MARLIN GUI

work in progress
17-11-2013

① ②

play/print

print
settings

machine
settings

schelp_fixed.gcode
thunderbirds_middlepart.gcode
joris_week34.gcode

vase_gyroid_extreme.gcode
regular_bracelet.gcode
zombie_hunterhead.gcode

the_colonel.gcode
stretchy_bracelet_marathon_eindhoven.gcode
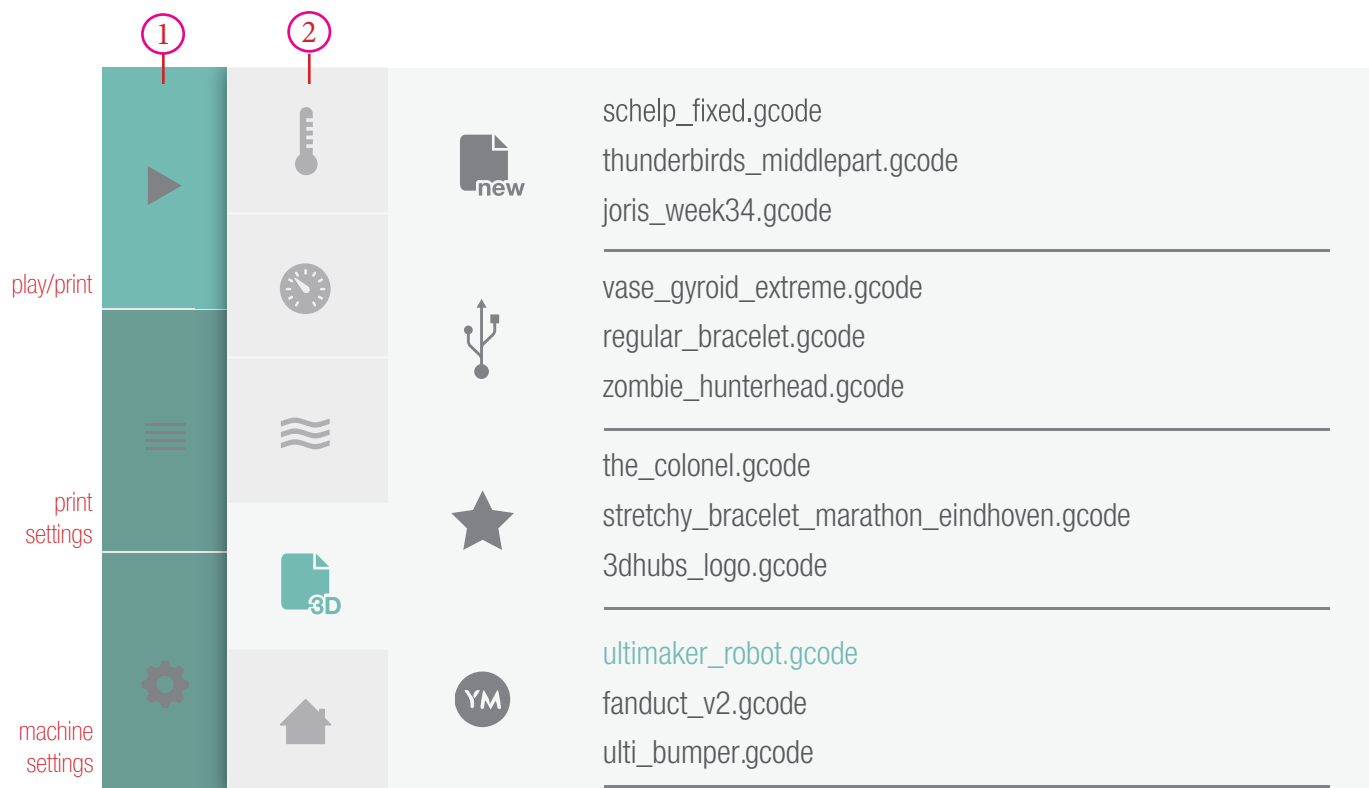3dhubs_logo.gcode

ultimaker_robot.gcode
fanduct_v2.gcode
ulti_bumper.gcode

The 'main menu' is shown always on the left, indicated by point 1. It contains three buttons, **'Play/Print'**, **'Print settings'** and **'Machine settings'**.

