

Amit's TD-3 Patcher App User Guide

version 1.0.57

TD-3 Patcher App is a utility to control and Program the Patterns on Behringer TD3 Synthesizer. This App Runs Inside a web browser (Chrome/Edge) and is mostly Platform Independent. (IOS needs a WebMidi Capable browser).

Requirements:

1. **USB Connection to TD3:** TD3 only transmits SYSEX over USB so its imperative that only USB port is used between the Host and TD3.
2. **Optional :** Controller Connected to TD3 Midi In Port via 5 Pin DIN and able to transmits on Midi Channel #16 (control Messages)

How it Works:

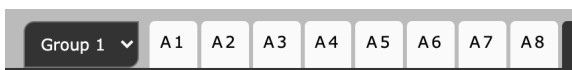
It Generates a Midi Pattern Sequence Sysex based on the input Parameters and writes that pattern to a "Write Location" Specified. So TD3 Must be Set to same **Write Location** as in the App. As You Make changes that Location keeps getting overwritten with the new pattern.

Connections:

1. Connect TD3 to your Computer / PC via USB
2. Launch the App : [Amits TD3 Patcher](#)
3. Set the Correct USB MIDI In and USB Midi Out Ports. The Editor will Appear Once the App is able to communicate with your TD3
4. If you are slaving TD3 to another Clock Source, that Must either come through 5 PIN Midi Din cable or a USB Midi Merger or a Virtual Midi Port in DAW.
5. Same Method as step:4 Applies to a Midi Controller. The Midi Controller should be set to transmit on channel 16 for Control messages for App functions and randomization. Channel 1 should be used for Note messages.

Functions

1. The Pattern Loader



The Group and Pattern Loader Allow You Load any Pattern Saved on your Td-3.
Note: The Patten will be written to the location specified in the **Write Location**.

2. Editor Sub Menu



- a. **Midi Map [ch:16]:** Link to an Image showing the Midi Mapping for the Mapping Chosen in Drop Down (when Available)

- b. **Dropdown:** Allows you to Select one of the pre-defined Midi Maps (for Controllers) to use Like, Akai Force, Novation Launch Pad Pro, or a Regular Keyboard.
- c. **Load:** Allows you to Load your Saved Patterns and Pattern Sets (a Saved Collection of 8 patterns or multiple single patterns up-to 8 in Snapshot slots).
- d. **Save:** Allows you to Save and Export Your Patterns
 - i. **Save pattern:** Save the Current Pattern to Disk.
 - ii. **Save Set:** Save the Current Snapshots Set into a Single Set File (8 patterns)
 - iii. **Save MPC (experimental) :** Save in Akai MPC Pattern format (Further Tweaking Required).
 - iv. **Save Midi (experimental) :** Save as a Midi File (Further Tweaking required)

3. Options Bar

- a. **Write Location:** Select a Location on your TD3 Where the pattern will be Written. [I highly Recommend setting this to Group1 A1 and Setting your TD3 to play the Same.](#) (Same as Above will Make any location you select from pattern load as write location and any changes will write to that).
- b. **Randomize in:** Selects the Key and The Scale / Chords as Cluster of Notes to choose random pitches from. The First and Last Note will always be the Key (root)
- c. **Pattern Modifier Buttons:** (These Works All the Lanes together) More on these Later.
- d. **Undo:** It Keeps Track of last few states so you can revert back to a pattern if you accidentally made some changes.
- e. **Snapshots:**



The 8 Snapshot slots Allow you to save and load the current pattern from them. You can easily build a performance set with these. These Sets can also be saved to disk as loaded for performance.


4. Steps BAR


- a. **1-16: Clicking on any of these will set the Length of Pattern**
- b. **Transpose:** Allows you to Transpose current Playing pattern pitch by +/- 12 Semitones. Please note Due to TD3 Range Limitations, the Notes that fall outside the TD3 Pitch range will not Transpose.


- 5. **The Lanes :** The 5 Lanes are where the Pattern Sequencing Happens. Using the Mouse/Touch you will get a menu on each cell to select a value for that.

6. **The Pattern/Lane Modifier Buttons** : These Buttons allow you to perform various operations on the pattern or a single pattern lane.





