

# TPCrt

## FrameWindow

```
procedure FrameWindow(LeftCol, TopRow, RightCol, BotRow, FAttr, HAttr :  
Byte; Header : shortstring);
```

Draw a frame around a window

## WhereXAbs

```
function WhereXAbs: Byte;
```

Return absolute column coordinate of cursor

## WhereYAbs

```
function WhereYAbs: Byte;
```

Return absolute row coordinate of cursor

## WhereXY

```
function WhereXY: Word;
```

Return absolute coordinates of cursor

## ScreenX

```
function ScreenX: Byte;
```

Return absolute column coordinate of cursor

## ScreenY

```
function ScreenY: Byte;
```

Return absolute row coordinate of cursor

## FastWrite

```
procedure FastWrite(St : string; Row, Col, Attr : Byte);
```

Write St at Row,Col in Attr (video attribute) without snow

## SetFrameChars

```
procedure SetFrameChars(Vertical, Horizontal, LowerRight, UpperRight,  
LowerLeft, UpperLeft : Char);
```

Sets the frame characters to be used on subsequent FrameWindow calls.

## WhereXYdirect

```
procedure WhereXYdirect(var X, Y : Byte);
```

Read the current position of the cursor directly from the CRT controller

## GetCrtMode

```
function GetCrtMode : Byte;
```

Get the current video mode. Also reinitializes internal variables. May reset: CurrentMode, ScreenWidth, ScreenHeight, CurrentPage, and VideoSegment.

## GotoXYAbs

```
procedure GotoXYAbs(X, Y : Byte);
```

Move cursor to column X, row Y. No error checking done.

## SetVisiblePage

```
procedure SetVisiblePage(PageNum : Byte);
```

Set current video page

## ScrollWindowUp

```
procedure ScrollWindowUp(XLo, YLo, XHi, YHi, Lines : Byte);
```

Scrolls the designated window up the specified number of lines.

## ScrollWindowDown

```
procedure ScrollWindowDown(XLo, YLo, XHi, YHi, Lines : Byte);
```

Scrolls the designated window down the specified number of lines.

## CursorTypeSL

```
function CursorTypeSL : Word;
```

Returns a word. High byte has starting scan line, low byte has ending.

## CursorStartLine

```
function CursorStartLine : Byte;
```

Returns the starting scan line of the cursor

## CursorEndLine

```
function CursorEndLine : Byte;
```

Returns the ending scan line of the cursor.

## SetCursorSize

```
procedure SetCursorSize(Startline, EndLine : Byte);
```

Sets the cursor's starting and ending scan lines.

## NormalCursor

```
procedure NormalCursor;
```

Set normal scan lines for cursor based on current video mode

## FatCursor

```
procedure FatCursor;
```

Set larger scan lines for cursor based on current video mode

## BlockCursor

```
procedure BlockCursor;
```

Set scan lines for a block cursor

## HiddenCursor

```
procedure HiddenCursor;
```

Hide the cursor

## ReadCharAtCursor

```
function ReadCharAtCursor: Char;
```

Returns character at the current cursor location on the selected page.

## ReadAttrAtCursor

```
function ReadAttrAtCursor: Byte;
```

Returns attribute at the current cursor location on the selected page.

## GetCursorState

```
procedure GetCursorState(var XY, ScanLines: Word);
```

Return the current position and size of the cursor

## RestoreCursorState

```
procedure RestoreCursorState(XY, ScanLines: Word);
```

Reset the cursor to a position and size saved with GetCursorState

## FastWriteWindow

```
procedure FastWriteWindow(St: string; Row, Col, Attr: Byte);
```

Write a string using window-relative coordinates

## FastText

```
procedure FastText(St: string; Row, Col: Byte);
```

Write St at Row,Col without changing the underlying video attribute.

## FastTextWindow

```
procedure FastTextWindow(St: string; Row, Col: Byte);
```

Write St at window Row,Col without changing the underlying video attribute.

## FastVert

```
procedure FastVert(St: string; Row, Col, Attr: Byte);
```

Write St vertically at Row,Col in Attr (video attribute)