'Play/Print'
Marlin will start-up with the Play/Print open as default. A second bar with **quick buttons** is placed next to the 'main menu' bar. The quick buttons will be dynamic, depending on the machine state.

'Print settings' will feature a full list of print settings. This list will be dynamic depending on the machine state, pre print or during print. It might feature upto 24 small icons or fewer large icons. Ideally these icons should feature 'live information' immediately showing relevant printer settings such as temperature, speed, flow etc.

'Machine settings'
In this menu settings related to the machine will be shown. These settings will be used by 'pro users' but entry level users will not be likely to make changes to these settings.

'Play/Print' > 'SDCARD'
This menu is used to select a print file. The 4 categories, 'New', 'USB', 'Favorite' and 'YouMagine' make finding the appropriate file and 'archiving files' easier and more efficient.
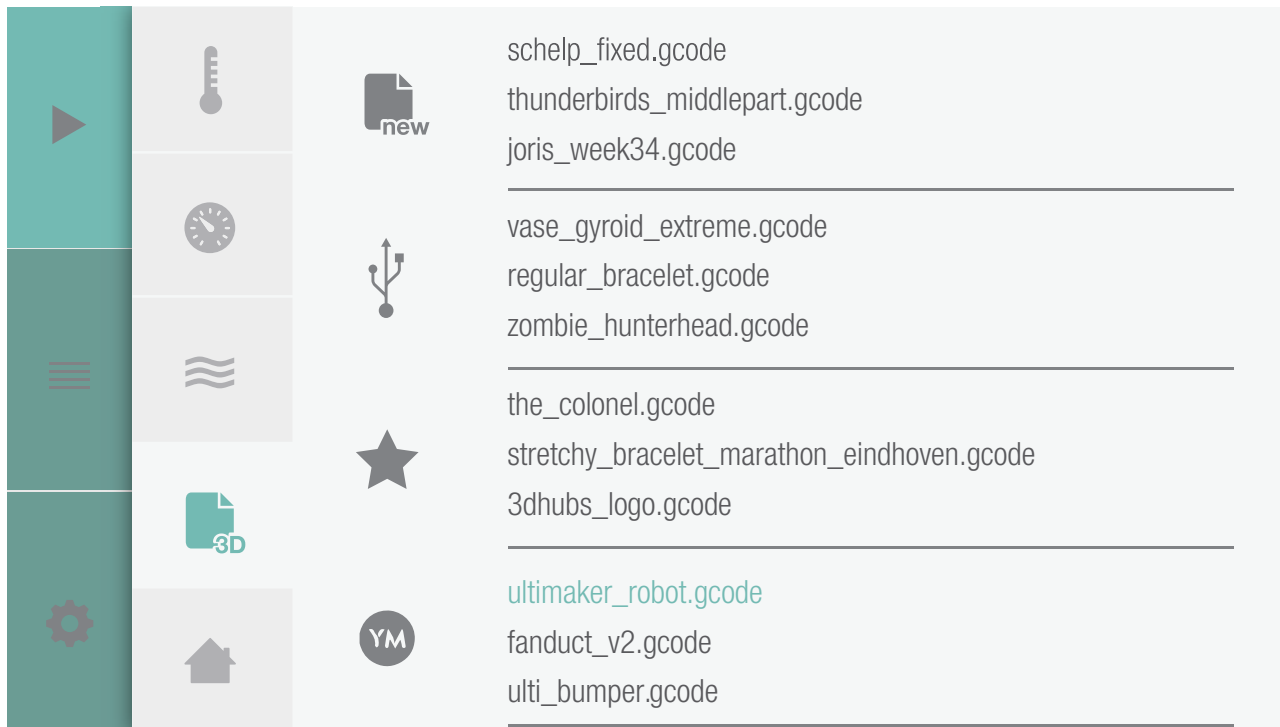
schelp_fixed.gcode

