RebGUI Widget Reference

```
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Purpose: Describes the use and operation of the various RebGUI widgets.
```

Introduction

Each of the following sections describes a function in detail with one or more of the following:

- **Usage:** one or more code samples demonstrating an aspect of the widget's use.
- **Description:** brief description of what the widget is and any other points of interest.
- **Options:** allowable specification options.
- **Attributes:** `rebface` attributes with a value other than `none!` (the default).
- **Predefined feels:** feel function(s) that have already been defined.
- **Predefined actions:** action function(s) that have already been defined.
- **Extended attributes:** attributes, other than functions, not present in the standard `rebface` object.
- **Accessor functions:** functions specific to the widget.

Contents

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1. anim

```
USAGE:
    anim data [ctx-rebgui/images/help ctx-rebgui/images/info]
    anim data [%img1.png %img2.png %img3.png]
```

```
     anim data [img1 img2 img3] rate 2

  DESCRIPTION:
      Cycles a set of images at a specified rate.

  ATTRIBUTES:
      size              -1x-1
      effect            fit
      rate              1

  PREDEFINED ACTIONS:
      on-time

  EXTENDED ATTRIBUTES:
      init              function!
```

Source code: anim.r

2. area

```
  USAGE:
      area
      area "Text" -1
      area "Text" 50x-1

  DESCRIPTION:
      Editable text area with wrapping and scroller.

  ATTRIBUTES:
      size              50x25
      text              ""
      color             255.255.255
      edge              object!
      font              object!
      para              object!

  PREDEFINED FEELS:
      redraw
      engage

  PREDEFINED ACTIONS:
      on-resize
      on-scroll

  EXTENDED ATTRIBUTES:
      esc               none
      caret             none
      undo              block!
      text-y            none
      key-scroll?       false
      init              function!
```

Source code: area.r

3. arrow

```
  USAGE:
      arrow
      arrow 10
      arrow data 'up
      arrow data 'down
      arrow data 'left
      arrow data 'right

  DESCRIPTION:
      An arrow (default down) on a square button face with height set to width.

  ATTRIBUTES:
      size              5x-1
      effect            block!
      data              down
      edge              object!

  PREDEFINED FEELS:
      over
      engage

  EXTENDED ATTRIBUTES:
      old-color         none
      init              function!
```

Source code: arrow.r

4. bar

```
USAGE:
    bar 100

DESCRIPTION:
    A thin bar used to separate widgets.
    Defaults to maximum display width.

ATTRIBUTES:
    size            -1x-1
    color           112.112.112

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: bar.r

5. box

```
USAGE:
    box red

DESCRIPTION:
    The most basic of widgets, a rectangular area.

ATTRIBUTES:
    size            25x25
```

Source code: box.r

6. btn

```
USAGE:
    btn "Hello"
    btn -1 "Go!"
    btn "Click me!" [print "click"]

DESCRIPTION:
    Performs action when clicked.

ATTRIBUTES:
    size            -1x5
    text            ""
    effect          block!
    edge            object!
    font            object!

PREDEFINED FEELS:
    over
    engage

EXTENDED ATTRIBUTES:
    old-color       none
    init            function!
```

Source code: btn.r

7. button

```
USAGE:
    button "Hello"
    button -1 "Go!"
    button "Click me!" [print "click"]

DESCRIPTION:
    Performs action when clicked.

ATTRIBUTES:
    size            15x5
    text            ""
    effect          block!
    font            object!

PREDEFINED FEELS:
    over
    engage
```

```
    PREDEFINED ACTIONS:
        on-resize

    EXTENDED ATTRIBUTES:
        init             function!
        old-color        none
```

Source code: button.r

8. calendar

```
    USAGE:
        calendar
        calendar data 1-Jan-2000

    DESCRIPTION:
        Used to select a date, with face/data set to current selection.
        Default selection is now/date.

    ATTRIBUTES:
        size             56x40
        color            255.255.255
        edge             object!

    PREDEFINED FEELS:
        redraw

    EXTENDED ATTRIBUTES:
        date             none
        init             function!
```

Source code: calendar.r

9. chat

```
    USAGE:
        chat 120 data ["Bob" blue "My comment." yello 14-Apr-2007/10:58]

    DESCRIPTION:
        Three column chat display as found in IM apps such as AltME.
        Messages are appended, with those exceeding 'limit not shown.

