

QUICK START GUIDE

1. Unpack your unit.

DANGER:

CO2 Cartridge should *NEVER* be left in an enclosed vehicle exposed to the sun!

The CO2 cartridge contains 8, 12, 16, 18 or 25 grams of liquefied Carbon Dioxide at about 850 psi.

If heated the pressure in the cartridge may cause the cylinder to vent at the threaded end thus inflating the airbag.

NEVER install the CO2 cartridge without 1st installing a TRIGGER BOBBIN

Failure to do this *WILL* cause the cartridge to vent its contents and deploy the airbag.

NEVER use a different size CO2 cartridge as it will burst the airbag upon deployment and your drone will sink.

2. CHARGE THE AUTOMATIC ACTIVATOR

- Remove by unscrewing the Clear plastic cover on the Automatic Activator
- Remove the Trigger Bobbin from the plastic/foil package
- Install the trigger bobbin into the end of the automatic activator.
 - NOTE: the trigger bobbin cannot be installed incorrectly. It will only fit into the activator one way and it will easily drop in.
 - The white surface with ridges points outward and is visible when installed correctly.
- Screw on the clear plastic cover all the way until its bottom edge mates with the black flange on the automatic activator.
- Install the CO2 cartridge by screwing it in clockwise until it seats tight. There is an "O" ring gasket that compresses when the cylinder is tight.
- The CO2 Cartridge **MUST** point forward if horizontally mounted or upward if vertically mounted for proper operation of the DRONE-RETRIEVE (DR) in rain
- Determine mounting location that provides no negative effect on Center of Gravity, or interference with propellers.
 - Note: on some drones where the drone power button is positioned on the top of the drone just behind the power On/Off button.
 - Many of these types of Drones have sufficient space on the bottom of the drone as another mounting option.
 - Most Drones will require deactivation of vision systems which is recommended by the manufacture when flying over water.

3. SURFACE MOUNTING METHOD

- Option "A" Releasable plastic zip tie (50 lb - 22.7 kg)
- Option "B" Non-releasable 304 stainless steel ball lock zip tie (176 lb – 80 kg)
- Materials:
 - Alcohol Pads - Used to clean the surfaces that you will attach the DUAL LOCK PADS.
 - DUAL LOCK Pads - 4 Dual Lock pads are provided for fixturing the DR to the drone.
 - ZIP TIE - The ZIP TIE is to secure attachment to the drone. It must be used with the DUAL LOCK as the DUAL LOCK alone will not secure the DR unit during a crash.
- MOUNTING:
 - Make sure that the area where you plan to attach the Dual Lock pad is clean and free from ANY oils, wax, etc.
 - These pads have a VHB (Very High Bond) adhesive and for proper attachment this adhesive needs a good clean surface.
 - Do not reuse these pads. The adhesive properties will be seriously reduced if the pad is removed and reinstalled.
 - Note: the adhesive on these fasteners becomes stronger over time thus let them sit for a day or so to increase the bond strength.
 - The DRONE RETRIEVER is provided with slots in the bottom ZIP TIE attachment
 - Ball Lock zip ties....
 - With the development of larger Drone Retriever units our customers are flying larger and heavier drones. Many fly with multiple Drone Retriever units attached.
 - Some of these fly at elevations that far exceed the 400' ceiling height. Customers were concerned that the plastic zip tie with 50lb / 22.7kg strength might not survive impact in a crash.
 - To achieve the tightest clamping, without the use of a special tool, follow the steps below.
 - Tools needed:
 - Shears to cut stainless steel band
 - Flat head screwdriver with wide head.
 - Pliers for folding and grabbing stainless steel zip tie band material.
 - Position band through the DR unit mounting slots located on the bottom.
 - Pull the tongue end of the zip tie snug.
 - Cut the tongue so that there is about 2" of material extending from the clasp.
 - Fold the tongue over about ½" to create a thicker material for the pliers to grab onto.
 - Position the zip tie such that the tongue is pointing "UP"
 - This will allow the locking ball to position itself for a tighter connection.
 - Position the flat head screwdriver against the clasp to keep it positioned.
 - With pliers attached to the tongue pull the tongue while pushing on the clasp with the screwdriver. This will yield a tight connection.
 - Cut off excess stainless steel tongue material
 - Ball Lock zip ties are by themselves not releasable. However, there is a tool that can be inserted into the clasp that will release the ball and allow the ball-lock zip tie to be removed and reused. This tool is provided when ordering ball lock zip ties.

