



SB2 User Manual

Release 2



BSS Audio

A division of Harman International Industries Ltd.

Cranborne House
Cranborne Road
Potters Bar
Hertfordshire
England
EN6 3JN

8500 Balboa Blvd
Northridge
CA 91329
USA

Tel: + 44 (0) 1707 660 667
Fax: + 44 (0) 1707 660 755
email: info@bss.co.uk
web: www.bss.co.uk

Tel: 818.920.3212
Free: 888.251.8351
Fax: 818.920.3208
email: BSSAudioUSA@harman.com

Application Background	1
Software Requirements	1
System Requirements	1
Installation	1
Loading or creating a file	2
Framework	3
The System View	4
Design Mode and Operate Mode	5
Online / Offline	5
Adding a device into the system	6
Renaming a device	7
The default Control Panel	8
Adjusting parameter properties within the default Control Panel	9
The Docking Windows	10
Control Panel Pages	11
Properties Window	12
Output Window	12
Network Window	13
Hardware Window	14
Gallery Window	14
Design Window	15
Custom Control Panels	16
Creating a Custom Control Panel from scratch	16
Creating a Custom Control Panel from an existing Control Panel	18
Navigating Control Panel windows	18
Editing Custom Control Panel appearance with the Gallery	19
Bitmap	19
Collections	21
Colours	21
Controls	23
Graphics	24
Text Strings	25
Text Styles	26
Wave Files	27
Notes on adding items to the Gallery	28
Renaming an item in the Gallery	28
Modifying items in the Gallery	29
Editing control properties	30
Removing References	31
Copying and Pasting Controls	31
Grouping Controls	32
Linking Controls	32

Adding Child Pages to a Custom Control Panel	33
FDS Programs	35
Undo / Redo	36
Saving a design file	36
Should SB2 crash...	37
Keyboard Shortcuts	38

BSS Audio SB2

Application Background

SB2 is the first incarnation of a new core software platform developed by BSS Audio. SB2 Release 1 included support for the BSS Audio FDS-366 and FDS-366T, and Release 2 adds support for the FDS-334, FDS-336, FDS-334T and FDS-336T Minidrive devices.

Soundweb users will notice immediately that SB2 is very similar to Soundweb Designer both in layout and feature set. As a result of this, SB2 offers far more in the way of flexibility than its predecessor Soundbench.

Software Requirements

SB2 will run on Microsoft Windows 2000 and Windows XP platforms only.

Windows 2000 users MUST have at least Service Pack 1 installed. It is strongly recommended that all users install the latest service packs for their operating systems.

Additionally Windows 2000 users should also ensure that the latest Microsoft Data Access Components (MDAC) service pack is installed. Please visit the Microsoft website to download.

System Requirements

It is recommended that SB2 is run on a machine with an Intel ® Pentium ® 4 processor and 512MB of RAM installed. A minimum of 50MB free disk space will be needed.

Installation

Double-click SB2R2.exe to install SB2 Release 2. Follow the instructions provided by the setup program. Once installed, you will be able to run SB2 from the Start menu.

If SB2 Release 1 is already installed, you will be prompted to remove the software before continuing.

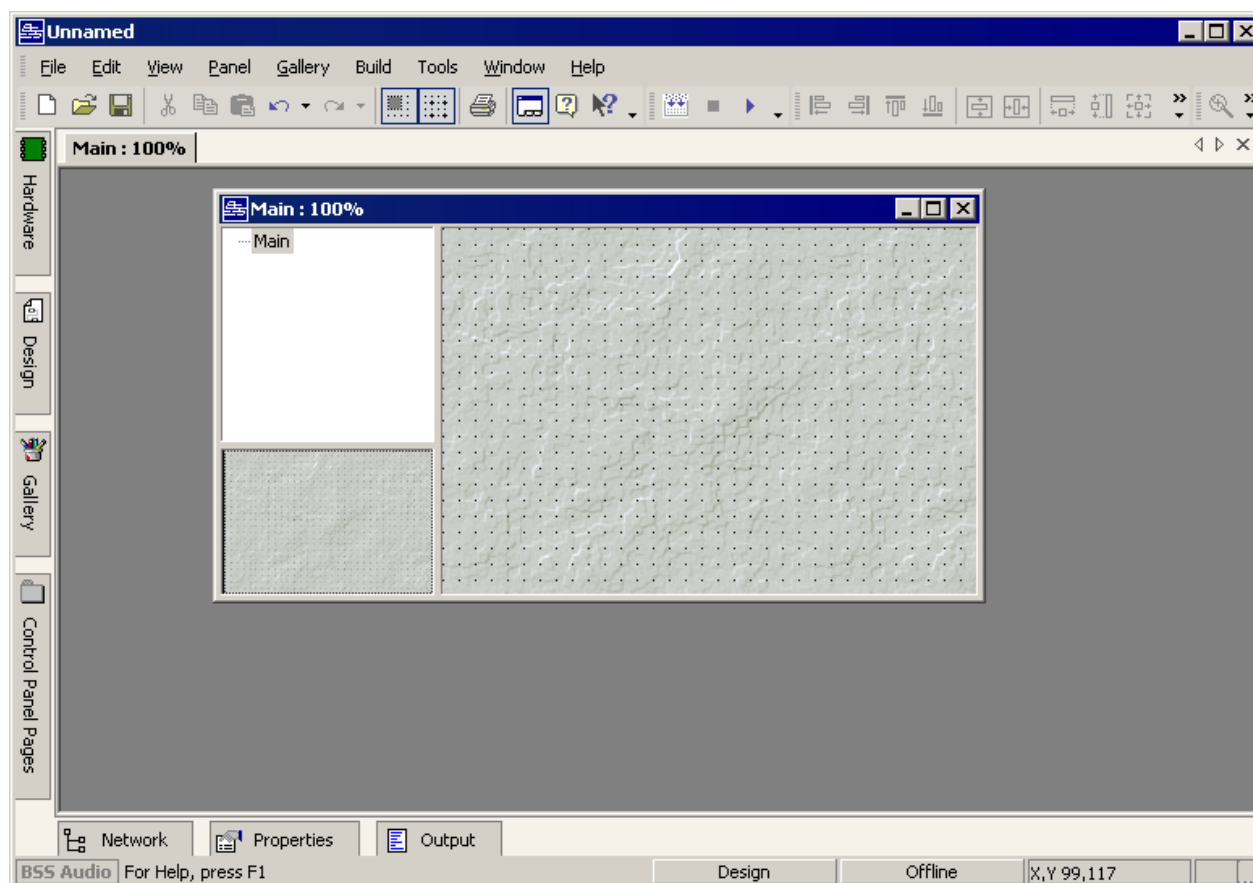
Should the application need to be uninstalled at any time, this can be done from the standard Windows **Add or Remove Programs** option in the Control Panel or by re-running SB2R2.exe and selecting the Remove option.

NOTE:

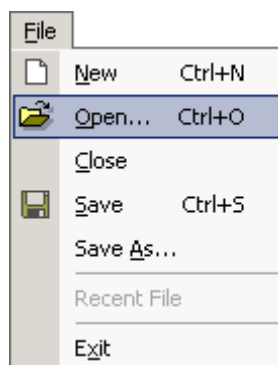
If upgrading SB2, the previous version should be uninstalled either by using **Add or Remove Programs** in the Windows Control Panel or by re-running SB2R2.exe and selecting the Remove option.

Loading or creating a file

Launch SB2 from the Start menu. The application will launch with a new, empty file loaded.



An existing file may then be loaded from the **File | Open** menu:



Framework

The framework consists of the following docking windows:

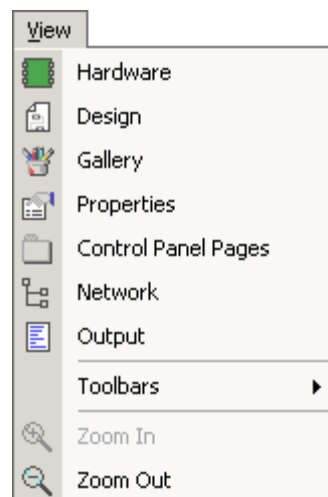
- Hardware
- Design
- Gallery
- Properties
- Control Panel Pages
- Network
- Output

These windows can be docked along any edge of the main application window. Additionally, docking windows can be grouped together into tabs.

Each docking window / group has a pin icon which can be used to toggle between permanently displaying the docking window, or having it scroll on and off the main window.



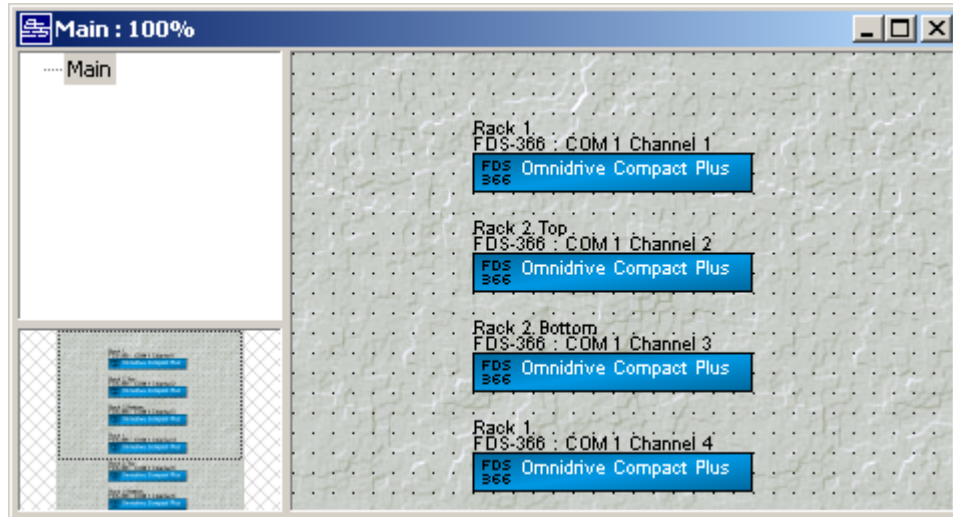
The docking windows can also be accessed from the **View** menu.