    OPTIONS:
        [limit n] where n specifies number of messages to show (default 100)
        [id n] where n specifies id column width (default 10)
        [user n] where n specifies user column width (default 15)
        [date n] where n specifies date column width (default 25)

    ATTRIBUTES:
        size             200x100
        pane             block!
        data             block!
        edge             object!

    PREDEFINED ACTIONS:
        on-resize

    EXTENDED ATTRIBUTES:
        height           0
        rows             0
        limit            none
        init             function!

    ACCESSOR FUNCTIONS:
        APPEND-MESSAGE user user-color msg msg-color date /no-show row
        SET-USER-COLOR id color
        SET-MESSAGE-TEXT id string
        SET-MESSAGE-COLOR id color
        REDRAW /no-show
```

Source code: chat.r

10. check

```
    USAGE:
        check "Option"
        check "Option" data true
        check "Option" data false
```

```
DESCRIPTION:
    Bistate check-box with a tick for Yes and empty for No.

ATTRIBUTES:
    size            -1x5
    text            ""
    effect          block!
    font            object!
    para            object!

PREDEFINED FEELS:
    over
    engage

EXTENDED ATTRIBUTES:
    p1              2x6
    p2              10x14
    init            function!
```

Source code: check.r

11. check-group

```
USAGE:
    check-group data ["Option-1" true "Option-2" false "Option-3" none]

DESCRIPTION:
    Group of check boxes.
    Alignment is vertical unless height is specified as line height.
    At runtime face/data is a block of logic (or none) indicating state of each check box.

ATTRIBUTES:
    size            50x-1
    pane            block!

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: check-group.r

12. drop-list

```
USAGE:
    drop-list "1" data [1 2 3]
    drop-list data ["One" "Two" "Three"]
    drop-list data ctx-rebgui/locale*/colors

DESCRIPTION:
    Single column modal selection list.
    At runtime face/text contains current selection.

ATTRIBUTES:
    size            25x5
    text            ""
    effect          block!
    data            block!
    edge            object!
    font            object!

PREDEFINED FEELS:
    over
    engage

PREDEFINED ACTIONS:
    on-resize
    on-unfocus

EXTENDED ATTRIBUTES:
    hidden-caret    none
    hidden-text     none
    init            function!

ACCESSOR FUNCTIONS:
    PICKED
```

Source code: drop-list.r

13. edit-list

```
USAGE:
```

```
        edit-list "1" data [1 2 3]
        edit-list data ["One" "Two" "Three"]
        edit-list data ctx-rebgui/locale*/colors

    DESCRIPTION:
        Editable single column modal selection list.
        At runtime face/text contains current selection.

    ATTRIBUTES:
        size            25x5
        text            ""
        color           255.255.255
        data            block!
        edge            object!
        font            object!
        para            object!

    PREDEFINED FEELS:
        over
        engage

    PREDEFINED ACTIONS:
        on-resize
        on-unfocus

    EXTENDED ATTRIBUTES:
        hidden-caret    none
        hidden-text     none
        init            function!
        caret           none

    ACCESSOR FUNCTIONS:
        PICKED
```

Source code: edit-list.r

14. field

```
    USAGE:
        field
        field -1 "String"

    DESCRIPTION:
        Editable text field with no text wrapping.

    ATTRIBUTES:
        size            50x5
        text            ""
        color           255.255.255
        edge            object!
        font            object!
        para            object!

    PREDEFINED FEELS:
        engage

    EXTENDED ATTRIBUTES:
        init            function!
        esc             none
        caret           none
        undo            block!
```

Source code: field.r

15. group-box

```
    USAGE:
        group-box "Title" data [field field]

    DESCRIPTION:
        A static widget used to group widgets within a bounded container.

    ATTRIBUTES:
        size            -1x-1
        text            ""
        effect          block!
        font            object!
        para            object!

    PREDEFINED FEELS:
        redraw
```

```
PREDEFINED ACTIONS:
    on-resize

EXTENDED ATTRIBUTES:
    group           none
    init            function!
```

Source code: group-box.r

16. heading

```
USAGE:
    heading "A text heading."

DESCRIPTION:
    Large text.

ATTRIBUTES:
    size            -1x7
    text            ""
    font            object!

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: heading.r

17. icon

```
USAGE:
    icon %actions/go-up.png

DESCRIPTION:
    An icon.

