YAMAHA

RAVedit

USER GUIDE

User Guide RAVedit

Documentation concept and development:

The Human Interface Group
De Regenboog 11, 2800 Mechelen
http://www.higroup.com/

Table of Contents

Installation

Contents of this chapter

System Requirements

- PC with a 486DX/66 MHz or higher processor

- Windows 95, Windows 98, Windows NT 4.0 or higher operating system

- 16 megabytes of RAM

- 15 megabytes of free disk space

- Super VGA or higher graphics card and monitor

- Available serial port which supports 115200 baud

Installation

> **Note**
>
> We recommend that you close all programs before installing *RAVedit*.

Installing from the web site

1   Open your internet browser.

2   Browse to the YAMAHA website: www.yamaha.com

3   Download *RAVeditSetup*.**exe**.

4   Double-click *RAVeditSetup*.**exe**.

5   Follow the on-screen instructions that will guide you through the installation procedure.
    The first time you run *RAVedit*, you have to accept the license agreement. Otherwhise *RAVedit* will not run.

Updating Your RAV-2000 Software

RAVedit is distributed with a standard RAV-2000 Update File with the latest available RAV-2000 software. This software can easily be updated to a later version.
You can check the version information of your RAV-2000 in the third panel in Setup mode. Please refer to the RAV-2000 Owner's Manual for more information about the Setup panels.

Future updates are available on the YAMAHA website. You need to store the RAV-2000 update files in the **Update** folder in the directory where *RAVedit* is installed.

> **Note**
>
> It is best not to touch your RAV-2000's touch screen or use any of your RAV-2000's direct access buttons, while updating is in progress.

1   Copy the RAV-2000 update files to the **Update** folder in the directory where *RAVedit* is installed.

2   Go to **Start** > **Programs** > *RAVedit*.
    RAVedit opens.

3   Select **Update RAV-2000** from the **Tools** menu and select the update file you want to use from the list.
    The 'Firmware Update' window appears.

4   Plug one end of the RAV-2000 serial cable in the serial port of your RAV-2000.

5   Plug the other end of the RAV-2000 serial cable in the serial port of your computer.

6   Click **Start**.
         After connecting to your RAV-2000 the updating process starts.

7   Follow the instructions on screen.
         It is possible that after updating your RAV-2000, you will be asked to
         calibrate the touch screen.
         Please refer to your RAV-2000 Owner's Manual for detailed instructions
         on calibration.

> **Note**
>
> You can also run update files directly from the website. Double-click the
> update file and follow the instructions on screen.

About *RAVedit*

RAVedit is the visual editor for creating and configuring CCFs. A CCF or configuration file defines the interface on the RAV-2000.

RAVedit allows you to personalize your RAV-2000 and to perform a range of powerful tasks:

- Uploading CCFs from your RAV-2000;

- Adding, deleting, modifying and rearranging panels, devices, macro groups, frames and buttons;

- Importing new graphics, creating your own custom devices, using your own bitmaps, replacing the home panels with your own panels;

- Letting any button take you to any panel, making any button into a macro, creating macros within macros;

- Saving, duplicating and sharing CCF files, codes or devices with another RAV-2000;

- Previewing new CCF files on *RAVemulator*;

- Personalizing CCF files to optimize the use of your RAV-2000;

- Downloading CCFs into your RAV-2000.

RAVedit views

RAVedit main window provides two views.
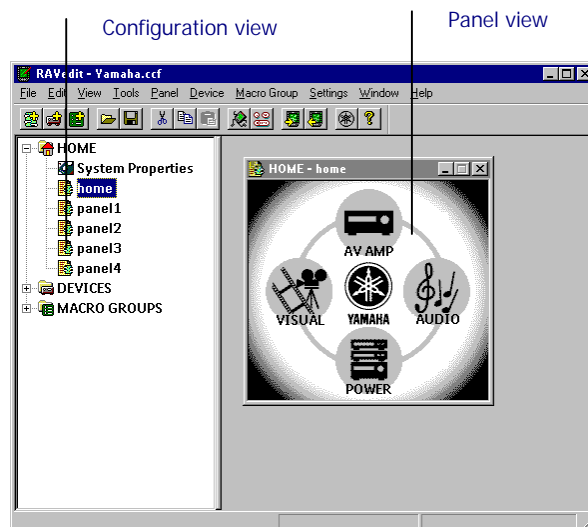
- **Configuration view**: displays the overall structure of the current CCF with its most important elements in a tree view:
  - ❑ **HOME**
  - ❑ **DEVICES**
  - ❑ **MACRO GROUPS**
- **Panel view**: displays the contents of a panel as it is defined in the current CCF.
  Panel views provide an up-to-date view on the current CCF: changes are immediately incorporated into the current CCF.

About CCFs

A CCF or a configuration file stores an RAV-2000 configuration. It fully defines the RAV-2000 user interface:

- devices and macro groups;

- panel layouts and button appearances;

- the behavior of all buttons, direct-access and left/right keys (including all IR codes).

CCFs are files with the extension 'ccf' and are represented by the ![icon] icon.

HOME, **DEVICES** and **MACRO GROUPS** are the three major building blocks to define CCFs. They consist of a number of panels and an action list.

HOME

In most cases the **Home panel** is used to access the most frequently used devices and macros. The Home panel contains a number of buttons that jump to specific panels of devices and macros.

DEVICES

A **device** usually contains a number of panels with different buttons to execute commands on the actual device. By tapping the buttons on the RAV-2000 IR codes are sent out to operate your devices.

MACRO GROUPS

A **macro Group** can contain **macros** and **timers**.

- A **macro** allows you to send a sequence of IR commands using one single button. A macro can also contain several macros.

- With a **timer** you can activate a device or a macro at the time you prefer.

Panels

A **panel** defines the rectangular area of your RAV-2000's touch screen between the system area at the top of the touch screen and the gray bar at the bottom of the touch screen.

A panel consists of up to 255 frames or buttons. Every frame can contain up to 255 frames or buttons.

Panel

Frame

Button:
containing an action

Button:
not containing an action
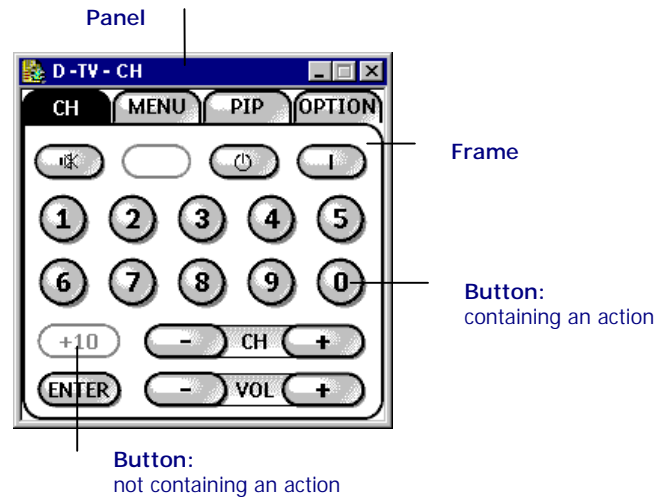
- ■ **Frames** are inactive user interface elements with a background color or a bitmap, and a name. Frames can be tapped, but they never contain an action.

- ■ **Buttons** are active user interface elements with a background color or a bitmap for each of four different states, and a name. Buttons can contain an action list. The action assigned to the button is executed when you tap it.

- ■ An **action list** is a list of up to 255 actions. An action can be a delay, an IR code, or an alias to another action list. The last action to execute can be a jump to a specific panel.

Creating a CCF

Contents of this chapter

Opening a CCF

RAVedit comes with a default CCF, located in the **Samples** folder in the directory where *RAVedit* is installed. This CCF, called **default.ccf**, contains the factory default CCF loaded in your RAV-2000.

When you want to create your own interface, it is advised to start from an existing CCF and modify the panels. When starting from a new and empty CCF, you will have to define all devices, macro groups and panels from scratch.

Loading a CCF into *RAVedit*

Loading a CCF into *RAVedit* means that you open a file that is located on your computer. There are several options to do this:

- Open the CCF
- Double-click
- Drag and drop with *RAVedit* running
- Drag and drop without *RAVedit* running

Loading with "Open Configuration"

1   Go to **Start > Programs > *RAVedit***.
    RAVedit opens.

2   Select **Open Configuration** from the **File** menu.
    -or-
    Click [icon] in the toolbar.
    The 'Open' window appears.

3   Browse to the **Samples** folder in the directory where *RAVedit* is installed.

4   Select **default.ccf**.

5   Click **Open**.
    Default.ccf is loaded into *RAVedit*.

If another CCF is already loaded in *RAVedit* when you want to load a new CCF, the following message appears: "Merge with current configuration or replace it?".

- Click **Merge** to add all home panels, devices and macro groups from the loaded CCF to the current CCF. You will merge both CCFs.

- Click **Replace** to remove the current CCF and replace it with the loaded CCF. You will replace one CCF by the other.
  If the current CCF has been modified, you will be allowed to save it first before it is replaced with the loaded CCF.

Loading by double-clicking

1   Open the Windows Explorer.

2   Browse to the **Samples** folder in the directory where *RAVedit* is installed.

3   Double-click **default.ccf**.
    RAVedit opens with the selected CCF.

Loading by dragging and dropping with *RAVedit* running

1   Go to **Start** > **Programs** > *RAVedit*.
        RAVedit opens.

2   Open the Windows Explorer.

3   Browse to the **Samples** folder in the directory where *RAVedit* is installed.

4   Drag and drop **default.ccf** in the *RAVedit* window.
        Default.ccf is loaded in *RAVedit*.

Loading by dragging and dropping without *RAVedit* running

1   Open the Windows Explorer.

2   Browse to the **Samples** folder in the directory where *RAVedit* is installed.

3   Drag and drop **default.ccf** on the *RAVedit* icon.
        RAVedit opens with the selected CCF.

Uploading a CCF from Your RAV-2000

Uploading a CCF from your RAV-2000 means copying the CCF from your RAV-2000 to your computer and displaying it in *RAVedit*.

Note

It is advised not to touch your RAV-2000's touch screen or use any of your RAV-2000's direct access buttons while uploading is in progress.

---

1   Plug one end of the RAV-2000 serial cable in the serial port on your RAV-2000.

2   Plug the other end of the RAV-2000 serial cable in the serial port on your computer.

3   Select **Upload from RAV-2000** from the **File** menu.
        -or-
        Click in the toolbar.
        -or-
        Press **CTRL + U**.
        RAVedit detects your RAV-2000.

Note

If *RAVedit* cannot detect your RAV-2000, the following message appears: "RAV-2000 not connected or not responding".

See "Troubleshooting" on page 63 for connection problems.

If there is another CCF loaded in *RAVedit* when you want to upload the CCF from your RAV-2000, the following message appears: "Merge with current configuration or replace it?".

■   Click **Merge** to add all home panels, devices and macro groups uploaded from your RAV-2000 to the current CCF. You will merge both CCFs.

■   Click **Replace** to remove the current CCF and replace it with the CCF uploaded from your RAV-2000. You will replace one CCF by the other.
     If the current CCF has been modified, you will be allowed to save it first before it is replaced with the CCF uploaded from your RAV-2000.

Creating a New CCF

1   Go to **Start** > **Programs** > *RAVedit*.
RAVedit opens.

2   Select **New Configuration** from the **File** menu.
A new CCF is created.

Modifying a CCF

The scenario to modify a CCF includes several steps:

■   Creating devices and macro groups;

■   Creating panels;

■   Creating frames and buttons;

■   Using bitmaps.