85% | TIME LEFT: 4:53 | Z: 53.06
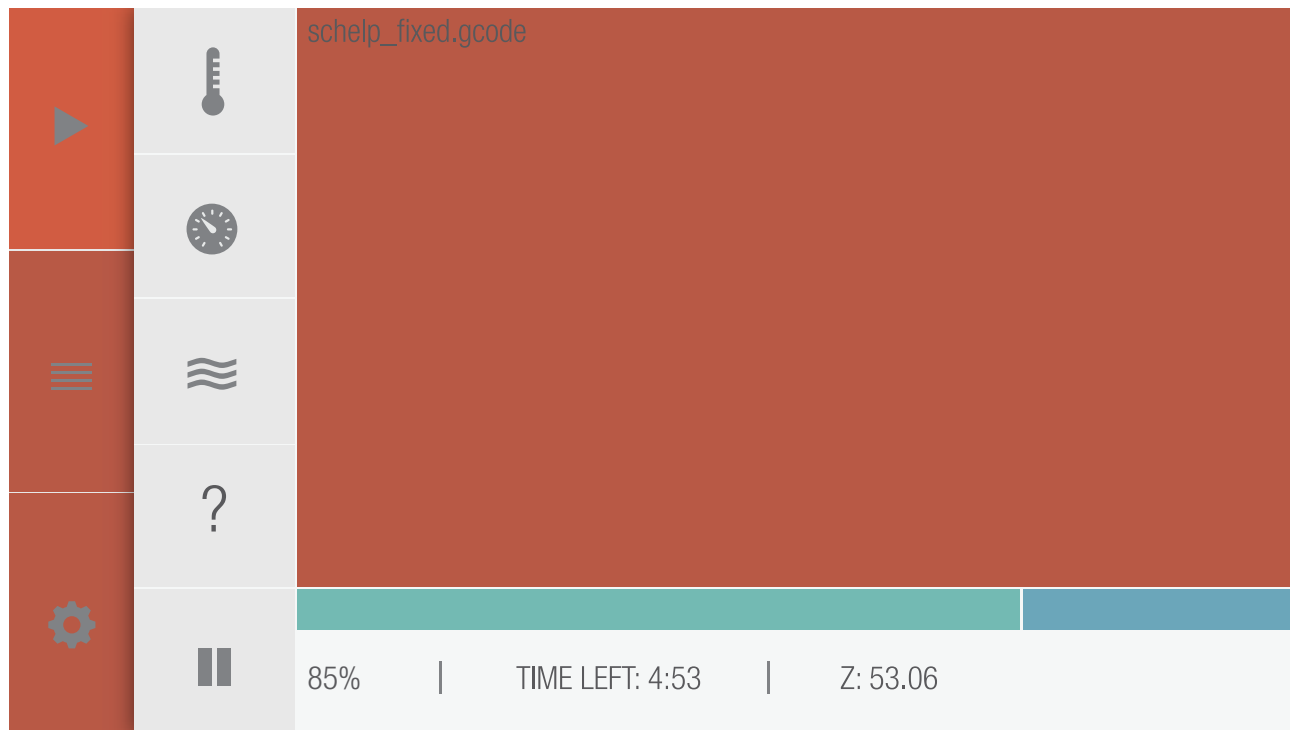
'Watch screen' when printing the 'play/print' button is highlighted and as a default the watch screen is shown. The watch screen shows relevant information about the print that is in progress. The bottem bar features a progress bar, percentage counter, time left and z height indicator.

The 'quick buttons' will now feature settings that are relevant while printing is in progress, such as temperature, speed, flow and etc.

