

## Contents

wl-kbptr .....	1
Install .....	1
Binds .....	1
Mid-stream click keys .....	2
Modes .....	2
Cell-pick keys (home_row_keys) .....	2
Universal keys .....	3
Useful CLI flags .....	3
Multi-monitor notes .....	3
Gotchas .....	3
Files .....	3

## wl-kbptr

Keyboard-driven mouse pointer for Wayland. Replaces mouseless, which is X11-shaped and breaks on niri.

Upstream: <https://github.com/moverest/wl-kbptr>

### Install

Bundled with the niri install target:

```
just niri-window-manager
```

Or standalone:

```
yay -S wl-kbptr jq
```

jq is required by the wl-kbptr-other-output helper (see Multi-monitor notes). Config lives at `~/.config/wl-kbptr/config`, stowed from `niri/dot-config/wl-kbptr/config` in this repo.

### Binds

	Current monitor	Other monitor
<b>default</b> (tile,bisect)	Mod+G	Mod+A
<b>+ click</b>	Mod+Shift+G	Mod+Shift+A
<b>coarse</b> (tile only)	Mod+Alt+G	Mod+Alt+A
<b>tile + split</b>	Mod+Ctrl+G	Mod+Ctrl+A
<b>bisect</b> → <b>tile</b>	Mod+N	Mod+M
<b>bisect</b> → <b>tile + click</b>	Mod+Shift+N	Mod+Shift+M
<b>detect + click</b> (X-ray)	Mod+X	—
<b>detect only</b>	Mod+Shift+X	—

The Mod+N/Mod+M families coarse-aim first, then refine on a grid: press the chord, bisect into the rough quadrant with `a/s/d/f/z/x/c/v` (positional left hand), recurse as deep as you want, then press **Enter** to hand the current area off to tile. Tile then shows labeled cells over that area

– type the label, cursor warps. Different mental model from Mod+G (“scan grid, type label”): “point first, label second”.

Other-monitor binds run `~/local/bin/wl-kbptr-other-output` (stowed from `niri/dot-local/bin/wl-kbptr-other-output`). The helper picks the non-focused output, calls `niri msg action focus-monitor` to flip keyboard focus there, then runs `wl-kbptr -o <name>`. Extra args are forwarded so each variant passes its own `-o modes=...`

## Mid-stream click keys

In any mode, pressing `j/k/l` commits the current cursor position and clicks. No need to chain click mode for occasional clicks.

Key	Click
j	left
k	right
l	middle

## Modes

Mode	What it does
tile	Grid of labeled cells. Type the label → cursor jumps to cell center.
bisect	Splits area into 2x4 (or 2x2 if square). One keypress per cell to refine.
split	Crosshair-style refinement; arrow keys (or wasd/h) shrink the area toward that side.
click	Commits position with a click. Default left; override with <code>-o mode_click.button=right</code> .
floating	Reads <code>WxH+X+Y</code> rectangles from stdin. Skip unless you script your targets.

Chains are left-to-right: each mode hands the chosen area to the next.

## Cell-pick keys (home\_row\_keys)

`home_row_keys` is exactly 11 characters: first 8 = bisect cells, last 3 = click buttons (left/right/middle).

Our config is `asdfzxcvjkl`:

```
keyboard      screen cells
a s d f       0 1 2 3   (top)
z x c v       4 5 6 7   (bottom)
```

```
j = left click
k = right click
l = middle click
```

Left hand drives bisect, right hand drives clicks. Symmetric, all stays on the home row.

## Universal keys

Key	Action
Enter	Commit current position; advance to next mode in chain
Backspace	Undo last keypress (works across mode boundaries)
Escape	Cancel – no warp, no click

## Useful CLI flags

Flag	Use case
-0 <NAME>	Target a specific output (DP-2, eDP-1, ...).
-r WxH+X+Y	Restrict overlay to a region (e.g. inside a single window).
-o KEY=VAL	Override config inline (-o modes=tile,bisect,click).
-p	Print result, don't warp or click. Test mode.
-c FILE	Load alternate config file.

## Multi-monitor notes

- Default behavior (no -0): wl-kbptr passes NULL to layer-shell; niri assigns the overlay to the focused output. So Mod+G always uses the monitor your keyboard focus is on.
- Mod+M family targets the *other* monitor via the helper script. niri only routes keyboard input to a layer-surface on the focused output, so the helper calls `niri msg action focus-monitor <name>` before launching wl-kbptr. Without that, the overlay appears but typing keeps going to the previously-focused window.
- 3+ monitors: the helper picks an arbitrary non-focused one. For deterministic ordering, edit `wl-kbptr-other-output`.

## Gotchas

- `~/.local/bin` is not in niri's PATH. Bind helper scripts with the full `~/.local/bin/<name>` path. Bare command names silently no-op.
- **Split mode + our home\_row\_keys.** j/k/l are click buttons, so they don't navigate in split. Use arrow keys, or w/a/s/h for up/left/down/left fallback. See issue #42.
- **Maintainer comment in #42 misstates click order.** The thread says i, j, k = right/left/middle, but the v0.4.1 source has indices 8/9/10 as LEFT/RIGHT/MIDDLE. Trust the source.

## Files

```
docs/wl-kbptr.md           # this file
niri/dot-config/wl-kbptr/config # home_row_keys + default mode chain
niri/dot-config/niri/binds.kdl  # Mod+G and Mod+M bind families
niri/dot-local/bin/wl-kbptr-other-output # helper for the Mod+M family
```