When you have created or modified all the elements, you can start configuring them as described in "Configuring a CCF" on page 34.

Opening and Closing Panels

The buttons of the devices and the macro groups on your RAV-2000 are organised into panels:

■   Home panels;

■   Panels for the different devices;

■   Panels for the different macro groups.

Opening the list of DEVICES and MACRO GROUPS

▶   Click on ⊞ next to **DEVICES** or **MACRO GROUPS** in the Configuration view on the left side of the *RAVedit* window.
The list of all devices or macro groups is displayed.
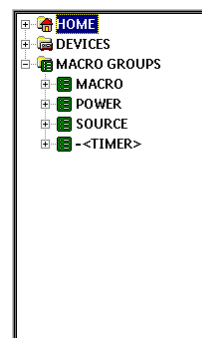
Opening a panel

1   Click on ⊞ next to **HOME**, or a **device** or **macro group** in the Configuration view.
The list of panels is displayed.

2   Select the panel in the Configuration view and select **Open Panel** from the **Panel** menu.
-or-
Right-click the panel and select **Open Panel** from the context menu.
-or-
Double-click the panel you want to open.
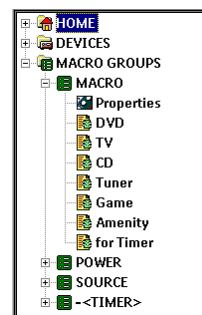
The panel appears in the Panel view on the right side of the *RAVedit* window.
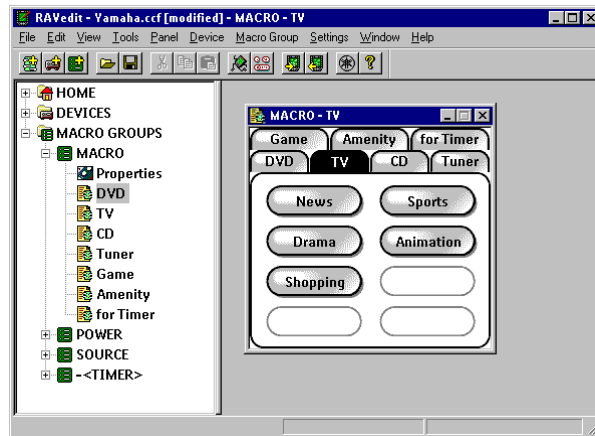
Closing a panel

▶ Click ⊠ to close the panel.

Note

Closing a panel will not undo any changes made to that panel. A panel is merely a view on the current CCF: changes are immediately incorporated into the current CCF.

Creating Devices and Macro Groups

Devices and macro groups are essentially equal. It is the location, in the list of **DEVICES** or in the list of **MACRO GROUPS**, which distinguishes a device from a macro group. You can move a device from **DEVICES** to **MACRO GROUPS** to turn that device into a macro group, and vice versa.

Devices and macro groups contain panels. You have to create and organise devices and macro groups before you start creating panels, frames and buttons.

Indicators

RAVedit uses indicators in the list of DEVICES and MACRO GROUPS to provide information on the status of the device or macro group. You cannot type the indicators in the labels of the devices or macro groups.

- **+**
  The device needs programming. There are no IR codes from a certain brand programmed for this device.
  When you download the configuration into the RAV-2000 and you use the device for the first time, you will have to define the brand for the selected device.

- **( )**
  The device is a template. A template does not appear in the Device menu on the RAV-2000 but it is available when you add a new device on your RAV-2000.

- **-**
  The device or macro group has a separator. The separator is displayed in the Device menu or Macro menu, above the selected device or macro group.

- **< >**
  The macro group is a timer group. With a timer you define one or more actions that have to be executed at a predefined day and time.

- **[ ]**
  The panel is hidden. The panel (in HOME, of a device or a macro group) is not directly displayed on your RAV-2000. It can only be viewed by creating a jump to it from within another panel.

- *****
  The device is Read Only. It cannot be modified, renamed, learned or deleted on your RAV-2000.

Copying a device or macro group

1   Select the device or macro group you want to copy in the Configuration view.

2   Select **Copy** from the **Edit** menu.
    The selected device or macro group is copied onto the clipboard.

3   Select **DEVICES** or **MACRO GROUPS**.

4   Select **Paste** from the **Edit** menu.
    The selected device or macro group is copied into **DEVICES** or **MACRO GROUPS**.

Note

RAVedit does not support copying from one running copy of *RAVedit* to another.

Moving a device or macro group

1 Select the device or macro group you want to move in the Configuration view.

2 Drag and drop the selected device or macro group to its new location.
If you drop a device or macro group on another device or macro group, it will be inserted before that device or macro group.
If you drop a device or macro group on **DEVICES** or **MACRO GROUPS**, it will be appended to the list of devices or macro groups.
-or-
Press and hold **CTRL** and use the **UP** or **DOWN** key to the move the selected device or macro group up or down its current list.

Renaming a device or macro group

1 Select the device or macro group and select **Rename** from the **Edit** menu.
-or-
Right-click the device or macro group and select **Rename** from the context menu.
-or-
Select the device or macro group and press **F2**.
The 'Rename device' or 'Rename macro group' window appears.

2 Type the new name for the device or macro group in the text field.
-or-
Use the keyboard on screen to edit the name for the device or macro group:

❑ To display a keyboard with capital letters or symbols, click **Shift**.

❑ To enter a character or symbol, click the character or symbol you want to use.

3 Click **OK** to save the new name.

Removing a device or macro group

1 Select the device or macro group you want to remove in the Configuration view.

2 Press **DELETE** to remove the selected device or macro group.

Adding a device

▸ Select **Add Device** from the **Device** menu.
-or-
Click ![icon] in the toolbar.
An empty device is added.

Changing a device into a template

▸ Select the device and select **Is Template** from the **Device** menu.
-or-
Right-click the device and select **Is Template** from the context menu.
The name of the device is displayed between **( )** brackets indicating that the device has been changed into a template.

You can change the template back to a 'regular' device at any time.

Removing a template

If you use *RAVedit* instead of your RAV-2000 to add new devices, you can remove all templates. This speeds up saving and loading and leaves more space in your RAV-2000's memory.

Note

Make sure not to overwrite **default.ccf** when you have deleted all your templates. So you can always restore the templates.

Adding a macro group

▶   Select **Add Macro Group** from the **Macro Group** menu.
    -or-
    Click in the toolbar.
    An empty macro group is added.

Changing a macro group into a timer group

▶   Select the macro group and select **Is TimerGroup** from the **Macro Group** menu.
    -or-
    Right-click the macro group and select **Is TimerGroup** from the context menu.
    The name of the macro group is displayed between **< >** brackets indicating that the macro group has been changed into a timer group.

You can change the timer group back to a macro group at any time.

Creating Panels

Panels are the basic elements of a CCF. They are used to organise the buttons and actions of the devices and the macro groups on your RAV-2000.

Copying a panel

1   Select the panel you want to copy in the Configuration view.

2   Select **Copy** from the **Edit** menu.
     The selected panel is copied onto the clipboard.

3   Select **HOME**, or the **device** or **macro group** where you want to copy the panel to.

4   Select **Paste** from the **Edit** menu.
     The selected panel is paste into **HOME**, the **device** or the **macro group** you selected.

> **Note**
>
> *RAVedit* does not support copying from one running copy of *RAVedit* to another.

Moving a panel

1   Select the panel you want to move in the Configuration view.

2   Drag and drop the selected panel to its new location.
     If you drop a panel on another panel, it will be inserted before that panel.
     If you drop a panel on **HOME**, a **device** or a **macro group**, it will be appended to the list of panels of **HOME**, that device or that macro group.
     -or-
     Press and hold **CTRL** and use the **UP** or **DOWN** key to the move the selected panel up or down its current list.

Renaming a panel

1   Select the panel and select **Rename** from the **Edit** menu.
     -or-
     Right-click the panel and select **Rename Panel** from the context menu.
     -or-
     Select the panel and press **F2**.
     The 'Rename panel' window appears.

2   Type the new name for the panel in the text field.
     -or-
     Use the keyboard on screen to edit the name for the panel:

     ❑   To display a keyboard with capital letters or symbols, click **Shift**.

     ❑   To enter a character or symbol, click the character or symbol you want to use.

3   Click **OK** to save the new name.

Adding a panel

1   Select **HOME**, a **device** or a **macro group** to which you want to add a panel. You can also select a **panel** where you want to add a new panel.

2   Select **Add Panel** from the **Panel** menu.
-or-

Click ![icon] in the toolbar.
A new panel is added.

New panels have the default contents of a **HOME**, **DEVICE** or **MACRO GROUP** panel. *RAVedit* loads default panels from one of these CCFs:

■   home.ccf

■   device.ccf

■   macro.ccf

Note

To add an empty panel, press and hold **SHIFT** while adding the panel.

Changing the default panels

1   Load one of the following CCFs:

❑   **home.ccf** to change the default Home panel;

❑   **device.ccf** to change the default device panel;

❑   **macro.ccf** to change the default macro panel.

The selected CCF is loaded in *RAVedit*. **HOME** has been renamed into **DEFAULT** in the default panel CCFs.

2   Click on ![plus] next to **DEFAULT** in the Configuration view.

3   Open the panel.
The panel is called **home**, **device** or **macro** depending on the default CCF you loaded.
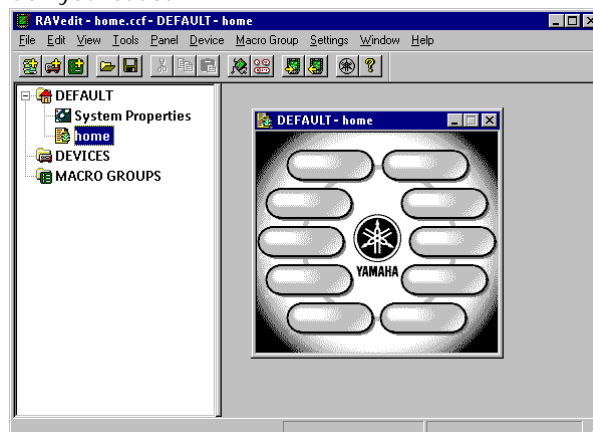
4   Modify the panel as you want.

5   Save the modified CCF with the same name.
RAVedit ignores all but the first **DEFAULT** panel of a default panel CCF.
The next time you add a panel *RAVedit* uses the modified default panel as you defined it.

Note

The default macro panel will not only be used in *RAVedit* to add a default macro panel, but also on your RAV-2000 to add a new macro group.

When adding devices on your RAV-2000, templates are used. See "Changing a device into a template" on page 18 for more information about templates.

Creating your own Home panels

By default, RAV-2000's Home panels contain aliases to all devices in the Device menu on the RAV-2000. The RAV-2000 automatically adds aliases to all devices on the Home panels if all of the following conditions are met:

■   There is at least one Home panel.

■   The first Home panel is named 'home' (all lowercase).

■   The Home panels are write-protected.

If you want to create your own Home panels, you have to make sure that at least one of these conditions is not met so that the automatic alias creation is disabled.

See "Setting the System Properties for the RAV-2000" on page 55.

Creating Frames and Buttons

Frames are inactive user interface elements: they can be selected, but they never contain an action.
Buttons are active user interface elements: they can contain actions that are executed when you tap them.

