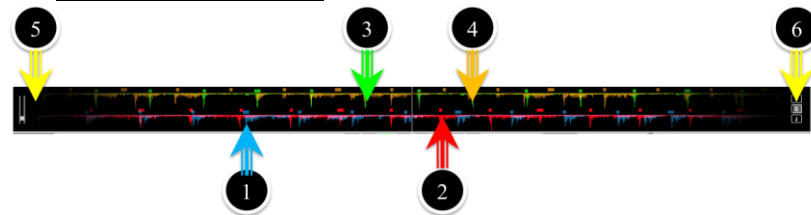# VirtualDJ 7 LE 4-Mx Overview

The VirtualDJ 7 LE 4-Mx interface can be split into **9 areas**:

- Waveform
- 4 Deck Viewer areas: A, B, C and D
- 2 Deck Controls areas: left and right
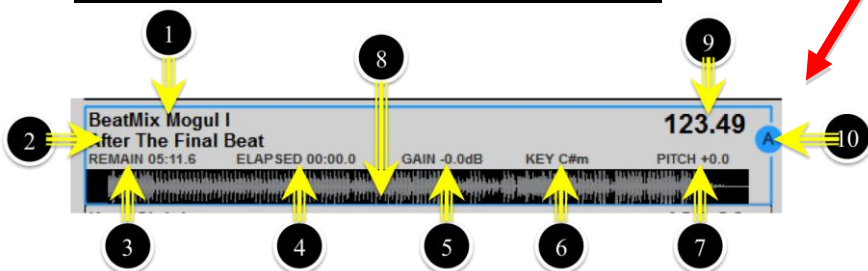- Mixer
- Browser area

A. Waveform area

This area displays up to **4 waveforms**:
1. the waveform of deck A in blue
2. the waveform of deck B in red
3. the waveform of deck C in green
4. the waveform of deck D in beige
5. a zoom slider on the left
6. 3 zoom presets on the right

## B. Deck Viewer: A, B, C and D areas

On each virtual deck, you can view:
1. the artist name
2. the track name
3. the time remaining until the end of the track
4. the time elapsed since the start of the track
5. the gain applied to the track (set via DJ Console 4-Mx gain button)
6. the musical key of the track
7. the pitch change compared to the track's default pitch
8. a compressed view of the waveform
9. the BPM rate of the track
10. the virtual deck name (A, B, C and D)

C. Deck Controls: left and right areas

In the **Deck Controls** areas (just on top of the browser), you can:
- load or eject music files on the corresponding deck
- move within the track
- play the track loaded on the deck
- add a bookmark to a position (called a Cue point)
- add effects to the track
- change the pitch (the playback speed)
- view the BPM rate and variation

