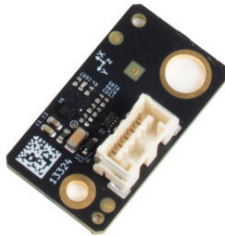


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# How to use accelerometer (MK3.5/S)

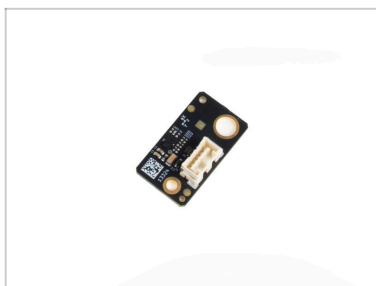


[help.prusa3d.com/g735910](https://help.prusa3d.com/g735910)

Scan the QR code to  
display the latest  
version of this  
chapter.



## STEP 1 Introduction



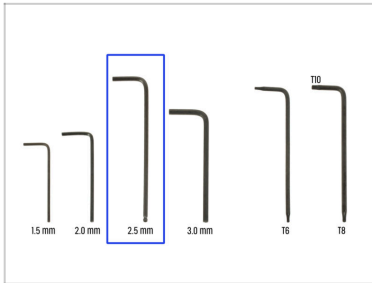
- ◆ This guide will take you through the **Input shaper calibration** using an **accelerometer** on your **MK3.5** or **MK3.5S**.

ⓘ The input shaper is calibrated from factory. However, if you made some modifications to the printer hardware, it might be beneficial to re-calibrate the settings using the accelerometer.

- ◆ All necessary parts are available in our eshop [prusa3d.com](https://prusa3d.com).

ⓘ Note that you have to be logged in to have access to the spare parts section.

## STEP 2 Tools necessary for this chapter



● **For this chapter, please prepare:**

● 2.5mm Allen key

## STEP 3 Parts preparation



● **For the following steps, please prepare:**

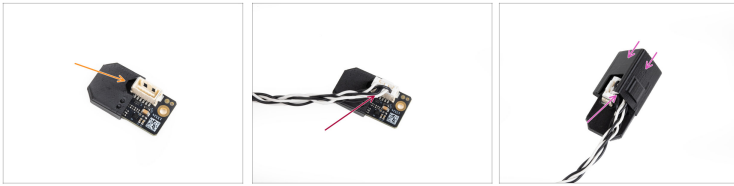
● Accelerometer cable (1x)

● Accelerometer cover (1x)

● Accelerometer bracket (1x)

● Accelerometer (1x)

## STEP 4 Accelerometer assembly



- ✦ Attach the cover onto the accelerometer. Note that the notch on the cover fits around the connector.
  - ✦ Connect the cable into the accelerometer.
  - ✦ Attach the bracket onto the assembly.
- ⚠ Make sure the cable goes underneath the top part of the bracket and no cable is getting pinched.**

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## STEP 5 Preparing the printer



- ◆ Make sure your printer runs firmware 6.1.0 or newer.
  - ◆ If your printer has an older firmware, please upgrade to 6.1.0 or newer.
- ⚠ Before you start, make sure that the printer is switched OFF and the power cord is disconnected from the printer (power supply unit)!**

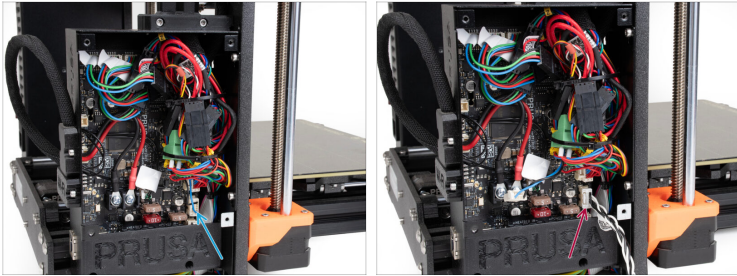
## STEP 6 Opening the xBuddy box



- ◆ From the left side of the printer, loosen four M3 screws on the xBuddy box cover and remove it from the printer.
- ◆ Find the print fan connector on the marked position on the xBuddy board.