When you add frames or buttons, they have a default background color. You can insert a bitmap to change the look and shape of the frame or button. See "Using Bitmaps" on page 27 for more information about bitmaps.

Copying frames and buttons

1   Open the panel with the frame or button you want to copy.

2   Press and hold **CTRL** and select the frame or button you want to copy. Drag and drop the selected frame or button where you want to copy it.
        If you want to copy a frame or button to another panel, open the panel to which you want to copy a frame or button.

        -or-

1   Open the panel with the frame or button you want to copy.

2   Select the frame or button you want to copy.

3   Select **Copy** from the **Edit** menu.
        The selected frame or button is copied onto the clipboard.

4   Go to the location where you want to copy the panel to.

5   Select **Paste** from the **Edit** menu.
        The selected frame or button is pasted.

Note

RAVedit does not support copying from one running copy of *RAVedit* to another.

When copying frames or buttons with a bitmap, the bitmap will also be copied. See "Using Bitmaps" on page 27 for more information about bitmaps.

Moving frames and buttons in a panel

1   Open the panel with the frame or button you want to move.

2   Click the frame or button you want to move.
        A red frame appears around the selected frame or button.

3   Drag and drop the selected frame or button to its new location.
        The status bar shows the current location of the selected frame or button.
        -or-
        Use the **arrow** keys to move the frame or button.
        To move it faster, press and hold the **SPACE** bar while moving the frame or button with the **arrow** keys.

Adding frames to a panel

1   Open a panel to which you want to add a frame.

2   Select **Add Frame** from the **Panel** menu.
        -or-
        Right-click the panel and select **Add Frame** from the context menu.
        -or-
        Press **ALT + A**.
        A default frame is added.

Adding buttons to a panel

1   Open a panel to which you want to add a button.

2   Select **Add Button** from the **Panel** menu.
-or-
Right-click the panel and select **Add Button** from the context menu.
-or-
Press **ALT + K**.
A default button is added.

Embedding frames or buttons

You can embed frames or buttons in a parent frame. When you embed frames and buttons it is much easier to arrange the frames and buttons in a panel. For example:

1   Open a panel and select the frame you want to use as the parent.

2   Press **ALT + A** to add a frame.
A child frame is added.
-or-
Press **ALT + K** to add a button.
A child button is added.

You can create a complete structure of embedded frames and buttons. For example, the Home panel in default.ccf:

Parent

First child

Sibling of the first child
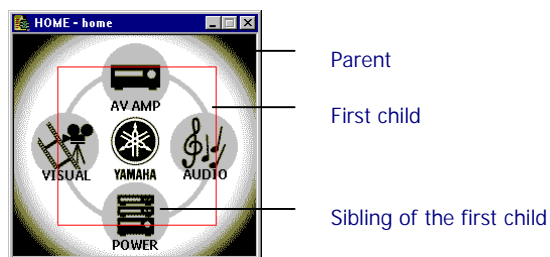
- ■ **Parent:** a frame on level 1;

- ■ **First child:** a frame or a button on level 2;

- ■ **Sibling:** other frames and buttons on level 2.

You can create a parent on every level (level x). The first child and siblings are created on the level x+1. This means that a frame or a button can be a first child or sibling and a parent at the same time.

Selecting frames and buttons in a panel

Frames and buttons in a panel are selectable. With embedded frames and buttons it is sometimes difficult to select the correct frame or button.

■ Click the frame or button you want to select.

   ❑ The **Move** cursor appears: you have selected a parent frame.

   ❑ The **Move** cursor and a red selection frame appear: you have selected a frame or button.

■ Select **Select** from the **Panel** menu.
   -or-
   Right-click in the panel and select **Select** from the context menu.
   You can choose the following options:

   ❑ **Parent:** select a frame with the embedded frames and buttons;

   ❑ **First Child:** select the embedded frame or button;

   ❑ **Next Sibling:** jump to the next frame or button;

   ❑ **Previous Sibling:** jump to the previous frame or button.

■ Press **TAB** to select the next sibling of the selected frame or button. Press **SHIFT + TAB** to select the previous sibling of the selected frame or button.

■ Press **ESC** to deselect the current selection.

■ Use the zoom feature to get a better view of what you are selecting.

Adding frames and buttons from a gallery

Instead of adding default frames and buttons (with a gray background and without bitmaps), you can add frames and buttons from a gallery. In that case you add a frame or a button with a bitmap. A gallery contains the bitmaps for frames and buttons used in a CCF.

Displaying the gallery

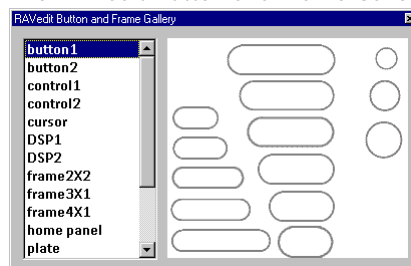1 Select **Gallery** from the **Tools** menu.
   -or-
   Click in the toolbar.
   -or-
   Press **CTRL + G**.
   The '*RAVedit* Button and Frame Gallery' window appears.

2 Select a group of frames and buttons in the list on the left side of the window.
   The frames and buttons in the group are displayed on the right side of the window.

Adding frames or buttons to the panel

1 Open the panel to which you want to add a frame or button.

2 Click the frame or button you want to add in the '*RAVedit* Button and Frame Gallery' window.
If the frame or button you want to add is embedded, clicking that frame or button will select the parent frame.
Press and hold **SHIFT** when clicking the frame or button to select only the first child or the sibling.

3 Drag and drop the selected frame or button to the panel where you want to add it.
A selected frame or button is added.

Selecting another gallery

Normally you add frames and buttons from gallery.ccf. When you want to use frames and buttons from another CCF, you have to select the CCF as a gallery.

1 Select **Select Gallery** from the **Tools** menu.
The 'Select Gallery' window appears.

2 Browse to the folder where the CCFs are stored.

3 Select the CCF you want to use.

4 Click **Open**.
The CCF is selected as a gallery.

Resizing frames and buttons

Frames and buttons can only be resized if they do not have any bitmaps. See "Using Bitmaps" on page 27 for more details about the size of frames and buttons.

1 Click the frame or button you want to resize.
A red frame appears around the selected frame or button.

2 Move the pointer over the edge of the frame or button until the **Resize** cursor with the desired orientation appears.

3 Move the **Resize** cursor to drag the edge and resize the frame or button.
The status bar shows the current size of the selected frame or button.
–or-
Use the **arrow** keys to resize the frame or button:

❑ Press and hold **SHIFT** to move the top or left edge.

❑ Press and hold **CTRL** to move the bottom or right edge.

❑ Press the **SPACE** bar in combination with **SHIFT** or **CTRL** and the **arrow** keys to resize an edge faster.

Removing frames and buttons from a panel

1 Open the panel with the frame or button you want to remove.

2 Click the frame or button you want to remove.
A red frame appears around the selected frame or button.

3 Press **DELETE**.
The selected frame or button is removed.

Using Bitmaps

Bitmaps or icons can be used to change the look of frames and buttons. *RAVedit* can load any Windows bitmap file with 1, 4 or 8 bits per pixel and with maximum dimensions of 240 by 219 pixels (the size of a panel).

RAVedit will automatically convert a color bitmap into a grayscale version more suitable for display on your RAV-2000.

Every frame or button can have its own unique icon. A frame can have only one icon. A button can have up to four icons, one for each of its states.

The four states of a button are:

■   inactive and unselected;

■   inactive and selected;

■   active and unselected;

■   active and selected.

Bitmaps take up memory and having many different bitmaps means less space for other data, like IR codes. You can minimize the memory bitmaps require by reusing bitmaps, where possible, on your frames and buttons. *RAVedit* checks for equal bitmaps when saving a CCF by looking at the actual bitmap contents, and only saves unique bitmaps.
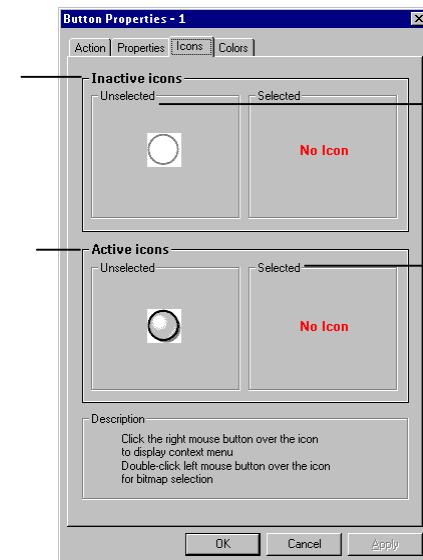
Inserting bitmaps

1   Select the frame or button and select **Properties** from the **Edit** menu.
-or-
Double-click the frame or button.
The 'Frame properties' or 'Button properties' window appears.

2   Select the **Icons** tab.

A button is **inactive** when its action list is empty. It is not visible in Use mode, only in Learn mode and Label mode.

A button is **unselected** when it can be tapped.

A button is **active** when one or more actions are programmed.

A button is **selected** when you tap on it on the RAV-2000.

3   Right-click the icon and select **Load** from the context menu.
-or-
Double-click the icon.
The 'Open' window appears.

4   Browse to the folder where the bitmaps are stored and select a new bitmap.

5   Click **OK**.
The new bitmap is displayed.

6   Click **OK** to accept the new bitmap.
-or-
Click **Cancel** to keep the default frame or button.

Notes

Bitmaps are displayed in the 'Frame Properties' or 'Button Properties' window with the same size as on the panel.
When bitmaps are too large and do not fit the icon area, they are scaled.
Click the bitmap to see what the size of the bitmap will be on the panel.

The size of a frame on the panel is defined by the bitmap.
The size of a button on the panel is defined by the smallest of the bitmaps used for the different states.

Saving bitmaps

You can save the bitmaps to use them for other purposes, in other CCFs or to edit them.

1   Select the frame or button and select **Properties** from the **Edit** menu.
-or-
Double-click the frame or button for which you want to insert a bitmap.
The 'Frame properties' or 'Button properties' window appears.

2   Select the **Icons** tab.

3   Right-click in the group box and select **Save** from the context menu.
The 'Save as' window appears.

4   Browse to the folder where you want to save the bitmap.

5   Type the name of the bitmap in the **File Name** text field.

6   Click **Save**.
The bitmap is saved in the folder you selected.

Copying bitmaps from one frame or button to another

You can insert bitmaps for the existing frames and buttons in your CCF one by one as described above. But when you want to use a bitmap for several frames or buttons you can easily do this by copying all bitmaps from one frame or button to another.

1   Open the panel with the frame or button to which you want to copy bitmaps.

❑   To copy bitmaps from a frame or a button in another panel, open the panel.

❑   To copy bitmaps from a frame or a button in the gallery, open the gallery.
See "Selecting frames and buttons in a panel" on page 25 for instructions on how to open the gallery.

2   Press and hold **ALT** and select the frame or the button from which you want to copy the bitmaps.

3   Drag and drop the selected frame or button to where you want to copy the bitmaps.
When you drag and drop the frame or button holding down **ALT**, the label **icons** appears under the selected frame or button. This indicates you are only copying the bitmaps on the frame or button and not the frame or button itself.

Modifying bitmaps

If you want to replace a bitmap that is used on several frames or buttons (even in different panels) by another bitmap, you do not have to change it manually. With the Bitmap Picker you can change the bitmaps on all frames or buttons at once.