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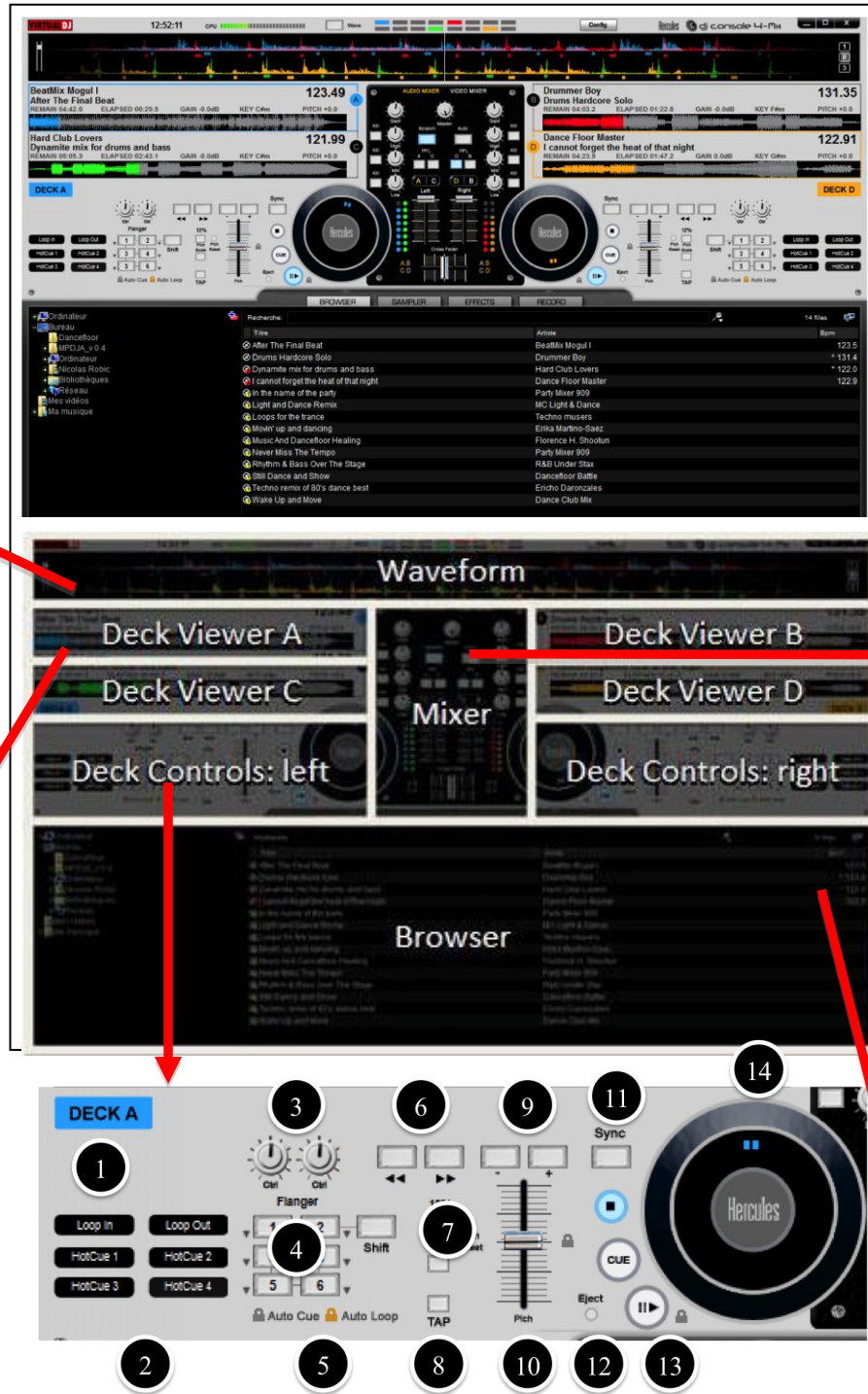
1. **Deck letter:** the controlled deck unit (A or C on left, B or D on right)
2. **Effects names:** names of the effects loaded on buttons 1 to 12
3. **Effect modulator:** modulates the last effect loaded on the deck
4. **Effect on/off:** activates the effects loaded on buttons 1 to 12 (**Shift** button switches between buttons 1-6 and 7-12)
5. **Auto Cue** and **Auto Loop** activation
6. **Rewind/fast forward**
7. **Pitch scale** and **pitch reset** controls
8. **Tap:** manual BPM counter (click on the beat to calculate the BPM)
9. **Pitch bend - / +:** temporarily change the playback speed
10. **Pitch fader:** set the playback speed (up=slower / down=faster)
11. **Sync:** synchronize the deck with the other deck (e.g. if activated on left deck controls, synchronizes left deck with right deck)

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12. **Eject:** remove the track from the deck
13. **Stop, Cue, Play/Pause** buttons
    Stop = stop playback and go to Cue point 1
    Cue = set Cue point (position bookmark) 1
    Play/Pause = play the track or pause playback
14. **Jog wheel** = drag and drop tracks on it to load; move within the track

