RobotBASIC V4.2.0

Commands Listed Alphabetically(350)

Note: See the Overview Of The Language section for a discussion on how commands and functions fit within the RobotBASIC language. The commands and functions are listed here in order of functionality. An alphabetical order can be found in another section. Commands and functions ***are not*** case sensitive. ClearScr, clearscr, and *clearSCR* are all the same command also sin(), SIN(), and sIn() are all the same function.

Note: In many commands and functions there are ***optional parameters***. If a parameter is not given RobotBASIC will assume a default value for it. If you need to specify a value for an optional parameter that comes after any preceding optional parameters, you have to put a space (or more or none) in place of any optional parameters that preceed the one you wish to specify. For example:

```
//this is how the command to save the screen is specified
//SaveScrWH {ne_X1{,ne_Y1{,ne_Width{,ne_Height}}}}
circlewh 10,10,100,100,red,red
SaveScrWH ,,70   //in this line we have accepted the default
                 //values for the first 2 parameters then specified
                 //a value for the 3rd and again accepted the default
                 //value for the last parameter
//this is how the function to obtain a substring from a strin is given
//Substring(se_Text{,ne_StartChar{,ne_NumCharacters}})
s = Substring(ss)       //useless but allowed start from beginning to the
end
s = Substring(ss, ,5)   //get 5 characters from the beginning
s = Substring(ss,3)     //get all the rest of the string from the 3rd
character
s = Substring(ss,7,2)   //get 2 characters from the 7th
```

Note: The following prefixes are used to describe the type of the parameter to be given to a command or function:

ne_ = An expression resulting in a numeric (integer or float).
se_ = An expression resulting in a string.
e_ = An expression resulting in a numeric **or** string.
vs_ = A simple variable that will be set by the command to a string value.
vn_ = A simple variable that will be set by the command to a numeric value.
v_ = A simple variable that will be set by the command to a numeric or string.
a_ = An array variable that will be used by the command or function as a whole array.
Expr = An expression that **can** result in a numeric or string but no easy description can be given.
ExprN = An expression that **mus**t result in a numeric but no easy description can be given.
{Expr} implies that it is optional and {Expr...} means many can be optionally given.
If a simple variable is expected in any of the commands, then if it exists it will be assigned the result otherwise it would be created and assigned the result.
If an array is expected then it must be a previously dimensioned array, but in some cases where the array is created by the command, it does not have to be previously dimensioned.
The character | means or. So if you see on | off, it means you can use either on, or off. v_Name | a_Name[...] means you can specify a simple variable or an array element.

AbortMethod {ne_AbortCode}
AddButton se_Name,ne_X,ne_Y{,ne_W{,ne_H{,se_Hint}}}
AddCheckBox se_Name,ne_X,ne_Y{,se_Caption{,ne_Checked{,ne_LeftOrRight{,se_Hint}}}}
AddEdit se_Name,ne_X,ne_Y{,ne_W{,ne_H{,e_Text{,se_Hint}}}}
AddListBox se_Name,ne_X,ne_Y{,ne_Width{,se_Items{,se_Hint}}}
AddListBoxItem se_Name{,e_NewItem}
AddMemo se_Name,ne_X,ne_Y{,ne_W{,ne_H{,se_Text{,se_Hint}}}}
AddMemoLine se_Name{,e_Text}
AddRBGroup se_Name,ne_X,ne_Y{,ne_Width{,ne_Height{,ne_Columns{,se_Buttons{,se_Caption{,se_Hint}}}}}}
AddRBGroupButton se_Name{,e_ButtonCaption}
AddSlider se_Name,ne_X,ne_Y{,ne_Width{,ne_Min{,ne_Max{,ne_Vertical{,ne_TickFreq{,ne_BigIncr{,se_Hint}}}}}}}
AddSpinner se_Name,ne_X,ne_Y{,ne_W{,ne_H{,ne_Min{,ne_Max{,ne_Incr{,ne_Vertical{,ne_Wrap{,se_Hint}}}}}}}
AddTimer se_Name{,ne_Period}
AllowEvents {on|off}
Arc ne_X1,ne_Y1,ne_X2,ne_Y2{,ne_StartAngle{,ne_ArcLength{,ne_PenWidth{,ne_PenColor}}}}
Beep {ne_Count}
BmpChangeClr se_SourceFile,ne_FromColor,ne_ToColor{,ne_Tolerance}
BmpCompare se_SourceFile{,se_CompareFile{,se_ToFile{,ne_Tolerance}}}
BmpContrast se_SourceFile,ne_Ratio{,ne_Threshold{,se_ToFile}}
BmpEdges se_SourceFile{,ne_Threshold{,se_ToFile{,ne_EdgeType}}}
BmpFindClr se_SourceFile,ne_Color,vn_Result{,vn_Confidence{,ne_ClrTolerance{,ne_ConfidenceTolerance{,ne_GridSize{a_SectorsCount}}}}}
BmpNegative se_SourceFile{,se_ToFile}
BmpRGB se_SourceFile,ne_Rratio,ne_Gratio,ne_Bratio{,se_ToFile}
BmpStats a_Stats{,se_FileName}
BmpToBW se_SourceFile{,ne_Threshold{,se_ToFile}}
BmpToCb {se_FileName{,ne_X{,ne_Y{,ne_Width{,ne_Height}}}}}
BmpToGray se_SourceFileName{,se_ToFileName{,ne_RedRatio{,ne_GreenRatio{,ne_BlueRatio}}}}
BorderEdit se_Name{,true|false}
BorderMemo se_Name{,true|false}
BuffPrintB vs_BuffString{,Expr,Expr,Expr...}
BuffPrintT vs_BuffString{,Expr,Expr;Expr...}{;|,}
CbFitBMP {se_FileName{,ne_Width{,ne_Height}}
CbToBMP {se_FileName}
CheckSerBuffer vn_NumOfBytes
Circle ne_X1,ne_Y1,ne_X2,ne_Y2{,ne_PenColor{,ne_FillColor}}
CircleWH ne_X1,ne_Y1,ne_Width,ne_Height{,ne_PenColor{,ne_FillColor}}
ClearListBox se_Name
ClearMemo se_Name
ClearRBGroup se_Name
ClearScr {ne_Color}
ClearSerBuffer {ne_Which}
ClrCB
CommaTab {true|false}
CopyFitScr {ne_CopyNumber{,ne_X{,ne_Y{,ne_Width{,ne_Height}}}}}
CopyScr {ne_CopyNumber{,ne_X1{,ne_Y1{,ne_Width{,ne_Height}}}}

