■ NIRI RICE GUIDE

High-Performance Desktop on Low-End Hardware

A complete setup guide for ricing the **niri** scrollable-tiling Wayland compositor with a minimal, fast, and beautiful stack. Every tool chosen here is lightweight-first and Wayland-native — no X11 bloat, no heavy DEs.

① The Essential Stack

Compositor

Package	What it does
`niri`	Scrollable-tiling Wayland compositor — the base of your rice

Status Bar

Package	What it does
`waybar`	The best Wayland bar. Modular, GPU-accelerated, low RAM usage

App Launcher

Package	What it does
`fuzzel`	Extremely lightweight Wayland-native launcher — faster than rofi/wofi

Wallpaper

Package	What it does
`swww`	Smooth wallpaper switching with GPU transitions, tiny memory footprint

Warm Light / Night Mode

Package	What it does
`wlsunset`	Simple gamma/colour temp daemon — no heavy background processes
`gammastep`	Alternative to wlsunset, supports location-based auto adjustment

Notifications

Package	What it does
`mako`	Minimal Wayland notification daemon. Extremely small footprint

Logout / Session

Package	What it does
`wleave`	Clean Wayland logout screen with button grid layout
`rlogout`	More theme-customisable logout, pick one of these two

Lock Screen

Package	What it does
`swaylock`	Lightweight and rock-solid Wayland lock screen
`hyprlock`	Prettier alternative, still very performant on low-end

Terminal

Package	What it does
`foot`	The most lightweight Wayland-native terminal — perfect for low-end systems

File Manager

Package	What it does
`yazi`	Blazing-fast TUI file manager — zero GUI overhead
`thunar`	Lightest GUI option if you need graphical file management

Screenshot

Package	What it does
`grim`	Wayland screenshot tool (standard)
`slurp`	Region/window selector for grim
`swappy`	Post-screenshot annotation tool

Clipboard

Package	What it does
`wl-clipboard`	CLI clipboard — wl-copy / wl-paste commands
`cliphist`	Clipboard history manager, pairs with fuzzel for fuzzy search

Idle / Auto-lock

Package	What it does
`swayidle`	Triggers lock screen after idle timeout — very lightweight

Polkit Agent

Package	What it does
`polkit-gnome`	Needed for GUI apps requiring elevated permissions — tiny

Audio

Package	What it does
`pipewire`	Modern low-latency audio server
`wireplumber`	Session manager for PipeWire
`pavucontrol`	GUI volume mixer (only launch when needed)

Fonts & Icons

Package	What it does
`ttf-jetbrains-mono-nerd`	Best coding + icon font for waybar/fuzzel
`papirus-icon-theme`	Clean, consistent icon set

② Installation (Arch / Arch-based)

Run these commands in order. AUR packages require **yay** or **paru**.

Core Wayland stack

```
sudo pacman -S niri waybar fuzzel foot mako swaylock swayidle \ grim slurp swappy
wl-clipboard pipewire \ pipewire-alsa pipewire-pulse wireplumber \ pavucontrol
polkit-gnome thunar
```

AUR packages

```
yay -S swww wlsunset wleave cliphist hyprlock yazi
```

Fonts & Icons

```
sudo pacman -S ttf-jetbrains-mono-nerd papirus-icon-theme
```

Enable PipeWire on login

```
systemctl --user enable --now pipewire pipewire-pulse wireplumber
```

③ Niri Config — ~/.config/niri/config.kdl

This is a complete starter config. Copy it to **~/.config/niri/config.kdl**.

Input & Layout

```
input { keyboard { xkb { layout "us" } repeat-delay 300 repeat-rate 50 } touchpad { tap;
natural-scroll; } } layout { gaps 8 border { width 2 active-color "#cba6f7" inactive-color
"#313244" } shadow { on; color "#00000088"; } } animations { slowdown 0.6; }
```

Autostart

```
spawn-at-startup "swww-daemon" spawn-at-startup "waybar" spawn-at-startup "mako"
spawn-at-startup "wlsunset" "-l" "40" "-L" "20" spawn-at-startup "swayidle" "-w" "timeout"
"300" "swaylock -f" "timeout" "600" "niri msg action power-off-monitors" spawn-at-startup
```

```
"/usr/lib/polkit-gnome/polkit-gnome-authentication-agent-1" spawn-at-startup "wl-paste"
"--watch" "cliphist" "store"
```

