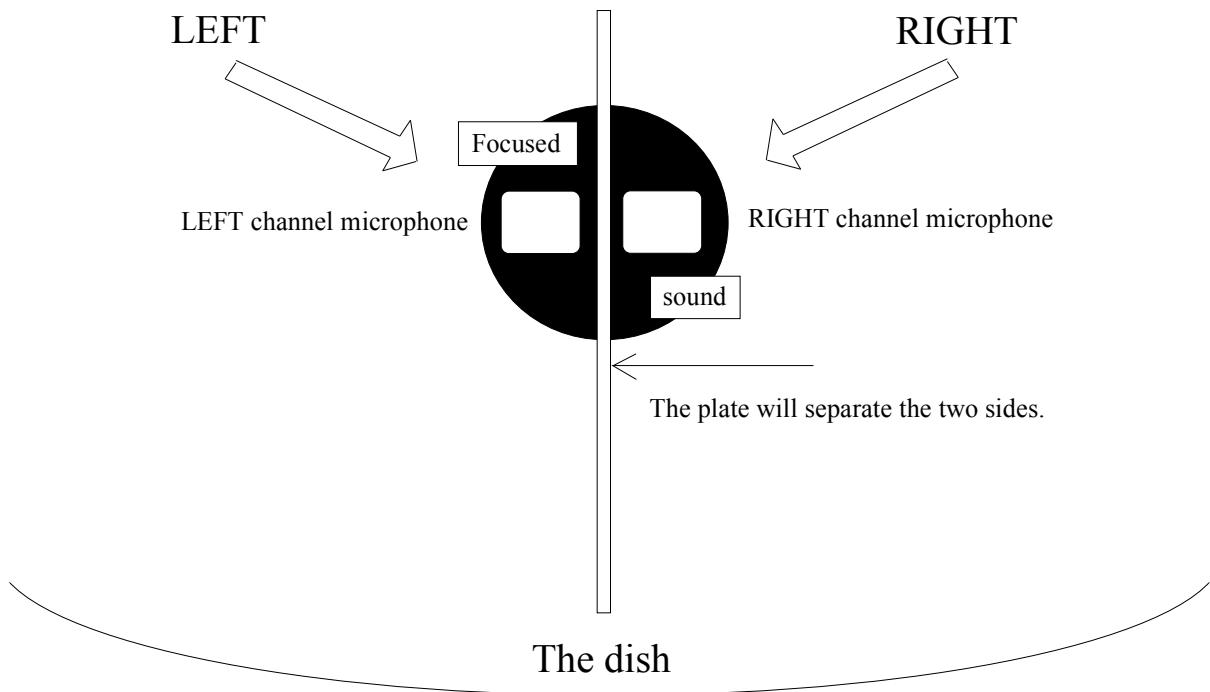
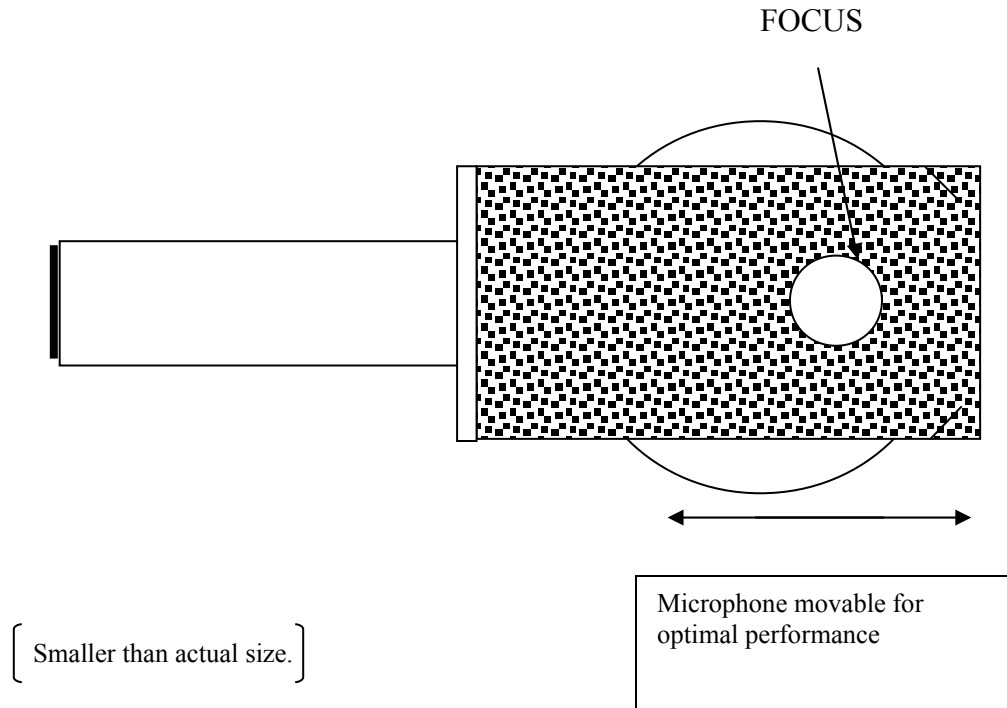
**The Stereo MK2 microphone has an Equivalent Noise Factor of aprx. 12 dB(A) only. Thereby, it does great justice to the dynamic range of modern recorders.**

The focused sound will be picked up in mono, while the background will be presented in stereo. Handling and wind noise suppression is excellent.

