3D printed accessories for the Volt, M1/M2, and other rigs 4.3.24

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Contact: Jerry Holway at jholway@comcast.net All prices include USPS Priority shipping in the USA. International shipping is extra			page
Volt Low-mode collar, M1/M2, all sizes, std. or short versio Volt Low-mode collar, and other modified, 1.50 post Volt Low-mode collar, Shadow, Clipper, 1.58 post 1 or 2 Volt Low-mode collar, Ultra 1.80 post 3 Hinged collars, all versions	ons	\$75 \$75 \$75 \$75 \$100	3
15mm rod mount with pivot, 60mm centers, std. length 15mm rod mount with pivot, 60mm centers, long version		\$125 \$125	4-5
Adjustable width rod mount with pivot, NEW design, Carbon fiber, 60mm to 100mm!		\$175	6
Plain 15mm rod mount, 100mm centers for M1 Plain 15mm rod mount with pivot, 100mm centers for M1 Volt brain mount with pivot		\$70 \$150 \$125	7
Plain 15mm rod mount, 60mm centers, 10-32 or ½-20 thread Plain .620" rod mount, 2.465" centers, U2, 10-32 threads Plain .620" rod mount, 3.500" centers, U2, ½-20 threads	ds	\$50 \$60 \$70	8
M1 monitor rod bracket to 15mm studs on 60mm centers Two inch to 15mm studs on 60mm centers Soft G-70X bumpers, set of six		\$75 \$75 \$45	9
Volt Gimbal Thumb Button Extender Volt cable shield Volt weight kits	\$40 to	\$125 \$50 \$100	10-11 12 13
M2 Battery switch guard (original M2's only) Archer2 battery switch guard M2 Topstage EZ cable guide, free with other purchase		\$50 \$40 \$15	14
Tiffen universal monitor yoke mounts, thin, TV Logic Tiffen universal monitor yoke mounts, thin, Stargate Tiffen universal monitor yoke mounts, thin, BON		\$100 \$100 \$100	15
15mm rod mount, to BFD snap-on clamp 15mm rod mount, plain, to Cheez plate 15mm rod mount, AB or IDX mount, with plate and cable —without cable, \$250, without plate or cable, \$125		\$100 \$100 \$325	16

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Dovetail mount to BFD snap-on clamp Dovetail mount to Cheez plate, AB or IDX mount		\$100 \$125	17
Dovetail mount to G-Zoom amp Medium dovetail mount to BFD snap-on clamp Medium dovetail mount to Cheez plate		\$60 \$100 \$100	18
Medium dovetail mount to low mode pivoting monitor mount			19
Single and Dual dovetail to 15mm rod holders	\$75 to	\$90	20
View Finder Prompter Bracket, Sony, Ikegami, Panasonic View Finder Prompter Bracket, with bottom mount 75 x 100mm VESA monitor bracket		\$75 \$125 \$100	21-22
Cable wranglers, 9 versions. \$20 for 1, \$30 for 2, \$3 each after that Additional discounts when purchased with other items, inquire			23-25
Dual arm post holder for Tiffen padded dock, .500, .625, ar	nd .740	\$85	26
The Original BattCheez TM dummy plate, V or AB mount The U2 BattCheez TM dummy plate, U2 dovetail base		\$125 \$125	27
Angled kick-back "Buzz" block, NEW , all TPU Tapered insert for Tiffen socket blocks, Carbon fiber	\$5 to	\$50 \$15	28
V-lock bumpers, set of two Arm Aircraft pin cushion, 3 different cup styles Spanner wrench for the Master Series gimbal's top nut.		\$20 \$20 \$50	29
Aero/Zephyr pivoting monitor mount Aero/Zephyr adjustable "big" monitor yoke and pivot, NEV Aero 2 nd battery mount, plug and play, for AB or IDX	W	\$125 \$300 \$325	30
Volt encoder ring protector, M1 and modified gimbals		\$100	31
Monitor weights. Stainless steel	\$90 to	\$175	32

NOTE:

Custom parts also available. All hardware is included.