Keybindings

```
binds { // Apps Mod+Return { spawn "foot"; } Mod+D { spawn "fuzzel"; } Mod+E { spawn
"thunar"; } Mod+W { spawn "wleave"; } Mod+L { spawn "swaylock"; } // Screenshot Print {
spawn "sh" "-c" "grim -g \"$(slurp)\" - | swappy -f -"; } // Clipboard history (fuzzel
dmenu) Mod+V { spawn "sh" "-c" "cliphist list | fuzzel --dmenu | cliphist decode |
wl-copy"; } // Cycle random wallpaper Mod+Shift+W { spawn "sh" "-c" "swww img $(ls
~/Wallpapers/* | shuf -n1) --transition-type wipe --transition-duration 1"; } // Window
management Mod+Q { close-window; } Mod+Left { focus-column-left; } Mod+Right {
focus-column-right; } Mod+Up { focus-window-up; } Mod+Down { focus-window-down; }
Mod+Shift+Left { move-column-left; } Mod+Shift+Right { move-column-right; } Mod+F {
maximize-column; } Mod+Shift+F { fullscreen-window; } Mod+Minus { set-column-width "-10%";
} Mod+Equal { set-column-width "+10%"; } // Workspaces Mod+1 { focus-workspace 1; } Mod+2 {
focus-workspace 2; } Mod+3 { focus-workspace 3; } Mod+4 { focus-workspace 4; } Mod+Shift+1
{ move-window-to-workspace 1; } Mod+Shift+2 { move-window-to-workspace 2; } // Volume
(with PipeWire) XF86AudioRaiseVolume { spawn "wpctl" "set-volume" "@DEFAULT_SINK@" "5%+";
} XF86AudioLowerVolume { spawn "wpctl" "set-volume" "@DEFAULT_SINK@" "5%-"; }
XF86AudioMute { spawn "wpctl" "set-mute" "@DEFAULT_SINK@" "toggle"; } }
```

④ Waybar Config — ~/.config/waybar/

Create two files: **config** and **style.css** in ~/.config/waybar/

config

```
{ "layer": "top", "position": "top", "height": 32, "spacing": 4, "modules-left":
["niri/workspaces"], "modules-center": ["clock"], "modules-right": ["pulseaudio",
"network", "cpu", "memory", "battery", "tray"], "niri/workspaces": { "format": "{icon}",
"format-icons": { "default": "●" } }, "clock": { "format": " {:%H:%M %d %b}",
"tooltip-format": "{calendar}" }, "cpu": { "format": " {usage}%", "interval": 2 },
"memory": { "format": " {used:.1f}G", "interval": 5 }, "network": { "format-wifi": "
{signalStrength}%", "format-ethernet": " {ifname}", "format-disconnected": "▇ No Network"
}, "pulseaudio": { "format": "{icon} {volume}%", "format-muted": " muted", "format-icons":
{ "default": ["", "", ""] }, "on-click": "pavucontrol" }, "battery": { "format": "{icon}
{capacity}%", "format-icons": ["", "", "", "", ""] }, "tray": { "spacing": 8 } }
```

style.css (Catppuccin Mocha)

```
* { font-family: "JetBrainsMono Nerd Font"; font-size: 13px; } window#waybar { background:
rgba(30, 30, 46, 0.92); border-bottom: 2px solid #313244; color: #cdd6f4; } #workspaces
button { color: #a6adc8; padding: 0 6px; border-radius: 6px; margin: 4px 2px; } #workspaces
button.active { color: #cba6f7; background: #313244; } #clock { color: #b4befe;
font-weight: bold; } #cpu { color: #a6e3a1; } #memory { color: #94e2d5; } #network { color:
#89b4fa; } #pulseaudio { color: #fab387; } #battery { color: #a6e3a1; } #tray { padding: 0
8px; }
```

