

- A. Keyboard: G2-C4. Full range is G-2 to C8. Will also transpose any recorded sequence. See "SHIFT" for latching
- B. **Red:** MIDI channel segment. 1-4.
- C. Green: Values segment.
- D. Octaves: 4 up and 4 down. Press both Octave buttons at the same time to return to center. Press SHIFT + octave down to enter loop sequence mode(the left most octave led will blink to indicate the mode).
  Press SHIFT + octave up to enter step sequence mode (the right most octave led will blink to indicate the mode). Pressing one of these twice will let you go back to manual play.
- E. MIDI Channel selection 1-4. SHIFT + MIDI enters in strumm mode. This mode will give you only short plucks of midi notes. This is handy for when you want to strumm a certain chord on rings or just friends. Arp led flashes to indicate strumm mode. When you enter arp strumm will be deactivated (otherwise you cant play arps) Strummed notes can be sequenced through the loop sequencer.
- F. VEL/OSC Velocity 0-127. In 1M mode velocity is recorded into a sequence and output on Yarns CV2. Try recording a different velocity for each note in your sequence and using CV2 output to modulate something.
  When "OSC mode" is on slider changes to Waveform selection. SHIFT + slider changes pulse wave init form
- G. ARP Range "0-4". "0" is off. Turns on at "1" with red LED. Turning with SHIFT and going past the 1 arp activation threshold turns on "Euclidean mode" with green LED. In "4T mode" used to turn on RG Rhythm Generator. 1 or higher will let you go in arp play mode and returning to 0 will let you go to manual play mode
- H. DIR Arp direction. Used also in "Euclidean mode" SHIFT + DIR changes pwm mod
- I. PAT Arp Pattern "S and 1-22". In "Euclidean mode" chooses Euclidean Fill "0-32". The arp uses the current sequence when S is selected
- J. FINE Fine tuning. In "Euclidean mode" chooses Euclidean Rotate "0-32". SHIFT + FINE changes the hold pedal mode used when tapping the SHIFT button when pressing keys
- K. SHIFT Special functions and Hold indicator. You can hold by pressing one or more notes and short pressing the SHIFT button. How notes will be held can be changed per midi channel bij SHIFT + FINE. The shift led will blink when the current channel is holding. The shift led will be on when another channel is holding.

- L. 3 & 7 When recording sequences in Yarns these will insert 3 or 7 ties. Together with SHIFT will insert 3 or 7 rests. In "Euclidean mode" will choose Euclidean Length -/+. In loop sequence (left most blink) mode the buttons will change the loop length. SHIFT + 3/7 for finer adjustments
  - a. 3 & 7 explained: Press "Record" on Yarns to record a sequence. It shows "step 01"
    - i. Insert any note in "step 01"...
    - ii. Press "3". You inserted 3 ties. Yarns will be on "step 5".
    - iii. Insert any note.
    - iv. Press "7". You inserted 7 rests. Yars will be on "step 13".
    - v. Press "3". You inserted 3 ties. Yarns will be on step "17".
    - vi. Press Record on Yarns exit recording. You recorded a 16 step sequence. This is how you can record sequences in Yarns super fast!

	3				7								3		
note	tie	tie	tie	note	tie	note	tie	tie	tie						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

- vii. Try inserting a kick on step 1, 5, 9, 13 by pressing 3 in between each one and exiting Yarns record mode on step 17. Takes 3 seconds (-:
- M. SLIDE Inserts a Slide. Legato must be turned on. Together with SHIFT chooses Sequence Clock Division "-"
- N. REST Inserts a Rest. Together with SHIFT chooses Sequence Clock Division "+"
- O. TIE Inserts a Tie. Together with SHIFT chooses Voicing (2P, 4P, 2>, 4>, 8>)
- P. MOD Vibrato. Independant for each channel. In "4T Mode" chooses Trigger Duration SHIFT + TUNE changes sustain envelope
- Q. **SPEED** Vibrato Speed. Independant for each channel. In "4T Mode" chooses Trigger Shape **SHIFT** + **SPEED** changes attack envelope
- R. TUNE Tuning System 0-33. SHIFT + TUNE changes decay envelope
- S. PORT Portamento. Only when Legato is off. SHIFT + TUNE changes release envelope
- T. LEG Legato on/off with LED indicator. Turn on for Slides. In "4T Mode" turns on Trigger Velocity Scale, used with Velocity Slider. SHIFT + LEG will change the sequence input response.
- U. **OSC DEF 4T**:
  - a. Default mode in center.
  - b. 4T mode changes SPEED, MOD, LEG, ARP to send 4T specific values. Remember that triggers in 4T come out of the Yarns CV outputs. Set the NO(TE) parameter to the trigger note you want for each Part. Default is "36, 38, 40, 42". I recommend setting it to "60, 62, 64, 65" which means C3, D3, E3, F3 which is the center octave setting. Save your Layouts in Yarns too.
  - c. OSC mode turns on an oscillator and loads a Saw waveform to as many channels as your current Yarns setup allows. Velocity slider chooses between the waveform. For example:
    - i. On CV4 in monophonic mode (1M)
    - ii. On CV3 and CV4 in duophonic modes (2M or 2P)
    - iii. On CV1, CV2, CV3, CV4 in quadraphonic modes (4M or 4P)

This is great for using Yarns as a 4 channel oscillator module (each channel having it's own unique waveform), or for fattening up sounds when sequencing in 1M and 2M modes - because CV3 or CV4 will play the exact same sequence that is recorded and sent out of CV1 and CV2.. So you can flip the OSC switch anytime and viola - you get one or two extra voices.

V. XTRA - This button now functions as a record button for the 2 sequence modes. Pressing it will start recording. Press SHIFT + XTRA to delete the recording When not in one of the 2 sequence modes this will switch the osc the oscillator between droning and enveloping.