4. TUBULAR MOUNTING METHOD

- Option “A” Releasable plastic zip tie (50 lb - 22.7 kg)
- Option “B” Non-releasable 304 stainless steel ball lock zip tie (176 lb – 80 kg)
- Materials:
 - Tubular mounting clip. Appropriately sized clips are selected when ordering the unit.
 - Plastic or Stainless steel zip ties are selected when ordering the unit.
- Mounting
 - TUBULAR CLIP(s)
 - The mounting clip is user installed.
 - The clip permanently converts the DR unit to Tubular Mounting
 - START by inserting the clip into the bottom slot located below the “hinge side” of the DR unit. Make sure it seats against the bottom edge of the unit. Keep it there with your thumb.
 - Rotate the clip so that the other end slides into the opposite slot and firmly press it such that it slides into the opening. Once pushed in, it will snap into place.
 - You MUST install hinge side 1st as the clip will not install correctly otherwise.
 - The only way to remove the clip, will be, to cut the center thus destroying the clip.
 - Plastic Zip Tie
 - The Zip Tie can be slid through the black plastic enclosure between the enclosure and the orange airbag. To facilitate easy insertion, bend the end of the zip tie downward so that as it is easily pushed through the enclosure. Note: The end of the Zip Tie points downward against the enclosure bottom.
 - Now attach the assembly to the tubular mounting point on your drone
 - NOTE: ALWAYS mount such that the CO2 Cylinder points FORWARD or UPWARD which is required in the event that you fly in the rain. You do not want the prop wash to push water into the clear plastic end of the DR Activator.
 - Once attached to the tubular mounting location rap the Zip Tie around the DR clip such that the Zip Tie rests in the slots against the colored friction pads, then pull tight. You may need to pull tighter to ensure that the colored gripper engages and keeps the DR unit from rotating.
 - We recommend trimming the Zip Tie but leave several inches to allow reuse.
 - Ball Lock zip ties....
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 - Some of these fly at elevations that far exceed the 400’ ceiling height. Customers were concerned that the plastic zip tie with 50lb / 22.7kg strength might not survive impact in a crash.
 - To achieve the tightest clamping, without the use of a special tool, follow the steps below.
 - Tools needed:
 - Shears to cut stainless steel band
 - Flat head screwdriver with wide head.
 - Pliers for folding and grabbing stainless steel band material.
 - Position band through the DR unit mounting slots. This assumes you have already mounted the dual Lock material and have the DR unit positioned.
 - Pull the tongue end of the tie snug.
 - Cut the tongue so that there is about 2” of material extending from the clasp.
 - Fold the tongue over about ½” to create a thicker material for the pliers to grab onto.
 - Position the zip tie such that the tongue is pointing “UP”
 - This will allow the locking ball to position itself for a tighter connection.
 - Position the flat head screwdriver against the clasp to keep it positioned.
 - With pliers attached to the tongue pull the tongue while pushing on the clasp with the screwdriver. This will yield a tight connection.
 - Cut off excess stainless steel tongue material
 - Ball Lock zip ties are by themselves not releasable. *However*, there is a tool that can be inserted into the clasp that will release the ball and allow the ball-lock zip tie to be removed and reused. This tool is provided when ordering ball lock zip ties.
- The drone retriever should be stored in a dry place such that excess humidity/water does not come in contact with the activator.
- We recommend reading “HOW IT WORKS” to better understand how your DRONE RETRIEVER operates. Additionally, you should be familiar with “PRE-FLIGHT CHECKLIST and MAINTENANCE” guide.