PREPARISTIONS

Parts:
1x Arduino Uno Board (like this one: https://www.sparkfun.com/products/11021)
1x USB Host Shield (like this one: https://www.sparkfun.com/products/9947)
2x 5 DIN sockets for MIDI In and Out
2x 220 Ohm resistors

Software:
Editor and programmer:
Arduino IDE 1.0.5

Libraries:
USB Host shield 2.0 (https://github.com/felis/USB_Host_Shield_2.0)
Arduino MIDI (http://playground.arduino.cc/Main/MIDILibrary)
USBH_MIDI from branch IOP_ArduinoMIDI by Yuuichi Akagawa
(https://github.com/YuuichiAkagawa/USBH_MIDI/tree/IOP_ArduinoMIDI)

For project state: 1x mini bareboard, some cables – in final version you could use goldpins on USB Host shield and solder here resistors etc

Attention: At this moment it is only bidirectional communication between MIDI 5 DIN In and OUT and USB MIDI Host. Communication with computer isn’t possible!
ASSAMBLING

1. Connect 5, 2, 4 pins of 5 DIN socket with cables.

MIDI Schematic

5 – TX or RX (i.e. TX for MID OUT socket, RX for MIDI IN socket)
2 – GND
3 - +5 V via 220 Ohm
2. Use this schematics for assembling. It is pretty easy.
a. Install Arduino IDE (read some basics here: [http://learn.adafruit.com/category/learn-arduino](http://learn.adafruit.com/category/learn-arduino). Lessons from 1 and 2 would be enough). Don’t ask read this!
b. then put USB_Host_Shield_2.0 library in folder “USB_Host_Shield_2” (create it if needed).

c. Then put Arduino MIDI in “MIDI” folder  
d. Then put USBH_MIDI_IOP in “USBH” folder
e. Open Arduino IDE and open sketch: bidrectional_converter (Menu File > Examples > USBH> bidrectional_converter)

f. Connect Arduino board to computer (how? Look at point A)
g. Load sketch to board (how? Look UP :)
h. Disconnect form computer if you like, and power up Arduino via USB or power supply.
i. Use it with Fishman TriplePlay or any other USB MIDI class compliant device)
j. If you have problem after steps A-J ask on VGuitar Forum. 😊