4D Systems

Application Note: 4D-AN-1004

4DGL Colour CONSTANTS

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Description

This Application Note is dedicated to providing an easy reference to various Colour CONSTANTS available within the 4DGL language. In order to utilise this Application Note, the following items are needed;

- Any 4D GFX Screen Module
- 4D Programming Cable
- 4DWorkshop3 IDE

Application Overview

Throughout 4D documentation, there are listings of various specialised internal functions for given processors. This application note is designed to assist the user, by presenting them with the various Colour Constant values possible. This will allow the user to get the most out of their module when creating graphics requiring a vibrant display of colours.

Setup Procedure

Firstly, you will need to download the 4DWorkshop3 IDE environment. This is where the end user application is developed and can be found from the 4D Systems website below:

http://www.4dsystems.com.au/prod.php?id=111

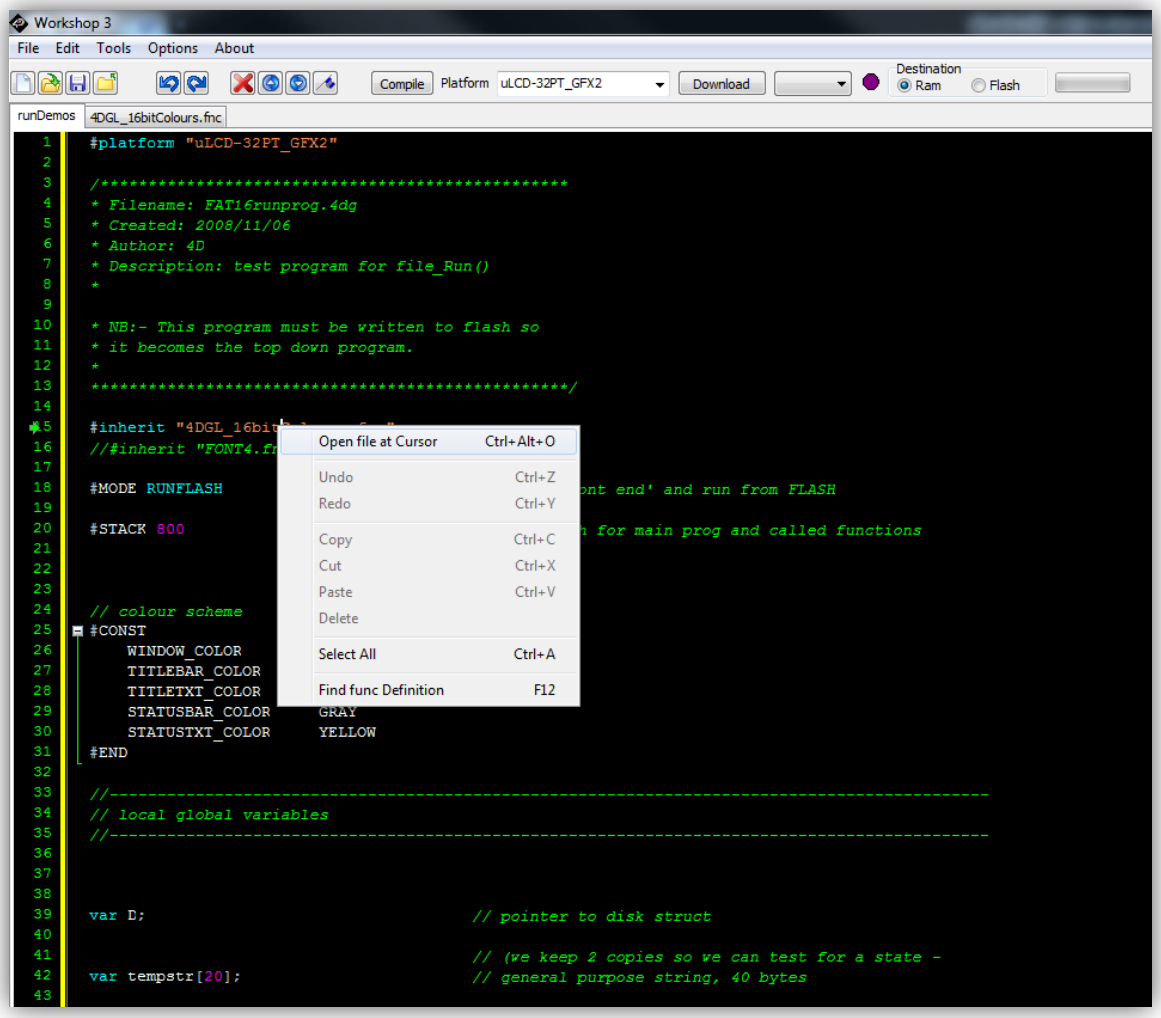
Simulation Procedure

Locating Colour Constant Values

In addition to using this reference Manual Application Note, it should be noted where these Colour CONSTANTS are sourced from. In any given 4DGL program, there may be one or more include files that are inherited into the code. This is because these files contain critical values and functions needed to successfully run certain applications. The Colour CONSTANTS are sourced from the following include file and is inherited at the beginning of the application;

#inherit "4DGL_16bitColours.fnc"

