

Theme Picker for RoboDK

Theme Picker suggests 3D view backgrounds that make your robot stand out, switches between them in one click, and lets you create and save your own themes.

Version 1.0.0

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What a theme is

A theme is three RoboDK settings:

Setting	Value
Theme	1 = light interface, 2 = dark interface
ColorBgTop	top colour of the 3D view background, #RRGGBB
ColorBgBottom	bottom colour of the 3D view background, #RRGGBB

RoboDK draws its 3D labels in white and the API can't change that, so every background Theme Picker suggests keeps white text readable (contrast of 4.5:1 or more).

Actions and keyboard shortcuts

Action	Shortcut	What it does
Next Theme	Ctrl+Shift+N	Steps through four themes suggested for the robot in the open station
Themes	none	Opens the Themes window
Restore	Ctrl+Shift+R	Restores RoboDK's default: Theme 0, ColorBgTop #000033, ColorBgBottom #6666B2

All three are in the Theme Picker menu and on the toolbar. Shortcuts are set in `AppConfig.ini` (`Shortcut=...`). If one clashes with another RoboDK shortcut, change it there and reload the add-in.

Next Theme

Each click applies the next of four themes:

1. Deep background, light interface
2. Deep background, dark interface
3. Lifted background, light interface
4. Lifted background, dark interface

The four share one background colour, the one opposite the robot's on the painter's colour wheel: green for a red robot, blue for orange, violet for yellow, dark red for green. Blue robots get a warm grey; white, grey and black robots get blue. A lighter robot gets a slightly darker, richer background.

Both backgrounds run from a near-black top to a clearly coloured bottom, about as steep as RoboDK's default gradient. Deep is darker and richer. Lifted is as bright as white labels allow, and softer.

The status bar shows the theme that was applied, its two colours and the robot it was based on.

Which colour is used:

- Several robots: the robot selected in the tree, otherwise the visible arm with the most axes.

- The colour most of the robot's links share is used, so accents such as red motor covers are ignored.
- No robot: the selected object, otherwise the first visible object.
- Nothing in the station: random colours.

Dark robots (black, dark blue) can't stand out strongly, because they need a light background and white labels need a dark one. Theme Picker picks the best balance and says so in the status bar.

Themes window

Pick a preset (Graphite, Midnight, Petrol, Aubergine, Ink), one of the four suggestions or one of your own themes. Edit the three settings with a live preview in RoboDK, and save the result as your own theme. The window warns when white labels or the robot get hard to see.

Set `DOCK_IN_ROBODK = True` at the top of `Themes.py` to dock the window inside RoboDK.

Install

Use the RoboDK Add-in Manager to install the add-in: select Tools > Add-in Manager, click Install... and choose the `.rdkp` file.

Files Theme Picker saves

In `<home folder>/RoboDK-ThemePicker`:

- `suggestions.json`: the current four suggestions, rebuilt when the station or robot changes.
- `custom/*.json`: your saved themes, one file each.

A theme file looks like this:

```
{"name": "My Navy", "Theme": 2, "ColorBgTop": "#0A111E", "ColorBgBottom": "#1B2A41"}
```

The theme designer page exports the same format: use Paste theme in the Themes window.

Icons

`NextTheme.png`, `Themes.png` and `Restore.png` are the toolbar and menu icons. `icon.png` is the add-in's package icon, a copy of the Next Theme icon. All are 256 px renders of Robot Automation artwork.

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