1   Select **Modify Bitmap** from the **Tools** menu.
     The 'Bitmap picker' window appears.

2   Double-click the bitmap you want to modify.
     The 'Open' window appears.

3   Browse to the folder where the bitmaps are stored and select a new bitmap.

4   Click **Open**.
     The new bitmap is displayed in the panel in the 'Bitmap picker' window.

5   Click **OK**.
     All original bitmaps are replaced by the selected bitmap.
     -or-
     Click **Cancel** to keep the original bitmap.

Creating your own gallery

RAVedit loads the gallery from **gallery.ccf** in the directory where *RAVedit* is installed.

1   Load **gallery.ccf** into *RAVedit*.
     The selected CCF is loaded in *RAVedit*. **HOME** has been renamed into **GALLERY** in **gallery.ccf**.

2   Click on ⊞ next to **GALLERY** in the Configuration view.

3   Open the panel with the frames, buttons and bitmaps you want to modify.
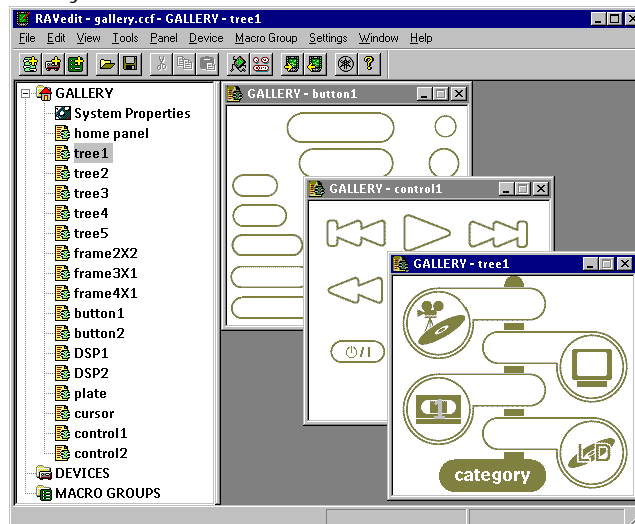
4   Modify the panels with the frames, buttons and bitmaps as you want.

5   Save the modified CCF back as **gallery.ccf**.
     RAVedit ignores all but the **GALLERY** panels of **gallery.ccf**.
     The next time you select a gallery you can use the frames and buttons from the modified gallery.

Using Grids

Grids are a helpful tool to arrange frames and buttons in a panel. A grid is a set of up to 64 horizontal and 64 vertical line segments. The grid lines are used to position and outline frames and buttons.

RAVedit stores 10 different default grids. The default grid is automatically assigned to a panel when it is opened.

You can use the grid settings on two levels:

■ When you use the options in the context menu you change the grid settings **per panel**.

■ When you use the options in the **Settings** menu you change the grid settings **globally** for all panels.

Displaying a grid

To display the grid for one panel

1 Open the panel.

2 Right-click in the panel, select **Grid > Display Grid** from the context menu.
-or-
Press **ALT + D**.
Blue grid lines appear.

3 Position the frame or button as you want using the grid lines.
To change the position of the grid lines, see "Editing a grid"on page 31.
To change the way the frames and buttons snap to the grid lines, see "Snapping to a grid" on page 32.

To display the grid for all panels

▶ Select **Display Grid** from the **Settings** menu.
For every panel you open the grid will be displayed.

Selecting a grid

1 Open the panel.

2 Right-click in the panel, select **Grid > Select Grid** from the context menu.

3 Select one of the grids (grid 0 to grid 9) you want to use.
The selected grid appears.
If you do not see the blue grid lines you have to display the grid as described in "Displaying a grid" on page 30.

Editing a grid

1   Open the panel and display the grid of the panel as described in
        "Displaying a grid" on page 30.
        The option **Edit Grid** is only enabled if the grid is displayed.

2   Right-click in the panel and select **Grid > Edit Grid** from the context
        menu.
        -or-
        Press **ALT + G**.
        The blue grid lines change into green grid lines.

3   Select the grid line you want to edit.
        The selected grid line turns red.

4   Edit the grid:

        ❑   Drag the selected grid line and move it to the position you want.

        ❑   Press **CTRL** while dragging to add a grid line.

        ❑   Press **CTRL** while pressing the **arrow** keys to add a grid line at the
            same distance of two other grid lines.

        ❑   Press **DELETE** to remove a grid line.
            Every grid must contain at least one horizontal and one vertical grid
            line. Therefore, the last remaining horizontal and vertical grid line
            cannot be deleted.

        ❑   Press **SHIFT** and use the mouse or the **arrow** keys to move an
            entire grid.

        ❑   When you put a grid line on top of another grid line and deselect the
            grid line, the two grid lines are merged.

> **Note**
>
> Positioning frames and buttons is not possible in **Edit Grid** mode. You have to
> disable this mode and work in Display Grid mode.

Creating an evenly spaced grid

1   Open the panel and display the grid of the panel as described in
        "Displaying a grid" on page 30.
        The option **Auto Grid** is only enabled if the grid is displayed.

2   Right-click in the panel, select **Grid > Auto Grid** from the context menu.
        The 'Auto Grid Settings' window appear.

3   Select the number of pixels from the **Horizontal Spacing** and **Vertical
        Spacing** drop-down list.
        The distance between the grid lines is defined.

4   Click **OK**.
        The grid lines you defined are displayed.

Copying a grid from one panel to another panel

The grids can be modified per panel without affecting the default grids. You have to make use of the global grid settings to copy the grid from one panel to another:

■ First you set the current grid of a panel as the default grid.

■ Then you assign that default grid to another panel.

To copy the grid

1 Open the panel with the grid you want to copy to another panel.

2 Select **Set Default Grid** from the **Settings** menu.

3 Select any unused grid as default grid, for example grid 9.
The following message appears: "Copied current grid of active panel into default grid 9".

4 Click **OK**.

5 Open the panel to which you want to assign the grid.

6 Right-click in the panel, select **Grid > Select Grid** from the context menu.

7 Select **grid 9**.
The default grid 9 is displayed in the active panel.

Snapping to a grid

With grid snapping the locations of the frames and buttons are restricted to the **grid locations**. These grid locations are situated where the grid lines intersect. Grid snapping affects:

■ moving a frame or a button;

■ dragging and dropping a frame or a button from the gallery into a panel or from one panel to another;

■ resizing a default frame or button.

To activate grid snapping

1 Open the panel with the frames and buttons you want to position.

2 Right-click in the panel, select **Grid > Snap to Grid** from the context menu.
-or-
Press **ALT + S**.
By default *RAVedit* snaps the top left corner of a frame or button to the nearest grid location.

3 Right-click again, select **Grid > Snap Mode** from the context menu.
Select one of the following options to change the way the frames and buttons snap to the grid locations:

❑ Top Left;

❑ Top Right;

❑ Bottom Left;

❑ Bottom Right;

❑ Center.

4 Move or copy the frames and buttons.
They will snap to the nearest grid location depending on the Snap Mode you selected.

Resetting all grids

1   Select **Reset all Grids** from the **Settings** menu.
The following message appears: "Are you sure you want to reset to the factory default grids?"

2   Click **OK** to reset all grids you modified and customized to their default pattern.
-or-
Click **Cancel** to keep the modified grids.

Saving grids

Grids are not stored in CCFs. You can export or import the default grids to or from a text file. This allows you to keep your grids with your CCFs and makes it easier to make changes to your CCFs afterwards.

▶   Select **Export Grids** from the **File** menu to export the grid to a text file.

▶   Select **Import Grids** from the **File** menu to import the grid from a text file.

Configuring a CCF

Contents of this chapter

Properties

After you have created the devices, macro groups, panels, frames and buttons you want to use in your CCF, you can start configuring the CCF by using the Properties windows.
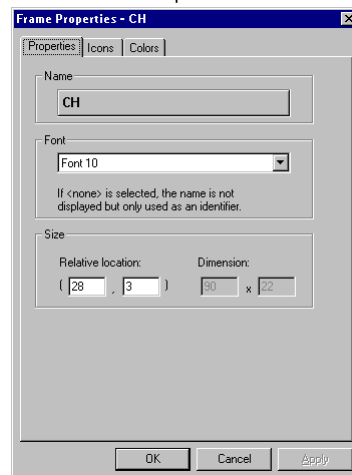
Frame Properties

The Frame Properties enable you to change the features of the frames in the CCF. You can only configure the look of the frames, you cannot program actions for a frame.

You can define the following functions in the different tabs:

Tab	Functions
Properties	To enter a name for the frame, define the font for the name and set the position for the frame in the panel.
Icons	To load, save and delete the bitmap for the frame.
Colors	To set the backgroud color and text color for the frame.

Opening the Frame Properties

1 Open the panel with the frame you want to configure.

2 Select the frame and select **Properties** from the **Edit** menu.
-or-
Right-click the frame and select **Properties** from the context menu.
-or-
Double-click the frame.
—or-
Select the frame and press **INSERT**.
The 'Frame Properties' window appears.

See "Modifying Frames and Buttons" on page 49 for instructions for setting the frame properties.

Button Properties

The Button Properties enable you to change the features of the buttons in the CCF. You can configure the actions and the look of the buttons.

You can define the following functions in the different tabs:

Tab	Functions
Action	To create an alias to another command, to set a delay, to assign IR codes, to add a beep, to add a timer.
Properties	To enter a name for the button, define the font for the name and set the position for the button in the panel.
Icons	To load, save and delete the bitmaps for four different states of the button.
Colors	To set the background color and text color for the button.

Opening the Button Properties

1   Open the panel with the button you want to configure.

2   Select the button and select **Properties** from the **Edit** menu.
-or-
Right-click the button and select **Properties** from the context menu.
-or-
Double-click the button.
-or-
Select the button and press **INSERT**.
The 'Button Properties' window appears.
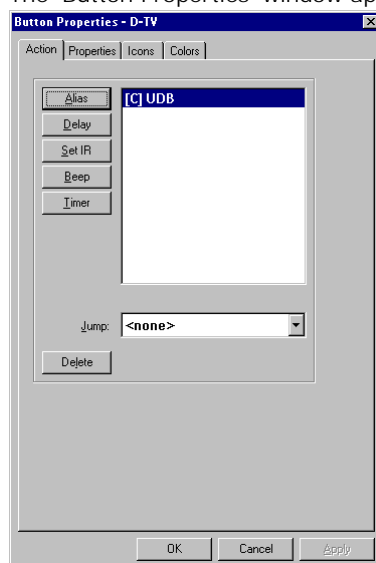
See "Programming" on page 40 for instructions for programming buttons.
See "Modifying Frames and Buttons" on page 49 for instructions for setting the button properties.
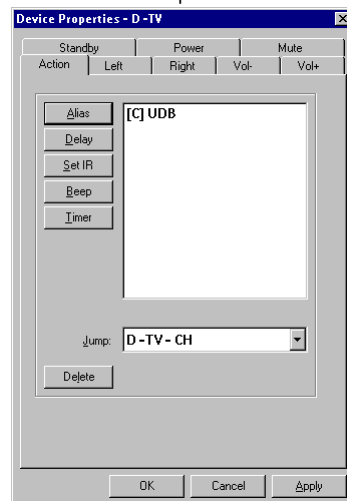
Device Properties

The Device Properties enable you to change the features of the devices in the CCF. You can configure device actions and hard key actions per device. Device actions are executed whenever the device is selected in the Device menu or the Home panel on your RAV-2000.

