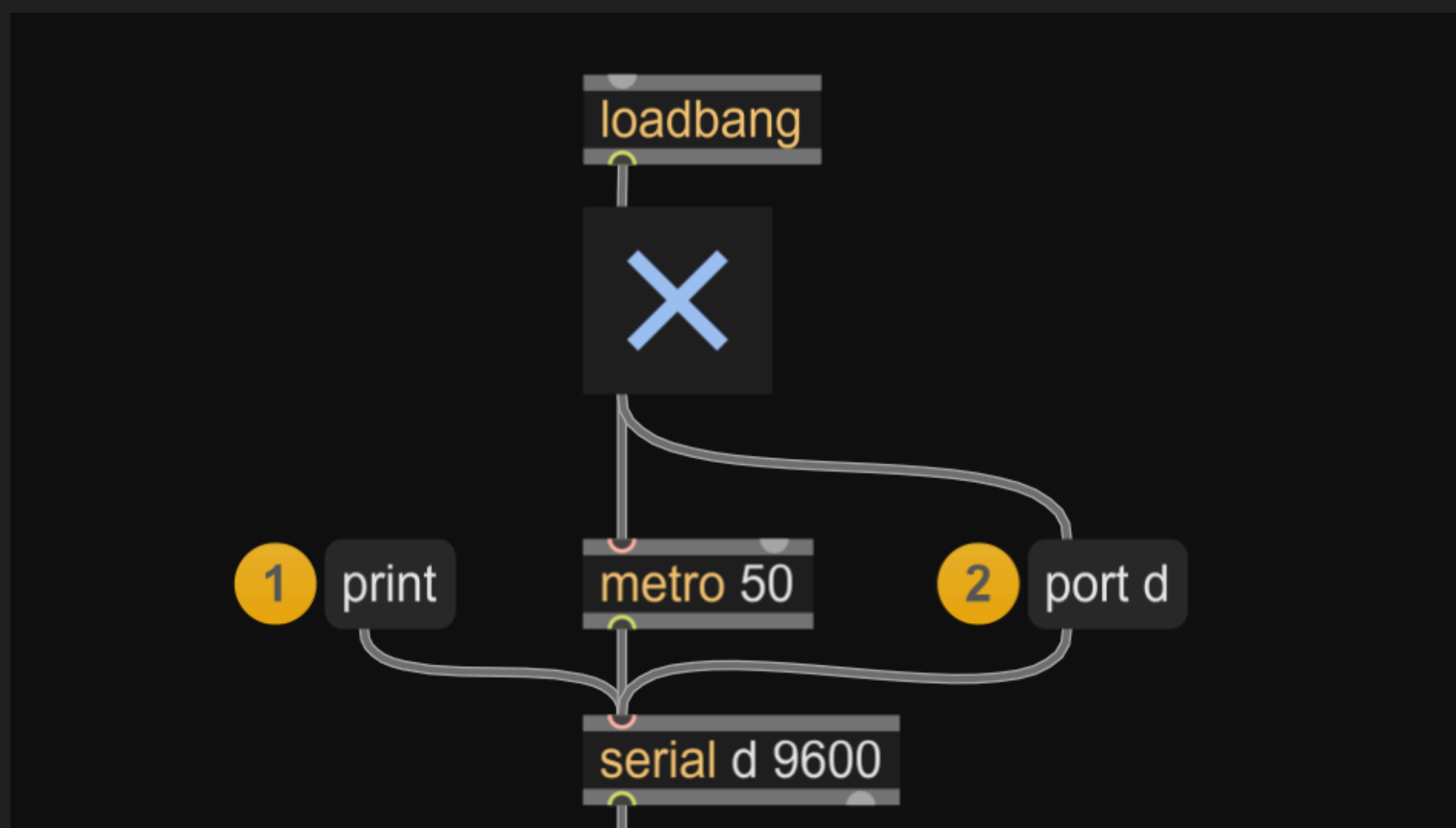# USER GUIDE.

Follow the steps below to explore its features.

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0   CONNECTION.

First-time setup:
- Open the patcher in Max/MSP (USB connect first).
- Click the print button (① in the figure) to see which serial port the Arduino is using (e.g. serial: port d: COM4).
- Update the message box next to it (②) with the correct port name (e.g. port d).
- Close the patcher after setting the port.

Normal connection:
- In Arduino IDE, open the Serial Monitor and check that the data stream is visible.
- Close the Serial Monitor (important: it must be closed, otherwise Max/MSP cannot access the port).
- Open the Max/MSP patcher again — now the data will be received correctly.

USER GUIDE.

Follow the steps below to explore its features.

1
BASIC.

- **Each finger** triggers a different drum sound (kick, snare, hi-hat, tom, cowbell).
- **Bend a finger** to play a drum.
- **Faster bends = stronger hits.**

2
CONTROL.

- **Hold a finger bent** to enter parameter mode.
- In this mode:
  - → **Pitch** tilt (up/down) = **pitch**
  - → **Roll** tilt (left/right) = **decay**
- Straighten your hand to exit.

3
SEQUENCER.

- **Swing hand down** → start/stop sequencer.
- **Twist wrist** → adjust BPM.
- **Tap fingers** → record pattern in real time.
- **Make a fist** → clear current pattern.

4
PRESET.

- **Show "1" hand gesture** → load preset 1.
- **Show "2" hand gesture** → load preset 2.
- **Show "3" hand gesture** → load preset 3.
- **Show "OK" hand gesture** → save current pattern to a preset.
(ONLY WORKS WHEN THE SEQUENCER IS STOPPED.)

USER GUIDE.

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5   TROUBLESHOOTING.

- **No data in Max/MSP** → Ensure the serial monitor in the Arduino IDE is closed to avoid port conflicts. Check that the USB cable is connected and update the correct serial port in Patcher. If these don't work, close Patcher, open the serial monitor in the Arduino IDE, close it, and then reopen Patcher.

- **No sound output** → Confirm that audio output is enabled in Max/MSP and that the audio driver is set to the correct device.

- **Unable to recognise gestures** → Ensure the glove is worn correctly and that the flex sensor is aligned with each finger. Use the LED feedback to verify that the correct finger is flexed. If necessary, try recalibrating the sensor range in the Arduino code.

- **System lag** → Reduce other running applications and confirm that the USB cable is securely connected.