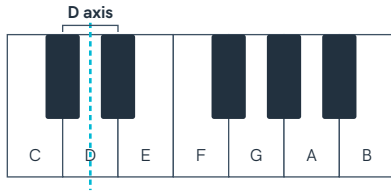


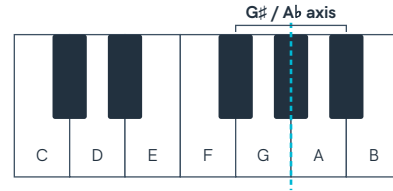
The Mirror Keyboard: D and A $\flat$

The keyboard's black-and-white pattern reflects around two keys. RH means right hand; LH means left hand.

1 · WHY THE KEYBOARD IS A MIRROR



D: the two-black-key group reflects with one black key on each side.



G $\sharp$ / A $\flat$: the three-black-key group splits around its middle black key.

Only D and G $\sharp$ /A $\flat$ preserve the repeating pattern: white keys mirror to white, black to black.

2 · THE MIRROR TABLE

The table works for **both axes**. C $\sharp$ = D $\flat$ · E $\flat$ = D $\sharp$ · F $\sharp$ = G $\flat$ · A $\flat$ = G $\sharp$ · B $\flat$ = A $\sharp$

Key	Mirror	Key color	Key	Mirror	Key color
C	E	white	F $\sharp$	B $\flat$	black
C $\sharp$	E $\flat$	black	G	A	white
D	D	white	A $\flat$	A $\flat$	black
E $\flat$	C $\sharp$	black	A	G	white
E	C	white	B $\flat$	F $\sharp$	black
F	B	white	B	F	white

To find the octave, count half steps (adjacent piano keys, including black keys) from D4 to the RH note. Count the same number the other way for the LH note. Optional MIDI check: each half step changes the number by 1; each octave by 12. C4 = 60, C5 = 72, D4 = 62, so $2 \times 62 - 72 = 52 = E3$. Using A $\flat$ 3 = 56 instead gives E2, one octave lower.

3 · SAME FINGERS, OPPOSITE DIRECTION

Axis: D4. RH C5-D5-E5-F5-G5 mirrors to LH E3-D3-C3-B2-A2.



Use **1-2-3-4-5** in **both hands**. Play each hand alone, then together. The pitches can sound unusual.

Try it Creative task: choose or invent a short RH pattern, write its notes and fingers, then mirror it around D4. Check every note with the table; copy the same fingers. Pianist Marc-André Hamelin learned this "symmetrical inversion" from Rudolph Ganz's exercises.



Listen: tissimo.co/worksheets/keyboard-mirror-d-and-a-flat
Hear the RH pattern, its LH mirror, then both together. · Piano, 80 BPM