CopyToScr {ne_CopyNumber{,ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_MapX{,ne_MapY}}}}}}}
Data a_Name;Expr{,Expr....}
Debug {Expr1,Expr2;Expr3...}
DebugOff
DebugOn
Declare v_Name {{=}e_InitialValue}{, ...}
Delay {ne_Milliseconds}
DeleteListBoxItem se_Name{,ne_Index}
DeleteMemoLine se_Name{,ne_LineNumber}
DeleteRBGroupButton se_Name{,ne_Index}
Dim a_Name1[ExprN{,ExprN...}]{ , a_Name2[ExprN{,ExprN...}] {, ...}}}...
DrawShape se_Shape,ne_X,ne_Y{,ne_Scale,ne_Color}
EnableButton se_Name{,true|false}
EnableCheckBox se_Name{,true|false}
EnableEdit se_Name{,true|false}
EnableListBox se_Name{,true|false}
EnableMemo se_Name{,true|false}
EnableRBGroup se_Name{,true|false}
EnableSlider se_Name{,true|false}
EnableSpinner se_Name{,true|false}
eRectangle ne_X1,ne_Y1,ne_X2,ne_Y2{,ne_PenWidth{,ne_PenColor}}
eRectangleWH ne_X1,ne_Y1,ne_Width,ne_Height{,ne_PenWidth{,ne_PenColor}}
FilePrintB vn_FileHandle{,Expr,Expr,Expr...}
FilePrintT vn_FileHandle{,Expr,Expr;Expr...}{;|,}
FitBMP {se_FileName{,ne_X{,ne_Y{,ne_Width{,ne_Height}}}}}
FitCb {ne_X{,ne_Y{,ne_Width{,ne_Height}}}}
Flip {on|off}
FlipBMP {se_FileName{,ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_MapX{,ne__MapY}}}}}}}
FlipCb
FloatEdit se_Name{,true|false}
FloodFill {ne_X{,ne_Y{,ne_NewColor{,ne_OldColor}}}}
FloodFill2 {ne_X{,ne_Y{,ne_NewColor{,ne_BorderColor}}}}
FocusButton se_Name
FocusCheckBox se_Name
FocusEdit se_Name
FocusListBox se_Name
FocusMemo se_Name
FocusRBGroup se_Name
FocusSlider se_Name
FocusSpinner se_Name
ge3Dto2DA a_3dPoints,a_CameraSpecs
ge3Dto2DV ne_X,ne_Y,ne_Z,ne_Rho,ne_Theta,ne_Phi,ne_Dist,ne_CenterX,ne_CenterY,vn_ScrX,vn_ScrY
ge3Dto2DVA ne_X,ne_Y,ne_Z,a_CameraSpecs,vn_ScrX,vn_ScrY
geCentroids a_3DPoints,a_SurfacesSpecs,a_Centroids
gePlotEdges a_3DPoints,a_Edges{,ne_LineWidth{,ne_LineWidth{,ne_Color}}
gePlotSurfaces a_3DPoints,a_SurfacesSpecs{,ne_DoFilling{,ne_LineWidth{,ne_OnlyVisible{,ne_CentroidAll}}}}
geRotateA a_3DPoints,ne_RotAngle,ne_AxisCode{,ne_From{,ne_To}}
geRotVx ne_X,ne_Y,ne_Z,ne_RotAngle,vn_X',vn_Y',vn_Z'
geRotVy ne_X,ne_Y,ne_Z,ne_RotAngle,vn_X',vn_Y',vn_Z'
geRotVz ne_X,ne_Y,ne_Z,ne_RotAngle,vn_X',vn_Y',vn_Z'
GetButton vs_Name
GetColor vn_PenColor,vn_BkgrndColor

GetCursor vn_Code
GetError vn_ErrNo{,vs_ErrMessage{,vn_LineNo{,vn_CharNo}}}
GetKey vn_KeyCode
GetKeyE vn_ScanCode
GetLineWidth vn_Width
GetTimeOut vn_TimeOutValue
GetXY vn_X,vn_Y
geVisibles a_3DPoints,a_CameraSpecs,a_SurfacesSpecs{,a_Edges{,ne_ColorFactor}}
GotoXY {ne_X{,ne_Y}}
HideButton se_Name{,true|false}
HideCheckBox se_Name{,true|false}
HideEdit se_Name{,true|false}
HideListBox se_Name{,true|false}
HideMemo se_Name{,true|false}
HideRBGroup se_Name{,true|false}
HideSlider se_Name{,true|false}
HideSliderDial se_Name{,true|false}
HideSpinner se_Name{,true|false}
HonorCrLf {true|false}
#Include "FileName.Ext"{,...}
InlineInputMode {on|off}
InPort ne_PortNumber,vn_ByteValue
Input {e_Prompt,}v_Name | a_Name[,,,] {,...}
IntegerEdit se_Name{,true|false}
Joystick ne_JoystickNo,vn_XAxisPos,vn_YAxisPos,vn_ThrottlePos,vn_Buttons
JoystickE ne_JoystickNo,a_ReturnedData
Line ne_X1,ne_Y1,ne_X2,ne_Y2{,ne_PenWidth{,ne_PenColor}}
LineTo ne_X,ne_Y{,ne_PenWidth{,ne_PenColor}}
LineWidth {ne_Width}
mAdd a_Sourced,a_Destination
mAND a_Source,ExprN
mBezier a_Vertices{,ne_PenWidth{,ne_PenColor}}
mCombineClr a_RedValues,a_GreenValues,a_BlueValues,a_RGBvalues
mConstant a_Source,Expr
mCopy a_Source,a_Destination
mDet a_Source,vn_Determinant
mDFT a_Samples{,ne_WindowFunction}
mDiagonal a_Source,Expr
MediaGetPosition {v_X{,v_Y{,v_Width{,v_Height}}}}
MediaPause ne_DeviceNumber{,on|off}
MediaPlay ne_DeviceNumber,se_FileName{,ne_Loop}
MediaRecord ne_DeviceNumber,se_FileName
MediaReposition {ne_X{,ne_Y{,ne_Width{,ne_Height}}}}
MediaSave ne_DeviceNumber
MediaShow ne_DeviceNumber{,true|false}
MediaStop ne_DeviceNumber
MediaVideoSize DeviceNumber{,v_Width{,v_Height}}
mExpFit a_XYdata,vn_Exponent,vn_Factor
mFFT a_Samples{,ne_WindowFunction}
mFromString a_TextLines,se_String{,se_Separator}
mGraphPaper a_Specs
MicroDelay {ne_Amount}