The main screen can be used for many purposes. For instance showing current layer being printed, 3d rendered stl model and etc.
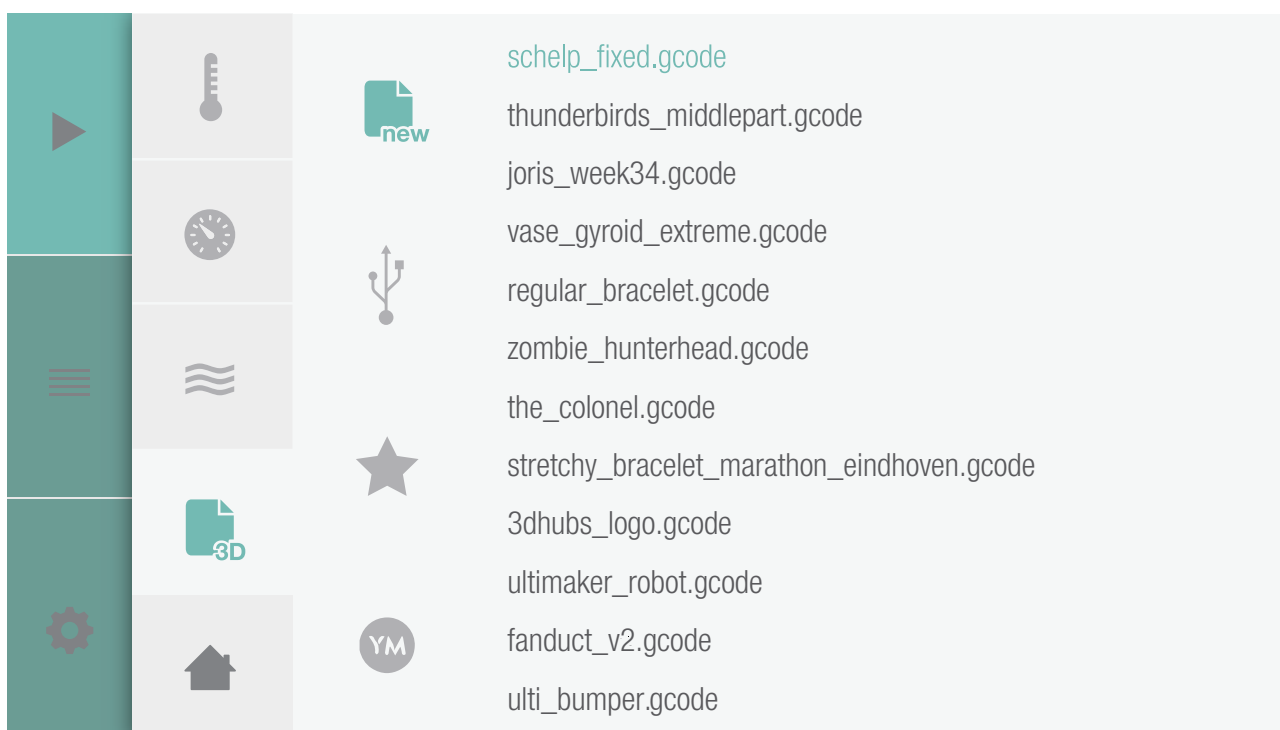
MARLIN START SCREEN
Selecting a file to print. No category is selected, so the three latest files of each category are shown. The very latest file is highlighted.

schelp_fixed.gcode
thunderbirds_middlepart.gcode
joris_week34.gcode

vase_gyroid_extreme.gcode
regular_bracelet.gcode
zombie_hunterhead.gcode

the_colonel.gcode
stretchy_bracelet_marathon_eindhoven.gcode
3dhubs_logo.gcode

ultimaker_robot.gcode
fanduct_v2.gcode
ulti_bumper.gcode

'FILE SELECTION'
The category 'new' is selected and the file schelp_fixed.gcode is chosen for printing.

schelp_fixed.gcode
thunderbirds_middlepart.gcode
joris_week34.gcode
vase_gyroid_extreme.gcode
regular_bracelet.gcode
zombie_hunterhead.gcode
the_colonel.gcode
stretchy_bracelet_marathon_eindhoven.gcode
3dhubs_logo.gcode
ultimaker_robot.gcode
fanduct_v2.gcode
ulti_bumper.gcode