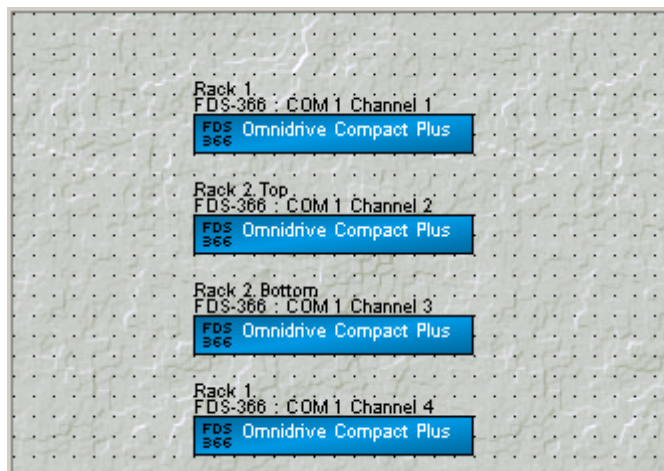
Note: Docking windows can also be closed or made to be floating. To reopen a closed docking window, select the window from the **View** menu.

The System View

Devices which exist in your design will be shown in the System View. A newly created file will show no devices.



The window is separated into three areas – the larger system schematic area to the right should be considered to be the virtual system and displays all editable devices. A device control panel can be accessed by double clicking the required device.



To the left and below is the quick navigation window. If the system schematic design is larger than the main window will allow, an outline of the visible area will be superimposed over the quick navigation window. The outline may then be dragged with the mouse and the main window will follow.

Design Mode and Operate Mode

SB2 Design Mode allows system configuration and design of control pages. When in Design Mode, parameters may be moved and stylised but the values may not be altered.

To operate controls or remotely control connected devices, the application must be put into Operate Mode.

The **Design / Operate** button in the SB2 status bar can be used to switch between Design and Operate Modes. The button will read 'Design' when the application is already in Operate Mode and vice versa. Hovering the mouse pointer over the button will prompt to change mode.



When entering Operate Mode in this manner, SB2 will not go online to the system, but merely allows offline operation of controls.

When entering or leaving Operate Mode, the application will take a couple of seconds to reorganise the screen layout, returning it to the state in which it was previously left.

To put the application into Operate Mode and automatically go online to a connected system, the **Run** (Play) and **Stop** buttons in the application status bar should be used.



If the **Run** button is highlighted, the application is in Design Mode – the default status of the application when launched.

To put the application into Operate Mode and go online, click the **Run** button. When in Operate Mode, the **Stop** button will be highlighted. Click this to return to Design Mode.

The **Run**, **Stop** and **Operate / Design** buttons are also available from the **Build** menu.

TIP:

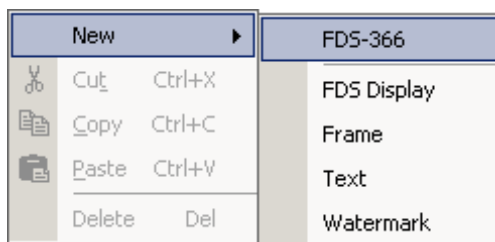
Holding SHIFT + CTRL while in Design Mode will put the application into Soft Operate Mode and enable adjustment of parameter values with the mouse.

Online / Offline

Also on the status bar is the Offline / Online status button. When offline no communication will exist between the PC and any connected devices. To send control change values to the connected devices the application must be Online.

Adding a device into the system

To add a device to the system, right click on the background of the system view and select the device from the **New** menu.



Alternatively, a device can be dragged into the System View from the tree-view device list in the Hardware Window, accessible as a docking window or from the **View** menu.



Note: These methods of adding a device may require that the COM port and MIDI channel are configured via the object Properties Window. For more information on the object Properties Window, see **The Docking Windows**.

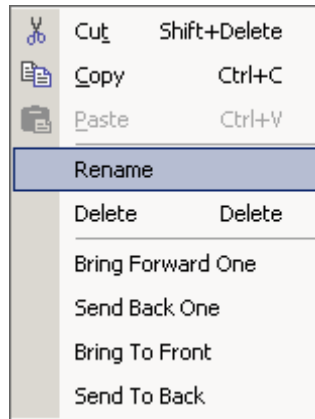
TIP:

Devices already connected to the PC will automatically be listed in the Network Window. Devices can be dragged and dropped from this window straight into the System View. A device added in this way will automatically be pre-configured to match the physical device attached to the PC.

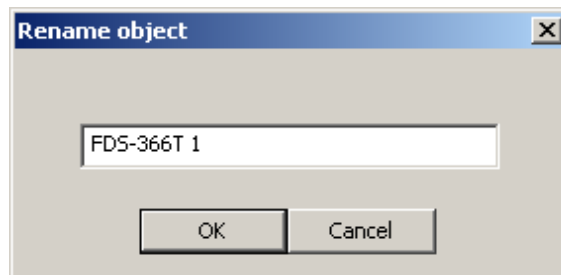
For more information on the Network Window, see **The Docking Windows**.

Renaming a device

Devices can be renamed for ease of identification. Right-click the device within the System View and select **Rename**.



The **Rename Object** dialog will appear. Type in the new name and click OK.



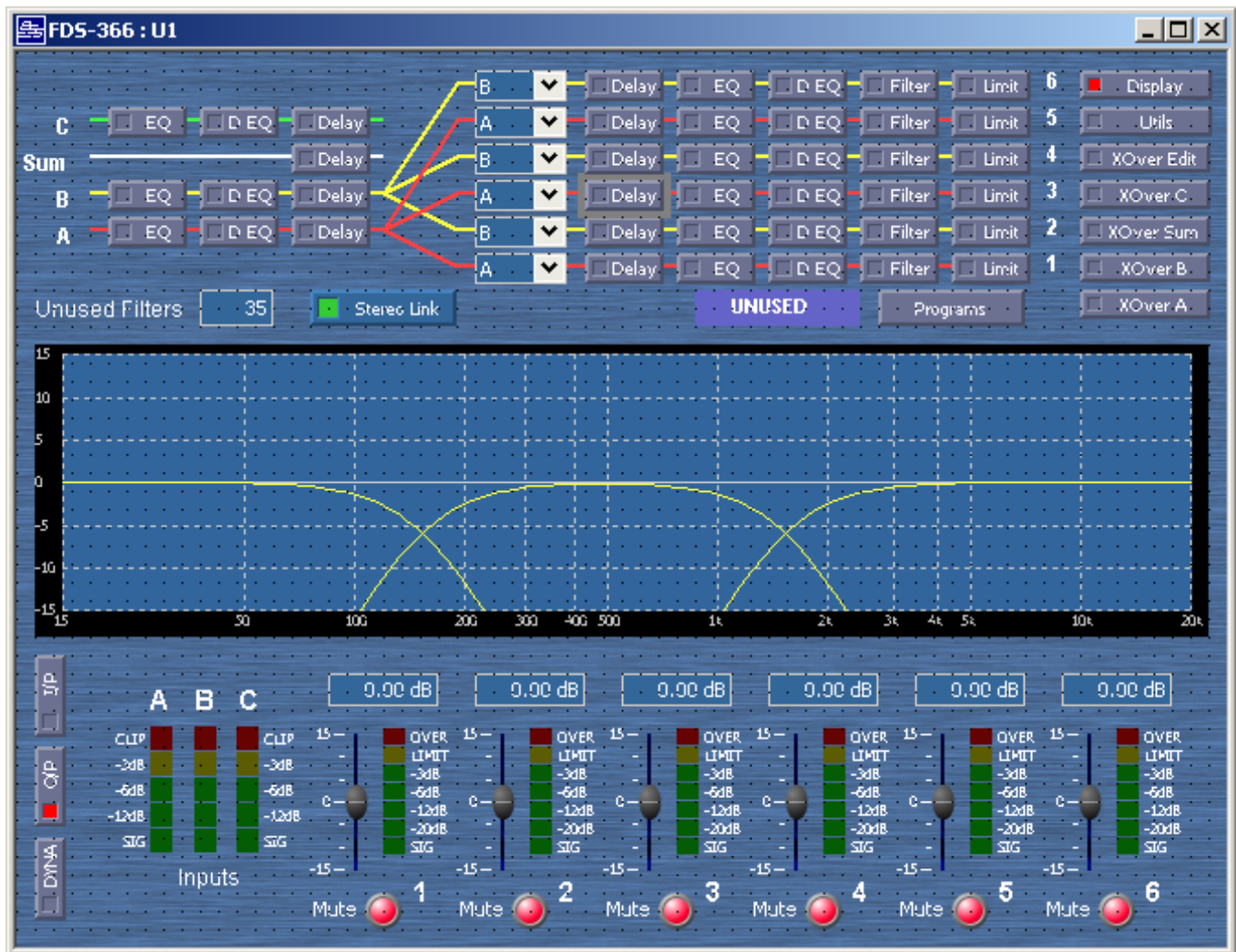
TIP:

The device right-click context menu can also be used to cut, copy, paste and delete devices and also to reorder the devices on the page. Once a device has been copied, right-click the background and select **Paste** from the menu.

The default Control Panel

Once a device has been loaded into the System View, the default control panel can be opened by double-clicking the device.

Below is the default control panel for the FDS-366 and FDS-366T devices.



The layout or design of default control panel cannot be modified but may be converted into a custom control panel, and later modified. See the section on **Creating a Custom Control Panel** for more information.

TIP:

The tabs beneath the main toolbar can be used to navigate easily between control panels. They can also be reordered by clicking and dragging left or right.