D. Mixer

The **virtual mixer** area, in the center, lets you adjust:
- the volume of each controlled deck
- the equalization (EQ = high/mid/low) on each deck
- the cross fader
- the gain on each deck
- which deck you control and which deck you preview
- scratch mode: On = scratch / Off = pitch bend
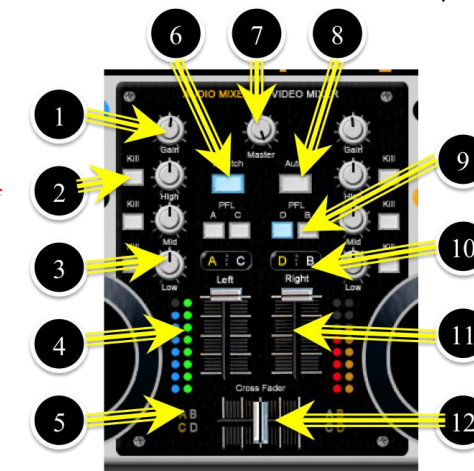
1. **Gain:** sets gain on controlled decks (A/C on left, B/D on right)
2. **Kill:** mutes the corresponding frequency band (high/mid/low)
3. **Equalization:** attenuate or add gain to the frequency band
4. **Level VU meter for decks:** blue = A / green = C / red = B / orange = D
5. **Deck assignment:** yellow = assigned / white = not assigned (default: A & C on left of the cross fader, B & D on right)
6. **Scratch mode:** blue = on / white = off
7. **Master output volume:** output level for the audience
8. **Auto mode:** automatically moves the cross fader to the other deck
9. **PFL** = deck preview (blue = preview / white = no preview)
10. **Controlled deck:** see which virtual deck is controlled in the mixer
11. **Left and right decks volume faders:** up = louder / down = lower
12. **Cross fader** = adjusts the mix between left and right decks

E. Browser

This area lets you **browse through the music** on your computer to select files you will load on the decks and mix with. The browser has **2 sub-sections**:
- the **folder browser** on the left: the area where you select a folder, a drive or a remote access location.
- the **file browser** on the right: the area where you can select the music track you want to load on each deck.
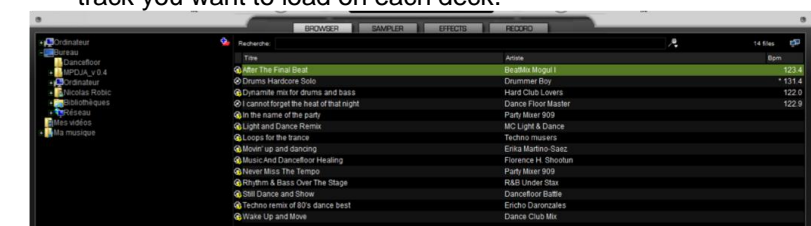
DJ Console 4-Mx in VDJ 7 LE

DJ Console 4-Mx has **8 main types of controls** in VirtualDJ 7 LE 4-Mx:
- Browsing
- Effects, loops and sampler
- Playback controls: 2-deck and 4-deck
- Jog wheels
- Preview controls
- Mixer controls: 2-deck and 4-deck
- Speed controls
- 4-deck controls

A.   Browsing

DJ Console 4-Mx provides **5 controls** to browse in VirtualDJ 7 LE 4-Mx:
1. **Folder**: move to the folder browser, or expand the folder.
2. **Files**: go to the file browser.
3. **Up/down buttons**: move up/down in the files or folder list.
4. **Load on left/right deck**: load the file on left/right controlled deck.
5. **Press and hold up/down buttons while turning the jog wheel**: move at high speed through the active browser area (folder or files).

B.   Effects / Loops / Sampler

Effects, loops and sampler are controlled by **8 controls per deck**:
- **6 transport buttons** (1 to 6): activate or switch off the function.
- **1 Shift transport button**: convert these buttons into 7 to 12.
- **1 knob** modulates the last effect loaded.

Changing the deck changes the bank of effects (effects on deck A are different from effects on deck C).

C.   Playback controls

Once a track is loaded on a deck, you can use the **playback controls**:
- **Play/Pause**: starts/pauses playback of the track loaded on the deck.
- **Cue**: in pause mode, sets a Cue point (bookmark); during playback, goes to the cue point and plays.
- **Stop**: stops playback and goes back to the first cue point (if any).
- **Rewind/fast forward**: moves back/forward in the track (while the button remains pressed down).

4-deck controls

After changing the target deck (with **Deck C/Deck D** buttons), process the same playback operations as in 2-deck mode.