## FastVertWindow

```
procedure FastVertWindow(St: string; Row, Col, Attr: Byte);
```

Write a string vertically using window-relative coordinates

## FastFill

```
procedure FastFill(Number: Word; Ch: Char; Row, Col, Attr: Byte);
```

Fill Number chs at Row,Col in Attr (video attribute) without snow

## FastFillWindow

```
procedure FastFillWindow(Number: Word; Ch: Char; Row, Col, Attr: Byte);
```

Fill Number chs at window Row,Col in Attr (video attribute) without snow

## FastCenter

```
procedure FastCenter(St: string; Row, Attr: Byte);
```

Write St centered on window Row in Attr (video attribute) without snow

## FastFlush

```
procedure FastFlush(St: string; Row, Attr: Byte);
```

Write St flush right on window Row in Attr (video attribute) without snow

## FastRead

```
procedure FastRead(Number, Row, Col: Byte; var St: string);
```

Read Number characters from the screen into St starting at Row,Col

## FastReadWindow

```
procedure FastReadWindow(Number, Row, Col: Byte; var St: string);
```

Read Number characters from the screen into St starting at window Row,Col

## ReadAttribute

```
procedure ReadAttribute(Number, Row, Col: Byte; var St: string);
```

Read Number attributes from the screen into St starting at Row,Col

## ReadAttributeWindow

```
procedure ReadAttributeWindow(Number, Row, Col: Byte; var St: string);
```

Read Number attributes from the screen into St starting at window Row,Col

## WriteAttribute

```
procedure WriteAttribute(St: String; Row, Col: Byte);
```

Write string of attributes St at Row,Col without changing characters

## WriteAttributeWindow

```
procedure WriteAttributeWindow(St: String; Row, Col: Byte);
```

Write string of attributes St at window Row,Col without changing characters

## ChangeAttribute

```
procedure ChangeAttribute(Number: Word; Row, Col, Attr: Byte);
```

Change Number video attributes to Attr starting at Row,Col

## ChangeAttributeWindow

```
procedure ChangeAttributeWindow(Number: Word; Row, Col, Attr: Byte);
```

Change Number video attributes to Attr starting at window Row,Col

```
procedure MoveScreen(var Source, Dest; Length : Word);
```

```
{-Move Length words from Source to Dest without snow}
```

```
procedure FlexWrite(St : string; Row, Col : Byte; var FAttrs : FlexAttrs);
```

```
{-Write St at Row,Col with flexible color handling}
```

```
procedure FlexWriteWindow(St : string; Row, Col : Byte; var FAttrs : FlexAttrs);
```

```
{-Write a string flexibly using window-relative coordinates.}
```

```
function SaveWindow(XLow, YLow, XHigh, YHigh : Byte; Allocate : Boolean;
```

```
    var Covers : Pointer) : Boolean;  
{-Allocate buffer space if requested and save window contents}
```

```
procedure RestoreWindow(XLow, YLow, XHigh, YHigh : Byte;
```

```
    Deallocate : Boolean; var Covers : Pointer);  
{-Restore screen contents and deallocate buffer space if requested}
```

```
procedure StoreWindowCoordinates(var WC : WindowCoordinates);
```

```
{-Store the window coordinates for the active window}
```

```
procedure RestoreWindowCoordinates(WC : WindowCoordinates);
```

```
{-Restore previously saved window coordinates}
```

```
function PackWindow(XLow, YLow, XHigh, YHigh : Byte) : PackedWindowPtr;
```

```
{-Return a pointer to a packed window, or nil if not enough memory}
```

```
procedure DispPackedWindow(PWP : PackedWindowPtr);
```

```
{-Display the packed window pointed to by PWP}
```

```
procedure DispPackedWindowAt(PWP : PackedWindowPtr; Row, Col : Byte);
```

```
{-Display the packed window pointed to by PWP at Row,Col. If necessary,  
the coordinates are adjusted to allow it to fit on the screen.}
```

```
procedure MapPackedWindowColors(PWP : PackedWindowPtr);
```

```
{-Map the colors in a packed window for improved appearance on mono/B&W displays}
```

```
procedure DisposePackedWindow(var PWP : PackedWindowPtr);
```

```
{-Dispose of a packed window, setting PWP to nil on exit}
```

```
procedure WritePackedWindow(PWP : PackedWindowPtr; FName : string);
```

```
{-Store the packed window pointed to by PWP in FName}
```

```
function ReadPackedWindow(FName : string) : PackedWindowPtr;
```

```
{-Read the packed window stored in FName into memory}
```

```
function CreateLibrary(var F : file; Name : string;
```

```
                Entries : Byte) : DirectoryPtr;  
{-Create a library with the specified # of directory entries}
```

```
function OpenLibrary(var F : file; Name : string) : DirectoryPtr;
```

```
{-Open the specified library and return a pointer to its directory}
```

```
procedure CloseLibrary(var F : file; var DP : DirectoryPtr);
```

```
