JET Micro User Manual

Overview, Features, and how to use the JET Micro MIDI controller

Overview

Basic features and controls of the JET Micro

Description

The JET Micro HX 3.0 is a three button MIDI controller made specifically for the HX Stomp. The Micro comes pre-programmed to control all of the Stomp's "utility" features such as preset scrolling, tap tempo, tuner, snapshots, & looper controls. Alongside the pre-programmed "utility" features, you can also use the three buttons to bypass blocks and/or toggle effect parameters up/down for up to 6 individual blocks.

As an additional bonus, the JET Micro can also control limited functionality to several other popular MIDI enabled pedals such as Strymon, Eventide H9, Boss, GFI Systems, Source Audio, Chase Bliss, & Empress. The Micro will send PC messages on different MIDI channels to control up to 5 additional pedals whenever you engage Snapshots. Snapshot 1 will send out the first PC#, Snapshot 2 will send out the second PC#, and Snapshot 3 will send out the third PC#. Use our "MIDI Implementation Table" to see which MIDI channel you should set your other devices to for proper operation for each pedal manufacturer. Link to the "MIDI Implementation Table" can be found here:

https://cdn.shopify.com/s/files/1/0219/3041/0084/files/JET_Micro_-_Midi_Implementation_Chart.pdf?186

*Note that this feature can be turned off in the Global Settings if desired.

We've also had a lot of customers ask about making one of the buttons in the red bank (Stomp Mode) be assignable to tap tempo, giving you access to an "always active" tap tempo button in lieu of having to navigate to the blue bank (Tap/Tuner Mode) to access the tap tempo. Now with the JET Micro HX 3.0 you can assign any of the three buttons (A, B, or C) to tap tempo, which can be setup within the Global Settings.

Getting Started

Instructions for setting up your HX Stomp to use with the JET Micro

Setting Up Your HX Stomp

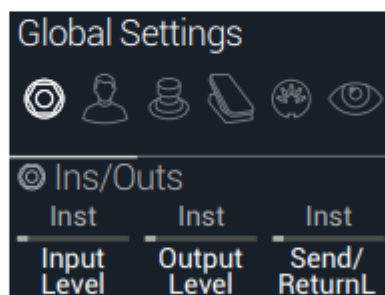Let's take a moment and setup your HX Stomp to work with the Micro...

- On the Stomp, press <Page and Page> simultaneously to open the menu
- Press Page> and then press Knob 1 (Global Settings)

Global Settings

The Global Settings menu contains additional parameters that apply to all presets, such as input and output levels, footswitch configurations, etc.

1. **Press ◁ PAGE and PAGE ▷ together to open the Menu.**

2. **Press PAGE ▷ and then press Knob 1 (Global Settings).**
   The Global Settings screen appears:

Global Settings		
◎ Ins/Outs		
Inst	Inst	Inst
Input Level	Output Level	Send/ ReturnL

3. **Turn the Upper Knob to select one of the six submenus.**
   If necessary, press PAGE ▷ to view more parameters.

   📌 *NOTE: See next page for a description of all Global Settings.*

- Turn the Upper Knob to select the Footswitches menu
  - Turn Knob 2 and assign FS3 function to Stomp 3 (this is only needed if you want to use fs3 as a stomp switch, you can choose not to do this step if you want to leave fs3 as tap/tuner)

**** IF PURCHASED AFTER 4.24.21 SKIP THE NEXT TWO INSTRUCTIONS AND PROCEED TO MIDI/Tempo BELOW ****

  - Turn Knob 3 and assign FS4 function to Preset Down

○ Press Page> and assign FS5 function to Preset Up

Global Settings > Footswitches 🐌

Page	Knob	Parameter	Description
1	1	Stomp Select	When set to "Touch," touching a Stomp mode switch selects its assigned item(s) but pressing doesn't. When set to "Press," pressing a Stomp mode switch selects its assigned item(s) but touching doesn't (helpful if you insist on playing barefoot). When set to "Both," either touching or pressing will select the assigned item. The default is "Touch."
	2	FS3 Function	Sets the function of Footswitch 3. Choose from TAP/Tuner, Stomp 3, Preset Up, Preset Down, Snapshot Up, Snapshot Down, All Bypass, or Toggle EXP 1/2. The default is TAP/Tuner.
	3	FS4 Function	Sets the function of Footswitch 4, but only when Global Settings > Preferences > EXP/FS Tip is set to "FS4." (It's set to "EXP 1" by default, so you must change this to "FS4" for FS4 Function to work properly!) Choose from TAP/Tuner, Stomp 4, Bank Up, Bank Down, Preset Up, Preset Down, Snapshot Up, Snapshot Down, Next Footswitch Mode (same as pressing PAGE ▷ from Play view), Previous Footswitch Mode (same as pressing ◁ from Play view), All Bypass, or Toggle EXP 1/2." The default is "All Bypass."
2	1	FS5 Function	Sets the function of Footswitch 5, but only when Global Settings > Preferences > EXP/FS Ring is set to "FS5." Choose from TAP/Tuner, Stomp 5, Bank Up, Bank Down, Preset Up, Preset Down, Snapshot Up, Snapshot Down, Next Footswitch Mode (same as pressing PAGE ▷ from Play view), Previous Footswitch Mode (same as pressing ◁ from Play view), All Bypass, or Toggle EXP 1/2." The default is "ToglEXP[1/2]."