"PREPARE SCREEN"

Selected file will show up as rendered image or toolpath visualisation. Print time and estimated weight is shown in lower bar. Oke button will start print, cancel button will return to file selection menu.

schelp_fixed.gcode | 5:45 | 360 gr

'DURING PRINT SCREEN'

The colorscheme has changed to indicate that the current machine state is printing. Icons in quick selection menu have changed with the machine state.

schelp_fixed.gcode

85% | TIME LEFT: 4:53 | Z: 53.06
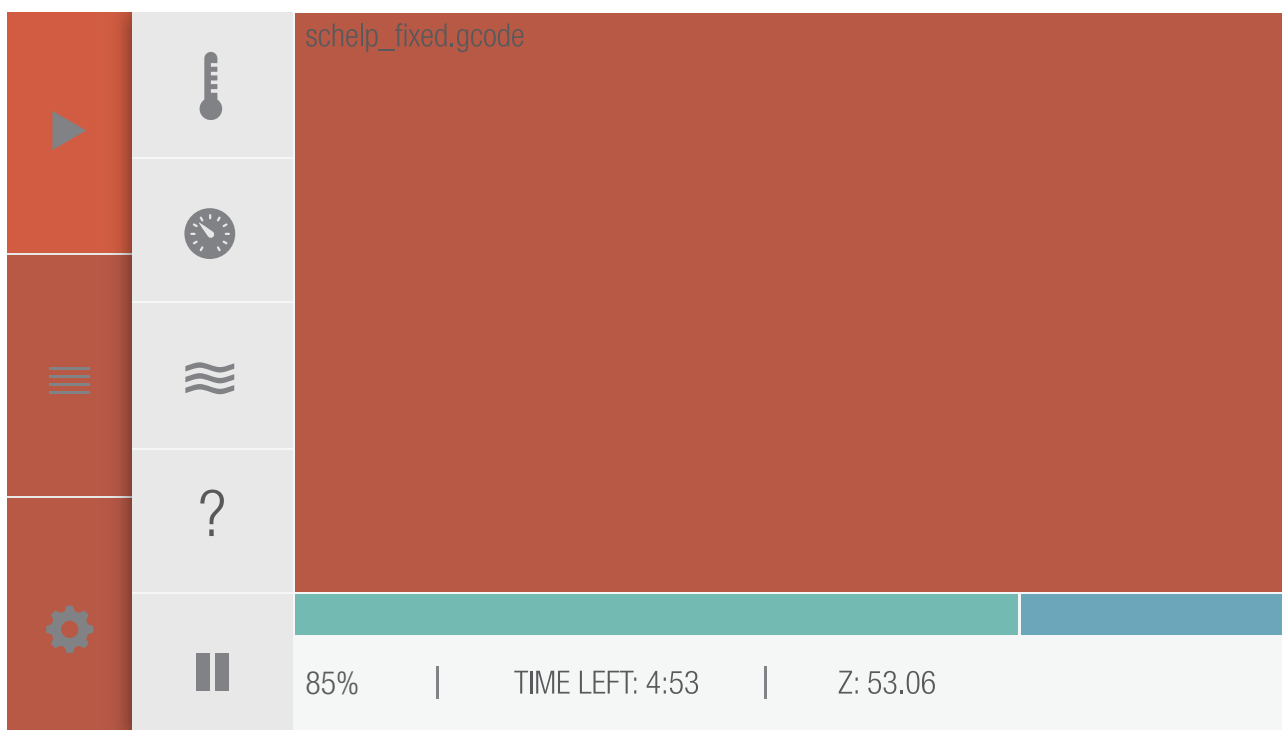
'ADJUST TEMPERATURE SCREEN'
Before printing and while printing the temperature can be
set. Extruders can be linked to heat up at the same time
or unlinked to heat seperately. Flags can be placed to
indicate preheat settings for different materials.