Some parts are now made with carbon fiber filament.

Some parts have mixed filament types, such an outer layer of TPU for gripping and a carbon fiber interior for strength. Mixed colors are also possible within a part. Inquire.

All threaded holes in the 3D parts have Helicoils® for strength.

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

Most of what I make, or improve, comes from customer requests - thank you.

VOLT Low-mode Collars

NEW versions with a slightly grippy TPU surface

Light weight and strong low-mode docking collars for the M1, M2, and other "Volt modified" sleds like the Ultra2, Archer 2, PRO, etc.

Each is designed to precisely mate with your padded dock. \$75.00.

Please specify which sled and gimbal you have, as there are (so far!) 9 basic 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.

Weights of collars vary from 3.0oz to 1.8oz. The M1 collar is 2.8oz.

All collars are also available in "short" versions, only 1.25 inches tall, to save room on the sled's centerpost.

And they are available in a short, hinged version for \$100. That makes 27 different collars! And others can be designed...







Rod Mount with pivot:

The 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 that a monitor or other accessory doesn't flop around when "loose" and the operator is adjusting its angle.

A captive, ½-20 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^{nd} 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 1/4-20 threaded hole.

Adjustable Width Rod Mount with pivot, or without, NEW design

This rod mount adjusts for 15mm diameter rods with center to center distances of 60 to 100mm. Yes, this bracket *will* extend wide enough for the M1 monitor rods!

Carbon fiber filament and a new design keep it stiff when extended, and the parts are beefier than the fixed width rod mounts. \$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.





Two fixed width 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 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 ½-20 SHCS's for mounting the monitor. Available with either the short or long pivoting arm.

\$150 for the mount with the pivot; \$70 for the plain mount. Both of these are now made with Carbon Fiber filament for stiffness; lighter and no SS rods! New pix soon...





Volt brain mount with pivot

This pivoting mount attaches directly to the front of the Volt brain. The pivoting arm can be longer or shorter, depending on the monitor you have – whether it is bottom mounted or back mounted (like the StarliteTM). Specify your monitor (and send pix of the mounting hole). \$125.



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 ½-20 thread to mount other accessories. \$50 for the mount, or \$35 when bought with two weights. Shown below with a 1lb 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" centers (the battery rods) or 3.500" centers (the monitor rods). Specify 10-32 or ½-20 threads and width. \$60 for the version with the battery rods. \$70 for the version for the monitor rods.



Custom versions can be made (for the Quattro monitor rods, for instance) Just ask...

M1 monitor rod bracket to 15mm studs on 60mm centers (100mm to 60mm)

This bracket makes it possible to use your 60mm c to c accessories on the M1's monitor rods. 15mm diameter studs. Different diameters and c to c distances available. Inquire. Carbon fiber filament. \$75.



Two inch to 60mm c to c adapter for 15mm rods. You will know if you need this handy accessory. \$75



(Hint: it works off the "ears" of some dovetail plates)

Soft bumpers for G70 and G70X, set of six

These bumpers greatly reduce noise and shock, almost magically! \$45





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 also great for operating without a zoom and focus controller.

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 cable shield

This shield snaps on to protect the cables and connectors to the Volt motors. Simple and effective, and especially useful then resting the sled on the shoulder between takes.







This, protected



versus this, without

Volt weight balancing kits, 2 styles, original and new

Both weight kits have the necessary hardware, various spacers, and a variety of steel washers for precise balancing. Instructions included.

Original style, many tricky parts,\$100. The Tiffen weight has an integral ½-20 screw.



Later style, \$40. Few parts, not so tricky. The Tiffen weight has a thru hole for a 1/4-20 screw.





M2 Battery switch guard:

Just for the original 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. You might need a drop of superglue to hold it in place. NOTE: M2 sleds made after October 2021 have this protection built in. \$50.



Archer 2 battery switch guard

Martin Newstead asked for this – seems like the power switches were getting hit when grips and assistants grabbed the rig – especially annoying when using the Volt. Clips in place. \$40.