mInvert a_Source,a_Destination,vn_Determinant
MirrorBMP {se_FileName{,ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_MapX{,ne__MapY}}}}}}}
MirrorCb
mLogFit a_XYdata,vn_Factor,vn_Translation
mmAND a_Source,a_Destination
mmOR a_Source,a_Destination
mmShiftL a_Source,a_Destination
mmShiftR a_Source,a_Destination
mMultiply a_Left,a_Right,a_Result
mmXOR a_Source,a_Destination
mNOT a_Name
mOR a_Name,ExprN
mPlotXY a_Specs,a_Xvalues,a_Yvalues **OR** **mPlotXY** a_Specs,a_XYvalues
mPolyFit a_XYdata,a_Specs
mPolygon a_Verices{,ne_FillColor}
mRead a_Name,se_FileName
mReadBMP a_Pixels{,se_FileName{,ne_ClrCode}}
mRegression a_XYData,vn_Slope,vn_Intercept
mScale a_Name,ExprN
mScrFitArray a_Pixels{,ne_X{,ne_Y{,ne_Width{,ne_Height}}}}
mScrFromArray a_Pixels{,ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_ArrayX{,ne_ArrayY}}}}}}
mScrToArray a_Pixels{,ne_X{,ne_Y{,ne_Width{,ne_Height}}}}
mShiftL a_Name,ExprN
mShiftR a_Name,ExprN
mSortR a_Name{,ne_OnRowNumber{,ne_Descending}}
mSortC a_NAme{,ne_OnColumnNumber{,ne_Descending}}
mSub a_Source,a_Destination
mTextFR a_TextLines,se_TextFileName
mTextFW a_TextLines,se_TextFileName
mTranspose a_Source,a_Destination
mWrite a_Name,se_FileName
mWriteBMP a_Pixels{,se_FileName}
mXOR a_Name,ExprN
ngc_DistanceHeading ne_LatA,ne_LonA,ne_LatB,ne_LonB,vn_Distance,vn_Heading
ngc_FractionDistancePoint ne_LatA,ne_LonA,ne_LatB,ne_LonB,ne_FractionalDistance,vn_Lat,vn_Lon
ngc_LatFromLonCrossing ne_LatA,ne_LonA,ne_LatB,ne_LonB,ne_Lon,vn_Lat
ngc_LonFromLatCrossing ne_LatA,ne_LonA,ne_LatB,ne_LonB,ne_Lat,vn_Lon1,vn_Lon2
ngc_RadialIntersection ne_LatA,ne_LonA,ne_LatB,ne_LonB,ne_HeadingFromA,ne_Heading,FromB,vn_Lat,vn_Lon
ngc_RadialPoint ne_LatA,ne_LonA,ne_Distance,ne_Heading,vn_Lat,vn_Lon
ngc_TrackPointsFromPoint ne_LatA,ne_LonA,ne_LatB,ne_LonB,ne_LatD,ne_LonD,ne_DstnceFrmPnt,vn_Lat1,vn_Lon1,vn_Lat2,vn_Lon2
ngc_XTrackError ne_LatA,ne_LonA,ne_LatB,ne_LonB,ne_LatD,ne_LonD,vn_XTrackDistance,vn_AlongTrackDistance
nrl_DistanceHeading ne_LatA,ne_LonA,ne_LatB,ne_LonB,vn_Distance,vn_Heading
nrl_RadialPoint ne_LatA,ne_LonA,ne_Distance,ne_Heading,vn_Lat,vn_Lon
nwt_GSpeedCourse ne_WindSpeed,ne_WindDirection,ne_TrueSpeed,ne_Heading,vn_GrndSpeed,vn_CourseHeading
nwt_GSpeedHeading ne_WindSpeed,ne_WindDirection,ne_TrueSpeed,ne_CourseHeading,vn_GroundSpeed,vn_Heading
nwt_TSpeedHeading ne_WindSpeed,ne_WindDirection,ne_GrndSpeed,ne_CourseHeading,vn_TrueSpeed,vn_Heading
nwt_TSpeedWSpeed ne_V1,ne_V2,ne_V3,vn_TrueSpeed,vn_WindSpeed
nwt_WSpeedDirection ne_GroundSpeed,ne_CourseHeading,ne_TrueSpeed,ne_Heading,vn_WindSpeed,vn_WindDirection
nwt_XWind ne_WindSpeed,ne_WindDirection,ne_RunwayHeading,vn_XWind,vn_HeadWind
ObjectGet a_ObjectArray,ne_ObjectNumber
ObjectPut a_ObjectArray,ne_ObjectNumber
OutPort ne_PortNumber,ne_ByteValue