*For connecting an external footswitch to access the FS4 or FS5 functions, the use of a momentary (unlatched) type footswitch is recommended.

• Turn the Upper Knob to select the MIDI/Tempo menu

○ Turn Knob 1 and confirm MIDI Base Channel is set to 1

Global Settings > MIDI/Tempo ⚛

Page	Knob	Parameter	Description
1	1	MIDI Base Channel	Sets the system base MIDI channel that HX Stomp uses for both receiving and sending MIDI communication via MIDI and USB.
	2	MIDI Thru	When on, MIDI OUT also acts as a MIDI THRU; that is, it passes through any MIDI messages received at the MIDI IN jack.
	3	Rx MIDI Clock	Determines whether HX Stomp responds to incoming MIDI beat clock received at its MIDI IN port, via USB, or whichever it senses first ("Auto"). If you don't want HX Stomp to respond to MIDI clock at all, set this to "Off."
2	1	Tx MIDI Clock	Determines whether HX Stomp transmits MIDI beat clock from its MIDI OUT port, via USB, or both. If you don't want HX Stomp to transmit MIDI clock at all, set this to "Off."
	2	Tempo Select	Choose whether the tempo is stored and recalled with each snapshot, recalled with each preset, or is applied globally across all presets and snapshots.
	3	BPM	Depending on the Knob 2 (Tempo Select) setting, this Beats Per Minute tempo value is saved per snapshot, per preset, or globally.
3	1	USB MIDI	When on, HX Stomp receives and transmits MIDI data via USB in the same capacity as its MIDI jacks.
	2	MIDI PC Rx	Determines whether or HX Stomp responds to incoming MIDI program change (PC) messages from its MIDI IN port, via USB, or both MIDI and USB. If you don't want HX Stomp to respond to PC messages at all, set this to "Off."
	3	MIDI PC Tx	Determines whether HX Stomp automatically sends MIDI program change (PC) messages from its MIDI OUT port, via USB, or both MIDI and USB when selecting presets.

• That's it! You are all setup to start using the Micro

Operating the JET Micro

How to use the JET Micro

Red Bank (Stomp Mode)

The Red Bank is where you will likely spend most of your time with the JET Micro. In this bank you can toggle blocks on/off, toggle effect parameters up/down, recall Snapshots, and scroll up and down presets. You can even setup one of the buttons to be an "always active" tap tempo if you wish, see "Global Settings" for details and how to set this up.

Each button has three time based press actions, which are a short press, double press, and long press.

- Short Press - quickly press and release the button within 1/2 of a second
- Double Press - quickly press the button at least two times within a 1/2 of a second
- Long Press - press and hold the button for at lease 3/4 of a second and then release

To recall Snapshots, simply do a long press of any button.

- Long Press Button A - recalls Snapshot 1
- Long Press Button B - recalls Snapshot 2
- Long Press Button C - recalls Snapshot 3

Two button presses will scroll up and down presets. You can also hold down the buttons to fast scroll in either direction

- Short Press AB - scrolls down presets
- Short Press BC - scrolls up presets

To bypass blocks within the HX Stomp, make sure the block you want to control is highlighted and then follow the steps below using the MIDI "Learn" feature. When you press (or double press) a button, the Micro will automatically send its respective MIDI CC message to the Stomp and the Stomp will sync to the Micro.

Block Bypass via MIDI

1. Press ◁ PAGE and PAGE ▷ together to open the Menu.
2. Press Knob 1 (Bypass Assign).
3. Turn the Upper Knob to select the block whose bypass you want to assign to incoming MIDI.
4. Press PAGE ▷ and then Knob 3 (Learn). Send a MIDI CC message from your foot controller, keyboard, etc.

   The CC number appears above Knob 1 (MIDI In).

   Incoming CC values 0-63 turn the block off; values 64-127 turn the block on. Note that some MIDI CCs are reserved for global functions and cannot be selected (see "MIDI CC").

   📌 NOTE: To manually select a MIDI CC, instead of step 4 above, press PAGE ▷ and turn Knob 1 (MIDI In) to select the desired MIDI CC number.

To toggle effect parameters up/down, follow the steps below to assign a button on the Micro to the effect you choose. When you press (or double press) a button, the Micro will automatically send its respective MIDI CC message to the Stomp and the Stomp will sync to the Micro.

Parameter Control via MIDI

1. From Edit view, press and hold the knob for the parameter you wish to control.

   HX Stomp jumps to the Controller Assign page and displays your parameter at Knob 1 (Parameter).

2. Press PAGE ▷ and then Knob 3 (Learn). Send a MIDI CC message from your foot controller, keyboard, etc.

   The CC number appears above Knob 3 (CC#).

   📌 NOTE: To manually select a MIDI CC, turn Knob 2 (Controller) to select "MIDI CC" and Knob 3 to the desired MIDI CC number.

3. If desired, press PAGE ▷ and turn Knob 1 (Min Value) and Knob 2 (Max Value) to set the range you wish to control.

   💡 TIP: To reverse controller behavior, swap the min and max values.

4. Press ⌂ when finished. Remember to save your preset to retain all assignments!

Green Bank (Looper Mode)

The green bank is dedicated to using the looper within the HX Stomp. Remember, in order to use the looper features you must have one of the blocks assigned to the "Looper" within the Stomp. All of the buttons listed below are pre-programmed and cannot be user assignable.

