



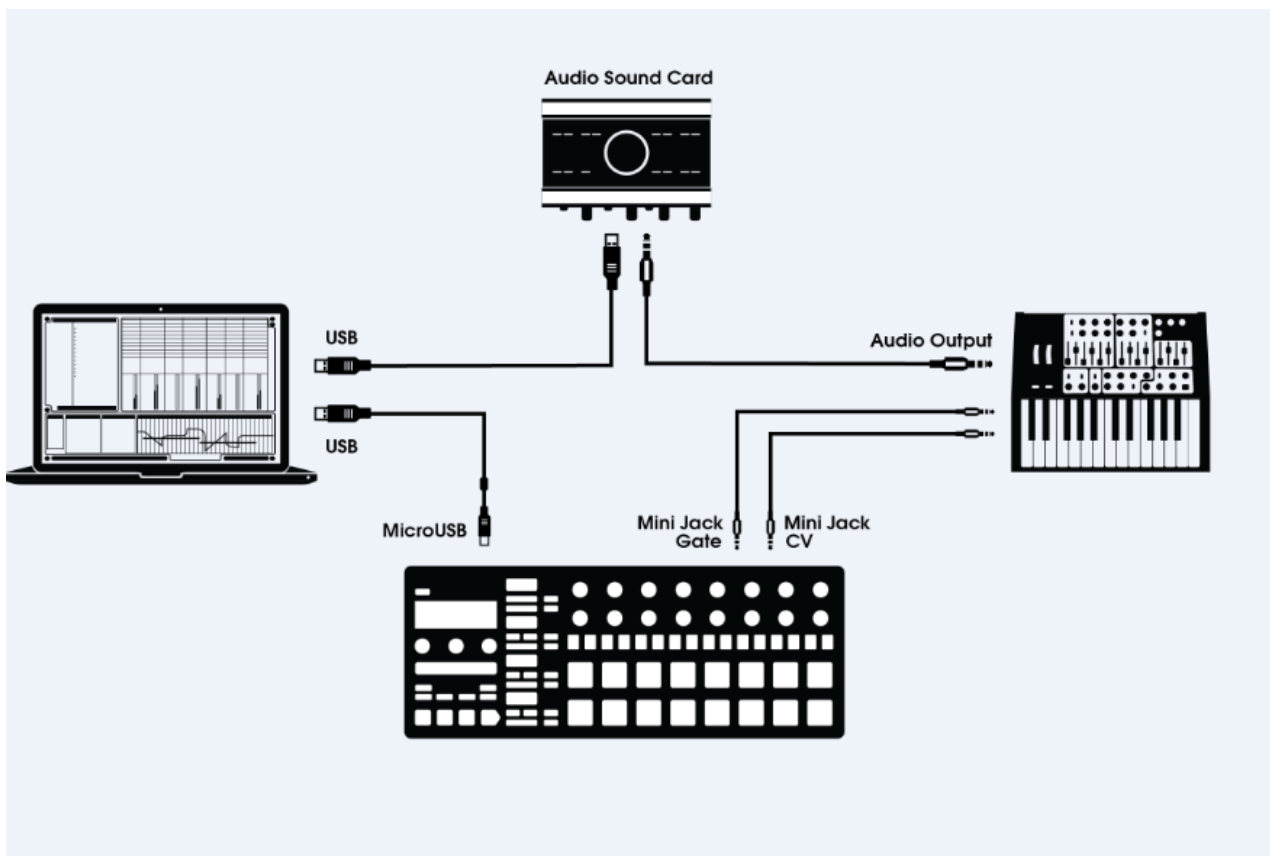
# AVOIDING GROUND LOOP WITH BEATSTEP PRO

## 1. Quick reminder

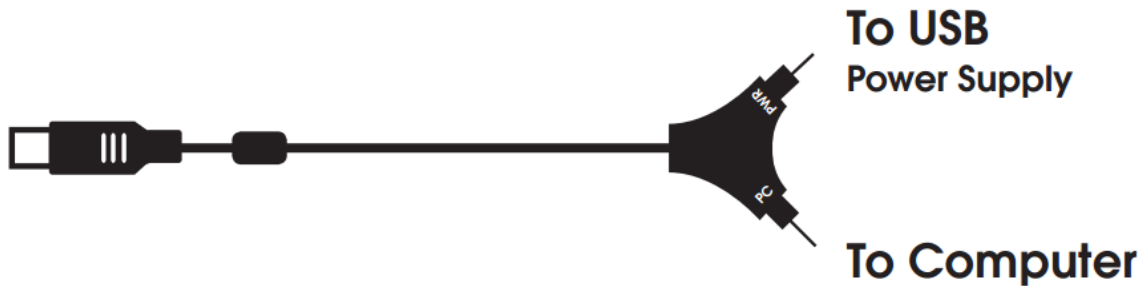
Ground Loop background noise might occur when 2 or more devices share ground connection with BeatStep Pro.