OverlayText {ne_X{,ne_Y{,Expr{,se_FontName{,ne_FontSize{,ne_FontStyle{,ne_PenColor{,ne_Quick}}}}}}}}
Pie ne_X1,ne_Y1,ne_X2,ne_Y2{,ne_StartAngle{,ne_ArcLength{,ne_PenColor{,ne_FillColor}}}}
PlaySong {se_Notes}
PlayWav {se_FileName{,ne_Mode{,ne_Loop}}}
PPortIn vn_ByteValue
PPortOut {ne_ByteValue}
Print {Expr,Expr;Expr...}{;|,}
PrinterSetup
PrintScr
rCharge {ne_Value}
rCommPort ne_PortNum {,ne_BaudRate {,ne_NumBits {,ne_Parity {,ne_StopBits {,ne_Protocol}}}}}
ReadBMP {se_FileName{,ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_MapX{,ne_MapY}}}}}}}
ReadMouse vn_X,vn_Y{,vn_Buttons}
ReadOnlyEdit se_Name{,true|false}
ReadOnlyMemo se_Name{,true|false}
ReadPixel ne_X,ne_Y,vn_Color
ReadScr {se_FileName}
ReadSerSignals vn_Flags
RecordGet a_DataBaseArray,ne_RecordNumber
RecordPut a_DataBaseArray,ne_RecordNumber
Rectangle ne_X1,ne_Y1,ne_X2,ne_Y2{,ne_PenColor{,ne_FillColor}}
RectangleWH ne_X,ne_Y,ne_Width,ne_Height{,ne_PenColor{,ne_FillColor}}
RemoveButton se_Name
RemoveCheckBox se_Name
RemoveEdit se_Name
RemoveListBox se_Name
RemoveMemo se_Name
RemoveRBGroup se_Name
RemoveSlider se_Name
RemoveSpinner se_Name
RemoveTimer se_Name
RenameButton se_CurrentName,se_NewName
ResizeBMP {se_SourceFileName{,ne_Width{,ne_Height{,se_ToFileName}}}}
RestoreScr {ne_X{,ne_Y}}
rFloorColor {ne_Color}
rForward {ne_Pixels}
rGps vn_X,vn_Y
rHeading {ne_Degrees}
rIgnoreCharge {true|false}
rInstError {ne_PercentageLevel}
rInvisible ne_Color1 {,ne_Color2...}
rLocate ne_X,ne_Y{,ne_Heading{,ne_Size{,ne_BorderColor{,ne_InsideColor{,ne_ObeyFlip}}}}}
RotateBMP {se_FileName{,ne_Angle{,ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_MapX{,ne_MapY}}}}}}}}
RotateCb {ne_Angle}
rPen ne_State {,ne_Color}
rRelocate {ne_X{,ne_Y{,ne_Heading}}}
rSenseType {ne_NumSensors}
rSensor ne_SensorNo,ne_Range,vn_Color,vn_Distance,vn_Found
rSensorA ne_Angle,ne_Range,vn_Color,vn_Distance,vn_Found
rSlip {ne_PercentageLevel}
rSpeed {ne_Speed}
rTurn {ne_Degrees}

SaveScr {ne_X1{,ne_Y1{,ne_X2{,ne_Y2}}}}
SaveScrWH {ne_X1{,ne_Y1{,ne_Width{,ne_Height}}}}
ScrFromCb {ne_ScreenX{,ne_ScreenY{,ne_Width{,ne_Height{,ne_MapX{,ne_MapY}}}}}}
ScrLimits vn_XLimit,vn_YLimit
ScrSetMetrics {ne_X{,ne_Y{,ne_Width{,ne_Height{,ne_PanelVisible{,ne_AllowResize}}}}}}
ScrGetMetrics {v_X{,v_Y{,v_Width{,v_Height{,v_PanelVisible{,v_AllowResize}}}}}}
ScrToCb {ne_X{,ne_Y{,ne_Width{,ne_Height}}}}
SeedRandom {ne_Seed}
SendEMail a_MessageSpecs,a_MessageBody {,ne_ShowProgress}
SerBytesIn ne_NumOfBytesToRead,vs_BytesRead,vn_ActualNumberRead
SerialOut Expr {,Expr {, Expr ...}}
SerIn vs_Bytes
SerOut Expr {,Expr {; Expr ...}}
SerPorts vs_PortsList
SetButtonCaption se_Name{,e_Caption}
SetButtonDim se_Name{,ne_X{,ne_Y{,ne_W{,ne_H}}}}
SetButtonFont se_Name{,se_FontType{,ne_FontSize{,ne_FontStyle{,ne_FontColor}}}}
SetCBText {se_Text}
SetCheckBox se_Name{,true|false}
SetCheckBoxCaption se_Name{,e_NewCaption}
SetCheckBoxColor se_Name{,ne_Color}
SetCheckBoxDim se_Name{,ne_X{,ne_Y}}
SetColor {ne_PenColor{,ne_BackGroundColor}}
SetCommPort ne_PortNum {,ne_BaudRate {,ne_NumBits {,ne_Parity {,ne_StopBits {,ne_Protocol}}}}}
SetCursor {ne_CursorShapeCode}
SetEdit se_Name{,e_Value}
SetEditColor se_Name{,ne_Color}
SetEditDim se_Name{,ne_X{,ne_Y{,ne_W{,ne_H}}}}
SetEditFont se_Name{,se_FontType{,ne_FontSize{,ne_FontStyle{,ne_FontColor}}}}
SetEditMask se_Name,se_MaskSpecs
SetInputArea {se_Text}
SetListBox se_Name{,ne_Index}
SetListBoxColor se_Name{,ne_Color}
SetListBoxDim se_Name{,ne_X{,ne_Y{,ne_W}}}
SetListBoxFont se_Name{,se_FontType{,ne_FontSize{,ne_FontStyle{,ne_FontColor}}}}
SetListBoxItems se_Name{,e_ItemsList}
SetMemoColor se_Name{,ne_Color}
SetMemoDim se_Name{,ne_X{,ne_Y{,ne_W{,ne_H}}}}
SetMemoFont se_Name{,se_FontType{,ne_FontSize{,ne_FontStyle{,ne_FontColor}}}}
SetMemoScrollBars se_Name{,ne_Value}
SetMemoSelected se_Name{,ne_StartCharPosition{,ne_NumCharacters}}
SetMemoSelection se_Name{,ne_LineNumber{,ne_CharacterNumber{,ne_SelectionLength}}}
SetMemoText se_Name{,e_Text}
SetMousePos {ne_X{,ne_Y}
SetPixel {ne_X{,ne_Y{,ne_Color}}}
SetPPortNumber {ne_PortNumber}
SetPromptArea {se_Text}
SetRBGroup se_Name{,ne_Index}
SetRBGroupButtons se_Name{,e_ButtonsList}
SetRBGroupColor se_Name{,ne_Color}
SetRBGroupColumns se_Name{,ne_NumColumns}
SetRBGroupDim se_Name{,ne_X{,ne_Y{,ne_W{,ne_H}}}}