Main : 100% **FDS-366 : U1** FDS-366 : U2 Custom Panel 1

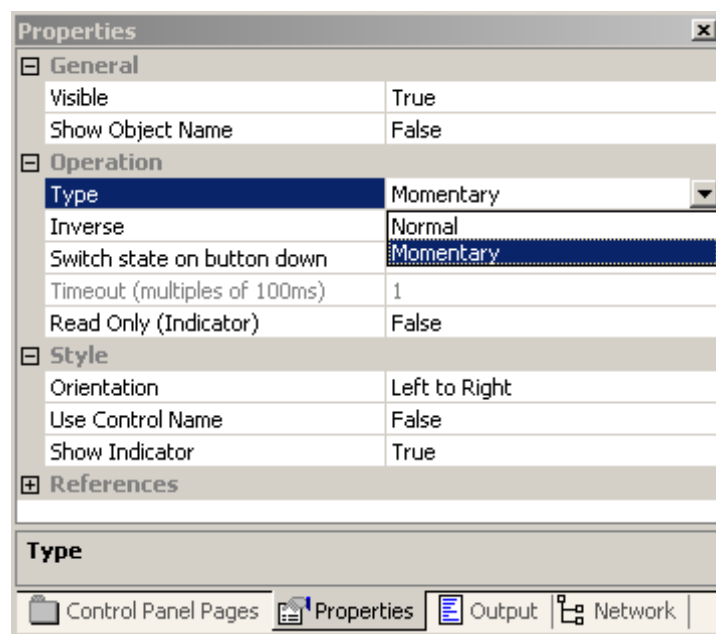
Adjusting parameter properties within the default Control Panel

The behaviour of any parameter within the default Control Panel for a device may be altered. Select the parameter and open the **Properties** docking window. The adjustable properties for the selected parameter will be listed. In this way, a mute may be given a momentary action for example.

Select the mute switch within the default Control Panel. It will highlight with a grey border.

Open the **Properties** window, either from the docking window tab or from the **View** menu.

Under **Operation | Type**, select the *Normal* setting on the right-hand side. A drop-down menu will appear – select *Momentary*:



The Docking Windows

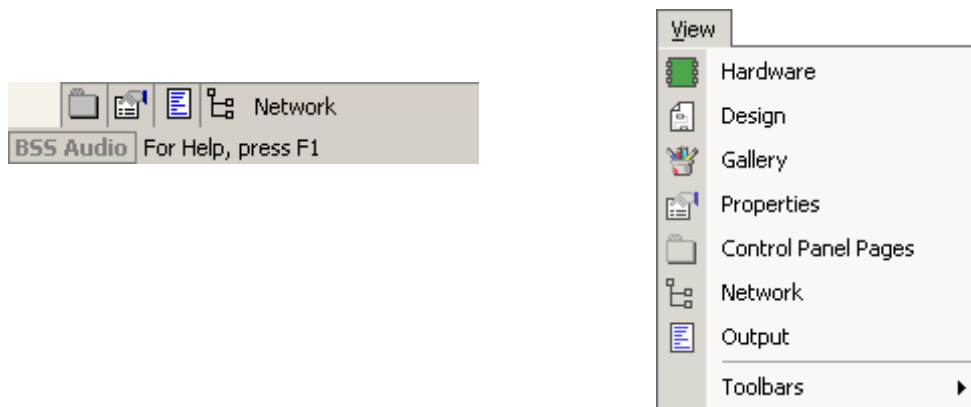
In SB2's default state, the following docking windows are available at the bottom edge of the System View:

- Control Panel Pages
- Properties
- Output
- Network

The following docking windows are available at the left-hand edge of the System View:

- Hardware
- Gallery
- Design

Any of these windows can be opened by clicking the relevant tab or by selecting from the **View** menu.



Docking windows can be set to be floating by dragging the window's title bar. The windows can then be re-docked at any edge of the screen. The outline of the window will highlight as the window is dragged.

TIP:

SB2 retains the docking window layout when restarted. Take time to organise the view to your preference.

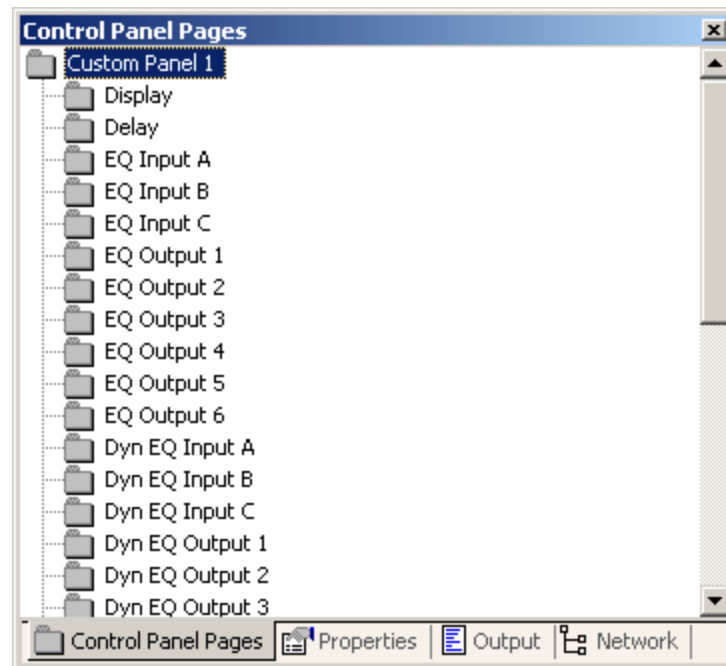
TIP:

With the docking window's pin in the vertical position, the docking window will open when the tab is clicked. When another window is opened or selected, the docking window will close.

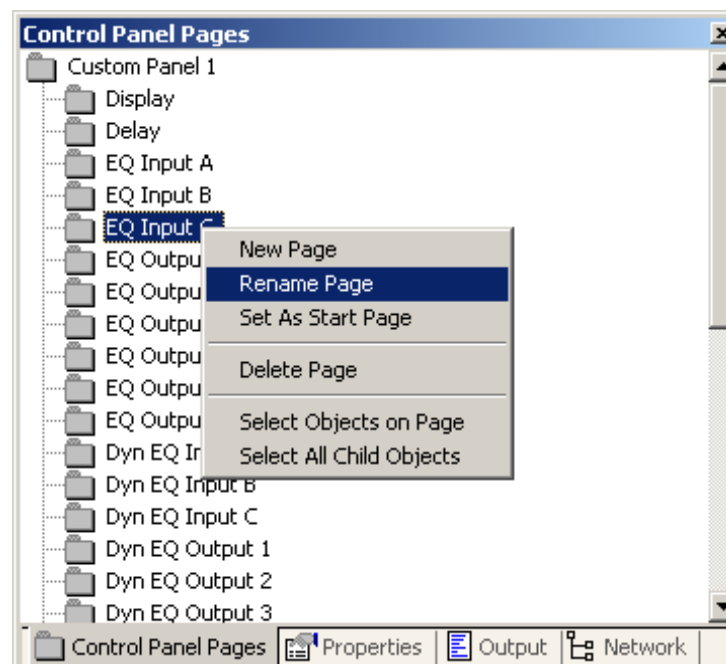
With the docking window's pin in the horizontal position, the window will open when the mouse cursor is hovered above the tab and close when the mouse cursor moves away from the window.

Control Panel Pages

This window shows the page layout for the currently selected control panel as a tree view of objects. The window will update to reflect the selected control panel. Selecting a page within the Control Panel Pages Window will automatically force the relevant Control Panel to jump to this parameter enabling quick and easy navigation.

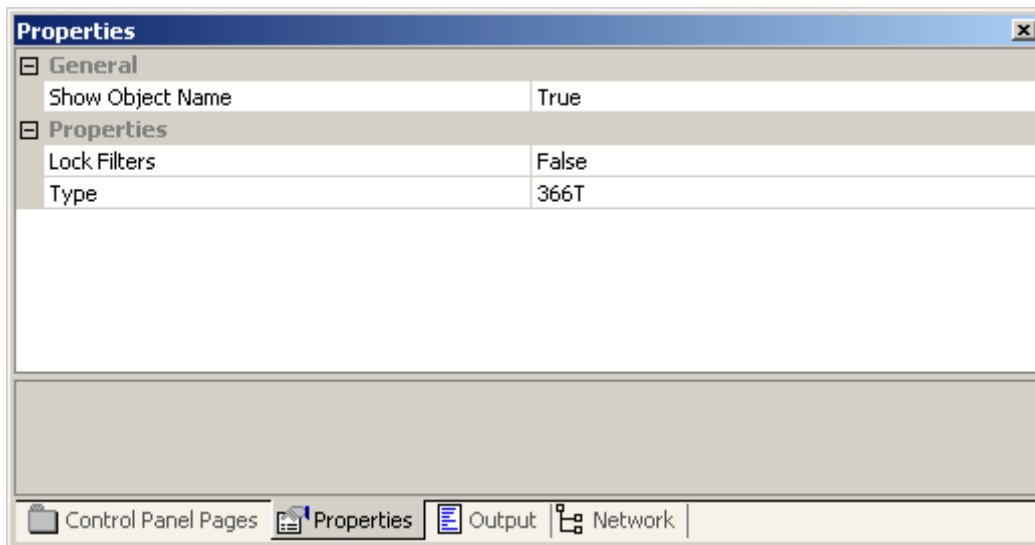


Right-clicking any of the pages in the list will display a context menu enabling page creation, renaming, deleting or multiple parameter selection within the Control Panel. The page may also be set as the starting page for the Control Panel.



Properties Window

The **Properties Window** both shows the properties for the currently selected object and enables adjustment.