When 4DWorkshop3 IDE is installed, this include file is installed as an fnc file into the same directory as the application program. Thus, the first way of accessing this list, is simply by opening it using a word processor. The alternative way is to right click on the fnc file as seen above, from within 4DWorkshop3 IDE. A dropdown list will appear. Select the first option; 'Open file at Cursor'. The following snapshots illustrate this point.



Workshop 3

File Edit Tools Options About

runDemos 4DGL_16bitColours.fnc

```
/*
    16 bit RGB (565) Colour Chart
    Original work by 4D Forum Member: skadoo
*/



#CONST
   ALICEBLUE         0xF7DF
   ANTIQUEWHITE      0xFF5A
   AQUA              0x07FF
   AQUAMARINE        0x7FFA
   AZURE             0xF7FF
   BEIGE             0xF7BB
   BISQUE            0xFF38
   BLACK             0x0000
   BLANCHEDALMOND    0xFF59
   BLUE              0x001F
   BLUEVIOLET        0x895C
   BROWN             0xA145
   BURLYWOOD         0xDDD0
   CADETBLUE         0x5CF4
   CHARTREUSE        0x7FE0
   CHOCOLATE         0xD343
   CORAL             0xFBEA
   CORNFLOWERBLUE      0x64BD
   CORNSILK          0xFFDB
   CRIMSON           0xD8A7
   CYAN              0x07FF
   DARKBLUE          0x0011
   DARKCYAN          0x0451
   DARKGOLDENROD      0xBC21
   DARKGRAY          0xAD55
   DARKGREEN         0x0320
   DARKKHAKI         0xBDAD
   DARKMAGENTA       0x8811
   DARKOLIVEGREEN      0x5345
   DARKORANGE        0xFC60
   DARKORCHID        0x9999
   DARKRED           0x8800
   DARKSALMON        0xECAF
   DARKSEAGREEN      0x8DF1
   DARKSLATEBLUE      0x49F1
   DARKSLATEGRAY      0x2A69
```

Colour Constants

Listed below is a list of all Colour CONSTANTS available for use within the 4DGL language.