D.   Jog wheels

The jog wheels control up to **5 operations**:
1. **Browse within a track**: if a track is loaded on a deck (but is not playing), turning the jog wheel moves inside the track.
2. **Scratch On/Off**: when scratch mode is on, turning the jog wheel while pressing it down slightly creates a scratch sound (like on a vinyl turntable). Your fingertips feel the scratch, and a blue light on the jog wheel shows the pushed-down status.
3. **Play/Pause**: when scratch mode is on, pressing the jog wheel down slightly pauses playback. This mode lets you start/pause playback by lifting up/pressing down your hand on the jog wheel.
4. **Pitch Bend**: when scratch mode is off (i.e. in playback mode), turning the jog wheel speeds up/slows down the music: the jog wheel bends the pitch.

5. **Fast browsing through files or folders**: press and hold the up or down button, and turn the jog wheel to quickly move through the list of files or folders.

You can change the jog wheels' resolution in the DJ Console 4-Mx control panel (the **Advanced** tab).

E.   Preview controls

Previewing = listening to a different track on your headphones than what the audience is hearing: the cross fader (controlling the music for the audience) has no impact on the preview.

There are of **3 types of preview controls**:
1. **Cue Select** (left or right deck) transport button: selects the deck you preview on your headphones (e.g. in 2-deck mode, **Cue Select Left Deck** = deck A; in 4-deck mode, = deck A or C).
2. **Cue/Mix** knob: select what is heard on your headphones:
- **cue** = the deck(s) selected with **Cue Select** button.
- **mix** = same music as the audience.
- or a combination of both, by setting it between **Cue** and **Mix**.
3. **Headphone** volume.
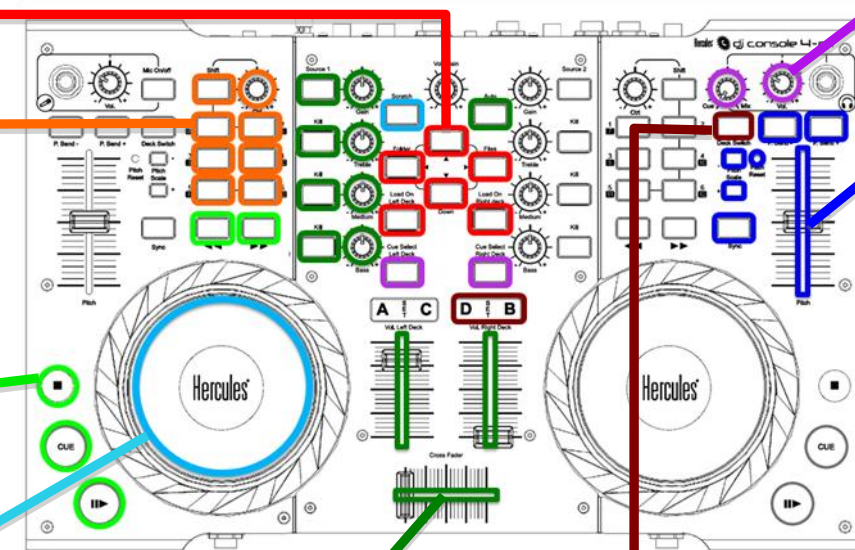
F.   Mixer controls
2-deck mode

1. **Gain** knob: boosts/attenuates the track's maximum output level.
2. **Equalization** (EQ) knobs (**Treble/Medium/Bass**): boosts/attenuates the output level of the track per frequency range.
3. **Kill** buttons: mutes/restores the track's output in the frequency range.
4. **Volume fader**: sets the track level (within the scale set via the **Gain** knob).
5. **Cross fader**: mixes left and right deck tracks for the audience:
- **full left** = the audience hears only left deck(s).
- **center** = the audience hears 50% left deck, 50% right deck.
- **full right** = the audience hears only the right deck(s).

For different DJing styles, you can change the cross fader curve:
- either in the software (with pro DJ software; not VDJ 7 LE 4-Mx).
- or in the DJ Console 4-Mx control panel (the **Advanced** tab).

If you set a cross fader curve in other DJ software, keep the cross fader curve set to **Beatmix** (default) in the Hercules control panel.

4-deck mode

After switching decks (via the **Deck C/Deck D** buttons), you can control on the new virtual decks the same mix operations on the mixer controls, but you must first **take over the software positions of gradual controls** (gain/EQ/volume) on the deck: each gradual control must reach the same position on the DJ Console 4-Mx hardware as shown in the software, before you are able to control that setting.

