

Registration Information

Order Form

Getting Custom Controls Written

Description

JoyStk is a Visual Basic custom control that sends joystick information to your VB program.

File Name

JOYSTK1.VBX

Object Type

Joystick

Remarks

JoyStk requires that a Windows joystick driver installed. If you do not have a driver, one has been provided in the SAMPLE.ZIP file (look for IBMJOY.ZIP). This driver can be redistributed with your programs.

When using JoyStk, be sure to set the Enabled property to True at run-time. If this is not done, the control won't function. Merely making sure that the property is True at design time is not enough. Also, you should ensure that Enabled is set to false prior to exiting.

Compatibility

VB 2.0 and above

Distribution Note When you develop and distribute an application that uses JoyStk, you should install the file JOYSTK1.VBX into the users Windows SYSTEM directory. JoyStk has version information built into it. So, during installation, you should ensure that you are not overwriting a newer version of JoyStk.

Properties

All of the properties that apply to this control are in this table. Properties that have special meaning for this control or that only apply to this control are marked with an asterisk (*).

<u>Align</u>	<u>Left</u>	<u>Top</u>
*Button1	*Manufacturer	*XMax
*Button2	<u>Name</u>	*XMin
*Button3	<u>*Period</u>	*XPos
*Button4	<u>*PeriodMax</u>	*YMax
*Buttons	*PeriodMin	<u>*YMin</u>
<u>*Devices</u>	<u>*Port</u>	*YPos
<u>Enabled</u>	*Product	<u>*ZMax</u>
<u>HelpContextID</u>	*ProductName	<u>*ZMin</u>
<u>hWnd</u>	<u>Tag</u>	*ZPos
<u>Index</u>	*Threshold	

Button1, Button2, Button3, and Button4 Properties

See Also

Description

Returns the current state of the joystick's buttons.

Usage

[form.][control.]Button1 [form.][control.]Button2 [form.][control.]Button3 [form.][control.]Button4

Remarks

These properties tell you which button(s) were pressed at the last time it was polled (see <u>Period</u>). They are read-only at run-time only. They are only valid after the joystick has been enabled.

Data Type

Integer (boolean)

Events:

<u>ButtonDown</u>

<u>ButtonUp</u>

Properties:

<u>Buttons</u>

<u>Period</u>

Buttons Property

See Also Example

Description

Returns the number of buttons on the joystick.

Usage

[form.][control.]Buttons

Remarks

This property returns the number of buttons on the joystick.

This property is read-only at run-time only. It is only valid after the joystick has been enabled.

Data Type

Events:

<u>ButtonDown</u>

<u>ButtonUp</u>

Properties:

Button1

<u>Devices</u>

Manufacturer

<u>PeriodMax</u>

<u>PeriodMin</u>

<u>Port</u>

<u>Product</u>

<u>ProductName</u>

Devices Property

See Also Example

Description

Returns the number of joysticks supported by the current driver.

Usage

[form.][control.]Devices

Remarks

This property tells you how many joysticks are supported in the system.

This property is read-only at run-time only. It is only valid after the joystick has been enabled.

Data Type

Properties:

<u>Buttons</u>

<u>Manufacturer</u>

<u>PeriodMax</u>

<u>PeriodMin</u>

<u>Port</u>

<u>Product</u>

ProductName

Manufacturer Property See Also Example

Description

Returns the manufacturer's ID of the joystick.

Usage

 $[form.] [control.] {\bf Manufacturer}$

Remarks

This represents the manufacturer of the driver. The values returned are:

Value	Description	
1	Microsoft	
s property	is read-only at run-time only	It is only valid after the joystick has been

This property is read-only at run-time only. It is only valid after the joystick has been enabled.

Data Type

Properties:

<u>Buttons</u>

<u>Devices</u>

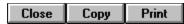
<u>PeriodMax</u>

<u>PeriodMin</u>

<u>Port</u>

<u>Product</u>

ProductName



Information Properties Example

In this example, the program will show the informational properties. To try this example, paste the code into the Declarations section of a form that contains seven labels, and a JoyStk control. Make sure that the <u>Port</u> property of the JoyStk control is set properly. Press F5. You'll see the settings of all of the informational properties.

```
Sub Form_Load ()
    Joystick1.Enabled = True

Label1.Caption = "Buttons: " & Joystick1.Buttons
    Label2.Caption = "Devices: " & Joystick1.Devices
    Label3.Caption = "Manufacturer: " & Joystick1.Manufacturer
    Label4.Caption = "PeriodMin: " & Joystick1.PeriodMin
    Label5.Caption = "PeriodMax: " & Joystick1.PeriodMax
    Label6.Caption = "Product: " & Joystick1.Product
    Label7.Caption = "ProductName: " & Joystick1.ProductName

Joystick1.Enabled = False
End Sub
```

Period Property

See Also Example

Description

Sets the polling interval for the joystick.

