A Friendly Guide to LARBS!

by
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Use vim keys (`h/j/k/l`) to navigate this document. Pressing `s` will fit it to window width (`a` to revert). `K` and `J` zoom in and out. `Super+f` to toggle fullscreen. `f` will highlight links to follow which are selectable by typing the number that appears plus `Enter`. `q` to quit. (These are general shortcuts of `zathura`, the pdf reader.)

- `Mod+F1` will show this document at any time.
- By `Mod` I mean the Super Key, usually known as "the Windows Key."

Questions or suggestions? Email me at luke@lukesmith.xyz

- LARBS website: https://larbs.xyz
- My website: https://lukesmith.xyz
- Donate: https://lukesmith.xyz/donate

FAQs are at the end of this document.

Welcome!

Basic goals and principles of this system:

- **Naturalness** – Remove the border between mind and matter: everything important should be as few keypresses as possible away from you, and you shouldn't have to think about what you're doing. Immersion.
- **Economy** – Programs should be simple and light on system resources and highly extensible. Because of this, many are terminal or small ncurses programs that have all the magic inside of them.
- **Keyboard/vim-centrality** – All terminal programs (and other programs) use vim keys when possible. Your hands never need leave the home row or thereabout.
- **Decentralization** – This system is a web of small, modifiable and replaceable programs that users can easily customize.

General keyboard changes

- Capslock is a useless key in high quality space. It's now remapped. If you press it alone, it will function as escape, making vimcraft much more natural, but you can also hold it down and it will act as another Windows/super/mod key.
- The menu button (usually between the right Alt and Ctrl) is an alternative Super/Mod button. This is to make one-handing on laptops easier.

If you'd like to change any of these keyboard changes, you need only open and change `~/.scripts/tools/remaps`. Actually, this should go without saying, but *everything* here can easily be changed. Additionally, while this isn't a part of i3, the default editing mode in the shell is using vi bindings. If you want to learn more of this, run `Mod+Super+E` and type and select the option for "vi mode in shell". This setting can be changed if you don't like it by deleting or commenting out the contents of `~/.inputrc`.

The Status Bar

If you're new to i3, notice the status bar on the top of the screen. To the left side, you'll see the numbers of your current workspace(s). On the right side, you'll see various system status notifiers, the date, volume, even music and local weather if possible, etc. I'm sure you can figure it out. Several modules will be click-sensitive, although if you're using my system as indented, you probably won't be doing much clicking. Still, you can right click on a module to get some information about what exactly it means.*

The i3blocks config is `~/.config/i3blocks/config`, which you can access by the terminal shortcut `cfib`. Notice that the config file refers to several module scripts in the `~/.scripts/` directory. You can read a summary of all of these scripts in the file `~/.scripts/SCRIPTS.md`.

Deeper Tutorials

In addition to this guide and reading the dotfiles of programs manually, you can also get program-specific information by running the `getkeys` command. This will give you the bindings of what program you want. You can also press `Mod+E` (that's a capital E) to get be able to watch tutorial videos on specific programs or concepts directly from YouTube.

Key Bindings

All of the bindings below are in the file `~/.config/i3/config` (easily accessible by typing `cfi` in the terminal) and can all be easily changed.

Window basics

Notice the case sensitivity of the shortcuts† , Be sure you play around with these. Be flexible with the basic commands and the system will grow on you quick.

- `Mod+Enter` – Spawn terminal (the default terminal is `st`; run `man st` for more.)
- `Mod+q/Q` – Close window
- `Mod+d` – dmenu (For running commands or programs without shortcuts)
- `Mod+t` – Toggle between spawning vertically and horizontally‡
- `Mod+f` – Fullscreen
- `Mod+h/j/k/l` – Move to different windows
- `Mod+H/J/K/L` – Move a window around
- `Mod+Y/U/I/O` – Resize windows
- `Mod+/` – Spawn vertical terminal
- `Mod+'` – Spawn horizontal terminal
- `Mod+s/S` – Increase/decrease inner gaps

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*Some people think the icons I use in the status bar are a little gaudy. Obviously I like them, but these are actually just unicode characters, meaning you can just change your default font in the status bar to change them. If you just want black and white icons, you should actually just be able to uninstall `ttf-emojione` and the font will fall back on a black and white font.

†To type capital letters, hold down the `Shift` key—that might sound like an obvious and condescending thing to tell you, but there have literally been multiple people (Boomers) who have emailed me asking how to type a capital letter since caps lock isn't enabled.

