

MagArrow II Upgrade

1. Much better GPS accuracy (1.5m 50% CEP; 1m 50% CEP with SBAS) compared to MagArrow I (3m 50% CEP) with a redesign of GPS module. If multi-path becomes an issue (close to ground), an external helical antenna (included) can be attached. With the external helical antenna, MagArrow II is 200g heavier than MagArrow I (1.2kg vs 1kg without batteries).



Figure 1 Using the internal GPS patch antenna by removing the external helical antenna.



Figure 2 GPS automatically switches to the external helical antenna when it is attached.

2. Dual internal and external power/reset button. The external button is shown in Figure 3. The internal button is the same as in MagArrow I.



Warning: if the external button is hit by extruding hard surface, like a rock, during landing, it may stop the data acquisition. Always make sure data acquisition is ON before drone flies out of the WIFI range.

Figure 3 External power/reset button.

3. Package redesign (both top and bottom). As a result, we can offer MagArrow II at the same price as MagArrow I with the same drop test parameters.
4. The top cover is no longer made of carbon fiber. Instead, it is vacuum formed plastic that is more flexible and much less expensive, thus saving the customer over \$4K when crashed units are sent in for repair. Customers may notice a slight difference in finish and appearance.