Beta Shell™ 3.0/4.0 Series Lens Case User Manual

Thank you for purchasing one of our Beta Shell™ lens cases!

We design, manufacture, and test our lens cases with the intent to exceed your expectations. If you are not satisfied with your Beta Shell™ lens case, we offer a 30 day "no questions asked" return policy. Simply return the unused Beta Shell™ lens case to us and we will refund the original purchase price. In addition, all our Beta Shell™ lens cases come with our unconditional *Bomb-Proof Guarantee* – If any part of your lens case wears out, breaks, or fails under intend use conditions we will replace or repair your Beta Shell™ at no cost – just get the lens case back to us and we will take care of the rest!

About your Beta Shell™ Lens Case

Your Beta Shell™ lens case is intentionally designed to be simple to use, yet provide superb protection to the stored optical lens. One of our primary goals in the product development phase was to simplify our lens case design without sacrificing functionality. From the experiences we photograph in the mountains, deserts, and rivers we have learned that *light is right* and *unnecessary complexity is a liability* – these two core philosophies are what have guided our Beta Shell™ lens case design.

Using Your Beta Shell™ Lens Case

To open your lens case simply rotate the Top Lid in the counter-clockwise direction – just as you would open a water bottle. Note the machined icons on the lid indicating the rotational directions to open and close your lens case (Fig. 1).

Figure 1: Top Lid assembly - rotate CCW to Open & CW to Close.

Inside your Beta Shell™ Lens case you will find 1.5 inch thick memory foam located at the bottom of the case and on the Top Lid Assembly. Memory foam is essentially special type of polyurethane foam – the same material almost all seat cushions are made from – it is extremely soft, durable, and resistant to deformation.

Place your SLR or rangefinder interchangeable lens into the lens case. The front of the lens should be rested against the foam found at the bottom of the case. The back end of the interchangeable lens should point up and have a storage end cap. The back end cap should not significantly extend beyond the plane of the top surface of the open lens case (Fig. 2 & 3). If it does we recommend using a larger Beta Shell™ lens case size. If your Beta Shell™ lens case seems overly large for the lens to be stored – read below to create a better fit.

Figure 2: Limit of acceptable fit in lens case.

Figure 3: Lens case is too small for lens - use a large size.

To close your lens case, gently press the lens down the into the bottom foam to “set” its location – then immediately gather the end cap with the memory foam attached to the Top Lid assembly. The lens end cap should be aligned to the center of the Lid assembly foam. Press the Lid assembly down to compress the foam and simultaneously rotate the Lid in the clock-wise direction to close the case. The lid should close with relative ease, as rotating the lid closed will compress the internal memory foam and lock the lens into place (Fig. 4).

Figure 4: Align to lens end cap to center of Lid foam and press-down to compress foam.

To check the lens is properly secured in the lens case, gently wiggle the lens case. *You should not feel the lens move around inside the case*. If you can feel the lens move around and impact the inner side walls of the lens case, please remove the lens from the case and use the extra foam disk supplied to create a tighter fit between lens and Lid assembly.

When using the extra foam disk to create a tighter fit, carefully remove the lower foam at the bottom of the lens case – the lower foam is not attached to the case and should pull right out (Fig. 5). You should now see the plastic bottom of the lens case. Place the extra foam disk at the bottom of the case, and then replace the original foam disk such that is sits on top of the extra foam disk. The lower foam surface will now be closer to the Lid foam, thus a tighter fit to the stored lens will be achieved. Re-insert the lens and check fit again as described above.

Figure 5: Remove the lower foam by compressing it and pulling upward.

If you plan on using your Beta Shell™ lens case in environments where dramatic changes in ambient temperatures occur – we strongly recommend placing a moisture absorbing Silica Gel Pack at the bottom of your case. Silica Gel is a simple material that will absorb moisture generated from condensation on in inside of your lens case (small, inexpensive silica gel packs can be purchased on our web site). Also, remember any moisture that enters your lens case (such as from falling snow flakes) will remain inside a sealed Beta Shell™ lens case.