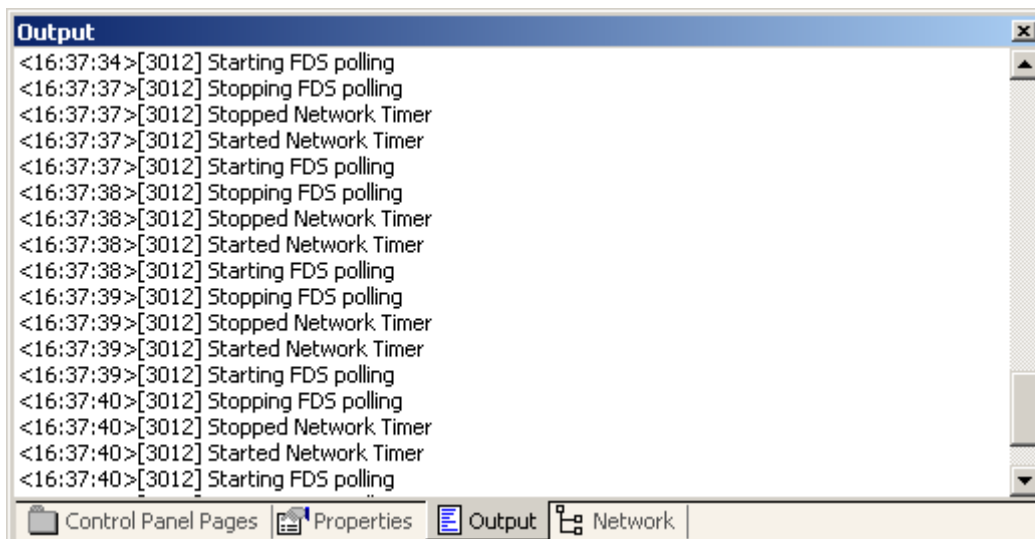
The Properties Window will automatically follow selection of devices, control panels or even parameters within etc.

TIP:

Time should be taken to explore the parameters available for viewing or configuration for each of the different types of object, in particular controls within Control Panels.

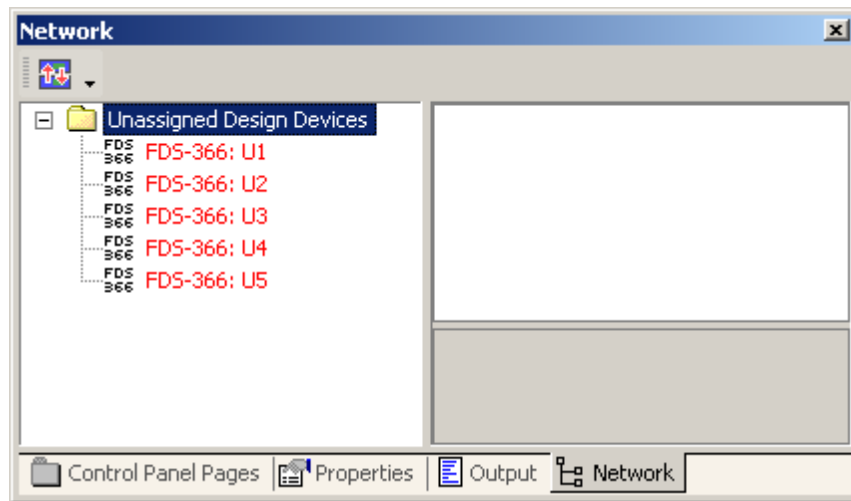
Output Window

The **Output Window** should be considered a live event log, detailing all SB2's background actions. In the example below, the Output Window shows network activity while the application searches for devices in the background.

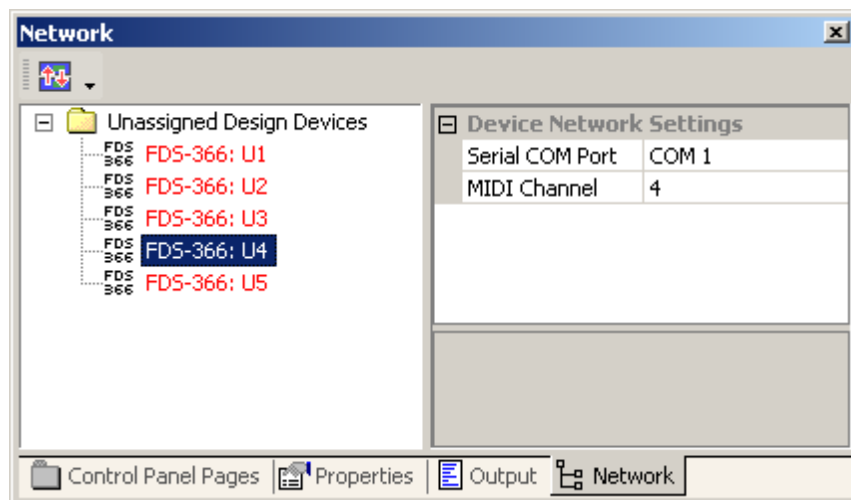


Network Window

The **Network Window** displays the devices connected to the PC and also those present in the design file but which are not connected.



Select a non-connected device to configure the serial COM port and MIDI channel manually in the Device Network Settings option boxes.



TIP:

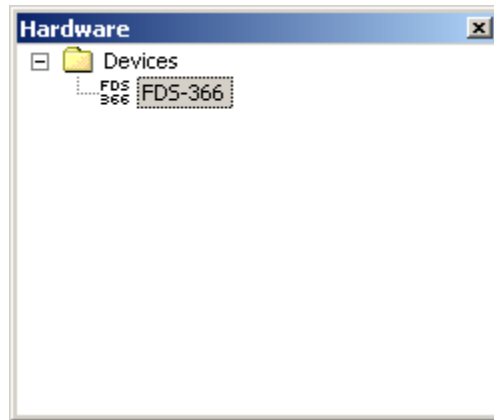
A device may be dragged from the Network Window into the System View to add the device to the design. In this way, the current parameter values of the physical device will be copied automatically to the device within the design.

TIP:

Clicking on the Synchronise button  will synchronise the devices within the design file with the physical devices on the network.

Hardware Window

The **Hardware Window** lists compatible hardware in a tree-view. SB2 Release 1 supports FDS-366 and FDS-366T devices only.

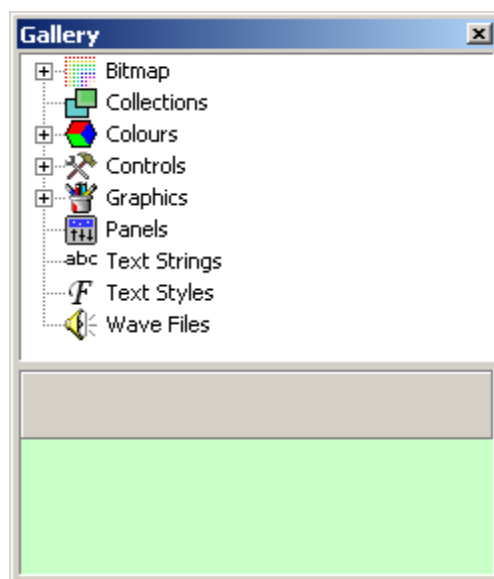


TIP:

A device may be dragged from the Hardware Window into the System View to add the device to the design. Note that adding a device in this way will assign default values to the device parameters.

Gallery Window

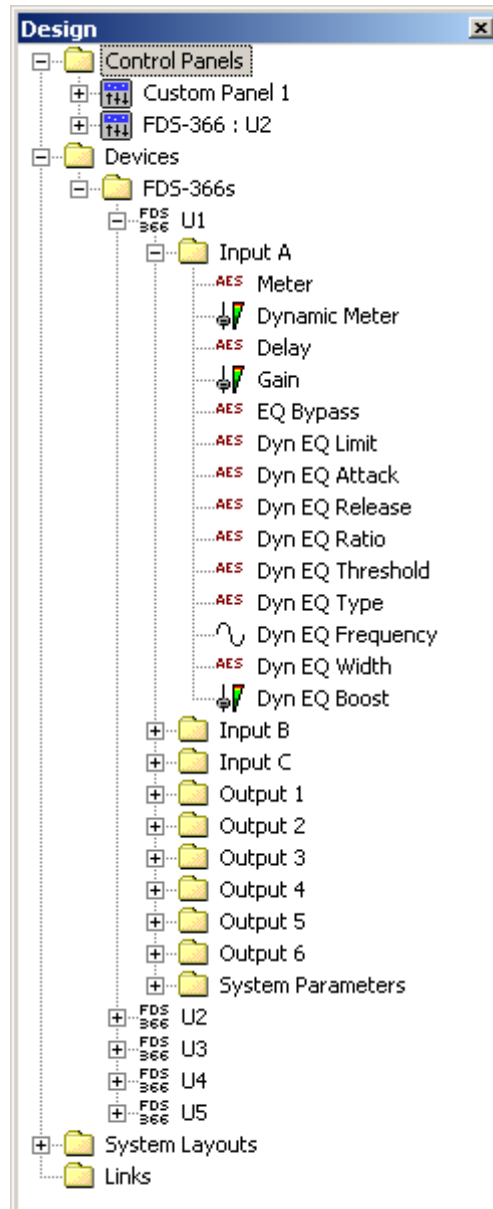
The gallery is your collection of graphical objects and controls which is used when creating your own control panels. For more information, see **Custom Control Panels: Editing the appearance of a Custom Control Panel**.



Design Window

The design tree view displays a design in tree form. Selecting a device or parameter in the design tree will highlight in red the device or parameter in all other open views.

As with other similar windows, the Design Window tree also enables parameter drag and drop onto Control Panels.



Note: A device will not appear as a Control Panel unless the default panel has been initialised by double-clicking the device within the System View.

Custom Control Panels

The concept of Custom Control Panels is to allow the system designer to create control pages or windows specific to the design. In this way, parameters from any device within the system design may be placed into the same window allowing quick and easy access to commonly used parameters.

Custom Control Panels can also be divided into sub-pages. The default FDS-366T control panel illustrates this.

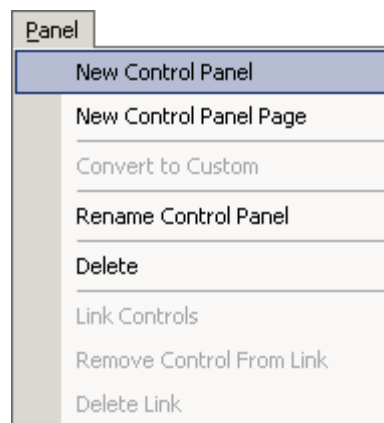
By default a control panel has a single master page which is always visible. Every page can have child pages, and those child pages can have child pages, and so on.

The **Control Panel Pages** window shows the page hierarchy for the currently active control panel.