- Short Press Button A - toggles between record and overdub
- Short Press Button B - stops the active loop. If you press the record button (button A) after stopping the active loop, the Stomp will automatically erase the previous loop and begin to record a new loop.
- Short Press Button C - plays the recorded (or overdub'd) loop
- Long Press Button B - stops the looper, exits the Green Bank, and returns back to the Red Bank
- Long Press Button C - toggles between undo and redo the most recent loop
- Double Press Button C - exits the looper bank and returns to red bank. If a loop is currently playing, you can exit the looper bank and use the red bank to toggle effects on/off while the loop is still playing. You must return to looper bank to stop the loop.

Blue Bank (Tap/Tuner Mode)

The blue bank is used to access tap tempo and the tuner. When in the blue bank, the follow buttons have been pre-programmed and cannot be user assignable.

- Short Press Button A - toggles the tuner on/off
- Short Press Button B - exits the Tap/Tuner Mode
- Short Press Button C - tap tempo

Navigating the Banks

The JET Micro has three different banks (Red, Green, & Blue), each bank is identified by the single color changing LED and offers unique features to control your HX Stomp.

When the pedal first powers up it will automatically pull up the red bank (Stomp Mode). To navigate from the red (Stomp Mode) and green (Looper Mode) banks, quickly press and release all 3 buttons simultaneously to enter the green bank. Once in the green bank, a double press of button C will exit and return to the red bank.

The blue bank (Tap/Tuner Mode) can be called up in either the red or green bank. To access the blue bank, simply press and hold all 3 buttons for at least 3/4 of a second and then release the buttons. To exit the blue bank, simply press the B button and the pedal will return to whichever bank you were previously in (red or green).

Global Settings

Access various features of the Micro

Controlling External MIDI Pedals

For detailed information about this feature and how it works, please visit the <u>Description</u> page.

> To enable or disable this feature, turn power off and back on to the Micro. While the Micro is in the startup phase (blinking LED's) press down button A and continue to hold it down. Once you are in the global settings (the LED will either be solid green or red) pressing button C will toggle the LED between red and green. If the LED is green, this feature is enabled, if red, this feature is disabled. Once you have reached your desired setting, simply release button A and the Micro will save your settings into permanent memory and exit the global settings.

Turning Off Double Press

In order for the Micro to tell the different between a single press and a double press, there is a little bit of timing magic that has to happen behind the scenes. Unfortunately this will cause a slight delay between the time you perform a single press and the time a block (or effect parameter) is changed. While this slight delay is minimal (1/2 of a second) this may be undesirable for some users. If you only need single press actions (access to 3 blocks) and not double press actions (access to 6 blocks) you can turn off the double press action (and it's respective delay) by following the steps below.

> To enable or disable this feature, turn power off and back on to the Micro. While the Micro is in the startup phase (blinking LED's) press down button B and continue to hold it down. Once you are in the global settings (the LED will either be solid green or red) pressing button C will toggle the LED between red and green. If the LED is green, double press is enabled, if red, double press is disabled. Once you have reached your desired setting, simply release button B and the Micro will save your settings into permanent memory and exit the global settings.

Always Active Tap Tempo

For detailed information about this feature and how it works, please visit the <u>Description</u> page.

To enable or disable this feature, turn power off and back on to the Micro. While the Micro is in the startup phase (blinking LED's) press down button C and continue to hold it down. Once you are in the global settings (the LED will either be off, solid red, green, or blue) pressing button A will toggle the LED between off, red, green, or blue.

If the LED is:

○ Off - tap tempo is disabled

○ Red - button A is "Always Active" tap tempo and will no longer toggle blocks or effect parameters

○ Green- button B is "Always Active" tap tempo and will no longer toggle blocks or effect parameters

○ Blue - button C is "Always Active" tap tempo and will no longer toggle blocks or effect parameters

Once you have reached your desired setting, simply release button C and the Micro will save your settings into permanent memory and exit the global settings.

FAQ

Frequently Askes Questions

Can I Update the Software on my Old Micro?

Yes, currently we only have a solution for Windows users, however please check back as we are working on a solution for Mac users.