SetRBGroupFont se_Name{,se_FontType{,ne_FontSize{,ne_FontStyle{,ne_FontColor}}}}
SetSerDTR {on|off}
SetSerRTS {on|off}
SetSliderBarEnd se_Name{,ne_Value}
SetSliderBarStart se_Name{,ne_Value}
SetSliderDim se_Name{,ne_X{,ne_Y{,ne_W}}}
SetSliderMax se_Name{,ne_NewValue}
SetSliderMin se_Name{,ne_NewValue}
SetSliderPos se_Name{,ne_PositionValue}
SetSpinner se_Name{,ne_Position}
SetSpinnerDim se_Name{,ne_X{,ne_Y{,ne_W{,ne_H}}}}
SetSpinnerIncr se_Name{,ne_Value}
SetSpinnerMax se_Name{,ne_NewValue}
SetSpinnerMin se_Name{,ne_NewValue}
SetSpinnerWrap se_Name{,true|false}
SetTextBuff {se_Text}
SetTimeOut {ne_MilliSeconds}
SetTimer se_Name{,true|false}
SetTimerPeriod se_Name{,ne_Period}
SetTimerTicks se_Name{,ne_Count}
ShowSliderBar se_Name{,true|false}
SizeBMP se_FileName,vn_Width,vn_Height
SizeCb vn_Width,vn_Height
SortListBox se_Name{,true|false}
Sound ne_Frequency,ne_Duration{,ne_Mode}
Speaker {on|off}
Stepping {On|Off}
Swap v_Left | a_Left[...] ,v_Right | a_Right[...]
TextBuffToCB
ToBMP se_SourceFile{,se_ToFile}
Transparent {on|off}
Undeclare
VarSet se_VarName,e_Value
VPPortIn ne_VirtualPortNo,vn_ByteValue
VPPortOut ne_VirtualPortNo,ne_ByteValue
WaitKey {e_Prompt,}vn_KeyCode
WaitNoKey {ne_MillisWait}
WaitNoKeyE ne_ScanCode{,ne_MillisWait}
WrapMemo se_Name{,true|false}
Write {Expr,Expr;Expr...}{;|,}
WriteBMP {se_FileName{,ne_X{,ne_Y{,ne_Width{,ne_Height}}}}}
WriteScr {se_FileName}
xyInput v_Input{,ne_X{,ne_Y{,e_Title{,e_Default{,ne_BoxLength}}}}}
xyString ne_X,ne_Y,Expr{;expr,expr;...}
xyText {ne_X{,ne_Y{,Expr{,se_FontName{,ne_FontSize{,ne_FontStyle{,ne_PenColor{,ne_BackgroundColor}}}}}}}}

Functions Listed Alphabetically(475)

AbortFlag()
Abs(ExprN)
ACos(ExprN)
ACosH(ExprN)
Ascii(se_Text)
ASin(ExprN)
ASinH(ExprN)
ATan(ExprN)
ATan2(ne_X,ne_Y)
ATanH(ExprN)
Average(a_Data)
Bin(ExprN{,ne_NumBits})
BinToInt(e_BinaryValue)
BitSwap(ne_Number{,ne_NumberOfBits})
BlueValue(ne_Color)
BuffRead(se_Buffer,ne_Position,ne_NumBytes)
BuffReadB(se_Buffer,ne_Position)
BuffReadF(se_Buffer,ne_Position)
BuffReadF32(se_Buffer,ne_Position)
BuffReadI(se_Buffer,ne_Position)
BuffWrite(se_Buffer,ne_Position,e_Value)
BuffWriteB(se_Buffer,ne_Position,ne_Value)
BuffWriteF32(se_Buffer,ne_Position,ne_Value)
ButtonEnabled(se_Name)
ButtonHasFocus(se_Name)
ButtonHidden(se_Name)
CaptureDlg({se_FileName})
CaptureImage({se_FileName})
CaptureRdy()
CaptureSrc()
CartX(ne_Radius,ne_ThetaRadians)
CartY(ne_Radius,ne_ThetaRadians)
CbRt(ExprN)
Center(se_Text,se_PadChar,ne_NumChars)
Char(ne_AsciiCode)
CheckBoxEnabled(se_Name)
CheckBoxHasFocus(se_Name)
CheckBoxHidden(se_Name)
ClrBit(ne_Number,ne_BitPosition)
ClrByte(ne_Number,ne_BytePosition)
CommandsList()
ConstantsList()
ConsToClr(ne_ColorConstantValue)
Contains(se_Text,se_CharList)
Convert(ne_ValueToConvert, ne_ConversionTypeCode)
CorrCoef(a_Data)
Cos(ne_Radians)
CosH(ExprN)

Count(a_Data)
CrLf()
Date({ne_Type})
DateStr(ne_DateTimeValue)
DateTime(ne_DateTimeValue{,se_Format})
DateTimeStr(ne_DateTimeValue)
DateTimeVal(se_DateTimeString)
DateVal(ne_Year,ne_Month,ne_Day)
Day(ne_DateTimeValue)
DayOfWeek(ne_DateTimeValue)
Degrees({ne_Degrees{,ne_Minutes{,ne_Seconds}}})
Degrees(se_FormattedDegrees)
DeskTopHeight()
DeskTopWidth()
DFtoSF(ExprN)
DirCount()
DirCreate(se_DirPath)
DirCurrent()
DirExists(se_DirPath)
DirList()
DirPrompt()
DirRemove(se_DirPath)
DirSet(se_DirPath)
DiskFree(ne_DiskNumber)
DiskSize(ne_DiskNumber)
DtoR(ne_Degrees)
EditBorder(se_Name)
EditChanged(se_Name)
EditEnabled(se_Name)
EditHasFocus(se_Name)
EditHidden(se_Name)
EditReadOnly(se_Name)
Encrypt(se_Text,se_Key)
ErrMsg(se_MessageText{,se_BoxTitle{,ne_Style}})
Evaluate(se_Expression)
Exp(ExprN)
Exp10(ExprN)
Extract(se_Text,se_SeparatorChars,ne_Part)
FactorColor(ne_Color,ne_Factor)
Factorial(ExprN)
ff_CIFV(PV,INTR,TERM)
ff_CII(PV,FV,TERM)
ff_CIT(PV,INTR,FV)
ff_FV(PMT,INTR,TERM,TYPE)
ff_FVP(FV,INTR,TERM,TYPE)
ff_FVT(PMT,INTR,FV,TYPE)
ff_PV(PMT,INTR,TERM,BAL,TYPE)
ff_PVP(PV,INTR,TERM,BAL,TYPE)
ff_PVT(PMT,INTR,PV,BAL,TYPE)
ff_SLN(COST,SALVAGE,LIFE)
ff_SYD(COST,SALVAGE,LIFE,PERIOD)
FileChangeExt(se_FileName,se_NewExtension)