A Custom Control Panel can be created in one of two ways. Either an existing panel can be converted into a custom panel and edited as required, or a panel can be created from scratch.

Creating a Custom Control Panel from scratch

To create a new blank custom control panel, select **New Control Panel** from the **Panel** menu.



By default the control panel will have a grey background. The background colour can be changed by opening the **Colours | Windows System Colours** or **Bitmap** menus within the Gallery Window and dragging on a colour or bitmap while holding down CTRL.

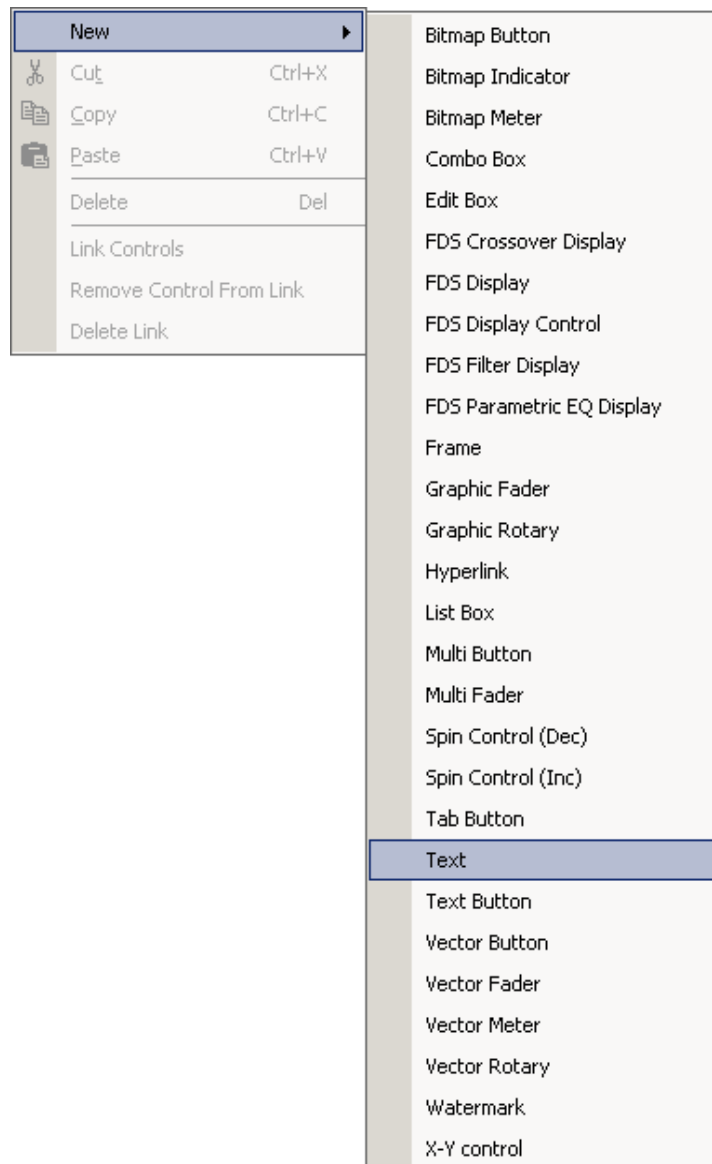
Elements can be added to a Custom Control Panel in one of three ways.

Firstly a parameter may be dragged and dropped or copied and pasted from any existing control panel, including default panels, while in Design Mode. Parameters created in this way will automatically carry over their previous assignment, effectively creating a new instance of the control.

Secondly a parameter type may be dragged and dropped from the **Controls** menu within the Gallery Window into the Custom Control Panel. In this way, parameter assignment will not be predetermined. This is indicated with the presence of a small yellow warning triangle placed at the bottom right corner of the control.



The third method of control creation is to right-click the control panel background and select one of the many control types available in the **New** menu. Again parameter assignment will not be predetermined.

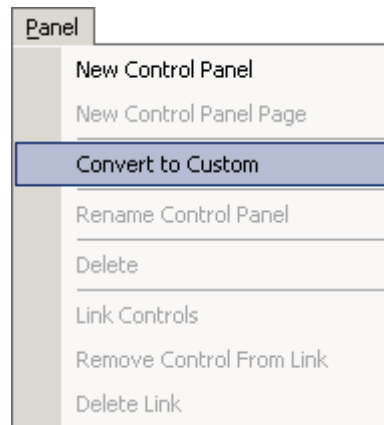


Unassigned controls are assigned a parameter by dragging and dropping a parameter from the Design Window. Expand the relevant device in the tree view to reveal its underlying parameters. Selecting the control within the Custom Control Panel will make it active in the Properties Window which will display all existing parameter assignments and control options. The Properties Window also enables parameter assignments for the selected control to be removed.

Creating a Custom Control Panel from an existing Control Panel

An existing Control Panel may also be converted directly into a Custom Control Panel, allowing for adaptation of a previous design.

With an existing default Control Panel open, select **Convert to Custom** from the **Panel** menu.



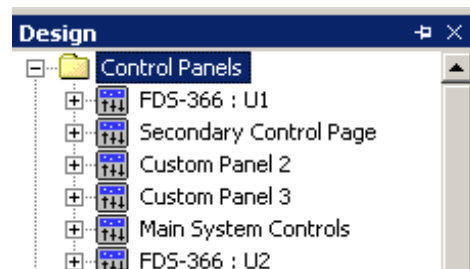
The default panel will be converted into a Custom Control Panel, and be editable as outlined above. The panel will be renamed and appear as a customisable panel in the **Control Panel Pages** docking window. Parameters may now be removed from the new Custom Control Panel and additional parameters from any other device within the system may now be added.

To re-open a default control panel, double-click the device in the System View.

Navigating Control Panel windows

All open windows are listed along the Tabs at the top of the window area. To jump to a window, simply select it with the mouse.

Closing a Control Panel window will remove the associated Tab. The panel can be opened again by double-clicking the required page from the Control Panel list in the Design Window.



Editing Custom Control Panel appearance with the Gallery

The Gallery Window is divided into eight sections which offer a number of utilities for editing of appearance of Custom Control Panels.

- Bitmap
- Collections
- Colours
- Controls
- Graphics
- Text Strings
- Text Styles
- Wave Files

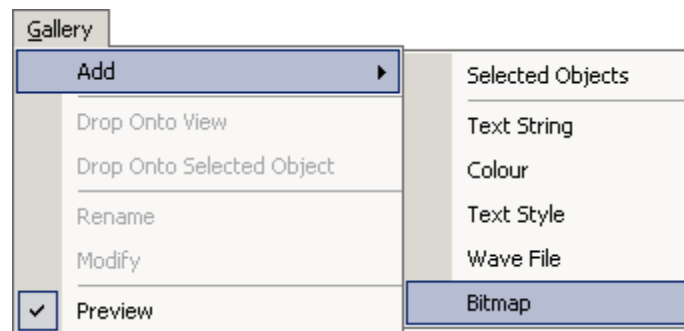
The **Bitmap**, **Collections**, **Controls** and **Graphics** menus contain objects which can be dropped directly onto a Custom Control Panel.

Colours, **Text Strings**, **Text Styles** and **Wave Files** list definable styles which can be quickly assigned to objects.

Bitmap

Instances of bitmaps are stored here. An FDS-366 default background is supplied with the application, but custom graphics may also be added.

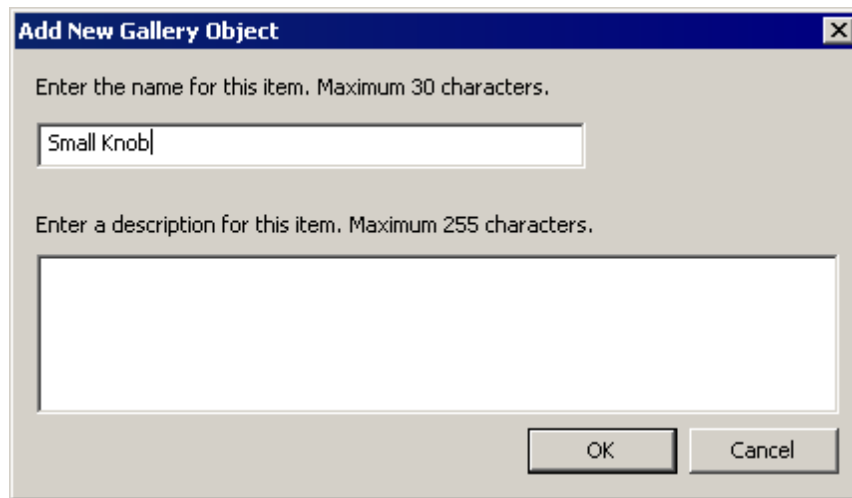
To add a bitmap to the library, open the **Gallery** menu and select **Add ► Bitmap**.



Browse to the file and open it. The following formats are supported:

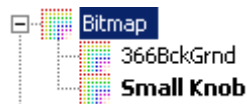
```
*.bmp, *.dib, *.rle
*.jpg, *.jpeg, *.jpe, *.jfif
*.gif
*.emf
*.wmf
*.tif, *.tiff
*.png
*.ico
```

Having selected a file, a dialog will prompt for a name and description.



Enter a suitable name and description and click OK.

The graphic will automatically appear by name in the gallery tree in the Gallery Window.



Bitmaps can be used in a number of ways. Most simply, a bitmap such as a logo can be dragged from the list and dropped into a Custom Control Panel. To remove a bitmap from the control panel, simply select it and press the DELETE key or select **Delete** from the right-click context menu.

To tile the background with a bitmap, press and hold CTRL while dragging the bitmap into the control panel. The panel will be updated with the new background.

To assign a customised bitmap to an existing bitmap button, bitmap indicator or bitmap meter control, drag the bitmap onto the required control.