A similar screen can be used for adjusting print speed
and flow rate.
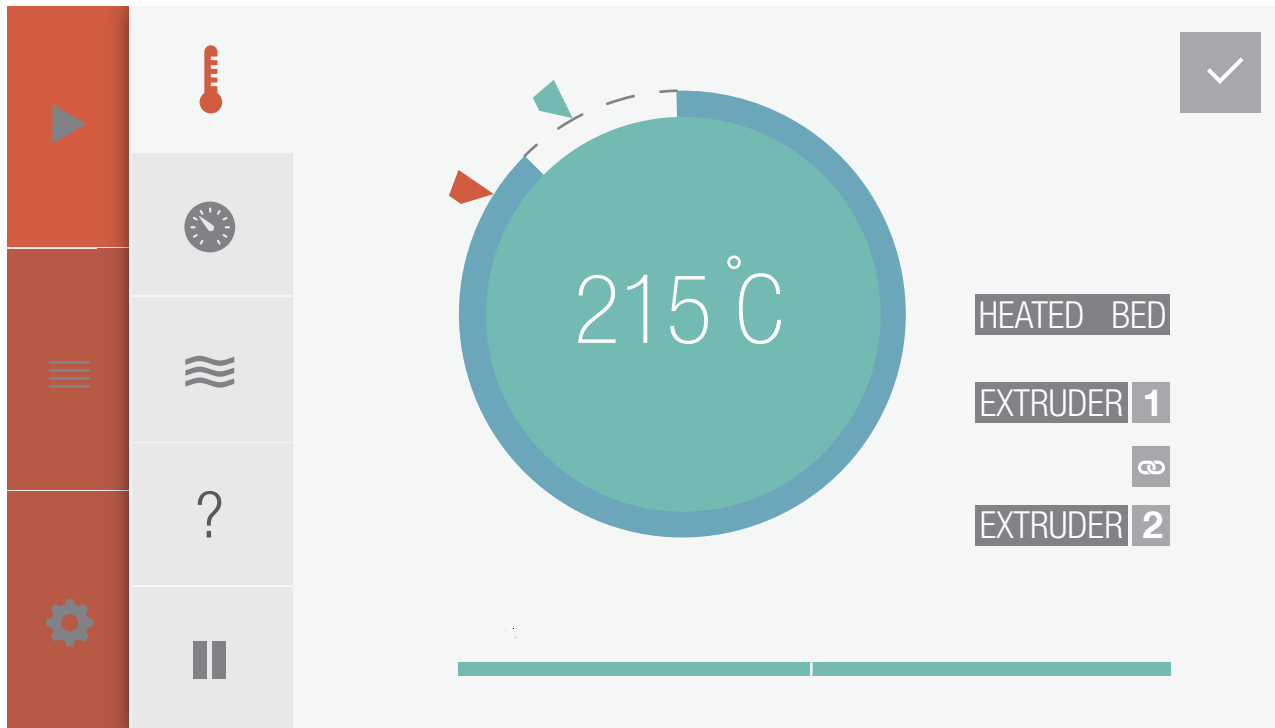
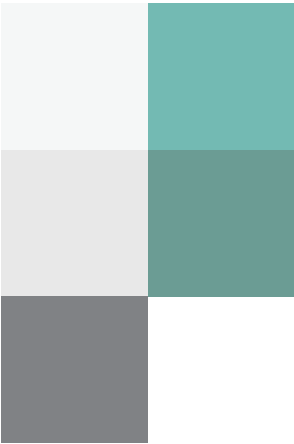**GRID - MARLIN GUI**
Screen size is 272 px by 480 px.

Buttons must be aligned with the pixelgrid of the
screen. Therefore buttons will be rounded to full pixels
and icons will be aligned to pixel grid too.