 : **Shift** the Pattern/lane **Left** by 1 Step


 : **Shift** the Pattern/lane **Right** by 1 Step

 : **Randomize** the Pattern based on key and Note Cluster (cell fill and contents)

 : **Reverse** the pattern

 : **Mirror** the Pattern (Splits in half, and adds reversed half back)

 : **Clear Pattern/Lane** to Default (Also Clear any Bypass Modes)

 : **Bypass** : Skips the Pattern Modifier Operations on the Lane.
(Useful for Locking in a specific pattern on a lane)

7. **Song Mode (v 1.0.53)**

The Song Mode Allows you to arrange your Snapshots in any order and as many times to build a longer sequence/songs.

For Example:

11112233 : Play Snapshot #1x4 times , followed by snapshot #2x2 times followed by snapshot #3x2 time and Then It loops back.

[Ability to Save snapshots along with Song may be implemented in future.](#)

8. AKAI Force Setup for Realtime Control

Akai Force requires a certain track config to be used as Realtime controller. However once it's set up, it's a game changer.

Make sure you can send Akai force midi output to TD3 while TD-3 is also connected to your PC/DAW.

- a. Best is to connect 5 pin din cables from Akai force to td3 5 pin Din and another cable back if you want to record midi back in Force.
- b. If you have a Midi USB multi host interface (like iConnectivity stuff) you can also create internal port routings between host ports and route force and pc port to td 3 without needing physical midi cables.

c. Akai FORCE Config

- i. Create a Midi track
- ii. Go to **Note Config** (Shift + Note) as Set as Follows
 1. Type: Scales
 2. PAD ROWS : Continuous
 3. Root Note: C
 4. Scale Chromatic
 5. Octave: 1
 6. Other parameters don't matter
- iii. **Track Settings** :
 1. Midi output Channel : 16
 2. Midi Output Port: Force (if using 5 Pin Midi cable, otherwise as applicable depending on your midi interface.
- iv. You can Also Create Knob macros for this track to Control some parameters from midi CC (see midi implementation in end)
- v. On the APP, from Midi Map Dropdown Select **8x8 Akai Force** mapping You can click the Blue Midi Map link to view the Mapping, if you so desire.

Midi CC Implementation : Ch:16

Sn	CC #	Function	Range	Description
01	8	Key Select	0-11 (C to B)	Root Note/Key for Randomization Note Cluster
02	9	Scale / Note Cluster	0-40 (will change as I add more)	Cluster of Notes To Randomize From
03	6	Transpose	52-76 (-12 to + 12)	Semitones
04	11	Length	2-16	Pattern Length

Scales/ Note Cluster Numbers

CC #9 Value	Scale / Note Cluster	Type
0	Chromatic	Scale
1	Major	Scale
2	Minor	Scale
3	Minor Pentatonic	Scale
4	Major Pentatonic	Scale
5	Sussed / Berlin School	Scale / Notes
6	Blues	Scale
7	Root	Note
8	bSeconds	Interval
9	Seconds	Interval
10	Minor Thirds	Interval
11	Thirds	Interval
12	Fourths	Interval
13	Aug Fourth	Interval
14	Fifths	Interval
15	Aug Fifths	Interval
16	Sixths	Interval
17	Aug Sixths	Interval
18	Seventh	Interval
19	Dorian	Scale / Mode
20	Phrygian	Scale / Mode
21	Phrygian Dominant	Scale / Mode
22	Lydian	Scale / Mode
23	Mixolydian	Scale / Mode
24	Locrian	Scale / Mode
25	Major Crd	Chord
26	Minor Crd	Chord
27	Sus2 Crd	Chord
28	Sus4 Crd	Chord
29	7th Crd	Chord
30	Maj7 Crd	Chord
31	Min7 Crd	Chord
32	7Sus Crd	Chord
33	Min7b5 Crd	Chord
34	Add9	Chord
35	Min Add9	Chord
36	Raga Bageshr	Raga
37	Raga Bhairvi	Raga
38	Raga Bhimplasi	Raga, Same as Minor Pentatonic
39	Raga Bhupali	Raga, Same as Major Pentatonic
40	Raga Kafi	Raga
41	Raga Kirwani	Raga

42	Raga Pahadi	Raga
43	Raga Yaman	Raga