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. \$15.00 when ordered separately.



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 .249. inches. There are different "universal" yokes. Contact me when ordering.

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





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; easy to adjust for different camera builds and clearances. On request, clamps for other receivers can be made. \$100.



15mm Rod mount to Cheez plate

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



15mm rod mount to AB or IDX mount

This bracket clamps rigidly to 15mm rods on 60mm centers. It can be supplied with or without the AB or IDX battery plates. The ideal IDX plate is the PV-2, as it has two additional mounting holes in addition to the standard 4. Either AB or IDX, with battery plate and cable, \$325 With battery plate but no cable, \$250, without battery plate or cable, \$125 (IDX mount shown)



Dovetail mount to BFD snap-on clamp

Peter Abraham asked me to make this accessory for his ZalexTM Longplate. There is a lot of real estate *under* the Longplate on many camera builds, but there is no easy, strong, and also versatile way to mount accessories there. Peter also wanted to keep the top surface of his Longplate clean for other accessories. It also fits any standard dovetail, as shown below. \$100.



Dovetail mount to Cheez plate

And one thing leads to two other things...It's easy to mount some other accessory to the bottom of the Zalex Longplate. The plate has four ¼-20 Helicoils, or you can use sticky back Velcro. We gave this Cheez plate an offset dovetail clamp for additional mounting options. \$125



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

Dovetail mount to G-Zoom. Also works great on the Zalex Longplate. \$60



Medium dovetail mount to BFD snap-on clamp

Peter Abraham had to go and make the ZalexTM Longplate M for operators with all those sleds that used the smaller, "medium sized" dovetail plates, like the Clippers, Archers, Zephyrs, etc. So naturally, I had to make a mount for the Longplate M to the BFD. It snaps on or off the BFD, just 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. \$100



Medium dovetail mount to low mode pivoting monitor mount

This part also was designed specifically for sleds with a medium dovetail plate (Aero/Zephyr etc.) but lacking 15mm rods. When used with the ZalexTM Longplate M, it makes it easy to add a 2nd small monitor for low mode work. The picture shows the "L pivoting arm" version, designed for monitors with the mounting hole on the bottom. For monitors with the mounting hole on the back (like the StarliteTM), there's a version with a "straight" pivoting arm. Either one, \$125.



Single and Dual dovetail to 15mm Rod mount holders

For mounting focus, iris, or zoom motors. Shown here on the ZalexTM Longplate – It's especially useful if the lens gear is far from the camera body. Lightweight and adjustable side to side. These rod holders are made from a carbon fiber filament for extra rigidity. Also, with extra screws and washers, it's also mountable on the underside of the Longplate.

Single \$75, Dual \$90





VF Prompter Bracket

The VF prompter monitor bracket fits the view finder bracket on broadcast cameras. Versions for Sony, Ikegami, and Panasonic. 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 $\frac{1}{4}$ -20 threaded hole for alternate mounting options. (Nogo arm) Weight: 1.4oz. \$75 each or \$135 for both brackets.





In use on a Sony camera





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 ½-20 hole on the bottom. ½-20 captive mounting crew included.

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

Two 6-32 thumb screws, two M4 thumb screws, and one captive ½-20 screw included. Specify Sony, Ikegami, or Panasonic for the VF bracket. L bracket weight: 1.7oz.



75 by 100 X VESA Bracket

This bracket is for mounting monitors with 75mm or 100mm Vesa spacing. Five ½-20 threaded holes. Four 4mm thumb screws included. \$100.



Cable wranglers – 9 or 10 different ones (I've lost count)!

A neat alternative to bongo ties, Velcro straps, and the like. Compact and neat, each of these wranglers hold two or three cables in a flexible plastic.

\$20 for one, \$30 for two, and \$3 for each one beyond that. Add \$5 each for the Hopsing Dual. Additional discounts when purchased with other items.

Cable wrangler Hoss

A two-part wrangler for the end of a 15mm rods with ½-13 threads (like M2, Zacuto, etc.)