Creating a Water-Proof Seal

The primary design goal of your Beta Shell™ lens case is to protect your lens from environmental conditions. Components of your Beta Shell™ such as the threaded Lid, O-ring, and tapered Lid memory foam – are all

designed to protect your lens. Ultimately - how well your Beta Shell™ keeps dust, dirt, moisture, and the cold away from you lens depends purely on how tightly the Lid is closed. To keep dirt, dust, and rain water out of you lens case, the Lid need only to be closed relatively gently.

If a 100% water-proof seal is required the Lid must be closed tightly enough to compress the heavy-duty O-ring seal. In general an average male user can close the Lid tightly enough by hand to create a water-proof seal. It is very unlikely anyone can close the Lid by hand too tightly enough to damage the lens case.

To guarantee anyone can close the Lid tightly enough to create a water-proof seal have we integrated simple leverage points in our Lid design to allow anyone to guarantee a 100% water-proof seal. By using the straight edge of a tool, ski, or table to gain leverage, any one can easily close a Lid tightly or free a tightly closed Lid (Fig. 6). View a demo video of how to do this on our web page - http://www.betashell.com/SearchResults.asp?Cat=28 .

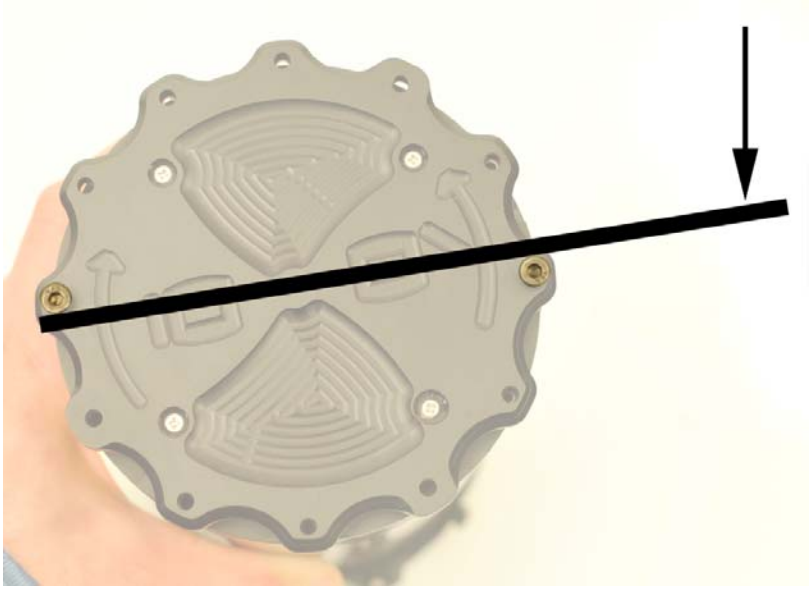

Figure 6: Use a rigid straight edge such as the edge of a table to tightly close Lid.

Before you head out into the field and demand a 100% water-proof seal – we strongly recommend you experiment closing and opening your Beta Shell™ in a manner such that a 100% water-proof seal in achieved. You can easily verify a water-proof seal by submerging your Beta Shell™ (without a lens) in a buck of water (Fig. 7). If air bubbles escape between the O-ring seal and the matting flat surface, then the Lid needs to be closed more tightly!

Note – tiny air bubbles may initially surface as air escapes from small features on the outside of the case – this does not mean the lens case is leaking. Look for larger bubbles escaping from the O-ring / sealing surface interface that do not stop within a minute of submersion.

Figure 7: No continuous escaping air bubbles = 100% water-proof seal!

The Bungee Case Strap

Because our Beta Shell™ lens cases are designed to be stuffed in a pack full of other important gear – our lens case design includes a simple strap to help the user securely pull the case out from a stuffed pack. Our simple bungee strap is also intended to aid you in grabbing your Beta Shell™ when the conditions get slick such as in rain or snow. When not in use, the bungee strap can by stored around the base of the lens case body (Fig. 8 & 9). In addition, the Bungee Strap can easily be replaced or removed by the user.

