To ensure the proper setup of the Arduino IDE, follow these steps and install the necessary libraries and plugins:

1. Libraries Installation:
   * [Control Surface Library](https://tttapa.github.io/Control-Surface-doc/Doxygen/d8/da8/md_pages_Installation.html) by tttapa
   * [Joystick](https://github.com/gmarty2000-ARDUINO/arduino-JOYSTICK) by Giuseppe Martini
   * [RF24](https://www.arduino.cc/reference/en/libraries/rf24/) by TMRh20
   * [light\_CD74HC4067](https://www.arduino.cc/reference/en/libraries/light_cd74hc4067/) by SunitRaut
   * [Encoder](https://www.arduino.cc/reference/en/libraries/encoder/) by Paul Stoffregen
   * SPI
2. Code Upload:
   * Upload the code from FinalTest\_TxL to the left keypad.
   * Upload the code from FinalTest\_TxR to the right keypad.
   * Upload the code from FinalTest\_Rx to the base station.
3. Plugin and Synthesizer Setup:
   * Download all plugins from the provided plugin folder.
   * Download the synthesizer program "[Kushview Element.](https://kushview.net/element/download/)"
   * Open NovelMIDISynth.els from the Synthesizer Plugins & Session Folder in Element.
4. Synthesizer Configuration:
   * In Element, navigate to File > Preferences > MIDI and select "Control Surface Library" if not already chosen.
   * Exit the preferences screen and double-click on the MIDI Monitor as shown in Figure i below.

By following these steps, you'll have the necessary components installed, codes uploaded, and synthesizer configured for your project.



*Figure i. The image above shows the connections for all plugins within the synthesizer program.*