You can define the following functions in the different tabs:

Tabs	Functions
Action	To create an alias to another command, to set a delay, to assign IR codes, to add a beep, to add a timer.
Power	To configure the direct-access key Power for the selected device.
Standby	To configure the direct-access key Standby for the selected device.
Mute	To configure the direct-access key Mute for the selected device.
Vol+	To configure the direct-access key Vol+ for the selected device.
Vol-	To configure the direct-access key Vol- for the selected device.
Left	To configure the left key for the selected device.
Right	To configure the right key for the selected device.

Opening the Device Properties

1   Click on ⊞ next to the device you want to configure in the Configuration view.
    A list of panels appear.

2   Double-click the panel **Properties**.
    The 'Device Properties' window appears.

See "Programming" on page 40 for instructions for programming devices and hard keys.
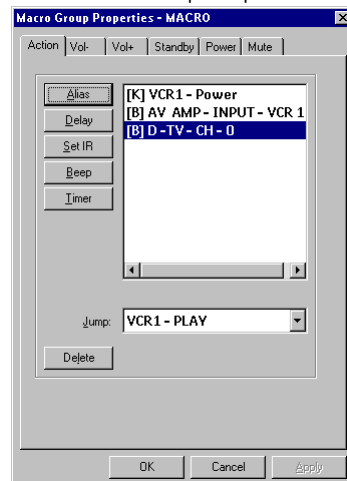
Macro Group Properties

The Macro Group Properties enable you to change the features of the macro groups in the CCF. You can configure macro group actions and hard key actions per macro group. Macro groups can contain up to 255 macros and are used to execute a list of commands instead of a single command.

You can define the following functions in the different tabs:

Tab	Functions
Action	To create an alias to another command, to set a delay, to assign IR codes, to add a beep, to add a timer.
Power	To configure the direct-access key Power for the selected macro group.
Standby	To configure the direct-access key Standby for the selected macro group.
Mute	To configure the direct-access key Mute for the selected macro group.
Vol+	To configure the direct-access key Vol+ for the selected macro group.
Vol-	To configure the direct-access key Vol- for the selected macro group.

Opening the Macro Group Properties

1   Click on ⊞ next to the macro group you want to configure in the Configuration view.
    A list of panels appear.

2   Double-click the panel **Properties**.
    The 'Macro Group Properties' window appears.

See "Programming" on page 40 for instructions for programming macro groups and hard keys.
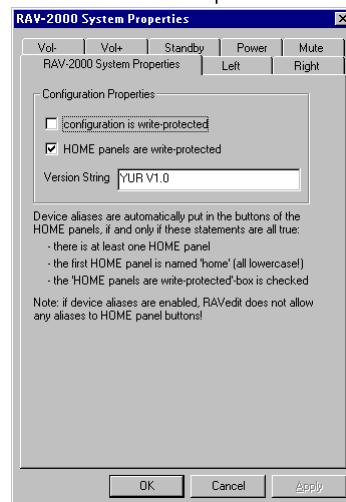
System Properties

The System Properties enable you to change the general features of the RAV-2000. You can configure the hard key actions globally.

You can define the following functions in the different tabs:

Tab	Functions
RAV-2000 System Properties	To write-protect the CCF and the Home panels, to create device aliases.
Power	To configure the direct-access key Power globally.
Standby	To configure the direct-access key Standby globally.
Mute	To configure the direct-access key Mute globally.
Vol+	To configure the direct-access key Vol+ globally.
Vol-	To configure the direct-access key Vol- globally.
Left	To configure the left key globally.
Right	To configure the right key globally.

Opening the System Properties

1 Click on ⊞ next to **HOME** in the Configuration view.
A list of panels appear.

2 Double-click the panel **Properties**.
The 'RAV-2000 Properties' window appears.

See "Programming" on page 40 for instructions for programming macro groups and hard keys.
See "Setting the System Properties for the RAV-2000" on page 55 for instructions for setting the system properties.

Programming

Actions

In every Properties window, exept for the Frame Properties window, you can add actions to the action list. You can program the following actions by clicking the different buttons:

Action	Description
Alias	With an alias you create a 'shortcut' to another command. You can create an alias to a button action, to a device or macro group action, to an action of a direct-access key or a left/right key. When your RAV-2000 is executing an action list and comes across an alias, the action list referred to by that alias is executed.
[A] [K] [B]	Device Alias Direct-access or left/right key Alias Button Alias
Delay [D]	To insert a short pause before a command or between two commands, you can add a delay.
Set IR [C]	Lots of IR codes for different devices and brands are stored in a universal database. By selecting IR codes and assigning them to panels, buttons and keys, you can program your RAV-2000 to operate your devices. In case your brand or the functions of the device are not present in the database you can learn the IR codes from the existing remote control of your device.
Beep [S]	With *RAVedit* you can add beeps to a panel or a button on your RAV-2000 so that every time you select the panel or the button you hear a beep. You can enter the frequency, duty cycle and duration.
Timer [T]	*RAVedit* allows you to add a timer to every button, device or macro group that is defined. You have to select the time and day to start the action and to stop the action. On your RAV-2000, however, timers can only be edited in macro buttons. This means that you can add a 'hidden' timer to a device button, which cannot be edited on your RAV-2000.

Actions can be moved up or down the action list by:

- selecting the action to be moved, holding down **CTRL** and using the **UP** or **DOWN** keys.

- dragging the actions up or down the action list.

An action can be removed from the action list by selecting it and clicking **Delete**.

Creating an alias

With an alias you create a 'shortcut' to another command. To create an alias it is necessary that the other command is programmed.

1   Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2   Select the **Action** tab.

3   Click **Alias**.
       The 'Select a Button, Hard key or Device' window appears.
       A tree view with HOME, all devices and macro groups is displayed here.
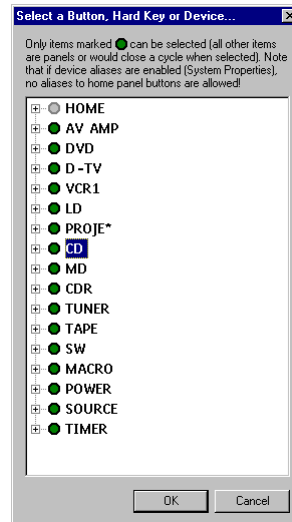
4   Click on ⊞ next to **HOME**, the device or macro group.
       The list of hard keys, panels and buttons is displayed.

   ❑   Items marked with a green disc ● can be selected.

   ❑   Items marked with a gray disc ○ cannot be selected.
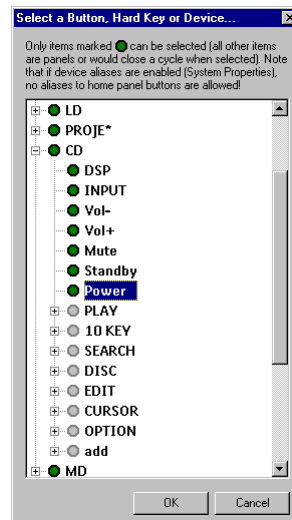
5   Select the item to which you want to refer.
       The RAV-2000 will refer to the alias and execute the command programmed for the selected item.
       When the alias is executed, only the action of the selected panel or hard key is executed. The RAV-2000 ignores the jump when executing an alias.

6   Click **OK** in the 'Select a Button, Hard key or Device' window.
The alias is added to the action list.

7   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Note

When device aliases are made from the Home panel, you will not be able to create aliases to the Home panel. In that case you would be creating a loop. For more information about devices aliases in the Home panel, see "Automatically creating device aliases" on page 55.

Setting a delay

1   Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2   Select the **Action** tab.

3   Click **Delay**.
The 'Default delay' window appears.

4   Enter the delay duration in the **Delay** text field.
A short pause will be inserted before the command is executed.

5   Click **OK** in the 'Default delay' window.
The delay is added to the action list.

6   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Assigning an IR code

You can assign an IR code to a button, a device or a macro group. When you tap a button or select a device from the Device menu or a macro group from the Macro menu on your RAV-2000 the IR code is sent out to the device and the command is executed.

1   Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2   Select the **Action** tab.

3   Click **Set IR**.
The 'Add IR' dialog box appears.

4   Go through one of the scenarios to assign IR codes:

❑   selecting the IR code from the universal database;

❑   learning the IR code from another remote control;

❑   defining a YAMAHA code.

To assign an IR code from the IR database

1   Select the device for which you want to set the IR codes from the **Device** drop-down list.

2   Select the brand of the device from the **Brand** drop-down list.

Note

You can also select **Non Applicable** from the **Brand** drop-down list. This allows you to create buttons and assign an IR code for a function that is not available for your current brand, but which can be used in case you change the brand for a new device.

For some brands the IR codes are divided into different code sets.

3   Select, if necessary, the appropriate set from the **Code Set** drop-down list.

4   Select which function has to be performed from the **Functions** list.
The IR codes for the functions are stored in the database. By selecting the function from the list you program the command from the button, hard key, device or macro group.

5   Click **View IR** to display the IR code associated with the selected function.
The **IR code** panel expands at the bottom of the window. The button changes into **Hide IR**.

6   Connect your RAV-2000 to your computer as described in "Uploading a CCF from Your RAV-2000" on page 13 and click **Test IR**.
You can try out the selected function on your RAV-2000.

7   Click **OK** in the 'Add IR' window.
The IR code is added to the action list of the selected button.

8   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

To assign an IR code by learning it

1   Plug one end of the RAV-2000 serial cable in the serial port on your RAV-2000.

2   Plug the other end of the RAV-2000 serial cable in the serial port on your computer.

3   Point the device's original remote control to the RAV-2000's learning eye.
Please refer to the RAV-2000 Owner's Manual for more information on learning commands.

4   Click **Learn IR**.
The 'Learn IR code' window appears with the following message: "Waiting for RAV-2000 to learn IR code".

5   Press and hold the corresponding button on your device's remote control.
One of the following messages appears:

❑   **Learning completed successfully**. The learned code has been added in the list of actions.
Click **OK** to assign the code to the selected button and to close the 'Button Properties' window.

❑   **Learning failed (timeout)**. *RAVedit* successfully connected to your RAV-2000, but somehow couldn't learn the code. Try again. Please refer to the RAV-2000 Owner's Manual for troubleshooting about learning commands.

❑   **RAV-2000 not connected or not responding.** *RAVedit* cannot connect to your RAV-2000.
Click **Details** to open a window listing all the serial ports on your PC.

6   Click **Test IR**.
You can try out the command on your RAV-2000.

7   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Note

See "Troubleshooting" on page 63 for connection problems.

To assign an IR code by defining a YAMAHA code

A list of YAMAHA codes is available on the YAMAHA website:
www.yamaha.com.

1   Click **Advanced**.
The 'Define YAMAHA code' window appears.

2   Enter a hexadecimal code in the **Custom code** text field.

3   Enter a hexadecimal code in the **Data code** text field.

4   Click **OK** in the 'Define YAMAHA code' window.
The YAMAHA code is defined.

5   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Adding a beep

1   Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2   Select the **Action** tab.

3   Click **Beep**.
The 'Define Beep Action' window appears.

4   Enter a value in the **Frequency** text field.
The higher the value for the frequency the higher the tone of the beep.

5   Enter a value in the **Duty Cycle** text field.
The higher the value for the duty cycle the louder the volume of the beep.