Figure 8: Stored bungee strap.

Figure 9: Used bungee strap.

A Few More Comments Regarding Use

As designed, your Beta Shell™ will provide a lifetime of protection to your SLR or rangefinder lenses. We expect users to take our suggestions above on how to use their Beta Shell™ cases as a starting point. We encourage users to be creative in adapting their Beta Shell™ lens cases to best meet their lens storage and transport needs. As an example, some users may elect to use their own straps or store other photographic equipment in their cases. Please visit our web page to see how other Beta Shell™ owners are using their lens cases.

Care and Maintenance

Your Beta Shell™ lens case is design to be essentially maintenance free. There are only two things to do to keep your lens case functioning like new – 1) keep the inside clean, and 2) keep the O-ring seal clean.

Remember that any dirt, dust, or substance that gets inside your Beta Shell™ case can end up on or inside your lens! If moisture collects inside your case, leave it open to dry out. Also, keep your lens case closed when not in use in the field.

To clean the outside of your lens case simply close it and spray it off with running water and dry it off (Fig. 10). You can use a mild soap to clean the outside and inner surfaces of the case, but never use solvents (such as gasoline or acetone) on any part of your lens case – ABS plastic and solvents do not mix well!

Figure 10: Close the lens case tightly and clean under running water.

To clean the internal foam gently wipe down the foam surfaces with a wet towel or mild soap. Natural yellowing of the memory foam over time is normal and this will not damage the foam or your lens. Remember, the lower foam disk can be removed while the lid foam and neoprene liner are not removable. All memory foam can be replaced if it is re-glued to the ABS shell (email us for how to replace memory foam).

Compressed air also works well to remove dust and dirt imbedded in the Neoprene liner or memory foam. Leave the lens case open and let the inside of your Beta Shell™ dry completely before restoring a lens inside.

Finally, keep the surface of the O-ring seal clean. Using the corner of a wet towel, gently wipe dirt and dust off the O-ring seal surface – remember this seal is what keep water and dust out (Fig.11). Once a year, use a Q-Tip style cotton swab to apply a Teflon or Silicon based lubricant (such as bike chain lube) to the surface of the O-ring seal.

Figure 11: A clean O-ring seal is required to keep water out.

If you plan to keep a lens stored inside a Beta Shell™ lens case for a long time make sure there is not any excessive moisture trapped inside the case and use a silica gel pack inside the lens case.

Product Liability and Disclaimer – Please Read.

It is your responsibility to protect your photographic equipment. The user shall determine the suitability of this product for his or her use, and shall assume all risk of liability in connection with that use. Under no circumstance will Mogomoto Prototype LLC be held responsible for damage to photo equipment arising from the use of this product. Neither Mogomoto Prototype LLC, it's suppliers, subcontractors, dealers or agents are liable for any loss, injury, or damage whatsoever arising from the use of this product. Modifications to your Beta Shell™ lens case will void the warranty. Never expose to excessive heat or petroleum based solvents. Never use this lens case to carry or protect objects other than photographic equipment. Beta Shell™ cases are tested at time of manufacture to be water-proof under test conditions. Water penetration will occur if lid is not properly closed, set, worn, or is damaged. Normal wear and tear will compromise the function of this product. Beta Shell™ lens cases are protected under U.S. patent right laws. Beta Shell™ lens cases are Patent Pending.

This product manual is not intended to cover all your questions regarding our Beta Shell™ lens cases. We encourage product feedback, questions, and comments – just e-mail, call, or write to us.
Happy shooting and good luck in your photo assignments!

Mogomoto Prototype LLC
8415 NE 8th Avenue
Vancouver, Washington
98665
USA

Ph. 503-208-2284
www.betashell.com
mproto@mproto.net