⑤ Fuzzel Config — ~/.config/fuzzel/fuzzel.ini

```
[main] font=JetBrainsMono Nerd Font:size=12 terminal=foot width=30 lines=10 prompt=❯
[colors] background=1e1e2edd text=cdd6f4ff match=cba6f7ff selection=313244ff
```

```
selection-text=cdd6f4ff border=45475aff [border] width=2 radius=8
```

⑥ Wallpaper Switching with swww

Start the daemon once on login (already in autostart above), then use these commands:

Set a specific wallpaper
```
swww img ~/Wallpapers/your_wall.jpg --transition-type wipe --transition-duration 1
```

Random wallpaper script — ~/scripts/wallpaper.sh
```
#!/bin/bash WALLDIR="$HOME/Wallpapers" IMG=$(ls $WALLDIR/*.{jpg,png,jpeg} 2>/dev/null |
shuf -n1) swww img "$IMG" --transition-type random --transition-duration 1

chmod +x ~/scripts/wallpaper.sh
```

★ *Make ~/Wallpapers/ and drop your images there. Bind Mod+Shift+W to the script in niri config.*

⑦ Warm Light with wlsunset

wlsunset shifts your screen colour temperature automatically based on time of day. Adjust -l (latitude) and -L (longitude) to your location.

```
# Thiruvananthapuram, Kerala example wlsunset -l 8.5 -L 76.9 -t 3500 -T 6500 # Add to niri
autostart: spawn-at-startup "wlsunset" "-l" "8.5" "-L" "76.9" "-t" "3500" "-T" "6500"
```

★ *-t is night colour temp (warm), -T is day colour temp. 3500K is warm, 6500K is neutral daylight.*

⑧ Mako Notifications — ~/.config/mako/config

```
font=JetBrainsMono Nerd Font 11 background-color=#1e1e2eee text-color=#cdd6f4
border-color=#cba6f7 border-radius=8 border-size=2 padding=12 width=340 height=120
max-visible=5 default-timeout=5000 layer=overlay
```

⑨ Logout with wleave

wleave shows a grid of logout/shutdown/reboot/suspend buttons. Bind Mod+W to launch it.

```
wleave
```

You can theme wleave by placing a CSS file at **~/.config/wleave/style.css**. Check the wleave GitHub README for button IDs to style each button individually.

⑩ Lock Screen — ~/.config/swaylock/config

```
color=1e1e2e ring-color=cba6f7 key-hl-color=a6e3a1 line-color=00000000 inside-color=1e1e2e
separator-color=00000000 font=JetBrainsMono Nerd Font indicator-radius=80
indicator-thickness=6 show-failed-attempts
```

Auto-lock with swayidle

```
swayidle -w \ timeout 300 "swaylock -f" \ timeout 600 "niri msg action power-off-monitors"
\ resume "niri msg action power-on-monitors"
```

■ Low-End Performance Tips

Tip	Detail
Reduce animation speed	Set 'slowdown 0.3' or even 'off' in niri animations block
Use foot over kitty/alacritty	foot has the smallest memory footprint of all Wayland terminals
Use yazi over thunar	yazi uses zero GPU, runs in terminal — huge RAM savings
Disable waybar modules you don't need	Each unused module = fewer background polls
Use swaylock not hyprlock	swaylock is ~3MB RAM vs hyprlock's ~20MB on lock
Use mako not dunst	mako is simpler and lighter than dunst on Wayland
Limit swww transition duration	Keep --transition-duration to 0.5-1s on weak GPUs
Kill pavucontrol after use	Don't leave it open in the background
Disable blur/shadows in niri	Remove the shadow block if GPU is very weak

■ Quick Reference Keybinds

```
Mod+Return → Open terminal (foot) Mod+D → App launcher (fuzzel) Mod+E → File manager
(thunar / yazi) Mod+W → Logout menu (wleave) Mod+L → Lock screen (swaylock) Mod+Q → Close
window Mod+F → Maximize column Mod+Shift+F → Fullscreen Mod+Shift+W → Random wallpaper
Mod+V → Clipboard history (fuzzel) Mod+Left/Right → Focus column Mod+Up/Down → Focus
window in column Mod+1..4 → Switch workspace Print → Screenshot selection → swappy
```

Happy Ricing! ■