Screen Control

The Screen Control program provides a simplified method to customize the color depth, screen resolution, font size and refresh rates. The advanced features allow selection of predefined virtual screen sizes, and entry into customization features of the virtual screen.

Main Panel

The main panel contains controls for setting screen resolution, color depth, font size, refresh rates. Not all combinations of screen resolution, color depth, font size and refresh rate are attainable.

Color depths of 16, 256, 65K, or 16.7M colors can be selected by clicking next to the desired option. Color depth determines the number of colors that may be simultaneously displayed on the screen. The selected color depth determines the possible resolutions.

Screen resolutions of 640x480, 800x600, 1024x768, 1280x1024 or 1600x1200 can be selected by clicking next to the available options.   The virtual screen size is automatically adjusted to be at least as large as the selected screen resolution.

The "Back to Default" option is used to reset the refresh rate to the factory default value, for that particular resolution and color depth.

Configuring the Display Driver:

- Select the color depth first. If the current driver does not support the selected color depth, then Windows will have to restarted.
- Select the resolution.
- Select the font size. (If available as an option)
- Select the refresh rate.
- Click on OK. If the current driver does not support the selected configuration, Windows will have to be restarted.

NOTE:
- Not all available refresh rates may be supported by the monitor used.

Advanced Features

Options for predefined virtual screen sizes and tools control are accessed by clicking on the button labeled **Advanced ...** or by pressing **Alt+D.**   This action opens up an extension of the Main Panel that presents the following features:

1. **Hot Key** selection. Enabling this function allows setting up predefined key strokes achieve specific virtual screen related actions.
2. **Trace Window** selection. Active window is always visible when virtual control turn on.
3. **Turn On** virtual screen. This function allows the use of the predefined virtual screen sizes. The predefined virtual screen sizes are selected by clicking next to available options. The size of the available predefined virtual screen is dependent on the selected color depth and resolution.

4. **Customize** Virtual screen area. Selecting this features opens up a new screen titled Virtual Screen Advanced Settings.

Customize Features

Virtual Screen Advanced Settings

Standard display resolutions are 640x480, 800x600, 1024x768 or 1280x1024. The amount of display memory used depends on the selected resolution and color depth. For resolutions of 640x480, 800x600 and 1024x768, there is a substantial amount of display memory left unused. The Virtual Screen features takes advantage of this unused memory by expanding the display area into the off-screen area. Therefore, Virtual Screen Control allows the user to make effective use of a display screen which is larger than the standard 640x480, 800x600 or 1024x768, and the standard resolution is the center of the screen. The user can pan around the larger Virtual Screen area by the use of a standard mouse or a set of HOT KEYS.

For example, it is possible to select a resolution of 640x480 and set the Virtual Screen size to 800x600. Thus, the 640x480 screen sits at the center of a 800x600 matrix, and the user can pan through the entire 800x600 matrix in a 640x480 window.

Customized virtual screen sizes are selected by:

1. Click and dragging the teal area representing the displayable area on the virtual screen map.
2. Manually select the horizontal and vertical dimensions by clicking next to their respective buttons.

The advanced features provide functions to customize the virtual screen:

- **Freeze Screen**

The Freeze Screen option is used to disable the panning feature, thus giving the illusion of a frozen screen, but keeping other virtual screen functions available. Hot key functions are available for this feature.

- **Linear Frame Buffer Address**

The Linear Addressing driver automatically detects the systems memory size and sets the frame buffer to an unused area above the system memory.

The Linear Frame Buffer Address setting is useful for avoiding conflicts with other Windows applications which may use the same linear frame buffer address as the Display Driver.

Addresses between System Memory + 2 and 62 Mbytes can be selected. If there is no conflict, the default setting is highly recommended.

- **Border Space**

The Border Space option is used to set up a border (thickness measured in pixels) within the Displayable Area, which is used as a marker for panning the screen. i.e. when the cursor hits against this border, screen panning occurs.

- **Pan Set Hot Key**

Hot keys can be set up to pan the virtual screen left, right, up and down, rather than using a mouse. The feature has to be enabled first by clicking on the ENABLE box, before hot keys can be selected.

Main Panel