**The over-all sound characteristics of the Stereo MK2 mic, is a "soft" high and a "big" and very transparent mid and low.**

The stereo sound resembles the stereo of a "dummy head". There is no "hole" between left and right. When using the parabola, a sound can move from one side to the other without "ping-pong" effects

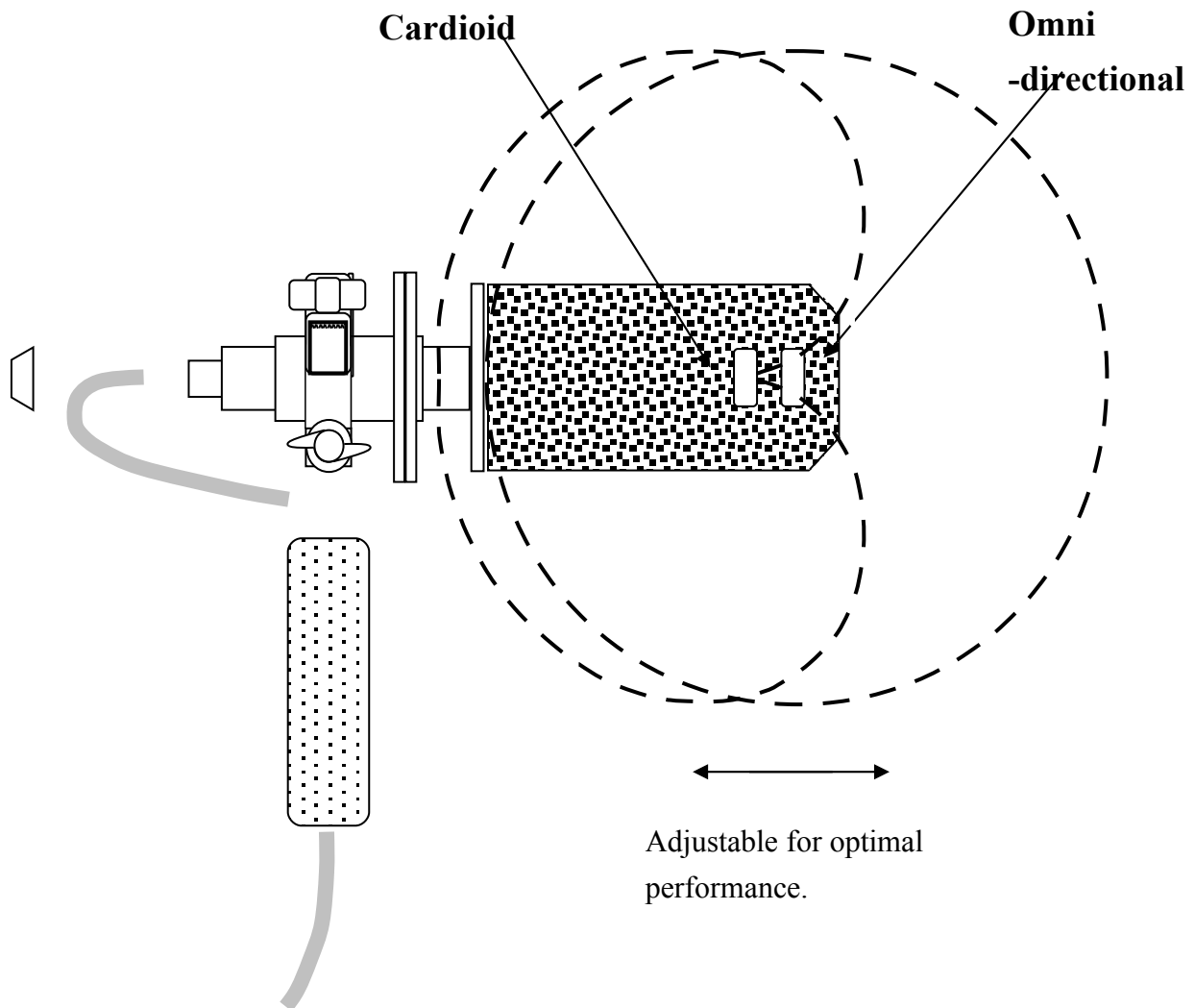
Using the Stereo MK2 connected to the PRO-8 MK2 or PRO-X handle, without the parabolic dish, it serves as a good multi-purpose stereo microphone **for small-signal use.**