Usage

[form.][control.]**Period**[= integer]

Remarks

This property determines the polling rate (in milliseconds) of the joystick.

When changing this property at run-time, the control should be disabled prior to changing it, then re-enabled afterwards.

Data Type

Properties:
PeriodMin

Period Property Example

In this example, the program will show the effects of different settings for the <u>Period</u> property. To try this example, paste the code into the Declarations section of a form that contains a horizontal scroll bar, two labels, and a JoyStk control. Press F5. Play with the horizontal scroll bar, then try the joystick, then the scroll bar again, etc.

```
Sub Form Load ()
    Joystick1.Enabled = True
    HScroll1.Min = Joystick1.PeriodMin
    HScroll1.Max = Joystick1.PeriodMax
    HScroll1.Value = (Joystick1.PeriodMax + Joystick1.PeriodMin) / 2
    Call HScroll1 Change
End Sub
Sub Form Unload (Cancel As Integer)
    Joystick1. Enabled = False
End Sub
Sub HScroll1 Change ()
    Label1.Caption = "Period: " & HScroll1.Value & " milliseconds"
    ' need to disable the joystick while doing this
    Joystick1.Enabled = False
    Joystick1.Period = HScroll1.Value
    Joystick1.Enabled = True
End Sub
Sub HScroll1 Scroll ()
    Call HScroll1 Change
End Sub
Sub Joystick1_Move (X As Integer, Y As Integer, Z As Integer)
    Label2.Caption = "Position: " & X & "," & Y
End Sub
```

PeriodMin and PeriodMax Properties

See Also Example

Description

Returns the minimum and maximum times between polling that this joystick supports.

Usage

[form.][control.]PeriodMax [form.][control.]PeriodMin

Remarks

These properties specify the minimum and maximum times between polling that the joystick driver supports (see <u>Period</u>).

This property is read-only at run-time only. It is only valid after the joystick has been enabled.

Data Type

Properties:

<u>Buttons</u>

<u>Devices</u>

<u>Manufacturer</u>

<u>Port</u>

<u>Product</u>

<u>ProductName</u>

Port Property

Description

Determines which joystick port to use.

Usage

[form.][control.]**Port**[= integer]

Remarks

This property determines which joystick to use. The allowable values are:

Value	Description
1	Joystick 1, 3-D joystick, or 4-button joystick
2	Joystick 2

This property must be set at design-time.

Data Type

Product Property

See Also Example

Description

Returns the product ID fo the joystick driver.

Usage

[form.][control.]Product

Remarks

This represents the product ID of the driver. The values returned are:

Value	Description	
1	Microsoft MIDI Mapper	
2	Microsoft Wave Mapper	
3	Sound Blaster MIDI output port	
4	Sound Blaster MIDI input port	
5	Sound Blaster internal synthesizer	
6	Sound Blaster waveform output port	
7	Sound Blaster waveform input port	
9	AdLib-compatible synthesizer	
10	MPU401 MIDI output port	
11	MPU401 MIDI input port	
12	IBM Game Control Adapter	

This property is read-only at run-time only. It is only valid after the joystick has been enabled.

Data Type

Properties:

<u>Buttons</u>

<u>Devices</u>

<u>Manufacturer</u>

<u>PeriodMax</u>

<u>PeriodMin</u>

<u>Port</u>

ProductName

ProductName Property See Also Example

Description

Returns the product name of the joystick driver.

Usage

[form.] [control.] ProductName

Remarks

This property specifies the product name of the joystick driver.

This property is read-only at run-time only. It is only valid after the joystick has been enabled.

Data Type

String

Properties:

<u>Buttons</u>

<u>Devices</u>

<u>Manufacturer</u>

<u>PeriodMax</u>

<u>PeriodMin</u>

<u>Port</u>

<u>Product</u>

Threshold Property

See Also Example

Description

Determines the amount the joystick must move for an event to be fired.