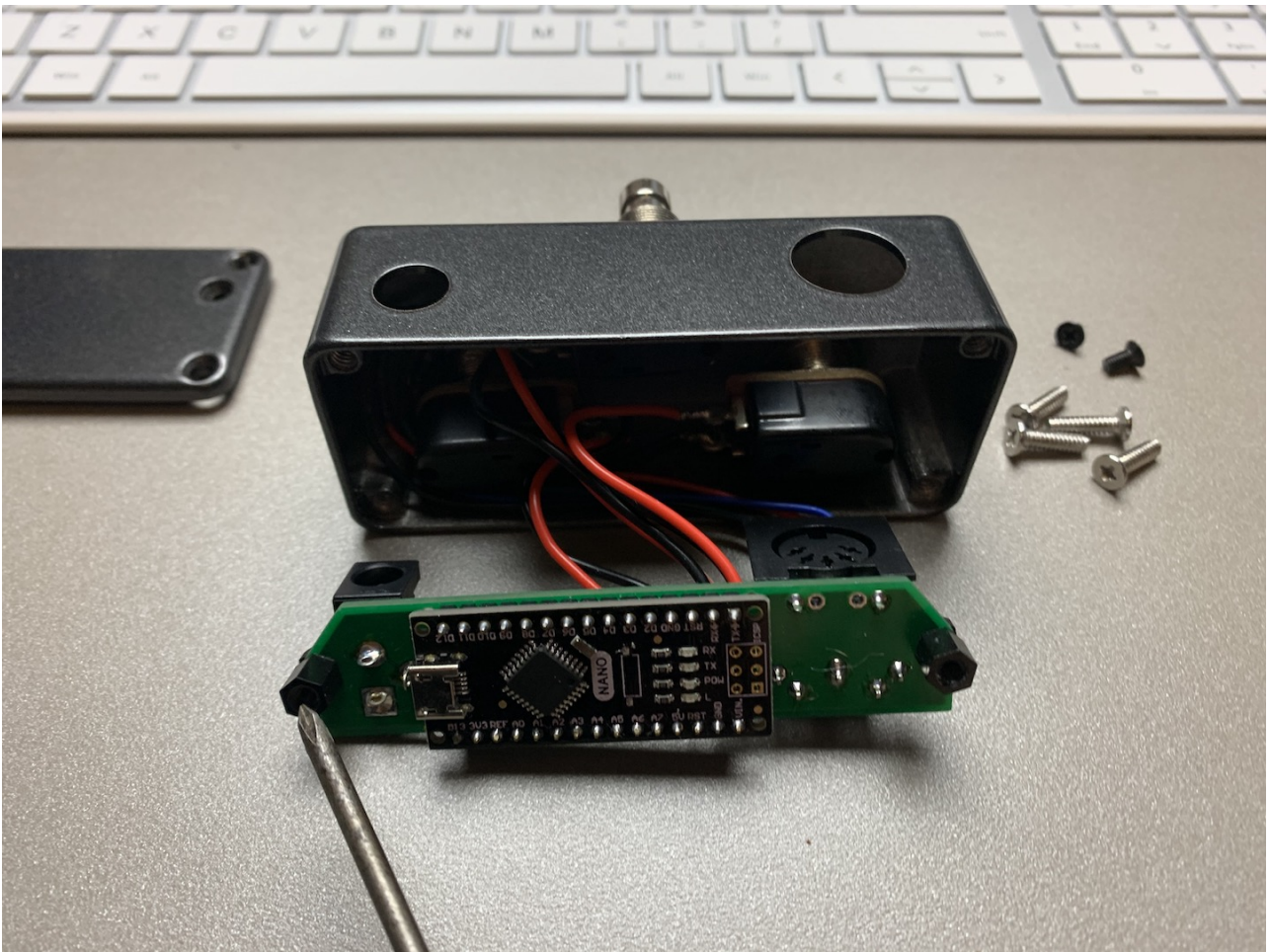 In order to update your Micro please follow these steps below:

1. Remove the backplate by removing the four silver screws holding it into place.
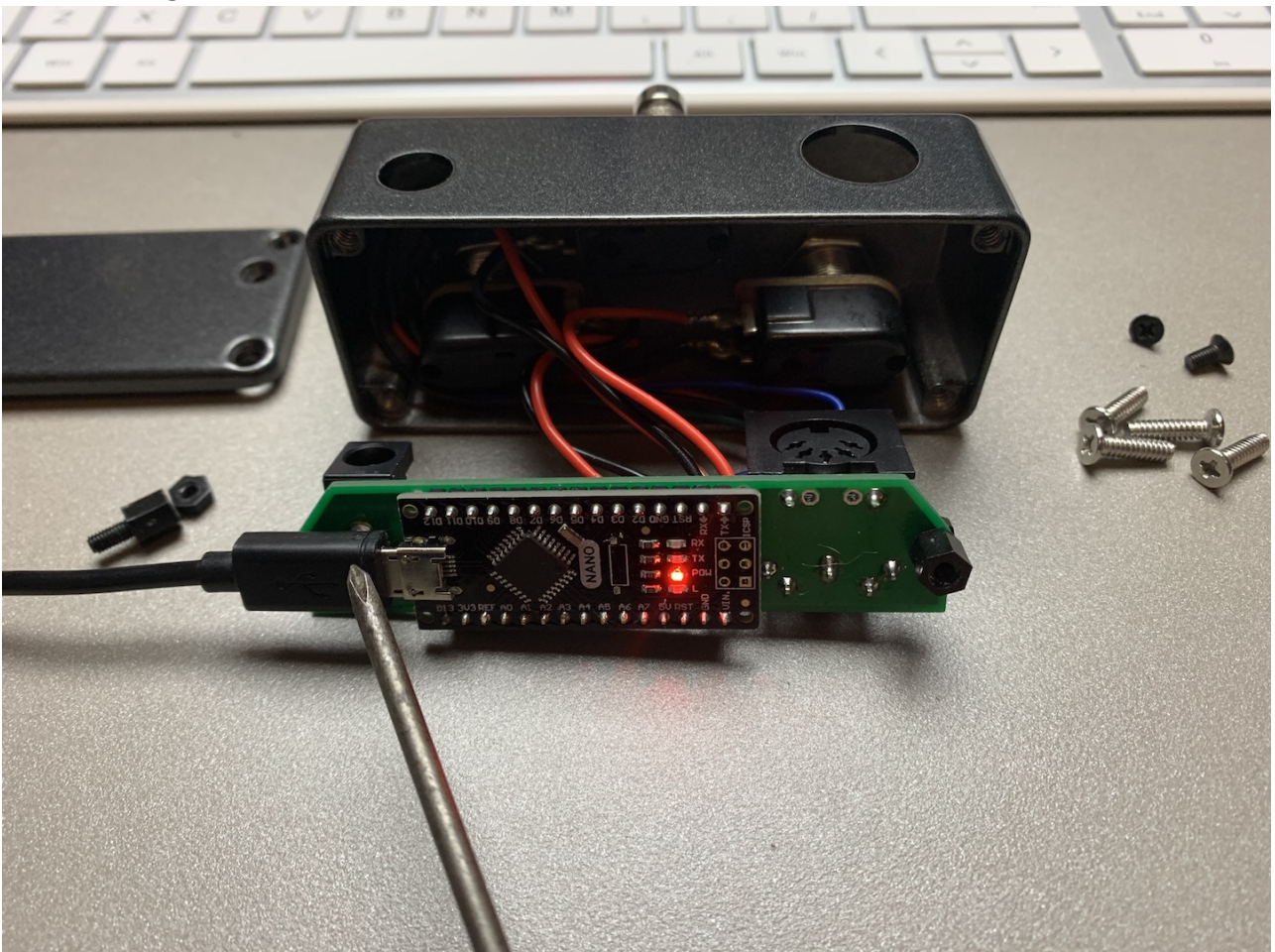