The software takeover function provides you with **gradual settings** on these controls after switching a deck:
- If there were no software takeover, after switching between 2 virtual decks with different settings for gain/EQ/volume, the software would jump to the new control position the second you move the gradual control.
- Therefore, the software takeover is a process which lets you smoothly reach the virtual setting prior to changing this setting.

G.   Speed (BPM = Beats Per Minute) control

The playback speed has **6 controls per deck**:
1. **Pitch fader**: the pitch fader changes the speed of the music: up = slower, down = faster.
2. **Pitch Scale -/+:** these transport buttons change the scale of the pitch fader: a lower scale gives a more precise speed variation / a higher scale gives a larger variation of the speed.
3. **Pitch reset**: by simultaneously pressing the **Pitch Scale -** and **+** buttons, you reset the pitch, so that the virtual pitch fader goes back to the center position, whatever the hardware position of the pitch fader.
4. **Pitch Bend -/+:** the pitch bend transport buttons slow down/speed up the speed temporarily, as long as you keep the button down.
5. **Sync:** changes the speed setting for the deck to the same BPM as on the other deck controlled by DJ Console 4-Mx.
6. **Jog wheel:** while music is playing, if you are not in scratch mode (if the **Scratch** button is off, or if your hand applies no pressure on the jog wheel), turning the jog wheel speeds up/slows down the music, like the **Pitch Bend** buttons.
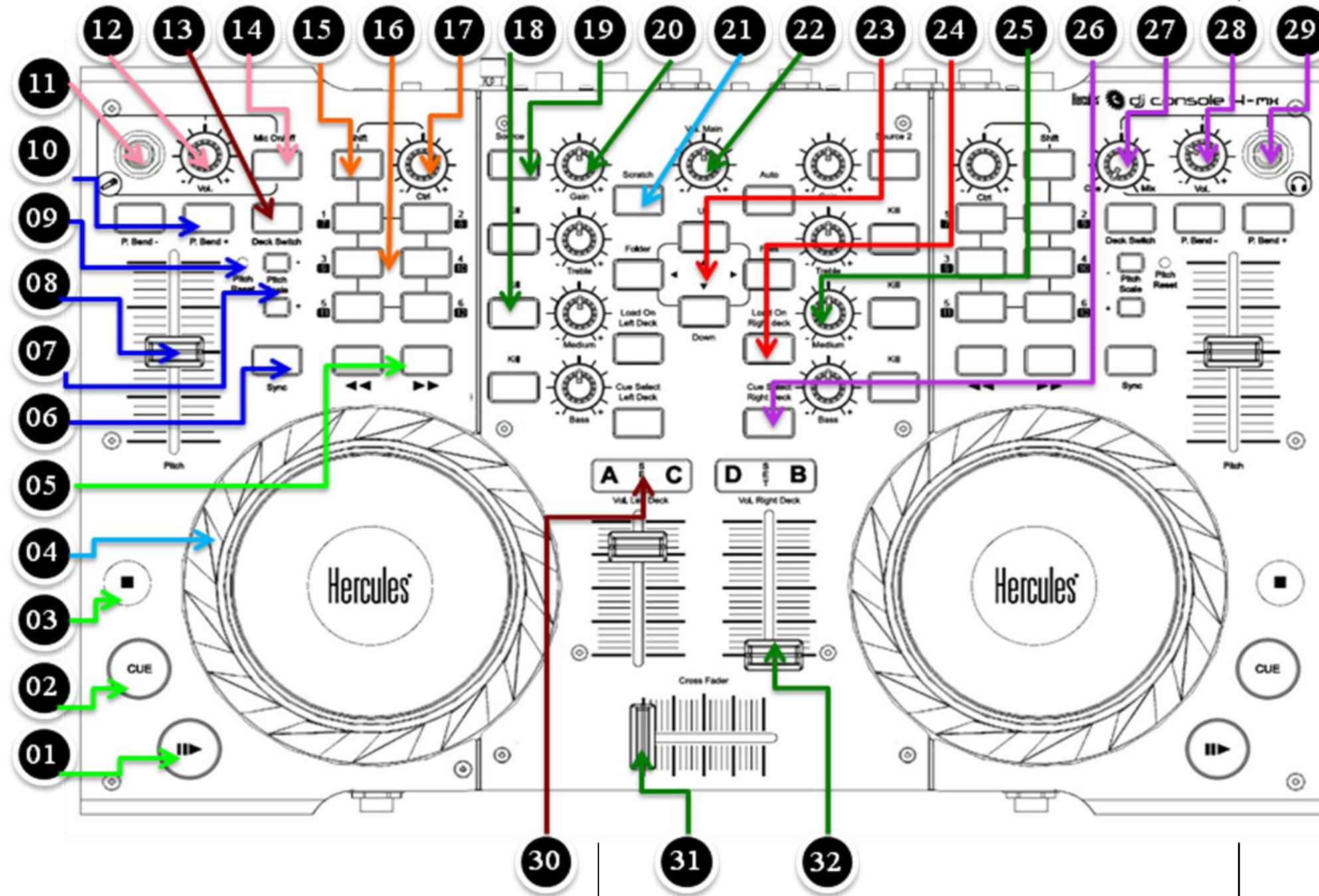
4-deck mode