⚠ The connector can be hidden behind the cable bundle. In that case, try to move the cable bundle away carefully. Make sure not to damage or disconnect any of the cables in the bundle.

## STEP 7 Connecting the accelerometer



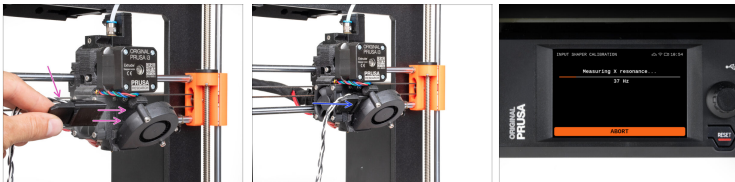
- ◆ Disconnect the marked connector on the xBuddy board. Leave it temporarily disconnected.
- ◆ Connect the accelerometer cable into the same connector on the xBuddy board.
- ◆ Leave the xBuddy box open, until the calibration is complete.
- ⚠ **Do not touch any of the internal components while the printer is on and running.**
- ◆ Leave the connected accelerometer aside for now. Make sure it doesn't interfere with any of the printer's moving parts.

## STEP 8 Calibration part 1



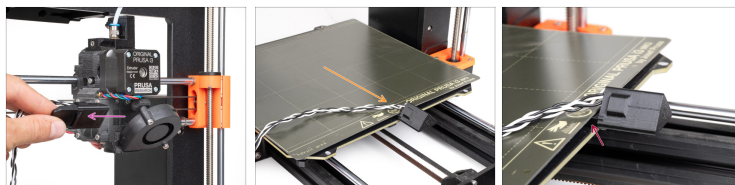
- Connect the printer and turn it on.
- Navigate to the menu **Settings > Input Shaper > Calibration**
- The printer will park its axes.

## STEP 9 Calibration part 2



- Once prompted to by the on-screen wizard, attach the accelerometer assembly onto the extruder.
  - First, make sure the assembly is oriented as seen in the picture. The cable should be pointing towards the extruder.
  - Insert the assembly into the space between the print-fan and the extruder-front part. Make sure it is firmly attached.
- Continue with the on-screen Wizard.

## STEP 10 Calibration part 3



- ◆ Once prompted to by the on-screen wizard, remove the accelerometer assembly from the extruder.
- ◆ Lift the print sheet on the heatbed. Attach the protruding part on the accelerometer by the print sheet.
- ⓘ Make sure the cable is on top of the print sheet.
- ◆ Make sure the accelerometer holds firmly on the heatbed.
- ◆ Proceed with the on-screen wizard.

## STEP 11 Calibration part 4



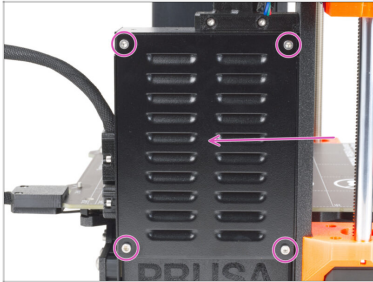
- Once the calibration is successful and complete, select YES to store the new values in the printer.
- Remove the accelerometer from the heatbed and re-seat the print sheet so that it is aligned properly.
- Turn off the printer and disconnect it from power.

## STEP 12 Disconnecting the accelerometer



- Disconnect the accelerometer from the xBuddy board.
- Connect the print fan connector back into the xBuddy board.
- Verify all the connections are exactly the same as before.

## STEP 13 Covering the xBuddy box



- Cover up the xBuddy box. Fix the cover in place using the four M3 screws you have removed earlier.

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## STEP 14 Finish



- Congratulations. You have just recalibrated the input shaper.
- Turn on the printer and run a test print.



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