ATTRIBUTES:
    size            5x5
    pane            block!
    effect          block!
    data            down
    edge            object!

PREDEFINED FEELS:
    over
    engage

EXTENDED ATTRIBUTES:
    old-color       none
    init            function!
```

Source code: icon.r

18. image

```
USAGE:
    image %icons/Tango-feet.png
    image logo
    image logo effect [crop 10x10 50x50]

DESCRIPTION:
    An image.

ATTRIBUTES:
    size            -1x-1
    effect          fit

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: image.r

19. label

```
USAGE:
    label "A text label."

DESCRIPTION:
```

```
        Label text.

    ATTRIBUTES:
        size            25x5
        text            ""
        font            object!

    EXTENDED ATTRIBUTES:
        init            function!
```

Source code: label.r

20. led

```
    USAGE:
        led "Option"
        led "Option" data true
        led "Option" data false
        led "Option" data none

    DESCRIPTION:
        Tristate indicator box with colors representing Yes & No, and empty being Unknown.

    ATTRIBUTES:
        size            -1x5
        effect          block!
        font            object!
        para            object!

    PREDEFINED FEELS:
        redraw

    EXTENDED ATTRIBUTES:
        init            function!
```

Source code: led.r

21. led-group

```
    USAGE:
        led-group data ["Option-1" true "Option-2" false "Option-3" none]

    DESCRIPTION:
        Group of LED indicators.
        Alignment is vertical unless height is specified as line height.
        At runtime face/data is a block of logic (or none) indicating state of each LED indicator.

    ATTRIBUTES:
        size            50x-1
        pane            block!

    PREDEFINED FEELS:
        redraw

    EXTENDED ATTRIBUTES:
        init            function!
```

Source code: led-group.r

22. link

```
    USAGE:
        link
        link http://www.dobeash.com
        link "RebGUI" http://www.dobeash.com/rebgui

    DESCRIPTION:
        Hypertext link.

    ATTRIBUTES:
        size            -1x5
        font            object!

    PREDEFINED FEELS:
        over
        engage

    EXTENDED ATTRIBUTES:
        init            function!
```

Source code: link.r

23. menu

```
USAGE:
    menu data ["Item-1" ["Choice 1" [alert "1"] "Choice 2" [alert "2"] ] "Item-2" [] ]

DESCRIPTION:
    Simple one-level text-only menu system.

ATTRIBUTES:
    size            100x5
    pane            block!
    color           207.207.207
    effect          block!
    edge            object!
    font            object!

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: menu.r

24. panel

```
USAGE:
    panel data [after 1 field field]

DESCRIPTION:
    A static widget used to group widgets within a container.

ATTRIBUTES:
    size            -1x-1
    effect          block!

PREDEFINED ACTIONS:
    on-resize

EXTENDED ATTRIBUTES:
    group           none
    init            function!
```

Source code: panel.r

25. password

```
USAGE:
    password
    password "Secret"

DESCRIPTION:
    Editable password field with text displayed as a progress bar.

ATTRIBUTES:
    size            50x5
    text            ""
    color           255.255.255
    effect          block!
    edge            object!
    font            object!
    para            object!

PREDEFINED FEELS:
    engage

PREDEFINED ACTIONS:
    on-edit

EXTENDED ATTRIBUTES:
    init            function!
    esc             none
    caret           none
    undo            block!
```

Source code: password.r

26. pill

```
USAGE:
    pill red

DESCRIPTION:
    A rectangular area with rounded corners.

ATTRIBUTES:
    size            10x10
    effect          block!

PREDEFINED ACTIONS:
    on-resize

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: pill.r

27. progress

```
USAGE:
    progress
    progress data .5

DESCRIPTION:
    A horizontal progress indicator.
    At runtime face/data ranges from 0 to 1 indicating percentage.

ATTRIBUTES:
    size            50x5
    effect          block!
    data            0
    edge            object!

PREDEFINED FEELS:
    redraw

PREDEFINED ACTIONS:
    on-resize

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: progress.r

28. radio-group

```
USAGE:
    radio-group data ["Option A" "Option B"]
    radio-group data [2 "On" "Off"]

DESCRIPTION:
    Group of mutually exclusive radio buttons.
    Alignment is vertical unless height is specified as line height.
    An integer provided as the first entry in the block indicates the default selection.

ATTRIBUTES:
    size            -1x-1
    pane            block!