381

52 px

52 px

1 px

3 px

90 px

48 px

272

11 px

4 px

11 px

4 px

65 px X 65 px

90 px

47 px
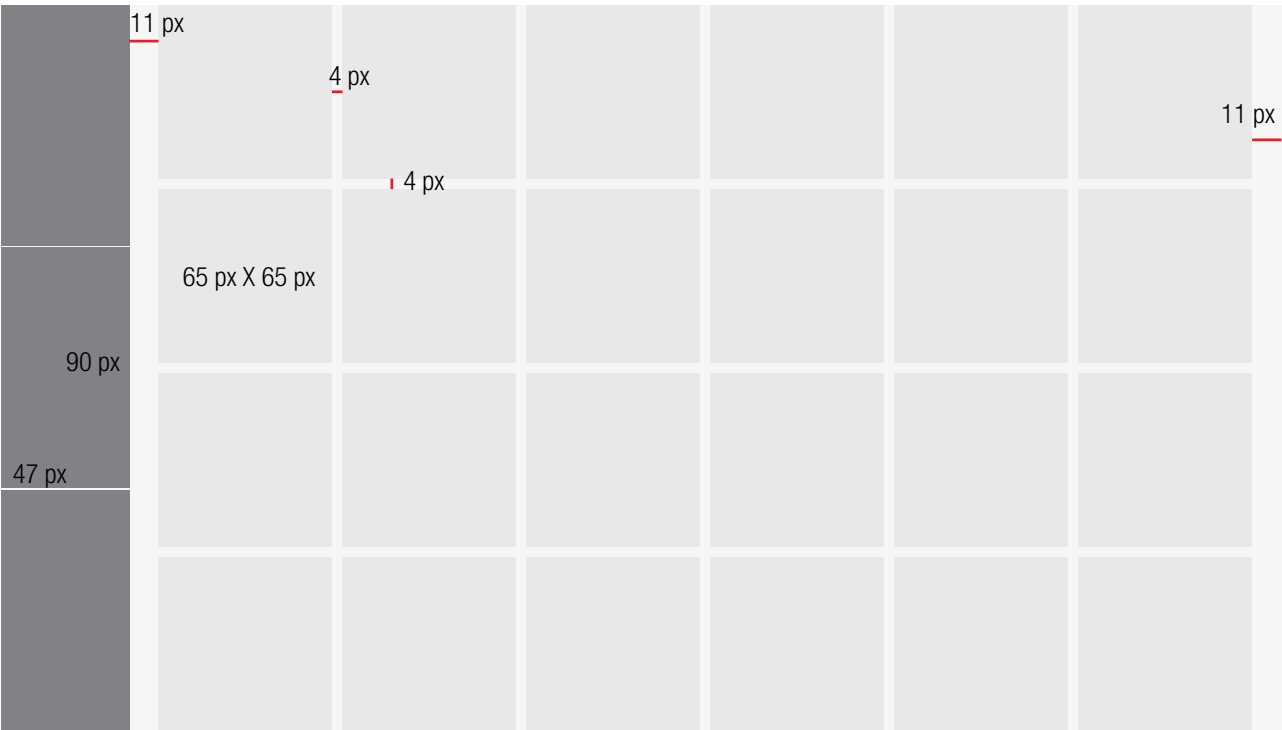
COLOR - MARLIN GUI

Colorschemes will be used to differentiate between
various machine states. A basic set of white, beige and
grey will be used through out the interface. A set of
colors will be used to highlight aspects of the interface,
this color will vary to show machine state, 'pre-print' or
'during printing'

Pre Print state   **During Print state**   **Extra**

ICONS - MARLIN GUI

Icons will be simple flat representations of the function,
feature or action of the button.

MARLIN MENU TREE

MAIN
- Play/Print
- Print settings
- Machine settings

PLAY/Print
- temperature
- speed
- flow
- SD card
- Motivation move axis

Print/Watch
- temp
- speed
- flow

Temp / Speed / Flow
- adjust knob
- show value

SD CARD
- New
- USB/SD
- favourite
- YN

Print settings
- temperature
- speed
- flow
- Disable step
- Move axis

Print Settings
- temp
- speed
- flow
- disable step
- move axis

Machine Settings
- Motion

direct button