6   Enter a value in the **Duration** text field.
The higher the value for the duration the longer the beep is executed.

7   Click **OK** in the 'Define Beep Action' window.
The beep is added to the action list.

8   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Adding a timer

A timer can be added in an action list of a button, a hard key, a device or macro group.

A timer can have a start and a stop action, each with their own time and day of execution. Only an alias action can be assigned as the start and stop action of a timer.

1   Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2   Select the **Action** tab.

3   Click **Timer**.
The 'Define Timer Action' window appears.

To start the timer

1   Click the **Start action** button.
The 'Select a Button, Hard key or Device' window appears.

2   Select the command the timer has to execute.
See the procedure in "Creating an alias" on page 41.
The action to start the timer is defined.

3   Enter the **Start time**.
RAVedit uses a 24-hour clock.

4   Select the check boxes for the days of the week to define on which
days the timer has to be executed.

5   To repeat the start action of the timer weekly, select the **Wkly** check
box.

To stop the timer

1   Click the **Stop action** button.
The 'Select a Button, Hard key or Device' window appears.

2   Select the command the timer has to execute.
See the procedure in "Creating an alias" on page 41.
The action to stop the timer is defined.

3   Enter the **Stop time**.
RAVedit uses a 24-hour clock.

4   Select the check boxes for the days of the week to define on which
days the timer has to be stopped.

5   To repeat the stop action of the timer weekly, select the **Wkly** check
box.

4   Click **OK** in the 'Define Timer Action' window.
The timer is added to the action list of the selected button.

5   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Deleting an action

1   Open the **Button Properties**, **Device Properties** or **Macro Group
Properties**.

2   Select the **Action** tab.

3   Select an action in the list.

4   Click **Delete**.
The action is deleted from the action list.

5   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Jumps

For every button, device and macro group, left/right and direct-access key you can create a jump to another panel.

You can create jumps:

- from the buttons on the Home panel to the devices and macro groups;

- from the first panel of a device to the next and scroll through the different pages (Page Up and Page Down);

- to a panel of another device;

- to an hidden panel.

Jumps are not part of the action list. A jump is executed when the RAV-2000 finished executing the actions in the action list. When creating an alias to a certain panel, only the action list is executed, not the jump.

Jumping to another panel

Any button can jump to any panel (or be a link to that panel). This is a very powerful feature which allows you to create your own RAV-2000 user interface structure.

There are a couple of special options in the **Jump** drop-down list:

- **MOUSE MODE** switches your RAV-2000 into a mouse mode in which your RAV-2000's touch screen acts as a touch pad to operate compatible* interactive devices.

- **SCROLL UP** scrolls up to the previous panel, exactly like the scroll button at the top of your RAV-2000's touch screen does.

- **SCROLL DOWN** scrolls down to the next panel, exactly like the scroll button at the bottom of your RAV-2000's touch screen does.

To create a jump

1   Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2   Select the **Action** tab.

3   Select one of the following options to jump to in the **Jump** drop-down list:

- <none>;

- Mouse mode;

- Scroll up;

- Scroll down;

- any panel of HOME, the different devices or macro groups.

The jump is created. When you tap the button, select the device or macro group the RAV-2000 will jump to the selected panel.

4   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

* compatible with Philips DVX8000, May 2001

Hard Key Actions

Hard keys on the RAV-2000

■   Direct-access keys

    ❑   Power

    ❑   Standby

    ❑   Mute

    ❑   Vol +

    ❑   Vol −

■   Left/Right keys

    ❑   Left

    ❑   Right

You cannot program the Left/Right keys for the macro groups.

Programming hard keys

You can program the hard keys on the RAV-2000 just like you program buttons, devices and macro groups. You configure the action list and create jumps for the hard keys:

■   for each device or macro group on your RAV-2000;

■   globally.

The actions and jumps globally defined will be executed when you did not configure the hard key actions for a device or macro group.

To configure the hard keys per device or macro group

▶   Open the **Device Properties** or **Macro Group Properties**.

To configure the hard keys globally

▶   Open the **RAV-2000 System Properties**.

To program a hard key

1   Select the tab of the hard key to which you want to add actions.

2   Configure the action list for the selected hard key with one or more of the following actions:

    ❑   "Creating an alias" on page 41;

    ❑   "Setting a delay" on page 42.

    ❑   "Assigning an IR code" on page 42.

    ❑   "Adding a beep" on page 44.

    ❑   "Adding a timer" on page 44.

    ❑   "Deleting an action" on page 45.

    ❑   "Jumping to another panel" on page 46.

3   Click **OK** to accept the properties.
    -or-
    Click **Cancel** to return without changing the properties.

Macros

Macros on your RAV-2000 and in *RAVedit*

On your RAV-2000 there is a clear distinction between:

■ **Buttons**, **direct-access** and **left/right keys** that can only perform a single command.

■ **Macros** that perform a list of commands.

In *RAVedit* this distinction does not exist. Every button, device, direct-access or left/right key can perform a single action or be a macro and perform a list of commands.

Note

All macros can be used on your RAV-2000, but only macro buttons in a macro group panel can be edited on your RAV-2000.

Creating a macro

1 Open the **Button Properties**, **Device Properties** or **Macro Group Properties**.

2 Select the **Action** tab.

3 Configure the action list for the selected button, device or macro group with following actions:

❑ "Creating an alias" on page 41;

❑ "Setting a delay" on page 42.

❑ "Assigning an IR code" on page 42.

❑ "Adding a beep" on page 44.

❑ "Adding a timer" on page 44.

❑ "Deleting an action" on page 45.

❑ "Jumping to another panel" on page 46.
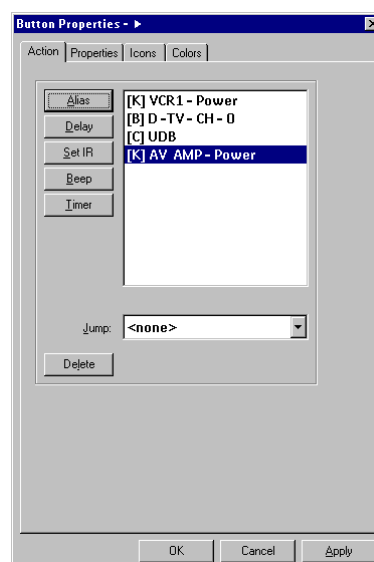
When selecting the button, device or macro group on your RAV-2000 the list of commands will be executed.

You can add up to 255 actions to the action list.

Modifying Frames and Buttons

Identifying Frames and Buttons

Naming a frame or a button

1   Open the **Frame Properties** or **Button Properties**.

2   Select the **Properties** tab.

3   Click the button in the **Name** group box.
A keyboard appears.
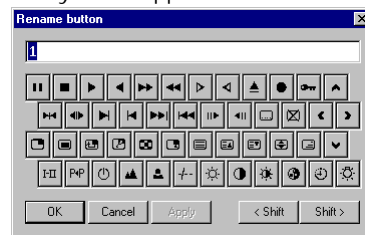
4   Type the name for the frame or button in the text field.
-or-
Use the keyboard on screen:

❑   To display a keyboard with capital letters or symbols, click **Shift**.

❑   To enter a character or symbol, click the character or symbol you
want to use.

5   Click **OK** to save the name.

6   Select a font size from the **Font** drop-down list.
Select one of the following options:

❑   <none>
When you select <none>, the name of the frame or button will not
be displayed on the RAV-2000. It will be used as an identifier only.

❑   Font 8
When you select Font 8, the symbols cannot be displayed on the
RAV-2000.

❑   Font 10

❑   Font 12

❑   Font 14

7   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Note
You can also rename frames or buttons by selecting them and pressing **F2**.

Entering the location and dimensions of a frame or a button

1   Open the **Frame Properties** or **Button Properties**.

2   Select the **Properties** tab.

3   Enter the position in the **Relative Location** text fields.
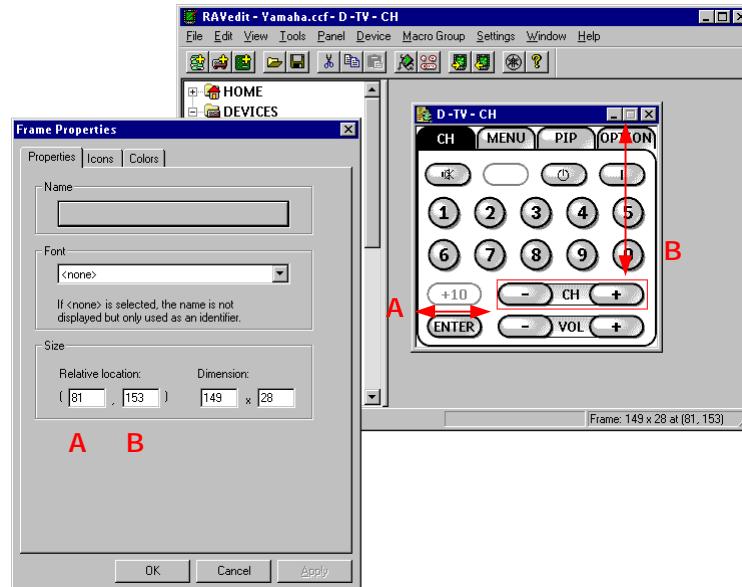
A is the distance between the left edge of the panel or the parent frame and the left edge of the frame or button.

B is the distance between the top of the panel or the parent frame and the top edge of the frame or button.

4   Enter the size of the frame or button in the **Dimension** text fields.
The **Dimension** option is only enabled for resizing default frames and buttons. When the frame or button contains a bitmap, you cannot resize it.

5   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Displaying the location of frames and buttons

When selecting a frame or button in a panel, the dimensions and location are displayed in the status bar.

The location of embedded frames and buttons can be displayed as:

■   **Relative location**: the location of the selected frame or button in relation to the top left corner of the **parent**.

■   **Absolute location**: the location of the selected frame or button in relation to the top left corner of the **panel**.

When frames and buttons are not embedded there is no difference between the relative and absolute location. The location always refers to the top left corner of the **panel**.

By default the relative location of frames and buttons is displayed.

To switch from relative location to absolute location

1   Open a panel.

2   Select a parent frame.
The dimensions and the location of the parent frame are displayed in the status bar.

Parent frame

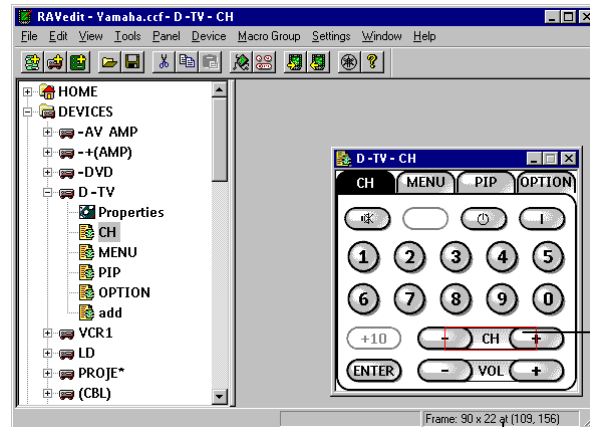Dimensions and **location** of the selected parent frame
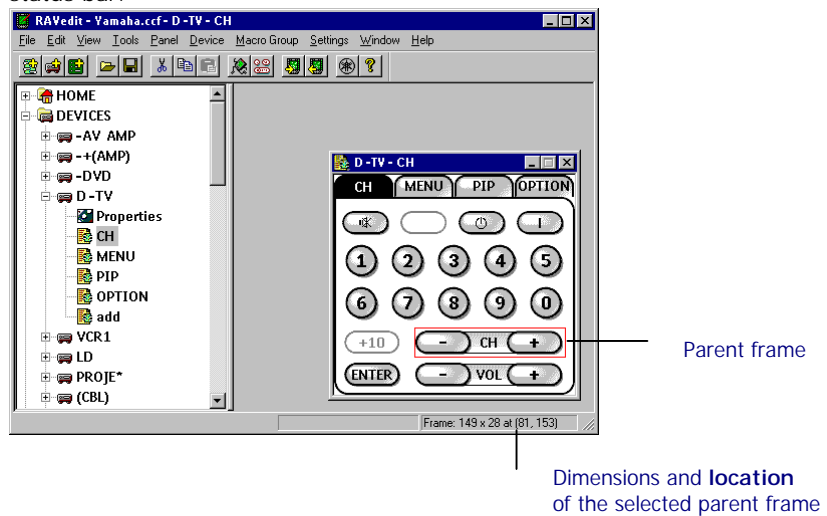
The location of a frame or button on the first level is always an absolute location and refers to the top left corner of the panel.