FileDelete(se_Name)
FileDir(se_Name)
FileDrive(se_Name)
FileClose(ne_FileHandle)
FileCopy(se_SourceFile,se_DestinationFile{,ne_Mode})
FileCreate(se_FileName)
FileDate(se_FileName)
FileEnd(ne_FileHandle)
FileOpen(se_FileName,ne_Mode)
FilePrompt({Expr})
FileRead(ne_FileHandle{,ne_ByteCount)
FileReadB(ne_FileHandle)
FileReadF(ne_FileHandle)
FileReadField(ne_FileHandle{,se_Separator})
FileReadI(ne_FileHandle)
FileSave({Expr})
FilesCount({se_Filter})
FileSeek(ne_FileHandle,ne_FromWhere,ne_OffsetCount)
FileSize(ne_FileHandle)
FileSize(se_Name)
FilesList({se_Filter})
FileWrite(ne_FileHandle,e_Value)
FileWriteB(ne_FileHandle,e_Value)
FileExists(se_FileName)
FileExt(se_Name)
FileName(se_Name)
FilePath(se_Name)
FileRename(se_OldName,se_NewName)
FileSearch(se_FileName,se_DirList)
Format(ExprN,se_FormatSpecifier)
Frac(ExprN)
FunctionsList()
GetBit(ne_Number,ne_BitPosition)
GetButtonCaption(se_Name)
GetButtonFont(se_Name)
GetButtonH(se_Name)
GetButtonW(se_Name)
GetButtonX(se_Name)
GetButtonY(se_Name)
GetByte(ne_Number,ne_BytePosition)
GetCBText()
GetCheckBox(se_Name)
GetCheckBoxCaption(se_Name)
GetCheckBoxColor(se_Name)
GetCheckBoxX(se_Name)
GetCheckBoxY(se_Name)
GetEdit(se_Name)
GetEditColor(se_Name)
GetEditFont(se_Name)
GetEditH(se_Name)
GetEditUnmasked(se_Name)
GetEditW(se_Name)

GetEditX(se_Name)
GetEditY(se_Name)
GetListBox(se_Name)
GetListBoxColor(se_Name)
GetListBoxFont(se_Name)
GetListBoxItem(se_Name,ne_ItemIndex)
GetListBoxList(se_Name)
GetListBoxText(se_Name)
GetListBoxW(se_Name)
GetListBoxX(se_Name)
GetListBoxY(se_Name)
GetMemoCharNo(se_Name)
GetMemoCharPos(se_Name)
GetMemoColor(se_Name)
GetMemoFont(se_Name)
GetMemoH(se_Name)
GetMemoLine(se_Name,ne_LineNumber)
GetMemoLineNo(se_Name)
GetMemoSelection(se_Name)
GetMemoText(se_Name)
GetMemoW(se_Name)
GetMemoX(se_Name)
GetMemoY(se_Name)
GetRBGroup(se_Name)
GetRBGroupButton(se_Name,ne_Index)
GetRBGroupCaption(se_Name)
GetRBGroupColor(se_Name)
GetRBGroupFont(se_Name)
GetRBGroupH(se_Name)
GetRBGroupItems(se_Name)
GetRBGroupText(se_Name)
GetRBGroupW(se_Name)
GetRBGroupX(se_Name)
GetRBGroupY(se_Name)
GetSliderBarEnd(se_Name)
GetSliderBarStart(se_Name)
GetSliderMax(se_Name)
GetSliderMin(se_Name)
GetSliderPos(se_Name)
GetSliderW(se_Name)
GetSliderX(se_Name)
GetSliderY(se_Name)
GetSpinner(se_Name)
GetSpinnerH(se_Name)
GetSpinnerIncr(se_Name)
GetSpinnerMax(se_Name)
GetSpinnerMin(se_Name)
GetSpinnerW(se_Name)
GetSpinnerWrap(se_Name)
GetSpinnerX(se_Name)
GetSpinnerY(se_Name)
GetStrByte(se_String,ne_ByteNumber)

GetTextBuff()
GetTimerPeriod(se_Name)
GetTimerTicks(se_Name)
GreenValue(ne_Color)
Hex(ExprN{,ne_NumBytes})
HexToInt(e_HexValue)
Hour(ne_DateTimeValue)
Insert(se_Text,se_Insert,ne_CharNum)
InString(se_Main,se_Sub{,ne_StartFrom})
IsNumber(Expr)
IsString(Expr)
JustifyL(se_Text,se_PadChar,ne_Len)
JustifyR(se_Text,se_PadChar,ne_Len)
KeyDown({ne_ScanCode})
LastButton()
LastCheckBox()
LastEdit()
LastKey()
LastListBox()
LastMemo()
LastMouse()
LastRBGroup()
LastSlider()
LastSpinner()
LastTimer()
Lat_DM(ne_Degrees)
Lat_DMS(ne_Degrees)
Left(se_Text,ne_NumChars)
LeftTrim(se_Text)
Length(se_Text)
Limit(ne_Value,ne_LowerLimit,ne_UpperLimit)
ListBoxEnabled(se_Name)
ListBoxHasFocus(se_Name)
ListBoxHidden(se_Name)
ListBoxItemsCount(se_Name)
ListBoxSorted(se_Name)
Log(ExprN)
Log2(ExprN)
LogB(ne_Base,ExprN)
Lon_DMS(ne_Degrees)
Lon_DM(ne_Degrees)
Lower(se_Text)
MakeBit(ne_Number,ne_BitPosition,on|off)
MakeByte(ne_Number,ne_BytePosition,ne_ByteValue)
Map(ne_FromValue, ne_FromMin, ne_FromMax, ne_ToMin, ne_ToMax)
mAverage(a_Data)
Max(a_Data)
MaxDim(a_Name{,ne_Dimension})
MaxFloat()
MaxInteger()
MaxV(ExprN1,ExprN2)
mCount(a_Data)

