# 3D printed accessories for the Volt, M1/M2, and other rigs

All prices include USPS Priority shipping in the USA. International shipping is extra. All threaded holes in the 3D parts have Helicoils® for strength. All hardware is included. Custom parts also available. Contact: Jerry Holway at <u>jholway@comcast.net</u>

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8.30.20

# The Volt Gimbal Thumb Button Extender (VGTBE)

It's almost impossible to push the Volt Gimbal Thumb Button (that's what it is called!) when a zoom and focus controller is added to your gimbal handle.



The Volt Gimbal Thumb Button Extender solves this problem quite nicely, in spite of having a dorky name.



The VGTBE has a large, thumb-sized surface for your thumb to push. It extends the gimbal button towards the handle 1.50" (38mm).

Slip your thumb off the zoom rocker and the button is right there.

It's still *possible* to see the mode and power LED's, especially when the sled is on the stand. When operating, the glow from the LED's can be seen, but operators tend to rely on the LED's in the M2 topstage or on the Volt "brain."



The VGTBE is great for operating without a zoom and focus controller, too.

You can push the button in two places – choose whatever spot is most comfortable, based on your hand size and/or where you like to grab the gimbal handle.



The VGTBE slides onto the Volt and snaps into place. It can also be easily removed. No tools or reworking of the Volt is required.

It works for the G-Zoom and with the Bebob Zoe. For other controllers, inquire. It can be mounted for right or left side operating, of course. \$125.

#### Volt encoder ring protector:

This 3D printed assembly protects the encoder ring without adding any height to the gimbal. It is non-destructive and it is easy to install or remove without disassembling the sled or the Volt.

The ring protector works for both regular and goofy mounted Volts. It comes with a cable clamp, all necessary hardware, and installation instructions.

There are significant differences between the encoder ring protectors mounted on M1 gimbals and those mounted on gimbals modified for the Volt.

Please let me know what gimbal you have when ordering.

This accessory is completely unnecessary for the M2 Volt and later gimbals of the M1 Volt, because the encoders are mounted *inside* the gimbals. \$100.



#### EZ Cable Guide:

Just for the M2 top stage: The EZ Cable Guide is a soft and pliant replacement for the supplied cable guide that makes it much easier to attach and detach cables. The guide is free when purchased with any one of the other accessories. \$10.00 when ordered separately.



#### M2 Battery switch guard:

Just for the M2 battery mount: A slip-on Switch Guard. This guard makes it tough for anything to accidentally bump those switches, like a pointy elbow in mid shot. The indicator lights and lettering are still visible. \$50.



# Very thin monitor yoke mounts.

# Why have the monitor yoke and pivoting hardware be any wider than necessary?

These are very thin mounts for use with Tiffen yokes - both the "universal yoke" as shown and some of the older, fixed or variable width yokes. The distance from the inside of the yoke to the exterior of the monitor is only .145" (3.68mm).

I've made a set of these for TV Logic monitors, Bon monitors, and for the Transvideo Stargate. They can be made to fit many other monitors with threaded holes on the sides. For other monitor yokes, please inquire. \$100 with hardware.



**Plain old rod mounts:** These brackets span 15mm rods on 60mm centers. One version of the mount has a 10-32 screw to fit the monitor weights. The other version has a <sup>1</sup>/<sub>4</sub>-20 thread to mount other accessories. \$50 for the mount, or \$35 when bought with two weights. Shown below with a 1pound weight.

There are two more versions of this non-adjustable bracket for Ultras (and the like), that clamp onto .620" rods on either 2.465" or 3.500" centers. Specify 10-32 or <sup>1</sup>/<sub>4</sub>-20 threads and width.





#### **Rod Mount with pivot:**

Like the "plain" rod mounts, this rod mount easily attaches to 15mm rods on 60mm centers – there's no need to slide it on.

The pivot has both a Tee handle lock and an adjustable brake so a monitor or other accessory doesn't flop around when adjusting its angle.