‡You may notice that one side of your window border is a different color. This indicates the direction that the next window will spawn.

- `Mod+z/Z` – Increase/decrease outer gaps
- `Mod+D` – Reduce gaps to 0 pixels
- `Mod+T` – Restore gaps to default (15 pixels)
- `Mod+Shift+Space` – Make a window float (it will still be resizeable)
- `Mod+Space` – Switch focus from a floating window to a non-floating one (or vice versa)
- `Mod+o` – Make floating window sticky (will stay on active workspace)
- `Mod+b` – Toggle status bar
- `Mod+B` – Toggle window float in bottom left corner (good for video watched intermittently)
- `Mod+N` – Same as above, but for the bottom right corner.

Basic Programs

Note: LARBS will install nearly all of these programs by default, but some only come if you chose an extra option. Naturally, you can use `yay` to look for and install any you want to add.

- `Mod+r` – ranger (file browser/manager)
- `Mod+e` – mutt (email)
- `Mod+m` – ncmpcpp (music player)
- `Mod+w` – nmtui (for connecting to wireless internet)
- `Mod+a` – R/Python calculator (hide with `mod+a`)
- `Mod+i` – htop (system info)
- `Mod+n` – newsboat (RSS feed reader)
- `Mod+y` – calcurse (calendar and schedule)
- `Mod+u` – "Dropdown" terminal (hide with `mod+u`)
- `Mod+A` – pulsemixer (audio system control)
- `Mod+W` – Web Browser
- `Mod+G` – GIMP (for general image manipulation; starts on workspace 5)

System

- `Mod+R` – resize a floating window to give size (width height)
- `Mod+x` – i3lock (Enter password to return)
- `Mod+X` – shutdown (will ask to confirm)
- `Mod+Shift+Backspace` – reboot (will ask to confirm)
- `Mod+Shift+Escape` – exit i3 (will ask to confirm)
- `Mod+F1` – Shows this document
- `Mod+F2` – Refresh i3
- `Mod+F3` – Select screen/display to use
- `Mod+F4` – Hibernate (will ask to confirm)
- `Mod+F5` – Reset Network Manager, search for new networks
- `Mod+F6` – transmission torrent client (cli)
- `Mod+F7` – Toggle on/off transmission client via dmenu

- `Mod+F8` – Check mail, if [mutt-wizard](#) is installed.
- `Mod+F9` – Mount a USB drive/hard drive or Android
- `Mod+F10` – Unmount a non-essential drive or Android
- `Mod+F11` – Search term on DuckDuckGo
- `Mod+F12` – `nmtui` for selecting the wireless internet source.
- `Mod+`` – Select an emoji to copy to clipboard
- `Mod+Insert` – Show contents of clipboard/primary selection
- `Mod+Pause` – Show QR code from clipboard contents (requires `qrencode`)

Audio

I use ncmpcpp as a music player, which is a front end for mpd.

- `Mod+m` – ncmpcpp music player
- `Mod+.` – Next track
- `Mod+,` – Previous track
- `Mod+<` – Restart track
- `Mod+p` – Pause
- `Mod+M` – Mute all audio
- `Mod+-` – Decrease volume (holding shift increases amount)
- `Mod++` – Increase volume (holding shift increases amount)
- `Mod+[` – Back 10 seconds (holding shift increases amount)
- `Mod+]` – Forward 10 seconds (holding shift increases amount)
- `Mod+A` – ncpamixer (general volume sink/source control)

Workspaces

There are ten workspaces. They work just like those in vanilla i3 with some additions.

- `Mod+(Number)` – Go to that number workspace
- `Mod+Shift+(Number)` – Send window to that workspace
- `Mod+Tab` – Go to previous workspace
- `Mod+g` – Go to left workspace
- `Mod+;` – Go to right workspace
- `Mod+Shift+Delete` – "Porno-mode" Press this key sequence if you want to hide what you have on your screen. Moves to a totally new workspace, mutes sound, pauses music and brings up distraction windows.

Recording

I use scrot and ffmpeg to make different recordings of the desktop and audio. All of these recording shortcuts will output into ~, and will not overwrite previous recordings as their names are based on their exact times.

- `PrintScreen` – Take a scrot screenshot
- `Shift+PrintScreen` – Take a scrot screenshot of only selected window
- `Mod+PrintScreen` – Opens dmenu menu to select kind of audio/video recording

- `Mod+Delete` – Kills any recording started in the above way.
- `Mod+ScrollLock` – Turn on and off screenkey (if installed) for visual typing display
- `Mod+Shift+c` – Toggles a webcam in the bottom right for screencasting.