EXTENDED ATTRIBUTES:
    picked          none
    init            function!

ACCESSOR FUNCTIONS:
    SELECTED
    SELECT-ITEM item
```

Source code: radio-group.r

29. scroll-panel

```
USAGE:
    scroll-panel data [sheet]

DESCRIPTION:
    A panel used to group widgets within a scrollable container.

OPTIONS:
```

```
        'offset keeps the original offset

    ATTRIBUTES:
        size            50x50
        pane            block!
        edge            object!

    PREDEFINED ACTIONS:
        on-click
        on-resize
        on-scroll

    EXTENDED ATTRIBUTES:
        p1              none
        p2              none
        p3              none
        p4              none
        sld-offset      0x0
        init            function!
```

Source code: scroll-panel.r

30. sheet

```
    USAGE:
        sheet
        sheet options [size 3x3 width 2]
        sheet options [size 3x3 widths [2 3 4] ]
        sheet data [A1 1 A2 2 A3 "=A1 + A2"]

    DESCRIPTION:
        Simple spreadsheet, based on rebocalc.r, with formulas calculated left to right, top to bottom.
        A cell is either a scalar value, string, or a formula starting with "=".
        Scalar values are automatically right-justified, series values left-justified.
        Remember to put spaces between each item in a formula and use () where needed.

    OPTIONS:
        'size specifies number of columns and rows
        'width specifies cell width in relation to cell height
        'widths specifies n cell widths

    ATTRIBUTES:
        size            -1x-1
        pane            block!
        color           207.207.207
        data            block!

    EXTENDED ATTRIBUTES:
        group           none
        init            function!

    ACCESSOR FUNCTIONS:
        LOAD-DATA dat
        SAVE-DATA
        ENTER face
        COMPUTE
```

Source code: sheet.r

31. slider

```
    USAGE:
        slider []
        slider data .5 [print face/data]

    DESCRIPTION:
        A slider control. Its size determines whether it is vertical or horizontal.
        At runtime face/data ranges from 0 to 1 indicating percentage.

    OPTIONS:
        [ratio n] where n indicates the initial dragger size

    ATTRIBUTES:
        size            5x50
        pane            block!
        effect          block!
        data            0
        edge            object!
        font            object!

    PREDEFINED FEELS:
        redraw
```

```
         over
         engage

EXTENDED ATTRIBUTES:
    ratio           0.1
    step            5E-2
    axis            2
    state           none
    init            function!

ACCESSOR FUNCTIONS:
    SET-DATA new
    UPDATE-DATA offset
```

Source code: slider.r

32. spinner

```
USAGE:
    spinner
    spinner options [$1 $10 $1] data $5

DESCRIPTION:
    Similar to a field, with arrows to increment/decrement a value by a nominated step amount.

OPTIONS:
    [min max step] block of minimum, maximum and step amounts

ATTRIBUTES:
    size            20x5
    pane            block!
    text            ""
    color           255.255.255
    edge            object!
    font            object!
    para            object!

PREDEFINED FEELS:
    engage

PREDEFINED ACTIONS:
    on-resize
    on-scroll
    on-unfocus

EXTENDED ATTRIBUTES:
    init            function!
    esc             none
    caret           none
    undo            block!
```

Source code: spinner.r

33. splitter

```
USAGE:
    area splitter area

DESCRIPTION:
    Placed between two widgets on the same row or column.
    Allows both to be resized by dragging the splitter left/right or up/down respectively.
    Its size determines whether it is vertical or horizontal.

ATTRIBUTES:
    size            2x25
    effect          block!
    edge            object!
    font            object!

PREDEFINED FEELS:
    redraw
    over
    engage

EXTENDED ATTRIBUTES:
    init            function!
```

Source code: splitter.r

34. tab-panel

```
USAGE:
    tab-panel data ["A" [field] "B" [field] "C" [field] ]
    tab-panel data ["1" [field] action [face/color: red] "2" [field] ]

DESCRIPTION:
    A panel with a set of tabs.
    Each tab spec may be preceded by an action block spec.

OPTIONS:
    'action do action of initial tab (if any)
    [tab n] where n specifies tab to initially open with (default 1)
    no-tabs do not display tabs (overlay mode)

ATTRIBUTES:
    size            -1x-1
    pane            block!

EXTENDED ATTRIBUTES:
    group           none
    tabs            0
    init            function!

