

# **Debug**

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	<i>TITLE :</i> Debug		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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**REVISION HISTORY**

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# Chapter 1

## Debug

### 1.1 Debug Documenation

#### MODULE DOCUMENTATION

Name: DEBUG  
Version: 0.9 Beta.  
Date: December 1997  
Author: Paul Manias  
Copyright: DreamWorld Productions, 1996-1997. All rights reserved.  
Notes: The Debug functions are located in the DPKernel. They are only activated when the debugger "IceBreaker" is loaded.

#### CHANGES V0.9B

Renamed: ErrorMessage() to ErrCode()

Edited: ErrCode()  
DebugMessage() "see also"

Added: DPrintf()

### 1.2 Debugging Functions

#### FUNCTIONS

These functions are mapped in the dpkernel.

DebugMessage()  
DPrintf()  
ErrCode()  
StepBack()

### 1.3 Debug: DebugMessage()

#### FUNCTION

Name: DebugMessage()  
Short: Send a message to the debugger.  
Synopsis: void DebugMessage(LONG Type [d7], char \*String [a5]);

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## DESCRIPTION

Sends a message to the debugger if it is active. If the debugger is not active then this function does nothing.

This function is intended for use in the system modules, but you may also use it in standard programs to send your own debug messages. If this is the case then you will want to use the `DBG_Message` type and supply a String pointer. The message will show up in bold text, so you can easily identify it in the debug output.

## MODULE PROGRAMMERS

You will find that there is a debug type for all initialisation functions. If you are going to use `DebugMessage()` inside your module it must be called at the start of each function, as the debugger will want to pick up your parameters. You may also use the `STEP` flag in the `Type` parameter so that the debugger can provide tree-formatted output. If this is the case you will also need to call `StepBack()` at the end of your function.

## INPUTS

Type - One of the debug codes as described in `games/debug.i`.  
String - Optional string used by some debug codes such as `DBG_Message`.

## SEE ALSO

Debug: `ErrCode()`

## 1.4 Debug: `DPrintf()`

## FUNCTION

Name: `DPrintf()`  
Short: Send a formatted string to the debugger.  
Synopsis: `void DPrintf(const BYTE *Array [a5], ...);`

## DESCRIPTION

The `DPrintf()` function follows the same functionality and rules as the ANSI `Printf()`. The only difference is that it prints directly to the debug window. Due to internal limits your string is limited to a total of 256 bytes output, although you should keep everything within 60 bytes to avoid running onto a second row. You can supply a maximum amount of 5 "%" parameters to this function.

## EXAMPLE

The following example will print the default width of a `Screen` object to the debug window.

```
void main(void)
{
    if (Screen = Get(ID_SCREEN)) {
        if (Init(Screen, NULL)) {
            DPrintf("The width of the screen is: %d", Screen->Width);
        }
        Free(Screen);
    }
}
```

## INPUTS

Array - The first member of the array must be a string. All other members of the array must be supplied according to the string formatting, 1 parameter for every % symbol that you have used.

## SEE ALSO

Debug: DebugMessage()

## 1.5 Debug: ErrCode()

## FUNCTION

Name: ErrCode()  
Short: Send an error message to the debugger.  
Synopsis: LONG ErrCode(LONG ErrorCode [d0]);

## DESCRIPTION

Sends an error code to the GMS debugger, if it is currently active. If the debugger is not active then this function does nothing.

This function is intended for use in the system modules, but you may also use it in standard programs to send your own error messages. The error will show up in bold text so that you can easily identify it in the debug output.

## INPUTS

ErrorCode - Standard GMS error code as described in dpkernel.i.

## RESULT

Returns the same error code that you provided.

## SEE ALSO

Debug: DebugMessage()

## 1.6 Debug: StepBack()

## FUNCTION

Name: StepBack()  
Short: Steps back the debugging tree in IceBreaker.  
Synopsis: void StepBack(void);

## DESCRIPTION

This function is intended for use by system modules. You may use it in your own programs if you want to use IceBreaker's tree feature to aid your output.

StepBack() has to be used in conjunction with the STEP flag in the DebugMessage() function. See DebugMessage() for more information on this. Any time DebugMessage() is called with the STEP flag you will need to call StepBack() as this is the only way to get the tree back to the position before you altered it. If you forget to call StepBack() then the debug tree will be permanently out of position.

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SEE ALSO

Debug: DebugMessage ()

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