mDim(a_Name)
Median(a_Data)
MediaIsVideo(ne_DeviceNumber)
MediaState(ne_DeviceNumber)
MemoBorder(se_Name)
MemoChanged(se_Name)
MemoEnabled(se_Name)
MemoHasFocus(se_Name)
MemoHidden(se_Name)
MemoLinesCount(se_Name)
MemoReadonly(se_Name)
MemoScrollBars(se_Name)
MemoWrap(se_Name)
Millisecond(ne_DateTimeValue)
Min(a_Data)
MinFloat()
MinInteger()
Minute(ne_DateTimeValue)
MinV(ExprN1,ExprN2)
mMax(a_Data)
mMin(a_Data)
Mod(ne_Numerator,ne_Denominator)
Month(ne_DateTimeValue)
mRange(a_Data)
MsgBox(a_TextLines{,e_Title{,ne_X{,ne_Y{,ne_W{,ne_H{,ne_DoWrap}}}}}})
mStdDev(a_Data)
mSum(a_Data)
mToCommaText(a_Array)
mToString(a_TextLines{,se_Separator})
mType(a_Name[...])
mVariance(a_Data)
nCr(ne_NumElementsAvailable,ne_NumElementsToSelect)
NLog(ExprN)
NoSpaces(se_Text)
NotContains(se_Text,se_CharList)
Now()
nPr(ne_NumElementsAvailable,ne_NumElementsToSelect)
NumParts(se_Text,se_Separator)
Pi({ne_Multiplier})
PixelClr(ne_X,ne_Y)
PolarA(ne_X,ne_Y)
PolarR(ne_X,ne_Y)
ProbG(ne_Element,ne_Mean,ne_StdDev)
ProbGI(ne_Probability,ne_Mean,ne_StdDev)
ProgName()
PromptBMP({se_Filter})
PromptColor({ne_DefaultColor})
Proper(se_Text)
PutStrByte(se_String,ne_ByteNum,ne_Val)
Random(ExprN)
RandomG(ne_Mean,ne_StdDev)
Range(a_Data)

rBeacon(ne_Color)
RBGroupEnabled(se_Name)
RBGroupHasFocus(se_Name)
RBGroupHidden(se_Name)
RBGroupItemsCount(se_Name)
RBGroupNumColumns(se_Name)
rBumper()
rChargeLevel()
rCommand(ne_Command,ne_Data)
rCompass()
rDBumper({ne_Color})
rDFeel({ne_Color})
re_End({ne_GroupNumber})
re_GrpNumber(se_GroupName)
re_Match(se_Text)
re_NumOfGrps()
re_Replace(se_Text{,se_ReplaceWith{,ne_SartFromPositionNumber{,ne_NumberOfMatchesToReplace}}})
re_Search(se_Text{,ne_SartFromPositionNumber})
re_Setup(se_Template{,ne_Mode})
re_Start({ne_GroupNumber})
RedValue(ne_Color)
Replace(se_OriginalString,se_NewSubString,ne_StartingAt)
rFeel()
RGB(ne_RedValue,ne_GreenValue,ne_BlueValue)
rGpsX()
rGpsY()
rGround(ne_SensorNo)
rGroundA(ne_Angle)
Right(se_Text,ne_NumChars)
RightTrim(se_Text)
rLook({ne_Angle})
RotShape(se_ShapeString,ne_Direction)
Round(ExprN)
RoundDN(ExprN{,ne_Type})
RoundUP(ExprN{,ne_Type})
rPoints()
rRange({ne_Angle})
rSense({ne_Color})
RtoD(ne_Radians)
Second(ne_DateTimeValue)
SetBit(ne_Number,ne_BitPosition)
SetByte(ne_Number,ne_BytePosition)
SFtoDF(ExprN)
Sign(ExprN)
SignExtend8(ExprN)
SignExtend16(ExprN)
Sin(ne_Radians)
SinH(ExprN)
SliderBarHidden(se_Name)
SliderDialHidden(se_Name)
SliderEnabled(se_Name)
SliderHasFocus(se_Name)

SliderHidden(se_Name)
Soundex(se_Text{,ne_Length})
Spaces(ne_NumOfSpaces)
Spawn(se_ProgramName,se_Parameters,ne_Mode)
Spell(ExprN)
SpinnerEnabled(se_Name)
SpinnerHasFocus(se_Name)
SpinnerHidden(se_Name)
SqRt(ExprN)
sRepeat(se_RepeatChars,ne_NumTimes)
StatementsList()
StdDev(a_Data)
StringBox(se_Text{,e_Title{,ne_X{,ne_Y{,ne_W{,ne_H{,ne_DoWrap}}}}}})
StrInput({e_Caption{,e_Prompt{,e_Default}}})
StrOfBytes(Expr{,Expr{,....}})
Substitute(se_Text,se_TextToReplace,se_ReplaceWith)
Substring(se_Text{,ne_StartChar{,ne_NumCharacters}})
Sum(a_Data)
Tan(ne_Radians)
TanH(ExprN)
TCP_LocalIP()
TCPC_BuffCount()
TCPC_Close()
TCPC_Connect(se_ServerIPaddress{,ne_ServerPort})
TCPC_ConnectHost(se_ServerName{,ne_ServerPort})
TCPC_Peek()
TCPC_Read()
TCPC_Send(se_Data)
TCPC_Status()
TCPS_BuffCount()
TCPS_Close()
TCPS_Header({on|off})
TCPS_Peek()
TCPS_Read()
TCPS_Send(se_Data)
TCPS_Serve({ne_Port})
TCPS_Status()
TextBox(se_FileName{,e_Title{,ne_X{,ne_Y{,ne_W{,ne_H{,ne_DoWrap}}}}}})
TextHeight(se_Text{,se_FontName{,ne_FontSize{,ne_FonctStyle}}})
TextWidth(se_Text{,se_FontName{,ne_FontSize{,ne_FonctStyle}}})
Time({ne_Type})
Timer( )
TimerIsOn(se_Name)
TimeStr(ne_DateTimeValue)
TimeVal(ne_Hour,ne_Minute,ne_Second,ne_Milliseconds)
ToByte(Expr)
ToCommaText(se_String)
ToNumber(Expr{,ne_Default})
ToString(Expr)
ToTime(ne_Seconds)
Trim(se_Text)
UDP_BuffCount(se_Name)