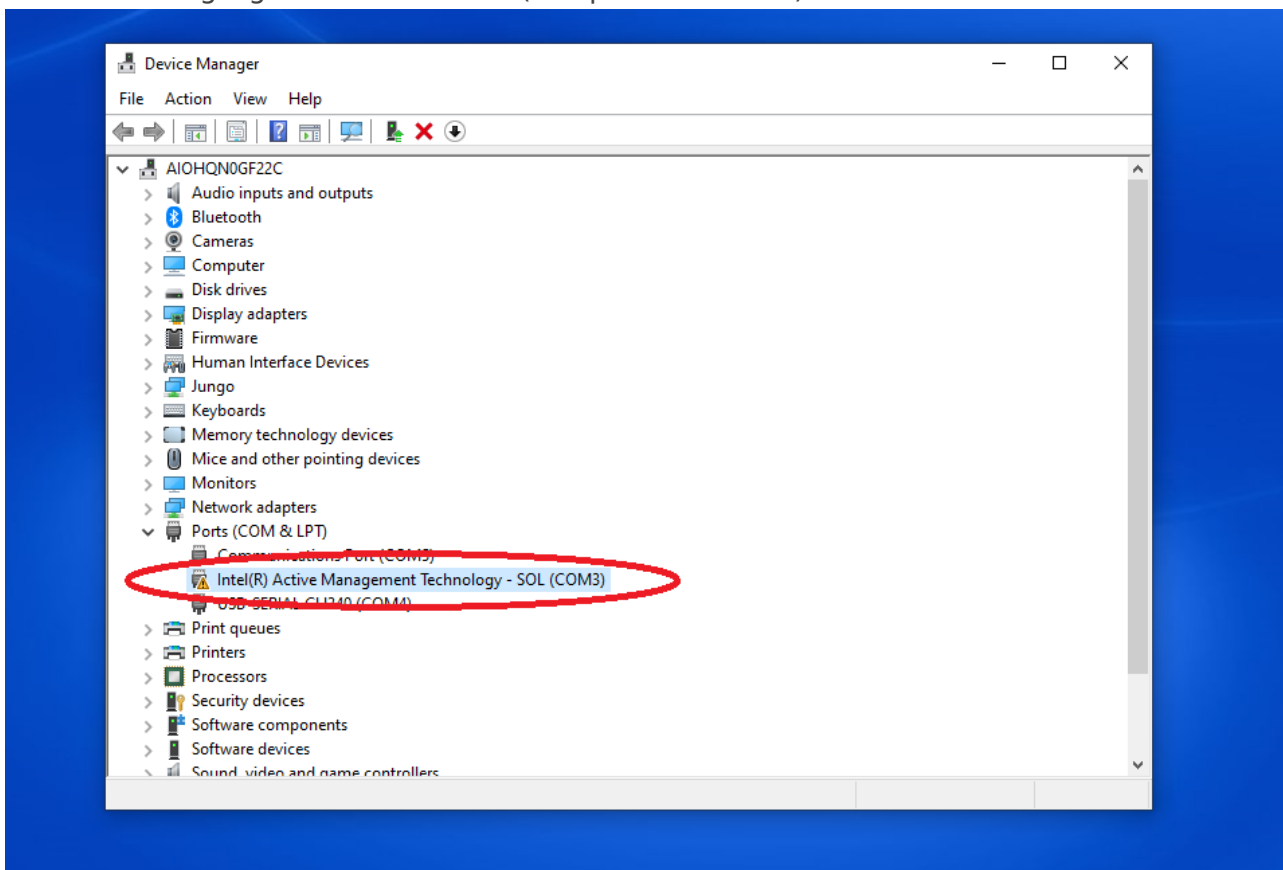2. Remove the backplate from the PCB by removing the two black screws.
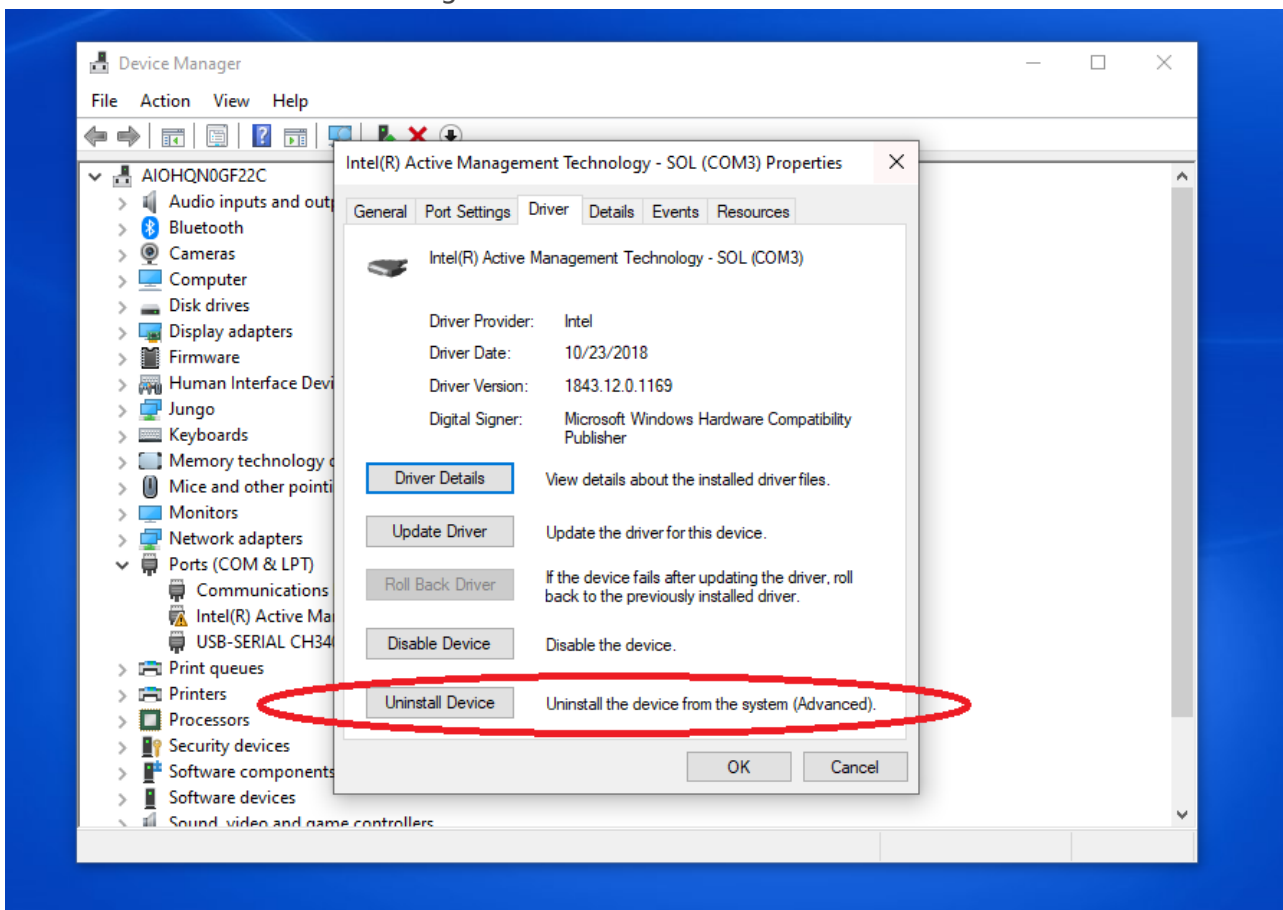
3. Remove the stand-off located next to the USB port.