TIP:

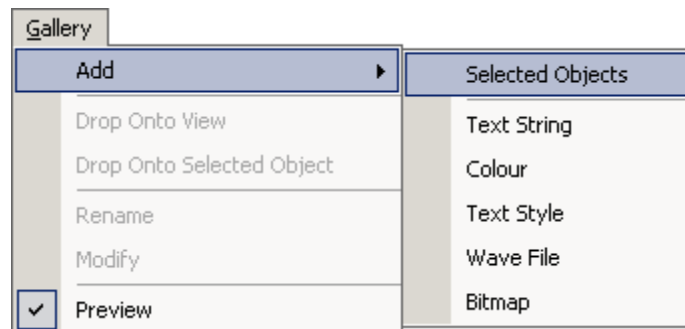
The lower pane of the Gallery Window will preview a selected Bitmap. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

Collections

A number of objects placed into a Control Panel can be stored as a **Collection** or template for future use, either in the current design file or a later project.

Any previous control assignment is not copied to the template. When a Collection has been dragged into a Control Panel, any editing to object properties or control assignment will not affect any other instance of the Collection.

To create a Collection, select a number of objects on a Control Panel by lassoing or adding to a selection by holding CTRL while selecting with the mouse. From the **Gallery** menu, select **Add ► Selected Objects**.



The subsequent dialog box will prompt for a name for the Collection and a description, if required.

The named Collection will automatically appear in the Collections menu.

Note that adding a single object from a Control Panel in this manner will add the object to the Graphics list.

TIP:

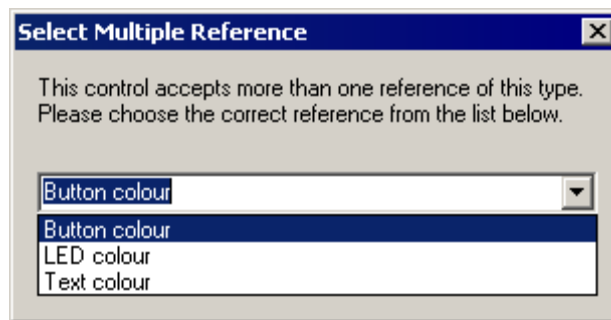
The lower pane of the Gallery Window will preview a selected Collection. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

Colours

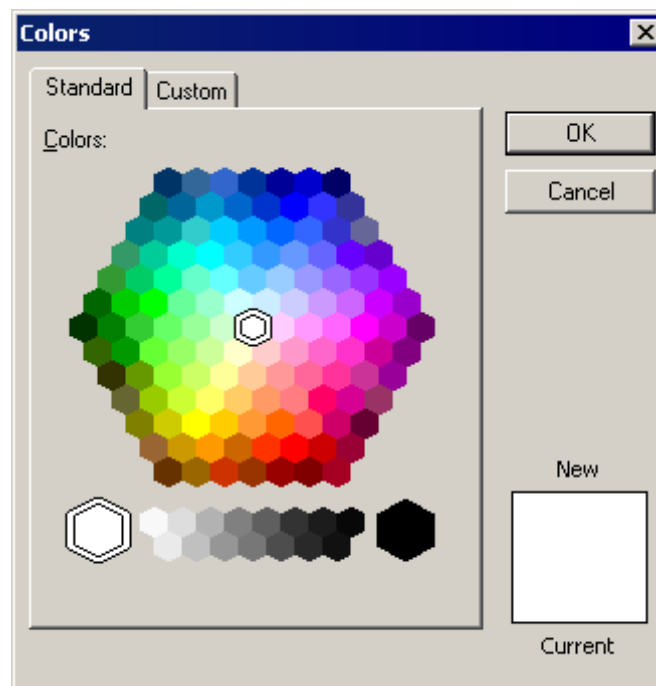
By default, the Windows system colours are available from the Gallery Window **Colours** menu.

Colours can be dragged from the menu onto an object to set the colour for different parameter dependent attributes.

For example, dragging a colour onto a Text Button will present the following dialog:



To add a custom colour to the list of available colours, select **Add ► Colour** from the **Gallery** menu. The standard Windows Colors dialog will appear.



Select the required colour from either the Standard or Custom tab and click OK.

The subsequent dialog box will prompt for a name for the colour and a description if required. The named colour will automatically appear in the Colours list.

TIP:

Dragging a colour directly onto a Custom Control Panel will automatically create a Frame of that colour.

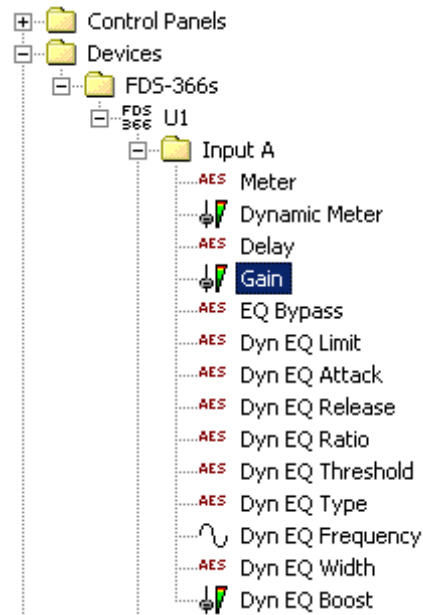
TIP:

The lower pane of the Gallery Window will preview a selected Colour. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

Controls

This section contains instances of controls, such as faders, buttons and knobs which can be dragged into a Custom Control Panel before being assigned a parameter. A similar list of controls is made available in the **New** submenu accessed by right-clicking the background of a Control Panel.

Having added an unassigned Control using one of these methods, assignment is made by dragging the parameter from any device within the system listed in the Devices list of the **Design Window** onto the control.



A control can be customised within a Control Panel and later added to the list within the Controls list.

To add a customised control, firstly select the source control and select **Add ► Selected Objects** from the **Gallery** menu.

The subsequent dialog box will prompt for a name for the control and a description, if required. The customised control will automatically appear in the Controls list.

Note that parameter assignment is not copied to the template from the source control.

To resize a control or multiple selection, select with the mouse and adjust the handles which appear at the object corners and edges.

TIP:

The lower pane of the Gallery Window will preview a selected Control. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

Graphics

This section stores graphical elements such as text, frames and other objects which can not be used for control but may be dragged into a Custom Control Panel.

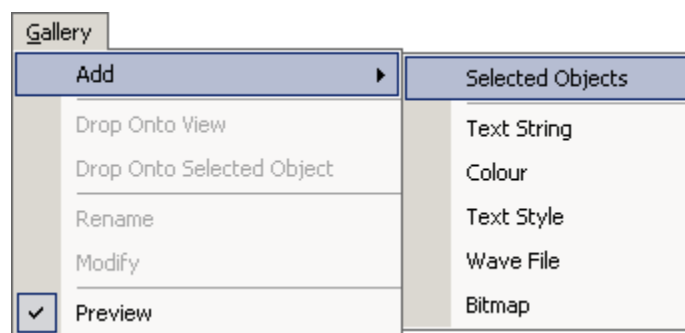
A **Frame** is merely a resizable rectangular object which can be coloured to enable a Control Panel to be divided into sections visually.

Create a Frame by dragging from the **Graphics** list onto the Control Panel and resize with the corner and edge handles as required. Colours can be added to the frame in the usual way.

A **Watermark** is a rectangular frame based, resizable object which allows a bitmap to be locked to a single corner, for example.

Create a Watermark by dragging from the **Graphics** menu and resize using the corner and edge handles as required. Add a bitmap by dragging from the **Bitmap** menu onto the Watermark. The bitmap alignment is set in the **Properties** window when the Watermark is selected.

To add to the section, highlight a non-control object on a Control Panel and select **Add ► Selected Objects** from the **Gallery** menu.



The subsequent dialog box will prompt for a name for the object and a description, if required. The named object will automatically appear in the Graphics list.

Note that adding a selection of multiple objects on a Control Panel in this manner will add the selection as a Collection template.

To resize a control or multiple selection, select with the mouse and adjust the handles which appear at the object corners and edges.

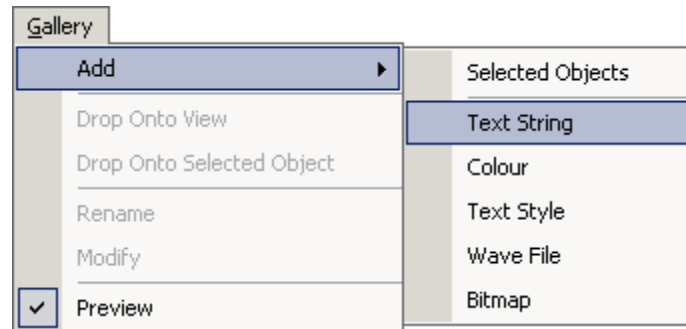
TIP:

The lower pane of the Gallery Window will preview a selected Graphic. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

Text Strings

This section, empty by default, can be used to store commonly used definable Text Strings. In this way a single Text String can be defined once only for a Custom Control Panel which needs to make use of a number of instances of the same text.

To add a Text String to the tree, select **Add ► Text String** from the **Gallery** menu.



In the first of the two subsequent dialog boxes which will appear, type in the required Text String and in the second dialog box provide a name by which it will be listed in the Text String list and a description if required.

The Text String will now appear in the Text Strings list. Drag it into the Custom Control Panel as required.

To alter an existing Text String, open the Text Strings list, right-click the string to be updated and select **Modify** from the context menu. The dialog boxes used to create the string will reappear, allowing the text, text string name and descriptions to be updated.

Note: Updating the text will automatically update any existing instance of the Text String in Custom Control Panels.

To rename a Text String, open the Text Strings list, right-click the string to be updated and select **Rename** from the context menu.

Any created Text Strings will be retained after the application has been closed and restarted.

TIP:

Dragging a Text String directly onto a Custom Control Panel will automatically create a text object.