Ground loop is a common issue when using several audio devices connected to two points that are supposed to be at the same potential.

## 2. Typical setup where you can face Ground Loop noise



### 3. How to avoid the ground loop noise



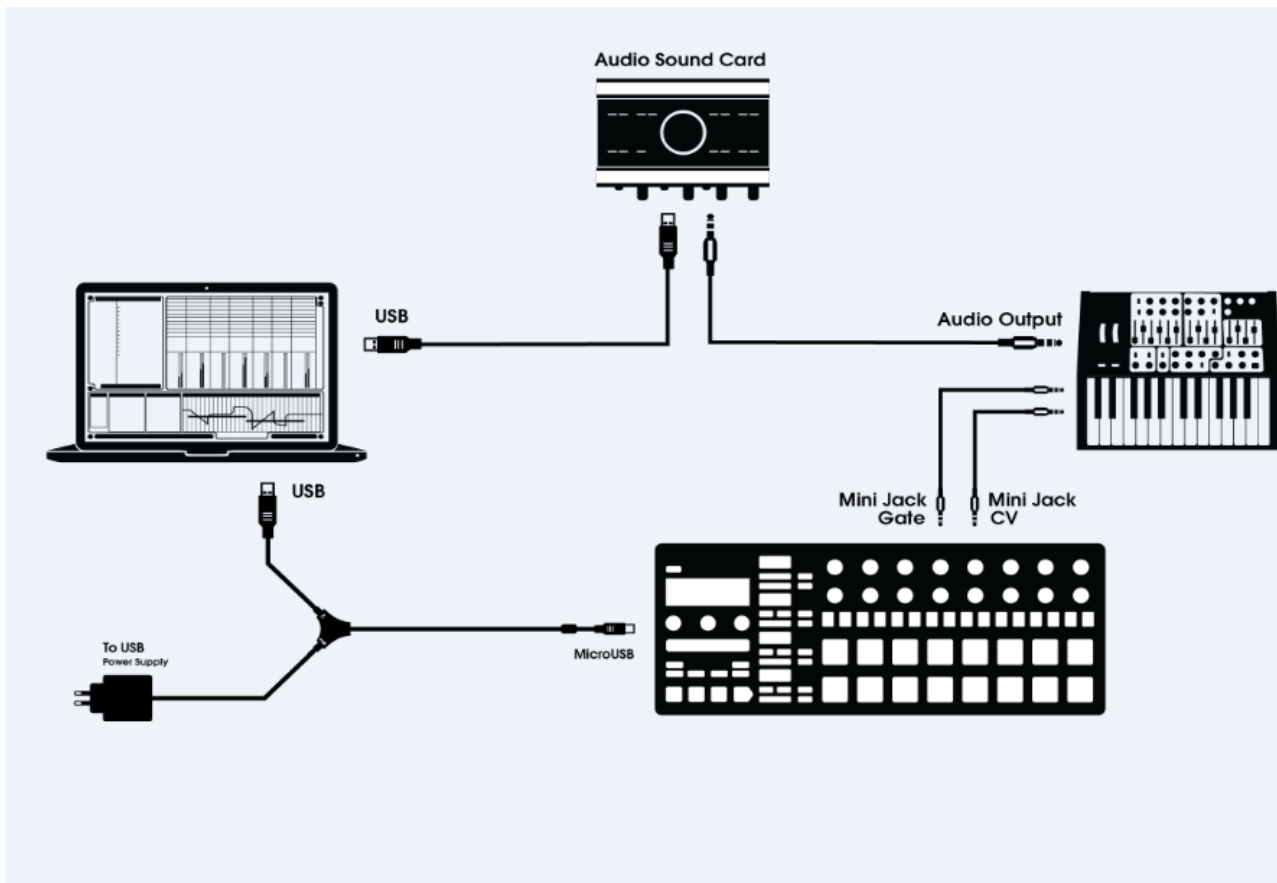
- **PWR Connector** : This side of the “Y” adaptor should be connected to a power source like a USB power supply with a minimum of 500mA.
- **PC connector** : This side of the adaptor only sends and receives DATA and should be connected to your computer.
- **Male micro usb plug** should be connected into your BeatStep Pro socket.



**PC connector MUST be connected on a back usb port and not on the front panel.**

**You must connect PWR and PC before connecting/power up your BeatStep Pro.**

## Example :



## More info about Ground Loops :

- **Ground Loop Noise in the NI USB-5132/5133 :**  
[http://zone.ni.com/reference/en-XX/help/370592N-01/digitizers/513x\\_ground\\_loop\\_noise/](http://zone.ni.com/reference/en-XX/help/370592N-01/digitizers/513x_ground_loop_noise/)
- **Solving Laptop Noise and Ground Loop Audio Interference**  
<https://www.youtube.com/watch?v=jSA2F1AwboU>