4. Plug a micro USB into the usb port. Once plugged into your computer, your computer should recognize the device.
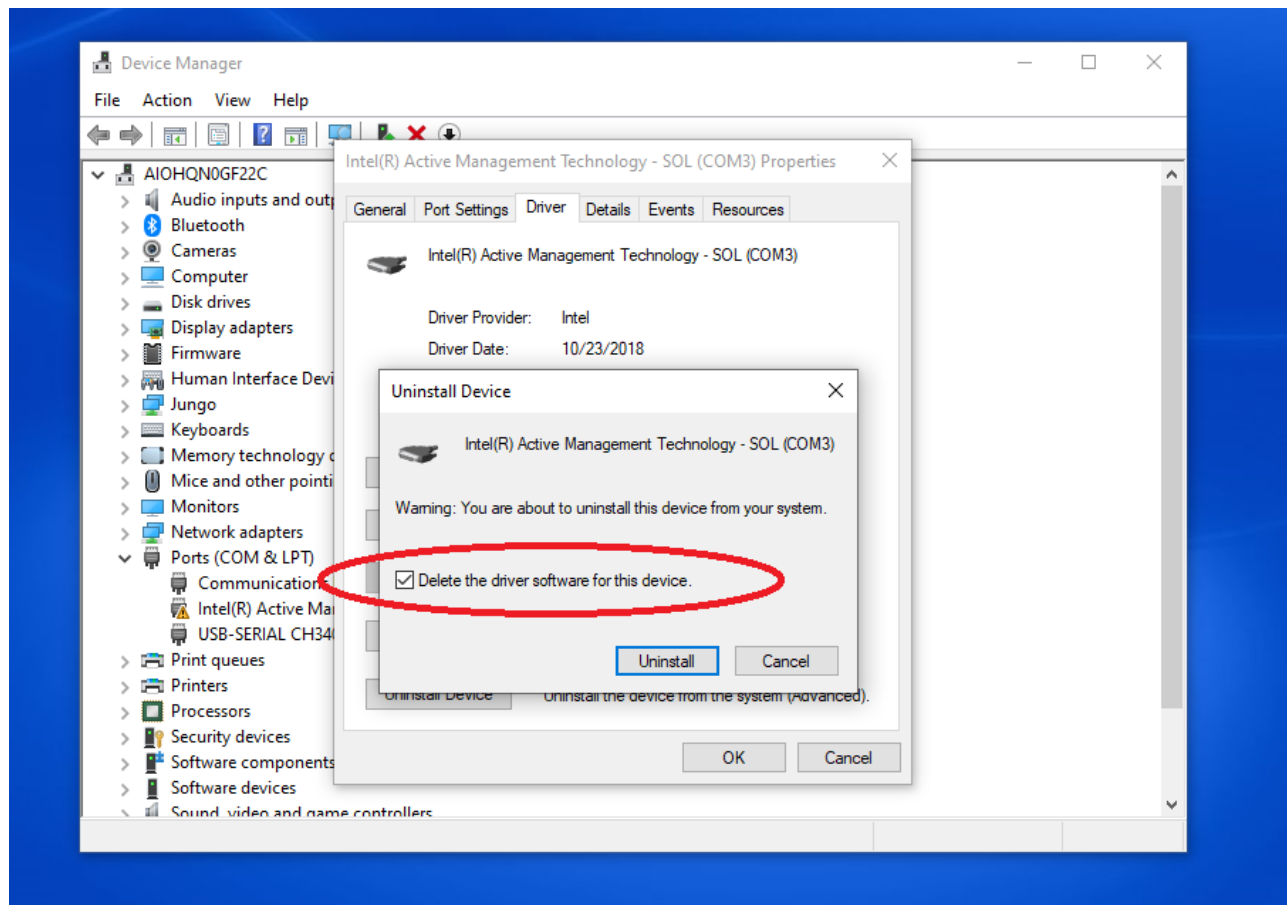
Some Windows 10 users may experience issues with bad drivers for the Micro, to make sure your computer can talk to the Micro open the Device Manager and see if there is a Yellow warning sign next the device (see pictures below).
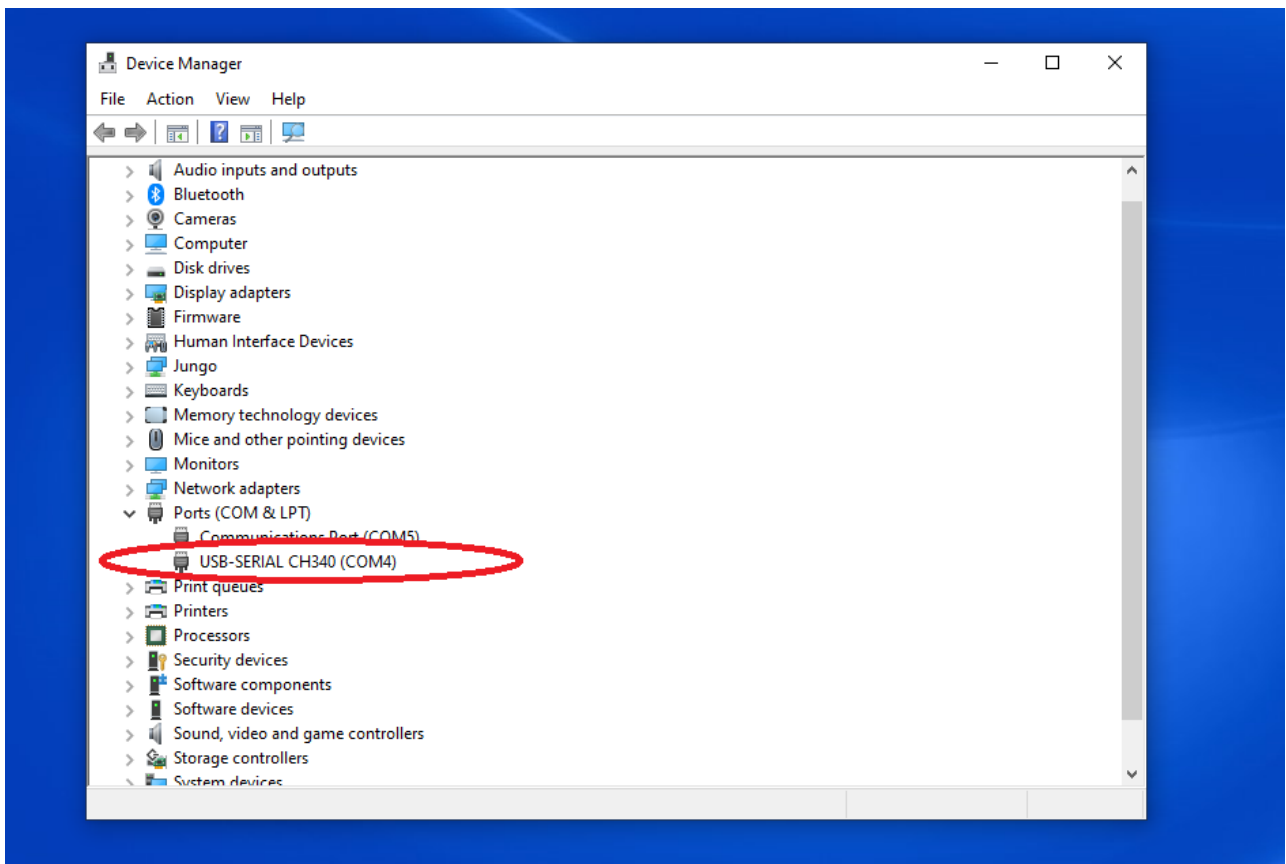