Colour	CONSTANT	Colour	CONSTANT	Colour	CONSTANT
ALICEBLUE	0xF7DF	GHOSTWHITE	0xFFDF	NAVY	0x0010
ANTIQUEWHITE	0XFF5A	GOLD	0xFEA0	OLDLACE	0xFFBC
AQUA	0x07FF	GOLDENROD	0xDD24	OLIVE	0x8400
AQUAMARINE	0x7FFA	GRAY	0x8410	OLIVEDRAB	0x6C64
AZURE	0XF7FF	GREEN	0x0400	ORANGE	0xFD20
BEIGE	0XF7BB	GREENYELLOW	0xAFE5	ORANGERED	0xFA20
BISQUE	0XFF38	HONEYDEW	0xF7FE	ORCHID	0xDB9A
BLACK	0x0000	HOTPINK	0xFB56	PALEGOLDENROD	0xEF55
BLANCHEDALMOND	0XFF59	INDIANRED	0xCAEB	PALEGREEN	0x9FD3
BLUE	0x001F	INDIGO	0x4810	PALETURQUOISE	0xAF7D
BLUEVIOLET	0x895C	IVORY	0xFFFE	PALEVIOLETRED	0xDB92
BROWN	0xA145	KHAKI	0xF731	PAPAYAWHIP	0xFF7A
BURLYWOOD	0xDDD0	LAVENDER	0xE73F	PEACHPUFF	0xFED7
CADETBLUE	0x5CF4	LAVENDERBLUSH	0xFF9E	PERU	0xCC27
CHARTREUSE	0x7FE0	LAWNGREEN	0x7FE0	PINK	0xFE19
CHOCOLATE	0xD343	LEMONCHIFFON	0xFFD9	PLUM	0xDD1B
CORAL	0xFBEA	LIGHTBLUE	0xAEDC	POWDERBLUE	0xB17C
CORNFLOWERBLUE	0x64BD	LIGHTCORAL	0xF410	PURPLE	0x8010
CORNSILK	0xFFDB	LIGHTCYAN	0xE7FF	RED	0xF800
CRIMSON	0xD8A7	LIGHTGOLD	0xFFDA	ROSYBROWN	0xBC71
CYAN	0x07FF	LIGHTGREEN	0x9772	ROYALBLUE	0x435C
DARKBLUE	0x0011	LIGHTGREY	0xD69A	SADDLEBROWN	0x8A22
DARKCYAN	0x0451	LIGHTPINK	0xFDB8	SALMON	0xFC0E
DARKGOLDENROD	0xBC21	LIGHTSALMON	0xFD0F	SANDYBROWN	0xF52C
DARKGREY	0xAD55	LIGHTSEAGREEN	0x2595	SEAGREEN	0x2C4A
DARKGREEN	0x0320	LIGHTSKYBLUE	0x867F	SEASHELL	0xFFBD
DARKKHARKI	0xBDAD	LIGHTSLATEGRAY	0x7453	SIENNA	0xA285
DARKMAGENTA	0x8811	LIGHTSTEELBLUE	0xB63B	SILVER	0xC618
DARKOLIVEGREEN	0x5345	LIGHTYELLOW	0xFFFC	SKYBLUE	0x867D
DARKORANGE	0xFC60	LIME	0x07E0	SLATEBLUE	0x6AD9
DARKORCHID	0x9999	LIMEGREEN	0x3666	SLATEGRAY	0x7412
DARKRED	0x8800	LINEN	0xFF9C	SNOW	0xFFDF
DARKSALMON	0xECAF	MAGENTA	0xF81F	SPRINGGREEN	0x07EF
DARKSEAGREEN	0x8DF1	MAROON	0x8000	STEELBLUE	0x4416
DARKSLATEBLUE	0x49F1	MEDIUMAQUAMARINE	0x6675	TAN	0xD5B1
DARKSLATEGRAY	0x2A69	MEDIUMBLUE	0x0019	TEAL	0x0410
DARKTURQUOISE	0x067A	MEDIUMORCHID	0xBABA	THISTLE	0xDDFB
DARKVIOLET	0x901A	MEDIUMPURPLE	0x939B	TOMATO	0xFB08
DEEPINK	0xF8B2	MEDIUMSEAGREEN	0x3D8E	TURQUOISE	0x471A
DEEPSKYBLUE	0x05FF	MEDIUMSLATEBLUE	0x7B5D	VIOLET	0xEC1D
DIMGRAY	0x6B4D	MEDIUMSPRINGGREEN	0x07D3	WHEAT	0xF6F6
DODGERBLUE	0x1C9F	MEDIUMTURQUOISE	0x4E99	WHITE	0xFFFF
FIREBRICK	0xB104	MEDIUMVIOLETRED	0xC0B0	WHITESMOKE	0xF7BE
FLORALWHITE	0xFFDE	MIDNIGHTBLUE	0x18CE	YELLOW	0xFFE0
FORESTGREEN	0x2444	MINTCREAM	0xF7FF	YELLOWGREEN	0x9E66
FUCHSIA	0xF81F	MISTYROSE	0xFF3C		
GAINSBORO	0xDEFB	MOCCASIN	0xFF36		

Proprietary Information

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