**STEREO MK2:** The plate separates the two sides from each other, while the focused sound will affect the two microphones equally **Result:** the focused sound will be recorded mono, while the background will be presented in stereo. To L&R channels (2 channels) NOT M/S! (3 channels)



## THE TWIN SCIENCE MK2 (MONO WITH 2 CAPSULES)



The Telinga Twin Science MK2 microphone contains two microphone capsules, one of them is omni-directional and the other one a cardioid. As a general rule, one can say that the cardioid will cause a more obvious "spot-effect" of the focused sound, compared to the more "over-all" sound picture of the omni. This is because of its attenuation of the ambience. However, practical experiments show that this basic rule has a variety of exceptions. How to use the Twin Science is therefore a matter of learning and a matter of personal taste. In post-production, one can mix the different outputs, both in and out of phase with one-another.

## **FOLDING THE 22" DISH (FOLDABLE DISH ONLY)**



**The V2 Telinga foldable dish is 22" (57 cm) and weighs only 0.33 kg / 0.72 lbs.**

The improved polycarbonate mix offers greater performance and plastic memory. Featuring a gray rim (standard on delivery) allows super easy folding and also protects the dish surface from scratches and dents. Compatible with ALL Telinga handles and microphones - including earlier models such as the PRO-5/6/7/8 handles and microphones.

**Folding the dish is very easy, and you may fold it over and over again for travelling. Simply use your hands until it is folded together properly (as the above photo) - this so you can place it inside the Soft Case or a Suitcase. The V2 dish comes with 2 years international warranty, so you don't have to be afraid of accidentally breaking it.**

## PACKING THE COMPLETE SYSTEM

**PLEASE NOTE:** YOU CAN ONLY FOLD THE V2 FOLDABLE 22" DISH (STANDARD WITH PRO-8 MK2 AND PRO-X PACKAGES)

**YOU CANNOT FOLD THE STATIONARY DISH 22" (2mm) OR THE 11.5" COMPACT / MINI DISH AND PLACE INSIDE THE SOFT CASE.**



**Pack your complete Telinga setup with the handle, microphone and cables protected** inside the rolled dish - with some padding in between: a High Wind Cover for example (or available cloth). After travelling the dish will retain it's shape quickly. If you go for longer travels, 8-12 hours (+) where your Telinga is stored inside an airplane (for example) let the dish rest for some time, **unfolded**, to retain it's shape before recording.

Complete weight including cables is only 1.2 kilo / 2.6 lbs (or less depending on model)

## ATTACHING THE TELINGA OR RYCOTE DISH HIGH WIND COVER (HWC)



Turbulence inside a parabolic dish, caused by side winds, can only effectively be reduced by covering the entire opening of a dish. The windshield will also serve as extra protection against rain and prevent insects from buzzing around inside the dish while recording. When storing your complete setup inside the **Telinga Soft Case** you may also use it as a good "wrap around" cloth, protecting your microphone further. The **Rycote HWC** offers up to 35 dB in wind noise reduction.



## THE TELINGA 11,5" MINI DISH



### The Telinga 11,5" Mini Dish / Compact Dish

**(CAUTION! NOT FOLDABLE)**

**FOCUS: ALWAYS PLACE ANY TELINGA MICROPHONE ALL THE WAY IN TOWARDS THE 11,5" MINI DISH (UNTIL STOP)**

When recording at closer distances, or when you prefer a broader stereo recording (Stereo MK2 microphone) with **less** center directional gain, the 11,5" dish is very useful. It is also a great compliment to your DSLR camera, or when the 22" dish is simply too large to bring. The 11,5" dish offers very good amplification at higher frequencies for its size.



**USING THE (OPTIONAL) TRIPOD MOUNT:** Place the Tripod Mount in the top handle screw, and secure it with the "bridge" of the mount into the handle. Make sure it is fastened properly before attaching it to the stand.



## IMPORTANT NOTES

**DURING FIELD WORK:** \* Do not leave the Telinga with the microphone and dish facing down into the ground due to risk of condensation. Allow a free air flow.

**\* Never point with the parabola directly towards the sun! The foam might burn.**

**THE DISH:** \* Keep the dish rolled up only when necessary. Clean with water and soap. The dish can be polished with car wax. Do NOT use mosquito spray on the dish! The dish is covered with a protective film of synthetic wax. This film can sometimes be visible, but is no error.

**THE HANDLE:** \* On dusty roads, keep in a plastic bag. Wipe off now and then with a piece of cloth. Silicon spray prolongs finish of handle and life of cables.

**AFTER USE:** \* When the Telinga is not used for several days - loosen the screw tightening the handle, and the rings holding the dish.

CONTACT US FOR ANY QUESTIONS / SUPPORT: [INFO@TELINGA.COM](mailto:INFO@TELINGA.COM)  
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