If you have the Yellow warning sign, just double click the device and click the Uninstall Device button in the next dialog window.
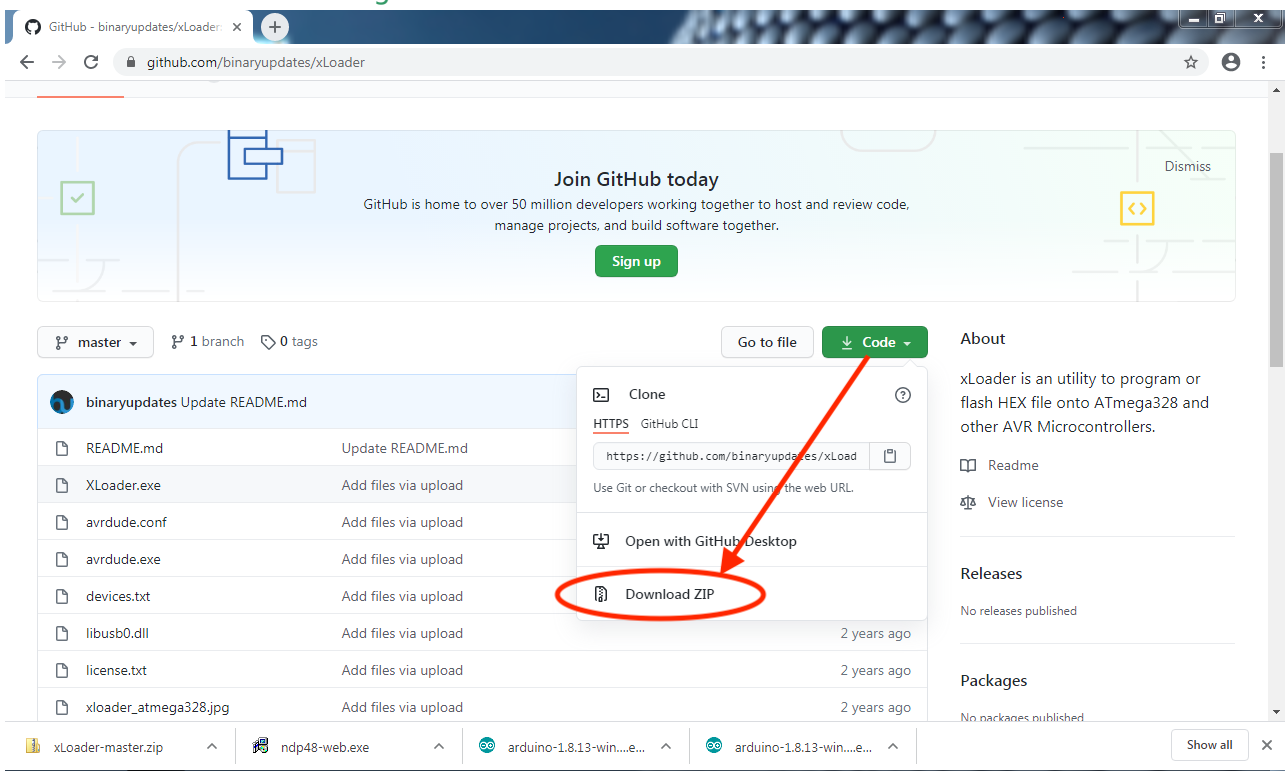
From here make sure you check the box that says to delete the driver software for this device and then click the Uninstall button.