A captive,  $\frac{1}{4}$ -20 SHCS (socket head cap screw) attaches the mount to the monitor. There is also a "long" version of this bracket that allows the monitor to fold flat to the rods. \$125.



Typically, it is used to support a return monitor:



Or to hold a 2<sup>nd</sup> monitor for low mode: The long version of this bracket is particularly useful for this purpose.



The pivoting bracket is used this way to hold a below-the-lens return monitor for talent!



Really, it can hold anything with a <sup>1</sup>/<sub>4</sub>-20 threaded hole.

### Two Rod Mounts for the M1's monitor rods

These rod mounts attach to 15mm rods on 100mm centers – the diameter and width of the M1's monitor rods. Two stainless steel dowels stiffen the cross piece. Two clamps are required for this width. The mount with the pivot weights 3.6 ounces and the plain mount weighs 2.1 ounces. Both have captive <sup>1</sup>/<sub>4</sub>-20 SHCS's for mounting the monitor.

\$135 for the mount with the pivot; \$60 for the plain mount.



## Adjustable Width Rod Mounts with pivot or without

These rod mounts adjust for center to center distances of 60 to 90mm. Four stainless steel dowels keep it stiff when extended, and the 3D parts are beefier than the fixed width rod mounts. Weight with pivot: 4.2oz. \$175.

The mount can also be equipped with clamps for .620" rods, as are used in the Ultras, Clippers, Shadows, etc. (FYI, .620" was the old Panavision standard rod diameter).

There are also adjustable width versions without the pivot, for either 15mm or .620" rods. \$100. **NOTE:** The adjustable bracket will not extend wide enough for the M1 monitor rods (100mm).





#### Dovetail mount to BFD snap-on clamp

Peter Abraham asked me to make this accessory for his Zalex<sup>TM</sup> Longplate. There is a lot of real estate *under* the Longplate on many camera builds, but there is no easy, strong, and also flexible way to mount accessories there. Peter also wanted to keep the top surface of his Longplate clean for other accessories.

Could we make a really low profile and totally solid clamp to hold an analog BFD? It had to be side mounting and tool free. A whole lot of prototypes later, and we have it. It also fits other standard dovetails, as shown below. \$100.



# 15mm rod mount to BFD snap-on clamp

One thing, of course, leads to another.

This is probably the simplest, low profile way to mount an analog BFD receiver to standard 15mm rods on 60mm centers.

To use, snap the part onto the BFD. It can be mounted anywhere along the BFD's length, making it easy to adjust for different camera builds and clearances. Attach to the rods, screw tight, and you are done. On request, clamps for other receivers can be made. \$100.



### **Dovetail mount to Cheez plate**

And one thing leads to two other things...

With this accessory, it's easy to mount some other accessory to the bottom of the Zalex Longplate. The plate has four <sup>1</sup>/<sub>4</sub>-20 Helicoils, or you can use sticky back Velcro. We gave this Cheez plate an offset dovetail clamp for additional mounting options. \$125



## 15mm Rod mount to Cheez plate

Of course – we had to make a rod mount to Cheez plate option. Again, there are four <sup>1</sup>/<sub>4</sub>-20 Helicoils, or you can use Velcro. \$125



#### Medium dovetail mount to BFD snap-on clamp

Peter Abraham had to go and make the Zalex<sup>TM</sup> Longplate M for operators with all those sleds that used the smaller, "medium sized" dovetail plates, like the Clippers, Archers, Zephyrs, etc. So I had to make a mount for the Longplate M to the BFD.

It snaps on or off like the one for the standard dovetail. \$100.



#### Medium dovetail mount to Cheez plate

It follows that we had to make this accessory as well.



Dovetail mount or Rod mount brackets to other accessories can be made. Inquire.

# **VOLT Low-mode Collars**

Low-mode docking collars for the M1, M2, and other "Volt modified" sleds (Ultra2, Archer 2, PRO, etc.) Designed to mate with your padded dock. \$75.00.

**Please specify which sled and gimbal you have**, as there are (so far!) *nine* different versions of this collar! For example, you might have a PRO sled with a modified PRO gimbal or a PRO sled with an M1 gimbal modified for a PRO sled. See page one for all the variations. Weights of collars vary from 3.0oz to 1.8oz. The M1 collar is 2.8oz.