Usage

[form.][control.]**Threshold**[= integer]

Remarks

This property determines the amount the joystick must move for a Move eventMove event to be fired.

When changing this property at run-time, the control should be disabled prior to changing it, then re-enabled afterwards.

Data Type

Events:

<u>Move</u>

Properties:

<u>Port</u>

Threshold Property Example

In this example, the program will show the effects of different settings for the <u>Threshold</u> property. To try this example, paste the code into the Declarations section of a form that contains a horizontal scroll bar, two labels, and a JoyStk control. Press F5. Play with the horizontal scroll bar, then try the joystick, then the scroll bar again, etc.

```
Sub Form Load ()
    Joystick1.Enabled = True
    HScroll1.Min = 1
    HScroll1.Max = 32000
    HScroll1.Value = 100
    Call HScroll1 Change
End Sub
Sub Form Unload (Cancel As Integer)
    Joystick1.Enabled = False
End Sub
Sub HScroll1 Change ()
    Label1.Caption = "Threshold: " & HScroll1.Value & " units"
    ' need to disable the joystick while doing this
    Joystick1.Enabled = False
    Joystick1.Threshold = HScroll1.Value
    Joystick1. Enabled = True
End Sub
Sub HScroll1 Scroll ()
    Call HScroll1 Change
End Sub
Sub Joystick1_Move (X As Integer, Y As Integer, Z As Integer)
    Label2.Caption = "Position: " & X & "," & Y
End Sub
```

XMin, XMax, YMin, YMax, ZMin, and ZMax Properties

See Also Example

Description

Returns the full range of the joystick's position.

Usage

[form.][control.]XMin [form.][control.]XMax [form.][control.]YMin [form.][control.]YMax [form.][control.]ZMin [form.][control.]ZMax

Remarks

These properties tell you the full range of the joystick's position. They are read-only at run-time only. They are only valid after the joystick has been enabled.

Data Type

Integer (long)

Properties:

<u>Period</u>

<u>Port</u>

<u>XPos</u>

YPos

<u>ZPos</u>

XPos, YPos, and ZPos Properties

See Also Example

Description

Returns the current position of the joystick.

Usage

[form.][control.]**XPos**[form.][control.]**YPos**[form.][control.]**ZPos**

Remarks

These properties tell you where the joystick was at the last time it was polled (see <u>Period</u>). They are read-only at run-time only. They are only valid after the joystick has been enabled.

Data Type

Integer (long)

Events:

<u>Move</u>

Properties:

<u>Period</u>

<u>Port</u>

<u>XMax</u>

<u>XMin</u>

<u>YMax</u>

YMin

<u>ZMax</u>

<u>ZMin</u>

Positional Properties Example

In this example, the program will show the changes in the position of the joystick when run. It will also show the relative amount (as compared to <u>XMin</u>, <u>XMax</u>, <u>YMin</u>, and <u>YMax</u>). To try this example, paste the code into the Declarations section of a form that contains two labesl and a JoyStk control. Press F5. Then, play with the joystick.

```
Sub Form_Load ()
    Joystick1.Enabled = True
End Sub

Sub Form_Unload (Cancel As Integer)
    Joystick1.Enabled = False
End Sub

Sub Joystick1_Move (X As Integer, Y As Integer, Z As Integer)
    Dim XP As Integer
    Dim YP As Integer

Label1.Caption = "Position: " & X & "," & Y

XP = (100 * (X - Joystick1.XMin)) / (Joystick1.XMax - Joystick1.XMin)
    YP = (100 * (Y - Joystick1.YMin)) / (Joystick1.YMax - Joystick1.YMin)
    Label2.Caption = "Relative: X " & XP & "% Y " & YP & "%"
End Sub
```

Events

All of the events that apply to this control are in this table. Events that have special meaning for this control or that only apply to this control are marked with an asterisk (*).

*ButtonDown

*ButtonUp

*Move

ButtonDown Event

See Also Example

Description

Occurs when the user pushes on one or more of the joystick's buttons.

Syntax

Sub ctlname_ButtonDown (Button As Integer)

Remarks

This event only occurs when a button is pressed. The joystick must be enabled for this event to happen.

Button represents the button pressed.

Events:

<u>ButtonUp</u>

Properties:

Button1

Button2

Button3

Button4

<u>Buttons</u>

ButtonUp Event

See Also Example

Description

Occurs when the user releases one or more of the joystick's buttons.