3   Select the first child.
The dimensions and the location of the first child are displayed in the status bar.

First child

Dimensions and **relative location** of the selected first child
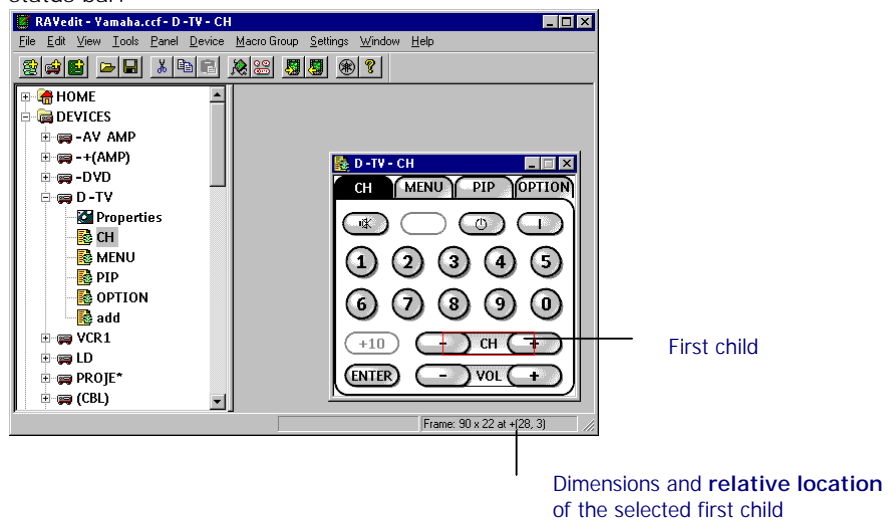
The + sign indicates that the relative location of the child in relation to the top left corner of the parent is displayed.

4   Select **Absolute location** from the **Settings** menu.

The relative location of the first child in the status bar changes into the absolute relation.

First child

Dimensions and **absolute location** of the selected first child

The + sign disappears indicating that the absolute location of a child in relation to the top left corner of the panel is displayed.

Designing Frames and Buttons

Adding bitmaps to a frame

1   Open the **Frame Properties**.

2   Select the **Icons** tab.
When you selected a default frame, **No Icon** is displayed in the **Icon** group box.
When you selected a frame with a bitmap, the bitmap is displayed in the **Icon** group box.

3   Right-click in the **Icon** group box and select **Load** from the context menu.
-or-
Double-click in the **Icon** group box.
The 'Open' window appears.

4   Browse to the folder where the bitmaps are stored and select a new bitmap.

5   Click **OK**.
The selected bitmap is displayed in the **Icon** group box.

6   Right-click the button and select **Save** from the context menu to save the bitmap.

7   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Adding bitmaps to a button

1   Open the **Button Properties**.

2   Select the **Icons** tab.
When you selected a default button, **No Icon** is displayed in the **Inactive icons** and the **Active icons** group boxes.
When you selected a button with a bitmap, the bitmaps are displayed in in the **Inactive icons** and the **Active icons** group boxes.

3   Right-click in the group box for the **Inactive-Unselected** state and select **Load** from the context menu.
-or-
Double-click in the **Icon** group box.
The 'Open' window appears.

4   Browse to the folder where the bitmaps are stored and select a new bitmap.

5   Click **OK**.
The selected bitmap is displayed in the group box for the **Unselected – Inactive** state.

6   Right-click the button and select **Save** from the context menu to save the bitmap.

7   Repeat the instructions 3 to 6 for the other states:

- ❑   **Unselected— Active**

- ❑   **Selected— Inactive**

- ❑   **Selected— Active**

8   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Setting the colors of a frame

1   Open the **Frame Properties**.

2   Select the **Colors** tab.

3   Click the field to change the **text color**.
Right-click the field to change the **background color**.
A context menu with four colors appears.

4   Select the color you want to use.
When you move your mouse over the colors, the color in the field
changes dynamically.

5   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Setting the colors of the button

1   Open the **Button Properties**.

2   Select the **Colors** tab.
You can select the text color and the background color for the four states
of the button.

3   Click the field to change the **text color**.
Right-click the field to change the **background color**.
A context menu with four colors appears.

4   Select the color you want to use for the **Unselected — Inactive** state.
When you move your mouse over the colors, the color in the field
changes dynamically.

5   Repeat the instructions 3 and 4 for the other states:

❑   **Unselected— Active**

❑   **Selected— Inactive**

❑   **Selected— Active**

6   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Setting the System Properties for the RAV-2000

Write-protecting a CCF

A write-protected CCF cannot be changed on your RAV-2000. This is useful if you want to set up a CCF with *RAVedit* and don't want anyone to inadvertently make changes to it when they use your RAV-2000.

> **Note**
>
> After loading a write-protected CCF in your RAV-2000, you can only access USE mode on your RAV-2000. Write-protecting a CCF does not affect any *RAVedit* operations.

1   Open the **RAV-2000 System Properties**.

2   Select the **RAV-2000 System Properties** tab.

3   Select the **CCF is write-protected** check box.

4   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.

Automatically creating device aliases

RAVedit automatically adds device aliases to the Home panel when three conditions are met:

■   There has to be at least one Home panel.

■   The first Home panel has to be called 'home' in lowercase.

■   The Home panels have to be write-protected.

> **Note**
>
> When these conditions are not met, you can create your own personal Home panel.

1   Select the first Home panel and press **F2**.
The 'Rename Panel' appears.

2   Type in lowercase the name **home** in the field.

3   Open the **RAV-2000 System Properties**.

4   Select the **RAV-2000 System Properties** tab.

5   Select the **HOME panels are write-protected** check box.

6   Click **OK** to accept the properties.
-or-
Click **Cancel** to return without changing the properties.
When you create a new device on your RAV-2000 or in *RAVedit*, an alias to this device will automatically be added to the Home panel.

Finishing a CCF

Contents of this chapter

Saving a CCF

Saving a CCF

You can save the current CCF in *RAVedit* in any of the following formats (all result in .ccf files):

■ RAV-2000 Configuration Files

■ No DB Configuration Files

■ No Timer & Beep Configuration Files

Notes

Saving the CCF as a **No DB Configuration File** will discard all Universal Database information.

Saving the CCF as a **No Timer & Beep Configuration File** will discard all timer and beep actions.

If a saved CCF does not fit in your RAV-2000, *RAVedit* will tell you it is too large and cancel the save. To reduce the size of the CCF you can try to:

■ delete some elements;

■ reuse bitmaps on your frames and buttons, where possible. *RAVedit* only saves unique bitmaps.

Saving a CCF

▶ Select **Save Configuration** from the **File** menu.
The current CCF is saved as a CCF file with the same file name.

Saving a CCF as …

1   Select **Save Configuration As** from the **File** menu.
The 'Save as' window appears.

2   Browse to the folder where you want to save the CCF.

3   Type the name of the CCF in the **File name** text field.

4   Select a CCF type from the **Save as type** drop-down list.

5   Click **Save**.
The current CCF is saved with a new file name.

Saving the current CCF file as EXE (Pack-and-Go)

You can save the current CCF in *RAVedit* as an EXE file. This EXE file is used to download a CCF into your RAV-2000 without opening *RAVedit*.

1   Select **Pack-and-Go** from the **File** menu.
The 'Pack-and-Go' window appears.

2   Browse to the folder where you want to save the EXE file.

3   Type the name of the CCF in the **File name** text field.

4   Select a type from the **Save as type** drop-down list:

❑ Exe RAV-2000 Configuration Files

❑ Exe No DB Configuration Files

❑ Exe No Timer & Beep Configuration Files

5   Click **Save**.
The current CCF is saved as an EXE file.

Making an EXE file

Instead of saving the current CCF as an EXE file, you can browse and select another CCF to make an EXE file.

1 Select **Make .EXE file** from the **Tools** menu.
The 'Make .EXE file' window appears.
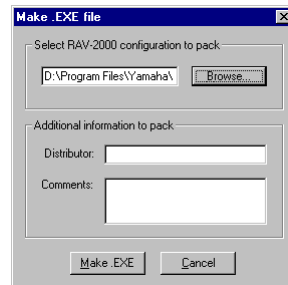
2 Click **Browse**.
The 'Open' window appears.

3 Browse to the folder where the CCFs are stored and select a CCF you want to save as EXE file.

4 Click **Open**.
The path of the selected CCF is displayed.

5 Type the name of the distributor in the **Distributor** text field.

6 Type additional information in the **Comments** text field.

7 Click **Make .EXE**.
The 'Save RAV-2000 .CCF-file as .EXE-file' window appears.

8 Browse to the folder where you want to save the EXE file.

9 Type the name of the EXE file in the **File Name** text field.

10 Click **Save**.

11 Click **OK** when the following messages appears: "The .EXE file has been successfully created!".

12 Repeat the instructions 2 to 11 to save other CCFs as an EXE file.
-or-
Click **Cancel** to close the 'Make .EXE file' window.

Replacing and Merging a CCF

Opening another CCF

If another CCF is already loaded in *RAVedit* when you want to load a new CCF, the following message appears: "Merge with current configuration or replace it?".

■ Click **Merge** to add all home panels, devices and macro groups from the loaded CCF to the current CCF. You will merge both CCFs.

■ Click **Replace** to remove the current CCF and replace it with the loaded CCF. You will replace one CCF by the other.
   If the current CCF has been modified, you will be allowed to save it first before it is replaced with the loaded CCF.

Copying a device to another CCF

Simultaneously running copies of *RAVedit* do not share a clipboard. This means that you cannot copy a device from one CCF to another by running two copies of *RAVedit*. You have to merge two CCFs.

1 Load the CCF from which you want to copy a device.

2 Delete everything but the device you want to copy.

3 Load the other CCF to which you want to copy the device, and merge it with the current CCF.

4 Save the merged CCF.

Viewing a CCF

Previewing with *RAVemulator*

Though part of the *RAVedit* package, *RAVemulator* is a separate application which emulates every aspect of your RAV-2000.

You can use *RAVemulator* to test drive your CCF without the need to download it to your RAV-2000. At any time you can launch *RAVemulator* to preview the CCF you created.

Launching *RAVemulator*

▶ Select **Emulate** from the **Tools** menu.
-or-
Click in the toolbar.
RAVedit saves the current configuration. The *RAVemulator* is launched and the CCF is displayed.