TIP:

The lower pane of the Gallery Window will preview a selected Text String. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

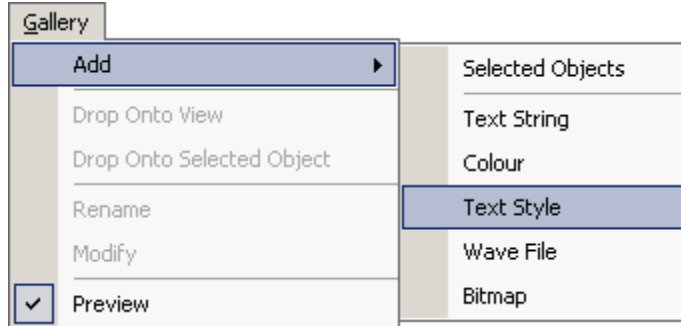
TIP:

Modifying the Text String at any time will update all previously used instances in all Custom Control Panels.

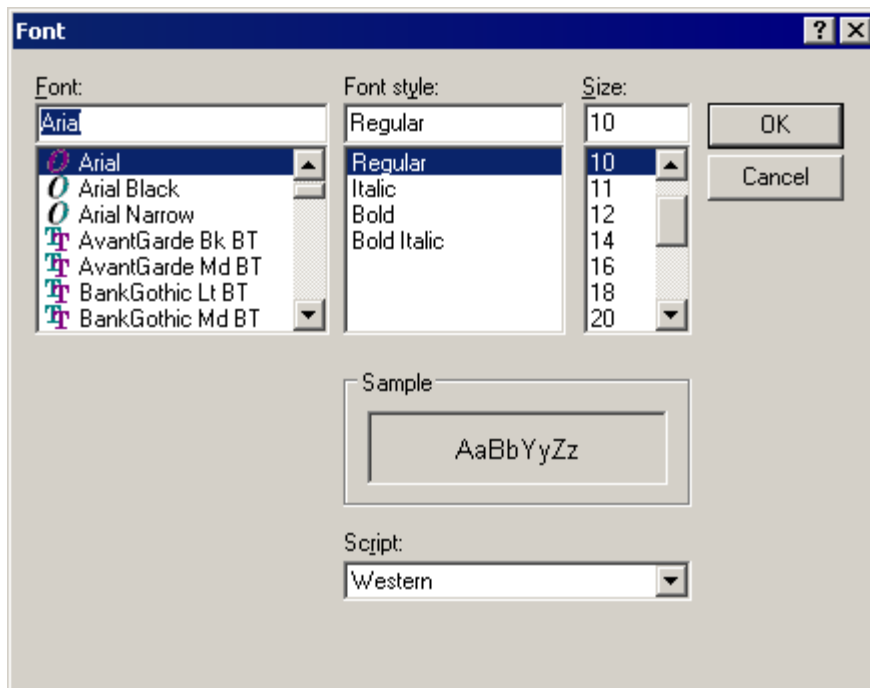
Text Styles

This section, again empty by default, can be used to store definable Text Styles which can be applied quickly and easily to any text within Custom Control Panels.

To create a Text Style, select **Add ► Text Style** from the **Gallery** menu.



The standard Windows font edit dialog will appear.



Configure the font as required and click OK.

In the subsequent dialog box, a name by which the Text Style should be known should be entered and also a description if required.

The Text Style will now appear in the Text Styles menu.

To use a Text Style, simply drag it from the list onto any object within a Custom Control Panel which enables customised text.

To alter an existing Text Style, open the Text Styles list, right-click the style to be updated and select **Modify** from the context menu. The font dialog box used to create the style will reappear, allowing it to be updated.

Note: Updating the Text Style will automatically update any existing reference in Custom Control Panels.

To rename a Text Style, open the Text Styles list, right-click the style to be updated and select **Rename** from the context menu.

Any created Text Styles will be retained after the application has been closed and restarted.

TIP:

Dragging a Text Style directly onto a Custom Control Panel will automatically create a Text object with the style applied.

TIP:

The lower pane of the Gallery Window will preview a selected Text Style. To disable or enable the preview pane, right-click anywhere within the Gallery Window and set the **Preview** option as required.

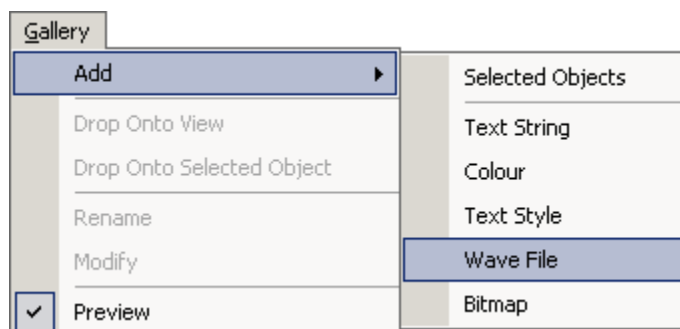
TIP:

Modifying the Text Style at any time will update all previously used instances in all Custom Control Panels.

Wave Files

The Wave Files list is empty by default but allows for a standard wave file to be attached to a Vector Button. The Wave file will play when the button is switched on.

To add a wave file to the list, select **Add ► Wave File** from the **Gallery** menu.



The subsequent dialog box will prompt to browse for the file. Windows *.wav format is supported.

TIP:

Attaching a wave file to a Vector Button can be used to provide an audio alert from the control PC to indicate a parameter change on a connected device etc.

TIP:

With a Wave File selected in the list, the lower pane of the Gallery Window will act as a Play button, enabling the file to be auditioned.

Notes on adding items to the Gallery

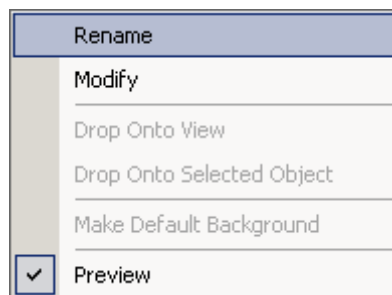
Items which have been added to the gallery appear listed in **bold**.

In addition to the methods outlined for adding items to the Gallery, Controls and Graphics may be selected on a control panel and added to the Gallery "Selected Objects" in the "Add" sub menu of the "Panel" menu.

Renaming an item in the Gallery

Any item which has been added to the Gallery may be renamed at a later date.

To rename an object, right-click it within the tree view and select **Rename** from the context menu.

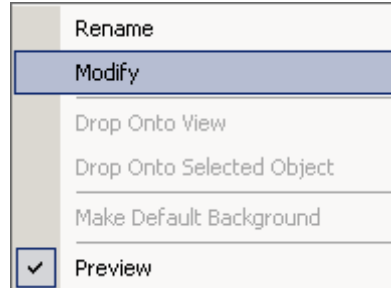


The dialog box used to name the object when it was initially created will reappear with the current name highlighted. Edit as required and click OK.

Modifying items in the Gallery

Any item which has been added to the Gallery may be modified at a later date.

To modify an object, right-click it within the tree view and select **Modify** from the context menu.



The dialog box used to set the properties of the object when it was initially created will reappear. Edit as required and click OK.

Editing control properties

Control properties can be edited simply by selecting the relevant control on a control page, opening the Properties Window and adjusting as required.

For example, selecting an FDS-366 output fader and opening the Properties window will allow the following attributes to be edited:

Properties	
General	
Visible	Yes
Show Object Name	No
Scale	
Scale Position	Left/Bottom
Show Scale	Yes
Subrange	No
Subrange Minimum	-15.00 dB
Subrange Maximum	-14.90 dB
User Value	No
User Value Minimum	-15
User Value Maximum	15
Inverse Scale	No
Scale Ticks	No
Tick Positions	Click to edit
Show Tick Marks	Yes
Use Stepping	No
References	
Trolley Alignment	1; 1
Width	1
Height	1
Resize Control	No
Horizontal	No
General	

Clicking an object property will convert the corresponding box in the right-hand column into a drop down menu. Select the required behaviour from the menu.

Greyed out properties cannot be altered.

Removing References

References to previously configured item properties can be removed using the **References** section of the Properties Window.

Select a previously configured control on a Custom Control Panel and open the Properties docking window. Within the References section, currently assigned properties are marked as *Referenced* and non-assigned properties as *Not Referenced*.

References	
[Wave] Activate Sound	Referenced
[Colour] Indicator Colour	Not Referenced
[Colour] Button Colour	Referenced

Click a referenced object property. The browse button will appear at the right-hand side of the dialog box.

References	
[Wave] Activate Sound	Referenced 
[Colour] Indicator Colour	Not Referenced
[Colour] Button Colour	Referenced

Click the  button. The current reference will be removed.

Copying and Pasting Controls

Controls may be copied and pasted to the same or another Custom Control Panel without first creating a custom Control or Collection in the Gallery Window.

Select a control or number of controls and right-click the selection. Select **Copy** from the context menu to copy the selection to the clipboard and **Paste** to paste it in the required location.

Additionally, a control may be dragged with CTRL held to copy it to a new location within the same window.

Dragging the control 'out' of a Control Panel window into another will copy the control to the new window.

Note that parameter assignment and style properties are also copied and with the control.

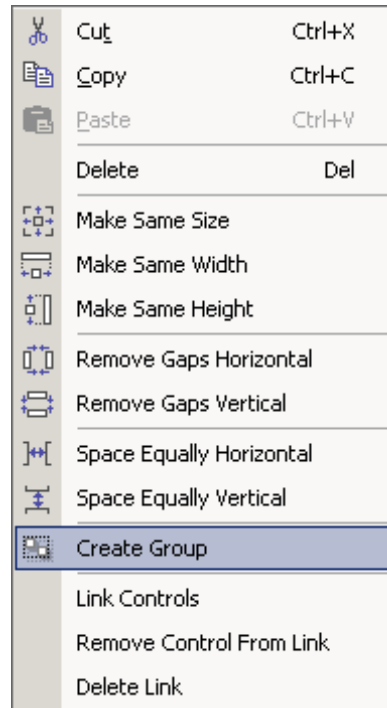
TIP:

Note that the **Copy** and **Paste** commands in the **Edit** menu or keyboard shortcuts CTRL + C (copy) and CTRL + V (paste) may also be used.

Grouping Controls

Custom Control Panel controls may be grouped for the purposes of quick and easy selection for copying and pasting, resizing or moving.

Select a number of controls, either by lassoing or adding to a selection with CTRL + click, right-click the selection and selecting **Create Group** from the context menu.