Other buttons

I've mapped those extra buttons that some keyboards have (play and pause buttons, screen brightness, email, web browsing buttons, etc.) to what you would expect.

Bookmarking Files and Directories

Note the files `~/.bmdirs` and `~/.bmfiles`. These files hold bookmarked directories and files respectively, along with shortcut keys to their left. LARBS, specfically the `shortcuts` script, will automatically read these files and autogenerate aliases and shortcuts for bash/zsh and ranger from them.

For example, by default, the shortcut key for `~/Documents` is simply d. Thus, if you type and run d in bash, you will automatically `cd` to `~/Documents`. It also generates four ranger shortcuts using the shortcut d:

- `gd` – Go to `~/Documents`
- `md` – Move (mv) selected file(s) to `~/Documents`
- `td` – Create a new tab in `~/Documents`
- `Yd` – Copy/yank (cp) a copy of the selected file(s) to `Documents`

Shortcuts like these are generated for all key sequence/directory pairs in `~/.bmdirs`. Additionally, you may also add editable files to `~/.bmfiles`. Each key sequence you pair with a file will become an alias to edit it in either bash or ranger.

Whenever you edit and save one of the bookmark files, vim will automatically rerun the shortcut script, thus uupdating the shortcuts that will be used in new instances of bash and ranger. It just werks. Note that it is your responsibility to ensure that none of the bindings you add conflict with another necessary function or command.

Frequently Asked Questions (FAQs)

My keyboard isn't working as expected!

LARBS runs some custom keyboard settings in `~/.scripts/tools/remaps`. These settings may override your preferred settings, so you should open this file and comment out troublesome lines if you have issues.

My audio isn't working!

Sometimes, PulseAudio can be finicky on initial installation and configuration. If you have no audio output, chances are your problems will be resolved by a reboot or manually killing and restarting PulseAudio. You may also need to set your preferred default output sink which you can do by the command line, or by selecting one with `pulsemixer` (mod+A).

How do I change the background/wallpaper?

The i3 configuration will always read the file `~/.config/wall.png` as the wallpaper. The script `setbg`, if run on an image will set it as the persistent background. When using the file manager, you can simply hover over an image name and type `bg` and this will run `setbg`.

How I change the colorscheme?

You can edit `~/.Xresources` to change the colorscheme. The terminal, status bar and other programs will automatically read the Xresources colors. Check [the Arch Wiki's article](#) for more information. LARBS is also compatible with pywal, but it is not installed or used by default anymore.

How do I set up my email?

- Create a GPG private/public key pair if you haven't already. Type `mod+shift+e` and you can select a tutorial for how to do this.
- Download the mutt-wizard repository to the mutt config directory: `git clone https://github.com/lukesmithxyz/mutt-wizard ~/.config/mutt`
- There run `mutt-wizard.sh` and follow the directions, specifically:
  - Add an account.
  - Run `offlineimap -o` in the terminal.
  - Then select the "Autodetect mailboxes" option.

You should then be able to open your mail in mutt with Mod+e. And this is somewhat of a miracle considering all of the moving pieces that have come together to make this happen. Honestly, people give me all this credit for making LARBS, but the mutt-wizard is probably my favorite work.

You can, through the mutt-wizard, schedule automatic mail checks every several minutes. You can also press `Mod-F8` at any time to check for new mail in your accounts. You might also want to run `notmuch setup` to set `notmuch` up as a mail indexer. This will allow quick searches of your mail in mutt with `ctrl+f`. The mailsync script will update the notmuch database once you do this.

How do I set up my music?

By default, mpd, the music daemon assumes that `~/Music` is your music directory. This can be changed in `~/.config/mpd/mpd.conf`. When you add music to your music folder, you may have to run `mpc up` in the terminal to update the database. mpd is controlled by ncmpcpp, which is accessible by `Mod+m`.

How do I update LARBS?

LARBS is deployed as a git repository in your home directory. You can use it as such to fetch, diff and merge changes from the remote repository. If you don't want to do that or don't know how to use git, you can actually just rerun the script (as root) and reinstall LARBS and it will automatically update an existing install if you select the same username. This will overwrite the original config files though, including changes you made for them, but this is an easier brute force approach that will also install any new dependencies.

Contact

- luke@lukesmith.xyz – For questions!
- https://lukesmith.xyz – For stalking!
- https://lukesmith.xyz/donate – To incentivize more development of LARBS!
- My Github Page – For the code behind it!
- [RSS](RSS) – For updates!