FFCPro 2016 Install

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Installing the Tunell monitor on FFCPro 2016

The basic information is pretty much the same as the steps for the older FF Creator Pro: https://cdn.shopify.com/s/files/1/0389/3729/files/TN-MON-4_Install_on_FlashForge_Creator_Pro.pdf?11555043677070510906 - but there are a few differences:

0) Cover the table with cardboard or towel, as you will be setting the printer on its side and/or on its front to gain access to the control board at the bottom of the printer and to remove/install the back housing.
1) Remove the cable holding cover (located where the hotend assembly's umbilical cord meets the printer body at the back of the printer) by unscrewing the two screws holding the cover to the printer. You will replace this cover with the 3D-printed cover with mounting features for the Tunell monitor mounting arms.
1) Unscrew the four screws holding the bottom cover plate. Slide the cover plate under the lip of the housing toward the front of the printer, and then pivot the cover plate so that it clear the back lip of the housing toward the back of the printer. Remove the cover plate.
2) Unscrew the back housing. NOTE, on many of the more recent production batches, the 2016 FFCP has additional feet reinforcements for the sheet metal skeleton. The reinforcement pieces are bolted in to place with a washer and nut that are threaded onto longer screws at the bottom left and bottom right corners of the back housing. If the screws on the lower corners do not come out easily, stop - loosen and remove the nuts and washer attached to the long screws first, and then continue to remove the screws in the corners. Slightly wiggling the feet reinforcements will loosen them for removal (it's better to proactively remove them than to have them fall on their own and catch you by surprise).
3) Carefully loosen the back housing -- the cable is usually zip-tied to the housing, so you can't simply set it aside
4) Run the Tunell monitor connection cable such that about 4.5 inches of the cable end will protrude out from the top of the replacement cable holding cover, and then zip tie the cable to the existing hot-end cable bundle, where it joins the Z-limit switch cable.
5) Reattach the back housing, taking care to route the cables through the small cutout in the frame. Reinstall the screws. After snugging up the long screws for the lower corners, reinstall the reinforcement feet and the washer and nut for each side.
6) Connect the Tunell monitor cable to the X-min endstop connector per the instructions for the older FFCP's.
7) Neatly gather the excess length of cable and zip-tie them to the existing cable bundle.
8) Reinstall the bottom cover.
9) Mount the repalcement cable holding cover and mount the tunell monitor arms to the new cable holding cover using the M3x8mm screws (two per arm)
10) Mount the tunell monitor into the arms using the M3x8mm screws (two per side -- one from above, one from below).   Connect the cable to the monitor.
11) (Optional step - needed to use the cover) Cut off approximately 140 mm (~5.5 inches) from the original filament feed tube - the shortened tube sits in the hole located at the top of the arms.