Syntax

Sub ctlname_ButtonUp (Button As Integer)

Remarks

This event only occurs when a button is released. The joystick must be enabled for this event to happen.

Button represents the button pressed.

Events:

<u>ButtonDown</u>

Properties:

Button1

Button2

Button3

Button4

Buttons

Button Event Example

In this example, the labels show which buttons are down and which are up. To try this example, paste the code into the Declarations section of a form that contains two labels and a JoyStk control. Press F5.

```
Sub Form Load ()
    Joystick1.Enabled = True
    Call JoystickCheck
End Sub
Sub Form Unload (Cancel As Integer)
    Joystick1. Enabled = False
End Sub
Sub Joystick1 ButtonDown (Button As Integer)
    Call JoystickCheck
End Sub
Sub Joystick1 ButtonUp (Button As Integer)
    Call JoystickCheck
End Sub
Sub JoystickCheck ()
    Dim Up As String
    Dim Down As String
    If Not Joystick1. Button1 Then Up = Up + "1" Else
             Down = Down + "1"
    If Joystick1.Buttons >= 2 Then If Not Joystick1.Button2 Then Up = Up +
             "2" Else Down = Down + "2"
    If Joystick1.Buttons >= 3 Then If Not Joystick1.Button3 Then Up = Up +
             "3" Else Down = Down + "3"
    If Joystick1.Buttons >= 4 Then If Not Joystick1.Button4 Then Up = Up +
             "4" Else Down = Down + "4"
    Label1.Caption = "Up: " & Up
    Label2.Caption = "Down: " & Down
End Sub
```

Move Event

See Also Example

Description

Occurs when the user moves the joystick.

Syntax

Sub ctlname_Move (X As Integer, Y As Integer, Z As Integer)

Remarks

This event occurs when the joystick's position changes. The change must be larger than the current setting of the $\underline{\text{Threshold}}$ property. The joystick must be enabled for this event to happen.

X, Y, and Z represent the joystick's new position (Z is only valid for 3-D joysticks).

Properties:

<u>Threshold</u>

<u>XPos</u>

<u>YPos</u>

<u>ZPos</u>

Registration Information

Credits

JoyStk was written by Zane Thomas. He can be reached on CompuServe at 72060,3327 or on Internet at 72060.3327@compuserve.com. His mailing address is:

Zane Thomas Post Office Box 300 Indianola, WA 98342

Inquiries, tech support, comments should be sent to James Shields. His address is 71231,2066 on CompuServe, or mabry@halcyon.com on Internet. If you must send something via U.S. Mail, the address is:

Mabry Software Post Office Box 31926 Seattle, WA 98103-1926

Registration

You can register this program by sending \$15 (\$20 for international orders) and your address. You can register JoyStk **and** its C source code by sending \$35 (\$40 for international orders). With your order, you will receive a copy of our manual documenting all of our controls.

For your convenience, an <u>order form</u> has been provided that you can print out directly from this help file.

E-mail Discount

You may take a \$5 discount for e-mail delivery of this package (CompuServe or Internet). If you choose this option, please note: a printed manual is not included. Be sure to include your full mailing address with your order. Sometimes (on the Internet) the package cannot be e-mailed. So, we are forced to send it through the normal mails.

CompuServe members may also take the \$5 e-mail discount by registering this package in the software registration forum (GO SWREG). JoyStks SWREG ID number is 1340. The source code version's ID number is 1341.

Credit Card Orders

We accept VISA and Mastercard. If you e-mail your order to us, please be sure to include your card number, expiration date, complete mailing address, and your phone number (in case we have any questions about your order).

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Mail this Mabry Software

form to: Post Office Box 31926

Seattle, WA 98103-1926

Phone: 206-634-1443 Fax: 206-632-0272

BBS: WinDev BBS 206-634-0783 CompuServe: 71231,2066 Internet: mabry@halcyon.com

Where did yo	u get this	copy of	JoyStk?			_
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Getting Custom Controls Written

If you or your organization would like to have custom controls written, you can contact me at the following:

James Shields Mabry Software Post Office Box 31926 Seattle, WA 98103-1926 Phone: 206-634-1443

Fax: 206-632-0272

BBS: WinDev BBS 206-634-0783

CompuServe: 71231,2066 Internet: mabry@halcyon.com

You can also contact Zane Thomas. He can be reached at:

Zane Thomas Post Office Box 300 Indianola, WA 98342 CompuServe: 72060,3327