Once this is finished, unplug the Micro from your computer and then plug it back it. Have a look at the Device manager to confirm your Micro is showing up with now warning signs, if there are no warning signs you are good to continue to the next step.
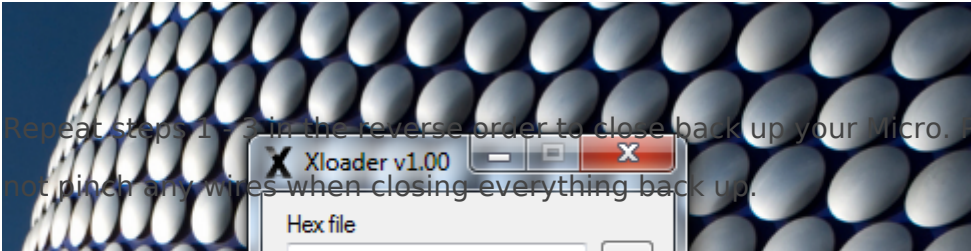
5. Using your web browser go to: github.com/binaryupdates/xLoader to download the free software XLoader. Hit the green "Code" button and select Download ZIP.

6. Once you've downloaded XLoader, run the installer file and install the application to your computer.

7. Download the .hex and save it to your Desktop, download link is found here: JET Micro HX3.11.hex

8. Open the XLoader application and upload the .hex file downloaded from the previous step. Choose Duemilanove/Nano(ATmega328) as the Device and select the COM port your Micro is plugged into. Please note that your COM port may vary depending on your computer, if you noticed in step 4 it was COM port 4 but below on a different computer it is COM port 3. Then hit the "Upload" button, once the software has finished loading, your Micro should be all set to use the new features!

9. Repeat steps 1 - 3 in the reverse order to close back up your Micro. Pay close attention to not pinch any wires when closing everything back up.

Will my Old Micro Still Work with the New HX 3.0 Update?

Most definitely! Just remember when you upgrade your HX Stomp, it resets its global settings so you will have to do the quick setup again after the update.