{-Close library F and deallocate its directory}
```

```
procedure PackLibrary(LName : string);
```

```
{-Pack a library to remove deleted entries.}
```

```
procedure AddWindowToLibrary(PWP : PackedWindowPtr; var F : file;
```

```
                DP : DirectoryPtr; WinName : LibName);  
{-Add a packed window to the specified library}
```

```
function ReadWindowFromLibrary(var F : file; DP : DirectoryPtr;
```

```
                WinName : LibName) : PackedWindowPtr;  
{-Read a packed window from a library}
```

```
procedure DeleteWindowFromLibrary(var F : file; DP : DirectoryPtr;
```

```
                WinName : LibName);  
{-Delete a packed window from the specified library}
```

```
function MapColor(c : Byte) : Byte;
```

```
{-Map a video attribute for visibility on mono/bw displays}
```

```
procedure SetBlink(Status : Boolean);
```

```
{-Enable text mode attribute blinking if On is True}
```

```
procedure SetCrtBorder(Attr : Byte);
```

```
{-Set border to background color if card type and mode allow}
```

```
function Font8x8Selected : Boolean;
```

```
{-Return True if EGA or VGA is active and in 8x8 font}
```

```
procedure SelectFont8x8(Status : Boolean);
```

```
{-Toggle 8x8 font on or off}
```

```
function HercPresent : Boolean;
```

```
{-Return true if a Hercules graphics card is present}
```

```
procedure SwitchInColorCard(ColorOn : Boolean);
```

```
{-Activate or deactivate colors on a Hercules InColor card}
```

```
function HercGraphicsMode : Boolean;
```

```
{-Return True if a Hercules card is in graphics mode}
```

```
function HercModeTestWorks : Boolean;
```

```
{-Return True if HercGraphicsMode will work}
```

```
procedure SetHercMode(GraphMode : Boolean; GraphPage : Byte);
```

```
{-Set Hercules card to graphics mode or text mode, and activate specified graphics page (if switching to graphics mode).}
```

```
function ReadKeyWord : Word;
```

```
{-Waits for keypress, then returns scan and character codes together}
```

```
function CheckKbd(var KeyCode : Word) : Boolean;
```

```
{-Returns True (and the key codes) if a keystroke is waiting}
```

```
function KbdFlags : Byte;
```

```
{-Returns keyboard status flags as a bit-coded byte}
```

```
procedure StuffKey(W : Word);
```

```
{-Stuff one key into the keyboard buffer}
```

```
procedure StuffString(S : string);
```

```
{-Stuff the contents of S into the keyboard buffer}
```

```
procedure RelnitCrt;
```

```
{-Reinitialize CRT unit's internal variables. For TSR's or programs with  
DOS shells. May reset: CurrentMode, ScreenWidth, ScreenHeight,  
WindMin/WindMax, CurrentPage, CurrentDisplay, CheckSnow, and VideoSegment}
```

```
{$ifdef WIN32} procedure SetSafeCPSwitching(F: Boolean); procedure SetUseACP(F: Boolean);  
{$ENDIF}
```

```
procedure AssignConToCrt;
```

```
procedure ClrScr;
```

```
{-Clears the screen and returns the cursor to the upper-left corner}
```

```
procedure TextBackground(Color: Byte);
```

```
{-Selects the background color}
```

```
procedure TextColor(Color: Byte);
```

```
{-Selects the foreground character color}
```

```
procedure Window(X1,Y1,X2,Y2: Byte);
```

```
{-Defines a text window on the screen}
```

```
procedure GotoXY(X,Y: Byte);
```

```
{-Moves the cursor to the given coordinates within the screen}
```

```
function WhereX: Byte;
```

```
{-Returns the X coordinate of the current cursor location}
```

```
function WhereY: Byte;
```

```
{-Returns the Y coordinate of the current cursor location}
```

procedure ClrEol;

```
{-Clears all characters from the cursor position to the end of the line }  
{ without moving the cursor. }
```

function KeyPressed: Boolean;

```
{-Determines if a key has been pressed on the keyboard and returns True }  
{ if a key has been pressed }
```

function ReadKey: Char;

```
{-Reads a character from the keyboard and returns a character or an }  
{ extended scan code. }
```

procedure TextMode (Mode: word); procedure InsLine;

```
{-Inserts an empty line at the cursor position}
```

procedure DelLine;

```
{-Deletes the line containing the cursor}
```

procedure LowVideo;

```
{-Selects low intensity characters}
```

procedure HighVideo;

```
{-Selects high-intensity characters}
```

procedure NormVideo;

```
{-Selects normal intensity characters}
```

procedure Delay(MS: Word); procedure Sound(Hz: Word); procedure NoSound; procedure AssignCrt(var F: Text);

```
{-Associates a text file with CRT device.}
```

procedure PlaySound(Freq,Duration: Longint);

```
{-Setups window coordinates }
```

procedure GetLastMode;

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