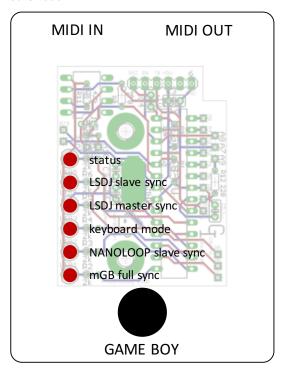
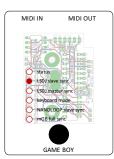
# ArduinoBoy Documentation **Modes Details**



#### Schematic



# Mode 1 - LSDJ as MIDI Slave Sync



Slave your Game Boy running LittleSoundDJ to your midi sequencer or Digital audio workstation.

You can send the arduinoboy midi notes to change sync resolution and start/stop the LSDJ sequencer.

LSDJ Slave Mode Midi Note

- 48 C-2 Sends a Sequencer Start Command
- 49 C#2 Sends a Sequencer Stop Command
- 50 D-2 Toggles Normal Tempo
- 51 D#2 Toggles 1/2 Tempo
- 52 E-2 Toggles 1/4 Tempo
- 53 F-2 Toggles 1/8 Tempo

Higher note values than these map LSDJ song position row offset on a Song Start.

In LSDJ the sync mode should be set to Slave

# Mode 2 LSDJ as MIDI Master Sync.



Send Midi sync with LSDJ as a midi clock master, LSDJ also sends a Midi Note on message that corresponds to the song row number on play.

In LSDJ the sync mode should be set to Master

# Mode 3 LSDJ PC Keyboard mode.



This mode emulates the PC Keyboard Mode built into LSDJ, allowing you to control the following aspects of LSDJ:

### Features:

- The first octave controls M-U-T-E,
- Cursor control (LSDJ Live mode only),
- Table selection
- Table cue

PC Keyboard mode midi note map

- 36 C-1 Mute Pu1 Off/On
- 37 C#1 Mute Pu2 Off/On
- 38 D-1 Mute Wav Off/On
- 39 D#1 Mute Noi Off/On
- 40 E-1 Livemode Cue Seguence 41 - F-1 Livemode Cursor Up
- 42 F#1 Livemode Cursor Down
- 43 G-1 Livemode Cursor Left
- 44 G#1 Live mode Cursor Right
- 45 A-1 Table Up
- 46 A#1 Table Down
- 47 B-1 Cue Table
- 48+ Notes from this note up will accept midi in from an external keyboard or sequencer and allow you to play the notesC-2 to C-8.
- Midi Program Change messages will select from instrument table
- Default Midi channel is 16. You can set this in the top of the main source file in the archive, or via the Max Pat editor.

In LSDJ the sync mode should be set to Keyboard

# ArduinoBoy Documentation Modes Details



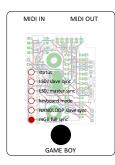
# Mode 4 MIDI to Nanoloop sync



Sync <u>Nanoloop.</u> to external midi clock signals sent to the midi in.

In Nanoloop, the sync mode should be set to slave.

## Mode 5 Full MIDI with mGB



mGB is a Gameboy cartridge program (You need a Flash Cart and Transfer hardware) That enables the Gameboy to act as a MIDI supported sound module that allows full control of the Game Boy sound hardware.

It works with the old DMG Gameboy as well as GBC/GBA.

# Mode 6 LSDJ MIDIMAP



Lsdj will sync to incoming MIDI sync, and incoming MIDI notes are mapped to LSDJ's song row #. The currently selected row's MIDI note is displayed on the top right of the LSDJ screen, and incoming MIDI notes will also display the relative song row number in the same location.

In LSDJ the sync mode should be set to Live/Sync. This requires a special version of LSDJ, which can be found in your account on the LSDJ website.

# Mode 7 LSDJ MIDIOUT



Each of the 4 gameboy channels send MIDI data on 4 midi channels by the use of effects commands:

- Nxx Sends a MIDI Note Absolute to the value placed in the effect. N00 sends note off, N01-N6F send midi notes 1 to 112.
- Qxx Sends a <u>MIDI Note</u> relative to the current channel's pitch. The effect value is a offset. so

QOC in PU1 would send a note 1 octave higher than what PU1 is currently playing. This is useful as a table command to track midi notes as normal notes in the sequencer.

- Xxx Sends a MIDI CC By default in Arduinoboy the high nibble selects a CC#, and the low nibble sends a value 0-F to 0-127. This can be changed to allow just 1 midi CC with a range of 00-6F, or 7 CCs with scaled or unscaled values.
- Yxx Sends a program/patch/preset change.

By default each channel of LSDJ is mapped to midi channels 1-4. For example note commands from PU1 will be sent to midi channel 1.

In LSDJ the sync mode should be set to Midiout. This requires a special version of LSDJ, which can be found in your account on the LSDJ website.