The speed of the *RAVemulator* depends on your PC and the CCF. It may differ from the speed on your RAV-2000.

When you right-click on the *RAVemulator* a context menu is displayed with the following options:

■ **Help:** to explain how to use the hard keys on the *RAVemulator*.

■ **About:** to provide information about the version of the *RAVemulator*.

■ **Transparent:** to change the shape of *RAVemulator*'s window into a rectangle. Disabling the option **Transparant** makes the *RAVemulator* slightly faster.

■ **Minimize:** to minimize the *RAVemulator*'s window and add a program button to the Windows ™ taskbar.

■ **Close:** to close the *RAVemulator*.

Making a screenshot in *RAVemulator*

▸ Press the **PRINT SCREEN** button.
  The currently displayed screen of *RAVemulator* is saved as a Windows
  bitmap file.
  A message appears with the location where the screenshot is saved.

RAVemulator saves up to 100 screenshots before it starts using the same
filenames again.

Downloading a CCF into Your RAV-2000

1 Load a CCF into *RAVedit* (see ").
  -or-
  Upload a CCF from your RAV-2000 (see "
).

2 Plug one end of the RAV-2000 serial cable in the serial port on your
  RAV-2000.

3 Plug the other end of the RAV-2000 serial cable in the serial port on your
  computer.

4 Select **Download into RAV-2000** from the **File** menu.
  -or-
  Click ![icon] in the toolbar.
  -or-
  Press **CTRL + D**.
  RAVedit sends the CCF to the RAV-2000 over the serial cable.

If the resulting CCF does not fit in your RAV-2000's available memory,
RAVedit will tell you it is too large and cancel the download. A possible
solution is to delete some elements and then try again.

RAVedit tries to connect to your RAV-2000

If *RAVedit* cannot connect to your RAV-2000, the following message appears:
"RAV-2000 not connected or not responding". Click **Details** to open a window
listing all the serial ports on your PC.

◼ If another application is using the serial port to which your RAV-2000 is
  connected:

  ❑ try another serial port;

  ❑ have the other application release the serial port.

◼ If *RAVedit* was able to open the serial port to which your RAV-2000 is
  connected but still could not connect, check if:

  ❑ both ends of the serial cable are properly plugged in;

  ❑ the RAV-2000's batteries have not run out.

  Wait a few seconds and try again.

◼ If after a number of attempts *RAVedit* still cannot connect, reset your
  RAV-2000.
  Wait until it beeps twice and try again.

RAVedit will check the CCF in your RAV-2000

If your RAV-2000 does not contain a valid CCF, the following message appears: "Failed to get valid information from RAV-2000, do you want to overwrite any CCF currently in RAV-2000?".

If your RAV-2000 contains a modified CCF, *RAVedit* will display a message with the creation date and time of this CCF and ask you if you want to overwrite it.

■   Click **No** if you don't want to overwrite the CCF in your RAV-2000.

■   Click **Yes** to continue downloading.

■   Click **Cancel** to abort the download.

Canceling the download may result in a corrupted CCF in your RAV-2000. You can fix this by fully downloading a CCF.

Note

It is best to not touch your RAV-2000's touch screen or use any of your RAV-2000's direct access buttons, while downloading is in progress.

RAVedit will download the CCF into your RAV-2000

After downloading, your RAV-2000 will tell you when it is ready to be used again by beeping twice.

Troubleshooting

The RAV-2000 does not connect to the serial port

1   If the following message appears: "RAV-2000 not connected or not responding", click **Details**.
    A panel appears listing all the serial ports on your PC.

2   Check if another application, e.g.a synchronization program for a PDA, is using the serial port.
    If this is the case:

    ❑   try another serial port;

    ❑   have the other application release the serial port.

RAVedit was able to open the serial port to which my RAV-2000 is connected but still cannot communicate

■   Check if both ends of the serial cable are properly plugged in.

■   Check if the RAV-2000's batteries have not run out.

■   Wait a few seconds and try again.

■   If after a number of attempts *RAVedit* still cannot communicate, reset your RAV-2000.
    Wait until it beeps twice and try again.

The Home panel on the RAV-2000 looks different from the way you designed it in *RAVedit*

You can create your own Home panel when at least one of the following conditions is met:

■   The first Home panel is **not** named 'home' (all lowercase).

■   The Home panels are **not** write-protected.

When the first Home panel is not named 'home' and the Home panels are write-protected, the RAV-2000 will boot up and display the first Home panel.

When the Home panels are not write-protected, the RAV-2000 will boot up and display the first panel of the first device.

If the first Home panel is named 'home' and the Home panels are write-protected, aliases to all devices will automatically be added to the Home panel.

New panels, buttons and frames appear in the loaded CCF

You have opened a new CCF while another CCF was still loaded in *RAVedit*. You have merged the two CCFs.

If you open a CCF when another CCF is already loaded when you want to load a new CCF, you have two possibilities:

■   **Merge both CCFs:** this means adding all devices, macro groups and panels from the CCF you are loading to the current CCF.

■   **Replace one CCF by another:** this means removing the current CCF and replace it with the loaded CCF.

You can use this feature to copy devices, macro groups and panels from one CCF to another. You edit the CCF with the devices, macro groups and panels you want to copy and merge it in another CCF.

Macros seem to be programmed correctly in *RAVedit* but are not working on the RAV-2000

You may have to add delays between the different commands in the macro. A device needs time to receive and execute the command. For example, when a devices receives the **Power on** command, it takes some time to start up. So the device will not be able to receive the next command.

See "Setting a delay" on page 42.

The function Test IR does not work properly

When you want to try out the IR code you have assigned, you have to connect the RAV-2000 to your computer.

- The function Test IR works **best** when the RAV-2000's touch screen is active.

- The function Test IR may **not** work optimally with timer actions or when *RAVemulator* is running.

The CCF on your RAV-2000 is invalid or corrupt

- "Invalid Configuration File Version"

- "File is not a valid configuration"

- "CCF file is invalid or corrupt"

See "Downloading a CCF into Your RAV-2000" on page 61 to download the CCF from *RAVedit* again.

RAV-2000 sends out 4 beeps and cannot be activated

The RAV-2000 software is corrupt.
See "Updating Your RAV-2000 Software" on page 6 to update the software on your RAV-2000.

The bitmap of a button is truncated

You can add four bitmaps to a button, one for each state:

- inactive – unselected;

- inactive – selected;

- active – unselected;

- active – selected.

The size of the button is defined by the smallest of the bitmaps used for different states of the button. You cannot resize a button that contains bitmaps. The best way to avoid the problem is using bitmaps with the same size per button.

Buttons without bitmaps can be resized.

Glossary

Action

An action is a command that will be executed by the RAV-2000. An action can be an alias, a delay, an IR code, a beep or a timer. You can assign one or more actions to:

- tapping a button;
- selecting a device;
- selecting a macro group;
- pressing a left/right key;
- pressing a direct-access key (Power, Standby, Mute, Vol+, Vol-).

When using one of these elements on the RAV-2000 the list of actions will be executed. An action list can contain up to 255 actions.

Alias (shortcut)

An alias is a shortcut to another command. You can create an alias to a button action, to a device or a macro group action, to an action of a direct-access key or a left/right key. When your RAV-2000 is executing an action list and comes across an alias, the action list referred to by that alias is executed.

Working with aliases saves memory.

Button

A button is a user interface element on the RAV-2000 used to execute commands. A button with at least one action in the action list appears on the RAV-2000, a button with an empty action list does not appear on the RAV-2000 until an action is assigned to it.

A button can be displayed with a label, several bitmaps and colors. You can change the look of a button by adding bitmaps. A button can have up to four bitmaps, one for each of its states.

CCF

A CCF or configuration file defines and stores the RAV-2000 user interface:

- devices and macro groups;
- panel layouts and button appearances;
- the behavior of all buttons, direct-access and left/right keys (including all IR codes).

Device

A device appears in the Device menu on the RAV-2000. A device can contain up to 255 panels.

Device action (source switching)

A device action is an action assigned to selecting a device, e.g. turning on the device.
The moment you select the device in the Device menu or on the Home panel on your RAV-2000, the action is executed and the RAV-2000 switches to the first panel of the selected device.

Frame

A frame is a user interface element on the RAV-2000 used to display a background image, text messages or labels. Frames and buttons can be embedded in a parent frame. It is much easier to move and arrange grouped frames and buttons in a panel.

A frame cannot be programmed, it never contains an action list. You can change the look of the frame by adding a bitmap.

Gallery

A gallery is a collection of frames and buttons. Instead of adding default frames and buttons to a panel, you can add frames and buttons from a gallery. A gallery contains the bitmaps for frames and buttons used in a CCF.

Grid

A grid is a set of up to 64 horizontal and 64 vertical grid lines. A grid is used to align frames and buttons in a panel. After editing the grid, you can let the frames and buttons snap to the grid.

Icon (bitmap)

An icon is used to change the look of the frames and buttons in the panels. *RAVedit* can load any Windows bitmap file with 1, 4 or 8 bits per pixel and with maximum dimensions of 240 by 219 pixels (the size of a panel).

IR code

The RAV-2000 sends out infrared (IR) codes to operate devices.

IR codes to activate different brands for all kinds of video and audio devices are stored in the RAV-2000's universal database. By selecting IR codes and assigning them to panels, buttons and keys, you can program your RAV-2000 to operate your devices.

When IR codes are not present in the database you can always learn them from the existing remote control of the device.

Jump

With a jump the RAV-2000 navigates from one panel to another panel. For every button, left/right and direct-access key, device and macro group a jump can be created. With jumps you can scroll through the different panels of a device or jump to a hidden panel.

Macro

A macro is a sequence of IR commands executed when selecting a single button on the RAV-2000.

On your RAV-2000 there is a clear distinction between buttons that can only perform a single command and macros that perform a list of commands. In *RAVedit* this distinction does not exist. Every button, device, direct-access or left/right key can perform a single action or act as a macro and perform a list of commands.

Macro group

A macro group appears in the Macro menu on the RAV-2000. Every macro group can contain up to 255 panels.

Panel

A panel is the area of 240 * 219 pixels containing frames and buttons displayed on your RAV-2000. There are 3 kind of panels:

■ Home panel;

■ Panel of a device;

■ Panel of a macro group.

System area

The system area is the area on the RAV-2000's touch screen that is predefined for the system navigation: it cannot be changed by the user.

Template

You can define the panels, buttons and frames for a device in a template.

The template is created in *RAVedit* and used on the RAV-2000 when adding a new device in the RAV-2000. A template is not visible on the RAV-2000.

Please refer to the RAV-2000 Owner's manual for information on how to add devices on the RAV-2000.

Timer

With a timer you can operate a device at the time you prefer. A timer can be created for every button, macro, device or macro group. To define a timer you have to select the time and day to start the timer action and to stop the timer action. A timer action can be repeated weekly.

On your RAV-2000 timers can only be edited in macro buttons. The 'hidden' timers to a button, macro or device cannot be edited in the RAV-2000.

UDB

The Universal DataBase stores IR codes to activate different brands for all kinds of video and audio devices. When configuring a CCF you can assign IR codes from the universal database to the buttons and devices in *RAVedit*.

With the option **Non Applicable** the brand for the device is not preprogrammed. This allows you to prepare your CCF for functions that are not available on your current device. In case you replace the existing device with a new one and the functions are available in the database, the IR codes assigned to the functions will be used.

Index