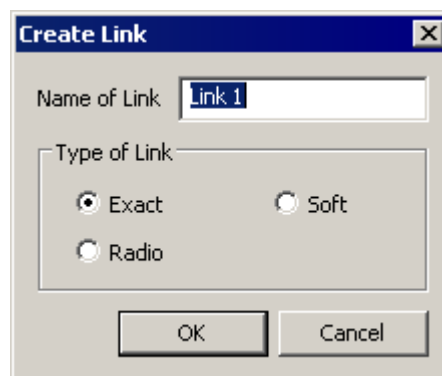
To ungroup controls, right-click the group and select **Split Group** from the context menu.

Linking Controls

Provided that parameter ranges match, multiple controls which exist within a single Custom Control Panel and which have been assigned parameters from different devices within the system may be operationally linked.

Select a number of suitable controls and right-click the selection. From the context menu, select **Link Controls**.

A dialog box will appear prompting for a name for the link and link properties.



Note that the link exists only within SB2, and it is the PC only which can control linked controls. The link will not operate correctly if operated from the front of a device. It is not currently possible to link parameters within an FDS-366 or FDS-366T device as the units feature their own linking features.

A link can be deleted by right-clicking a linked control and selecting **Delete Link** from the context menu.

A control may also be scoped out of an existing link by right-clicking it and selecting **Remove Control From Link**. Any other controls which exist as part of the link will remain linked.

TIP:

A linked control may be copied to another Custom Control Panel and retain the link.

Adding Child Pages to a Custom Control Panel

By adding 'child' pages to a control panel, a single frame can hold a number of windows. The default FDS-366 panel can be used to illustrate this.

TUTORIAL:

Create a FDS-366 device. Double click the device to open the default control panel. Put the application into operate mode using one of the methods outlined previously. Move between the Delay, EQ, D EQ (Dynamic EQ), Filter and Limit child pages for a channel.



The central area of the control panel will update to reflect the mode chosen, but the surrounding controls will remain fixed.

A number of child pages have been created for the FDS-366 control panel – five for each channel. In addition, child pages have been created for the inputs and global edit pages. The default child page buttons have also been edited.

To add a child page to a Control Panel, select the **New Control Panel Page** option in the **Panel** menu. Note that an existing page within the Control Panel will automatically be converted into a child page and a second, blank page is added. Two unnamed page select buttons now float over both pages.



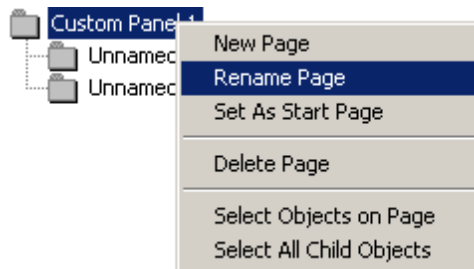
The appearance of these buttons can be comprehensively edited using the options available in the Gallery and Properties Windows.

TIP:

Unlike most controls in a Control Panel, the page buttons can be used to navigate with a single mouse click when in Design Mode.

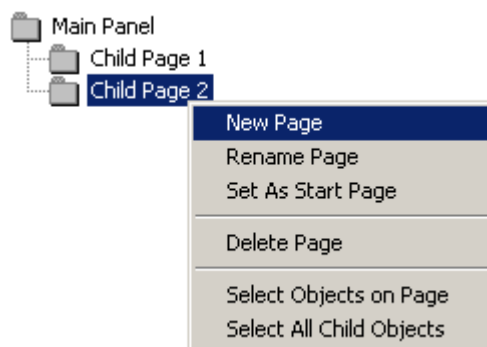
Controls or parameters dropped into the Custom Control Panel will now be placed on the active Control Panel Page. The active page is indicated in the **Control Panel Pages** docking window.

Control Panel pages can be renamed by opening the Control Panel Pages docking window, right-clicking on the appropriate page, and selecting **Rename** from the context menu.



Child pages can be shown or hidden by double clicking on the Custom Panel or parent page. They can then be renamed in the same manner.

Child pages can also be created within existing child pages (grandchild pages...?). To create a child page from a child page, open the **Control Panel Pages** window, right-click the existing child page and select **New Page** from the context menu.



TIP:

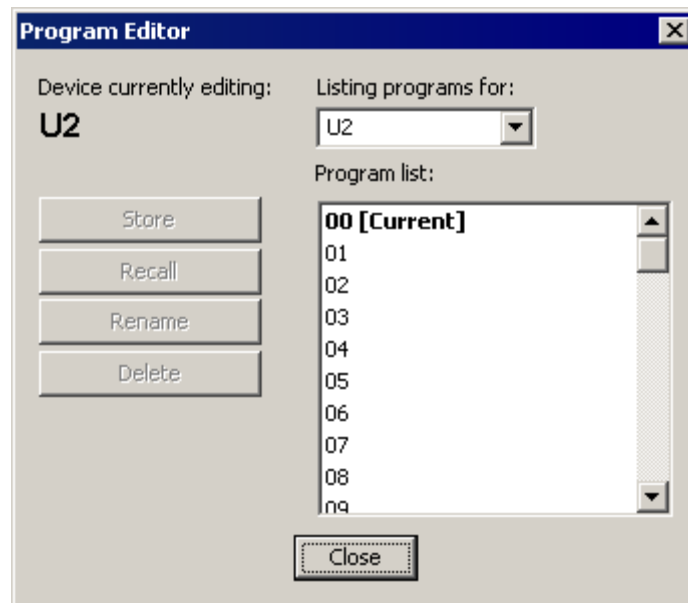
When opened, the **Control Panel Pages** docking window will automatically display the page configuration of the currently active control panel and can be used to navigate through the child pages. Open a default FDS-366 panel to see the number of child pages employed in its construction.

FDS Programs

The FDS-366 and FDS-366T default Control Panel on the FDS device has a **Programs** button.



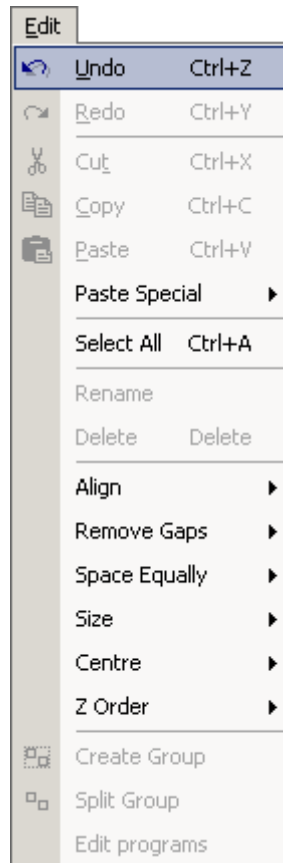
Clicking this button will bring up the Program Editor dialog, which can be used to recall and store programs. The Program Editor also allows the recall of programs from one device to another.



Undo / Redo

SB2 features fifteen levels of undo and redo. Anything from a parameter assignment, an object property change or moving or resizing controls may be undone.

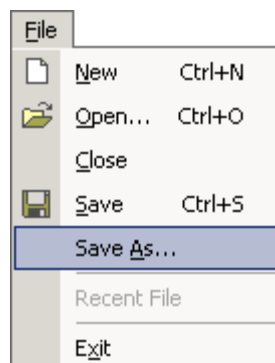
To undo a change, select **Undo** from the **Edit** menu, or use the keyboard shortcut CTRL + Z. To redo an undo, select **Redo** from the **Edit** menu, or use the keyboard shortcut CTRL + Y.



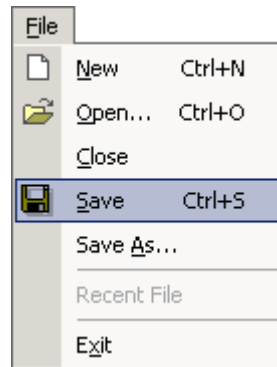
Note that parameter value changes are not stored in the undo buffer.

Saving a design file

Having created a design file, the file should be saved. Open the **File** menu and select **Save As**. The **Save As** dialog box will appear. Browse to a suitable location, type an appropriate file name and click **Save**. The filename will be given the extension .sb2.



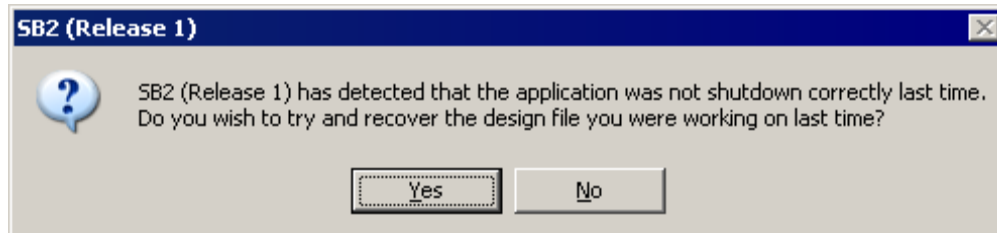
Having saved the file once, the **File** menu **Save** option may be used. The file will overwrite the existing saved file.



Should SB2 crash...

While BSS Audio is confident that SB2 is a quality application, we cannot be bold enough to assume that SB2 will never crash. SB2 safeguards against this, however, by attempting to restore the Design File which was being worked upon at the time of an application or system crash on restarting the application.

In this event, the following dialog will appear on restarting SB2. Be sure to click **Yes**...



Note: Even though this safety net is in place, it should not be relied upon. It is still recommended that work in progress is saved regularly.

Keyboard Shortcuts

Like many applications, SB2 makes use of standard Windows keyboard shortcuts.

A list of shortcuts is below:

File menu	ALT + F
New	CTRL + N
Open	CTRL + O
Save	CTRL + S
Edit menu	ALT + E
Undo	CTRL + Z
Redo	CTRL + Y
Cut	CTRL + X
Copy	CTRL + C
Paste	CTRL + Z
Select All	CTRL + A
View menu	ALT + V
Panel menu	ALT + P
Gallery menu	ALT + G
Window menu	ALT + W
Help menu	ALT + H