After switching decks (with **Deck C/Deck D** buttons), you must **take over the virtual position of the pitch fader** with the hardware pitch fader on the deck (i.e. you must reach the same position with the DJ Console 4-Mx pitch fader as in the software) prior to controlling the pitch.

H.   4-deck controls

2 transport buttons control 4-deck mode:
- **Deck C** button converts deck A into deck C:
  - when **Deck C** button is **on**, the console's left deck controls **virtual deck C**, and the viewer shows the letter **C** backlit in red.
  - when **Deck C** button is **off**, the console's left deck controls **virtual deck A**, and the viewer shows the letter **A** backlit in blue.
- **Deck D** button converts deck B into deck D:
  - when **Deck D** button is **on**, the console's right deck controls **virtual deck D**, and the viewer shows the letter **D** backlit in red.
  - when **Deck D** button is **off**, the console's right deck controls **virtual deck B**, and the viewer shows the letter **B** backlit in blue.

DJ Console 4-Mx controls

17. Modulate: modulate last function loaded

18. Kill: mute a frequency band (treble/medium/bass)

19. Source: replace the playback of the track loaded on the deck with the external source pass-through (input 1-2 on left deck, input 3-4 on right deck)

20. Gain knob: adjust the maximum level on the deck

21. Scratch: enable scratch mode on jog wheels

22. Main volume: set the volume on output 1-2

23. Browsing controls: controls browsing in the folder and files browser

24. Load On deck: load selected track on the deck

25. Equalization knobs: set treble, medium and bass levels on the deck

26. Cue Select: include this deck in the headphone preview

27. Cue/Mix: choose what you hear on your headphones, between Cue (preview the deck you have selected with the Cue Select buttons) and Mix (the music you play for the audience)

28. Headphone volume

29. Headphone connector (1/4" jack / 6.35mm)

30. Controlled deck viewer: shows which virtual deck is being controlled on DJ Console 4-Mx

31. Cross fader: mix the music between the left deck(s) (A and C) and the right deck(s) (B and D)

32. Volume fader: set the volume on the deck

Software takeover:

After switching decks, you must first **take over the software positions** of the following controls
08. Pitch fader
20. Gain
25. Equalization knobs (treble/medium/bass)
32. Volume fader

Each gradual control must reach the same position on the DJ Console 4-Mx hardware as the position shown in the software, before you can control the setting in question.

01. Play/Pause

02. Cue (Place cue points)

03. Stop (go back to cue point)

04. Jog wheel (browse, scratch and pitch bend)

05. Rewind/fast forward

06. Sync: synchronize the BPM with the other deck being controlled

07. Pitch Scale -/+: reduce/increase the pitch fader scale

08. Pitch fader: set the playback speed

09. Pitch Reset status: shows when the pitch is virtually at neutral

10. Pitch Bend -/+: temporarily change the playback speed

11. Microphone connector (1/4" jack / 6.35mm)

12. Microphone volume

13. Deck Switch: switch controls between A/C (left), B/D (right)

14. Microphone On/Off

15. Shift: switch functions 1 to 6 into functions 7 to 12

16. Buttons 1-6: assignable functions 1 to 6 and 7 to 12