ACCESSOR FUNCTIONS:
    SELECTED
    SELECT-TAB num
    REPLACE-TAB num block /title text
```

Source code: tab-panel.r

35. table

```
USAGE:
    table options ["Name" left .5 "Age" right .5] data ["Bob" 32 "Pete" 45 "Jack" 29]

DESCRIPTION:
    Columns and rows of values formatted according to a header definition block.

OPTIONS:
    'multi allows multiple rows to be selected at once
    'no-sort disables column sorting
    'no-resize disables column resizing
    'fixed-sort limits sorting to first column only

ATTRIBUTES:
    size            50x25
    pane            block!
    color           255.255.255
    data            block!
    edge            object!

PREDEFINED ACTIONS:
    on-resize

EXTENDED ATTRIBUTES:
    picked          block!
    widths          block!
    aligns          block!
    cols            none
    init            function!

ACCESSOR FUNCTIONS:
    REDRAW
    SELECTED
    ROWS
    ADD-ROW row /position pos
    REMOVE-ROW row
    ALTER-ROW row values
    SELECT-ROW row /no-action
```

Source code: table.r

36. text

```
USAGE:
    text "A text string."
    text "Blue text" text-color blue
    text "Bold text" bold
    text "Italic text" italic
    text "Underline text" underline

DESCRIPTION:
```

```
        Normal text.

    ATTRIBUTES:
        size            -1x5
        text            ""
        font            object!
        para            object!

    EXTENDED ATTRIBUTES:
        init            function!
```

Source code: text.r

37. text-list

```
    USAGE:
        text-list data ["One" "Two"]
        text-list data ctx-rebgui/locale*/colors
        text-list data [1 2]  [print face/selected]

    DESCRIPTION:
        A single column list with a scroller.

    OPTIONS:
        'multi allows multiple rows to be selected at once

    ATTRIBUTES:
        size            50x25
        color           255.255.255
        data            block!
        edge            object!

    PREDEFINED ACTIONS:
        on-resize

    EXTENDED ATTRIBUTES:
        picked          block!
        init            function!

    ACCESSOR FUNCTIONS:
        REDRAW
        SELECTED
        ROWS
        SELECT-ROW row /no-action
```

Source code: text-list.r

38. title-group

```
    USAGE:
        title-group %icons/setup.png data "Title" "Body"

    DESCRIPTION:
        A title and text with an optional image to the left.
        If an image is specified then height is set to image height.

    ATTRIBUTES:
        size            100x100
        font            object!

    EXTENDED ATTRIBUTES:
        init            function!
```

Source code: title-group.r

39. toggle

```
    USAGE:
        toggle data ["A" "B"]

    DESCRIPTION:
        Toggles state when clicked.

    OPTIONS:
        'on starts selected

    ATTRIBUTES:
        size            15x5
        text            ""
        effect          block!
```

```
        edge            object!
        font            object!

    PREDEFINED FEELS:
        over
        engage

    EXTENDED ATTRIBUTES:
        old-color       none
        init            function!
        texts           none
```

Source code: toggle.r

40. tool-bar

```
    USAGE:
        tool-bar data [arrow button field]
        tool-bar data [icon "Open" %actions/document-open.png [] ]

    DESCRIPTION:
        A toolbar with small margins (2x1) and minimal spacing (1x1).

    ATTRIBUTES:
        size            -1x7
        effect          block!
        edge            object!
        font            object!

    PREDEFINED FEELS:
        detect

    EXTENDED ATTRIBUTES:
        group           none
        .tip            none
        init            function!
```

Source code: tool-bar.r

41. tree

```
    USAGE:
        tree data ["Pets" ["Cat" "Dog"] "Numbers" [1 2 3] ]

    DESCRIPTION:
        Values arranged in a collapsible hierarchy.

    OPTIONS:
        'only returns item not full path

    ATTRIBUTES:
        size            50x25
        pane            block!
        color           255.255.255
        data            block!
        edge            object!

    PREDEFINED ACTIONS:
        on-resize

    EXTENDED ATTRIBUTES:
        picked          block!
        .data           block!
        .tabs           block!
        .data-path      block!
        .data-list      block!
        init            function!

    ACCESSOR FUNCTIONS:
        REDRAW
        SELECTED
        ROWS
        SELECT-ROW row /no-action
        BUILD-TREE string items
```

Source code: tree.r