

2023 DualSync ST Vegas E-3D TECHNICAL BULLETIN, 010523r11

The **Vegas E-3D**, with **Darton's NEW Wide Limb Design**, uses a unique cable and yoke system that equalizes the torsional stress in the limbs. This results in a more forgiving bow to shoot. With yoke cables anchoring at the axle, outside of the limbs, it maximizes the balancing effect of the yoke system while reducing the load on the cam bearings. Adjusting the yokes can also assist in tuning the bow to your style of shooting. These features also make it an easier bow to service and tune. **Equalizing yoke system covered by patent 8,826,894 B1**

Darton's NEW Quad Limb design coupled with its **DualSync Cams** and **E-System** provides a new level of smoothness and Shoot-ability not before obtainable. This is enhanced with the use of DARTON's Bowstring Suppression Unit. **The bumper should be adjusted so there is some clearance between it and the bowstring.** If there is no gap between the bowstring and the bumper, your bowstring may be deflected and slide off the bumper affecting the shot. The clearance is adjusted by loosening the set screws and then moving the rod in or out accordingly. **Anytime the limbs are adjusted, an inspection should be made to the bumper to assure its correct position relative to the bowstring.**

Additional 5/16-24 threaded accessories holes are provided for mounting accessories such as a counterbalance system or counterweights.

Each **DualSync** bow has an adjustable peak weight range of up to 10 pounds. Be sure the (2) screws used to lock each of the pivoting limb pockets in place are loosened (1/2 turn). After you are certain all adjustment locking screws have been loosened, tighten limb bolts **Clockwise (CW)** so the limbs are evenly adjusted. Count the bolt turns while tightening the limbs for later reference if you want to readjust the limbs. A maximum of 7 **Counter-Clockwise (CCW)** turns from tightened position is recommended; more than 7 **Counter-Clockwise (CCW)** turns will cause the screws to bind in the adjustment slot at the side of each limb pocket and may cause damage to the bow. Be sure to re-tighten all adjustment-locking screws when limb adjustment is completed. **DualSync Cams covered by patent 6,990,970 & 8,662,062 B2**

DARTON has included their patented **Tuning Mark System** on all **DualSync** bows to assist the individual shooter to achieve optimum performance. By lining up the power cables between the tuning lines on each cam, you can achieve the advertised draw lengths and performance. The cable lengths are adjusted by placing the bow in a press to remove tension from the cables. The cables are then adjusted by twisting to make them shorter, untwisting to make them longer. If they are not lined up or in the same relative position on each cam, you will lose some draw length and stored energy. Be sure the axle-to-axle measurement is checked after the bow is tuned. The correct axle-to-axle measurement will ensure excellent performance.

DARTON's adjustable **Cable Roller Guard Rod** is designed to enhance the smoothness and shoot-ability of your DS Series bow. It allows adjustment to assure adequate cable offset for better vane clearance when your vanes pass the cables. Excessive cable offset can cause cable clearance problems elsewhere. You do not have to adjust the roller guard rod in or out to compensate for any change in peak weight adjustment or draw length.

3 sets of Draw Stop Tabs are included with each bow for an adjustment to the module draw stops for less let-off.

If there is any noise caused from the draw stop contacting the power cable, or if you choose to soften the feel of contact, position one of the felt adhesive-backed pads included with each accessory package on the end of the draw stop.

In addition to the draw lengths adjustment listed below there is also a 1/4" adjustment between each numbered adjustment, i.e., 1.1, 1.25, 1.5, 1.75 & 2.0. Maximum draw length using 85% mod = 31".

Mass Weight: 4.72 lbs., Speed Rating: 315-320 fps (5g./lb. @ 30")

Adj. mark	#1	#2	#3	#4	#5	#6	#6.5	% let-off	Axle-Axle	Brace Height	w/100 pounds tension		
											Bowstring	Power Cable	Yoke OAL
w/G1 3D modules	25.5"	26.5"	27.5"	28.5"	29.5"	30.5"	31.0"	85 > 75	37 1/2"	7"	59 3/8"	33 1/16"	17 7/8"
w/G2 T modules	25.5"	26.5"	27.5"	28.5"	29.5"	30.5"	31.0"	80 > 70					
w/G3 T modules	25"	26"	27"	28"	29"	30"	30.5"	68 > 60					

Bowstrings and Power Cable measurements are with twist. Add or subtract twist in Power Cables to get correct tune. Axle - Axle tolerance is +/- 1/16".

For additional warranty or tuning information visit our web site www.dartonarchery.com or call Darton Service at 989-728-9511. To order parts, draw length modules or Darton Apparel call Darton Service at 989-728-4231.

Before pressing bow, back limbs out 4 turns from MAX setting. Darton's warranty does not cover damage to any bow caused by improper use of a bow press.