The design intent with the Hoss wrangler was to keep the cables off the rods and therefore make telescoping the monitor or battery is less frustrating.





Cable wrangler Ben comes in 3 sizes

Because not all rods have a ½-13 thread at the end, the Ben wrangler was designed to clip (or slip) onto 15mm rods, 19mm rods, or .620 rods (for U2, Shadow, Panavision, etc.).







Cable wrangler Adam

This wrangler gets screwed to the top, or to the underside, of a dovetail plate.

It's very useful when used with a long dovetail plate (like one of Peter Abraham's ZalexTM Longplates). When used on top of the dovetail, the grabber can be rotated to any position. The thread has a HelicoilTM, and it is supplied with a ½-20 SHCS and a special washer to fit the slots on the underside of the dovetail plate. It can also be fastened to other parts or accessories with a ½ inch through hole.





Cable wrangler Little Joe

Having an "offset" design, Little Joe mounts to the top of a dovetail plate, but with a lower profile than the Adam wrangler.

Note: it does *not* fit in the slot on the underside of the dovetails like the Adam wrangler.



Cable wrangler Hopsing and Hopsing Dual

(FYI, Hopsing was the cook on Bonanza...)

Hopsing is a cable wrangler that screws into any ½-20 threaded hole. Hopsing Dual helps when you have a lot of cables to wrangle. (\$5 extra, each)





Hopsing in use (Thanks Bryan Fowler)



Cable wrangler "Zippy"

Ziptie this wrangler to your vest or to anything else....



Dual arm post holder for padded dock

Shown with two arm holders for the Tiffen standard .740 diameter arm posts. Also available for the .625 (5/8ths) and .500 inch arm posts. Mounts with the standard tool holder on the opposite side, as shown, or without. Post sizes can be mixed. \$85





The Original BattCheezTM

The BattcheezTM is an accessory "dummy" battery plate, V or AB mount. We first designed the plate just to protect the optional 3rd 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 ½-20 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 BattCheezTM mounts to the Ultra 2 base's dovetail. Alan Green asked for this, and now it's a product.



Angled Kick-back "Buzz" Block, NEW! all "TPU soft stuff" in blue or traditional black.

The block 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: Shooting with the sled in front of you or more to the right side when operating in regular mode, the arm sections continue to swing to the side and behind you. This you a better view of the monitor and reduces the chance of the arm hitting the monitor.

Weight: 0.4oz. \$50.





Tapered insert for Tiffen socket blocks, NEW, made from carbon fiber filament

The original vest socket blocks from Cinema Products – way back when – were milled with a tapered center. Newer blocks don't have this tapered center, and it's sometimes hard or frustrating to insert the arm into the socket block. This is especially true when working with a hard mount. This little part re-creates the taper and makes life easier. \$15. \$5 when purchased with other accessories.



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!)



Spanner wrench for the Master Series gimbal's top nut.

The height and tight fit of the wrench to the center post really keeps the pins engaged with the holes in the top nut, and it keeps the wrench flat while tightening or loosening the nut. Other spanner wrenches can be made. \$50.





Accessories for the AeroTM and ZephyrTM sleds

Aero/Zephyr pivoting "small" monitor mount. \$125.

Shown here with a 5 inch SmallHDTM monitor



Aero/Zephyr adjustable "big" monitor mount, NEW

Adjustable width pivot and yoke style mount. For monitors from 6.5 to 9.4 inches wide! All carbon fiber. Amazingly stiff and light. Available for TV-Logic, BON, Transvideo Stargate, and others on request – happy to customize. \$300. Also available for rod mounting (2nd pix)



Aero 2nd battery mount, with Anton Bauer QRC Gold or IDX V mount, 12 volts. Plug and play for extra power and hot swapping. \$325.



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 (very smart work, Mr. Orf). \$100.



Monitor Weights

Stainless 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), \$90, or two 1lb weights, \$110.00. Set of 4 weights, \$175. The weights are easily adaptable to other monitor yokes.

The weights are made with unthreaded #10 though holes to mount on the monitor. Also available with ¼ inch though holes.



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