## **Monitor Weights**

Steel (not 3D printed!) monitor weights to fit Tiffen's universal monitor mount (some monitors are so darn light you need the extra weight!). Set of two ½lb weights, (1lb total), or two 1lb weights, \$75.00. Set of 4 weights with 2 setscrews included for stacking, \$135. The weights are easily adaptable to other monitor yokes. Threads are 10-32 pitch.

These weights also are made with 1/4-20 threads, but they won't work with the Tiffen universal monitor mount as shown below.



# The Original BattCheez<sup>TM</sup>

The Battcheez<sup>TM</sup> is an accessory "dummy" battery plate, V or AB mount. We first designed the plate only to protect the optional 3<sup>rd</sup> battery mounts on the bottom of the M2 and to provide a flat surface so the M2 sled could be set down safely on its base.

We added a number of  $\frac{1}{4}$ -20 mounting holes to the plate so that accessories can be easily added wherever there is a spare battery mount – including on the back of a camera.

The BattCheez makes those crazy, accessory laden, camera builds a little easier.

The plates solidly mount to the battery holders, without wiggle. However, the plate is not designed for mounting heavy accessories like gyros.

Weight of BattCheez-V: 1.7oz; BattCheez-AB: 2.8oz. \$125.





The U2 BattCheez<sup>™</sup> mounts to the Ultra 2 base's dovetail. Alan Green asked for this, and now it's a product.



#### **V-lock Bumpers**

These are protective bumpers for the release buttons on V-mount battery holders. A classy version of this bumper is part of the M2's design. These bumpers are intended to retrofit other sleds and products that use V-lock batteries. Use Super Glue Gel to mount them to the battery holder. Right now there are two versions – one for IDX branded battery holders, and one for another unmarked brand. Not all brands of V-mount battery holders can be accommodated as some of the release buttons stick out way too much. \$20 for a set of two protectors.



#### **Aircraft Pin Cushion**

A soft, protective bumper for the sharp edge of the "aircraft pin" on the arm.

Three sizes: big (the old standard), slim, and bowl-shaped. \$20.

These bumpers are made of a material (TPU) that is a PITA to print and leaves some "strings," but they work very well. Specify your pin head size and shape. (Not an insult!)



# Angled Kick-back Block with integral soft cover

The kick-back block for the arm socket block has an integral "bumper" of soft material.

This kick-back design is now standard on Tiffen arms. The bumper allows the upper arm section to move further back and out of the way when the sled is placed more in front of the operator's body. An example of this is shooting to the right when operating in regular mode.

Weight: 0.4oz. \$45.



### **VF Prompter Bracket**

The VF prompter monitor bracket fits the view finder bracket on broadcast cameras. One version is for Sony, the other for Ikegami. Vibration-free. The slots allow you to position the monitor vertically for best viewing. Two M4 thumb screws are included to mount to the standard 75mm VESA spacing on the prompter monitor.

Each bracket has a <sup>1</sup>/<sub>4</sub>-20 threaded hole for alternate mounting options. Weight: 1.4oz. \$75 each or \$135 for both brackets.





**VF prompter bracket, with an L bracket:** At the request of Rob Vouna, I made a bottom mount adapter for prompter monitors that have a <sup>1</sup>/<sub>4</sub>-20 hole on the bottom.

VF prompter bracket and L bracket, together, \$125.

Two 6-32 thumb screws, two M4 thumb screws, and one captive <sup>1</sup>/<sub>4</sub>-20 screw included. Specify Sony or Ikegami for the VF bracket.

L bracket weight: 1.7oz.



## 75 by 100X VESA Bracket

This bracket is for mounting monitors with 75mm or 100mm Vesa spacing. Five <sup>1</sup>/<sub>4</sub>-20 threaded holes. Four 4mm thumb screws included. \$100.



Email me with any orders or questions, comments, and ideas! jholway@comcast.net.