UDP_Header(se_Name{,on|off})
UDP_Peek(se_Name)
UDP_Read(se_Name)
UDP_Send(se_Name,se_Data,se_TargetIP{,ne_TargetPort})
UDP_Start(se_Name{,ne_ListenPort})
UDP_Status(se_Name)
Upper(se_Text)
usbm_ClearRecentError()
usbm_CloseDevice(ne_DeviceNumber)
usbm_DeviceCmd(ne_DeviceNumber,se_Data)
usbm_DeviceSpecs(ne_DeviceNumber)
usbm_DeviceValid(ne_DeviceNumber)
usbm_DirectionA(ne_DeviceNumber,ne_PinsDirection,ne_PinsFormat)
usbm_DirectionAIn(ne_DeviceNumber)
usbm_DirectionAInPullUp(ne_DeviceNumber)
usbm_DirectionAOut(ne_DeviceNumber)
usbm_DirectionB(ne_DeviceNumber,ne_PinsDirection,ne_PinsFormat)
usbm_DirectionBIn(ne_DeviceNumber)
usbm_DirectionBInPullUp(ne_DeviceNumber)
usbm_DirectionBOut(ne_DeviceNumber)
usbm_DllSpecs()
usbm_ErrorSpecs()
usbm_FindDevices()
usbm_InitLCD(ne_DeviceNumber,ne_Sel, ne_Port)
usbm_InitPorts(ne_DeviceNumber)
usbm_InitPortsU401(ne_DeviceNumber)
usbm_InitPortsU421(ne_DeviceNumber)
usbm_InitPortsU451(ne_DeviceNumber)
usbm_InitSPI(ne_DeviceNumber,ne_Specs)
usbm_LCDCmd(ne_DeviceNumber,ne_CommandByte)
usbm_LCDData(ne_DeviceNumber,ne_DataByte)
usbm_NumberOfDevices()
usbm_Read1Wire(ne_DeviceNumber)
usbm_Read1WireBit(ne_DeviceNumber)
usbm_ReadA(ne_DeviceNumber)
usbm_ReadB(ne_DeviceNumber)
usbm_ReadLatches(ne_DeviceNumber)
usbm_Reset1Wire(ne_DeviceNumber,ne_Specs)
usbm_ResetBit(ne_DeviceNumber,ne_PinNumber)
usbm_SetBit(ne_DeviceNumber,ne_PinNumber)
usbm_SetReadTimeout(ne_Time)
usbm_SPIMaster(ne_DeviceNumber,se_DataBytes)
usbm_SPISlaveRead(ne_DeviceNumber)
usbm_SPISlaveWrite(ne_DeviceNumber,se_DataBytes)
usbm_Stepper(ne_DeviceNumber,se_DataSpecs)
usbm_StrobeRead(ne_DeviceNumber,se_ByteData)
usbm_StrobeReads(ne_DeviceNumber,se_ByteData)
usbm_StrobeWrite(ne_DeviceNumber,se_ByteData)
usbm_StrobeWrites(ne_DeviceNumber,se_ByteData)
usbm_Wire2Control(ne_DeviceNumber,ne_Signal)
usbm_Wire2Data(ne_DeviceNumber,se_DataBytes)
usbm_Write1Wire(ne_DeviceNumber,ne_Data)

usbm_Write1WireBit(ne_DeviceNumber,ne_BitValue)
usbm_WriteA(ne_DeviceNumber,ne_ByteValue)
usbm_WriteABit(ne_DeviceNumber,ne_AndingMask, ne_OringMask)
usbm_WriteB(ne_DeviceNumber,ne_ByteValue)
usbm_WriteBBit(ne_DeviceNumber,ne_AndingMask, ne_OringMask)
Variance(a_Data)
varsList({ne_Global})
varType(se_VarName)
varValue(se_VarName)
vType(v_VarName)
WavBusy()
Within(ne_Value,ne_LowerLimit,ne_UpperLimit)
Year(ne_DateTimeValue)

Simulator Commands Listed Alphabetically(18)

Note: See notes at the top of the User Interface Commands section

rCharge {ne_Value}
rCommPort ne_PortNum {,ne_BaudRate {,ne_NumBits {,ne_Parity {,ne_StopBits {,ne_Protocol}}}}}
rFloorColor {ne_Color}
rForward {ne_Pixels}
rGps vn_X,vn_Y
rHeading {ne_Degrees}
rIgnoreCharge {true|false}
rInstError {ne_PercentageLevel}
rInvisible ne_Color1 {,ne_Color2...}
rLocate ne_X,ne_Y{,ne_Heading{,ne_Size{,ne_BorderColor{,ne_InsideColor}}}}
rPen ne_State {,ne_Color}
rRelocate {ne_X{,ne_Y{,ne_Heading}}}
rSenseType {ne_NumSensors}
rSensor ne_SensorNo,ne_Range,vn_Color,vn_Distance,vn_Found
rSensorA ne_Angle,ne_Range,vn_Color,vn_Distance,vn_Found
rSlip {ne_PercentageLevel}
rSpeed {ne_Speed
rTurn {ne_Degrees}

Simulator Functions Listed Alphabetically(16)

Note: See notes at the top of the User Interface Commands section

rBeacon(ne_Color)
rBumper()
rChargeLevel()
rCommand(ne_Command,ne_Data)
rCompass()
rDBumper({ne_Color})
rDFeel({ne_Color})
rFeel()
rGpsX()
rGpsY()
rGround(ne_SensorNo)
rGroundA(ne_Angle)
rLook({ne_Angle})
rPoints()
rRange({ne_Angle})
rSense({ne_Color})