

BisonWare LED Digit Control V7.0

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The BisonWare LED digit VCL component allows you to add stunning special effects to your DELPHI applications quickly and simply.

BisonWare LED digit controls can be grouped together to form complex panels of LED's.

Each LED digit control is made up of seven individual segments.

By appropriate setting of the BackColor, GhostColor and SegmentColor properties it is also possible to emulate an LCD display.

Registration details :

To receive the registered control go **SWREG #8010** on Compuserve - price **\$10.00**.

To receive the registered control + full source code, go **SWREG #9888** on Compuserve - price **\$49.95**

Registration is only **\$10**. You will receive the registered component by EMAIL.

Please address all queries to Compuserve ID **100416,3553**.

BisonWare LED Digit Control V7.0 - Custom Properties

The BisonWare LED digit VCL control for Delphi has the following special properties;

<u>AutoSize</u>	Controls automatic scaling of the <u>SegmentWidth</u> property
<u>BackColor</u>	Defines the <u>LED</u> digits background colour
<u>BackwardConnect</u>	Defines the next higher control in a <u>LED</u> digit array
<u>BlankWhenZero</u>	Does the control display blank or zero when the <u>Value</u> is zero
<u>CascadeValue</u>	Controls processing during value assignments
<u>ForwardConnect</u>	Defines the next lower control in a <u>LED</u> digit array
<u>GhostColor</u>	Defines the colour of <u>LED</u> segments in the off state
<u>LEDDisplayType</u>	Defines the type of <u>LED</u> digit in use
<u>MinValue</u>	Defines the minimum possible value of the <u>LED</u> digit
<u>MaxValue</u>	Defines the maximum possible value of the <u>LED</u> digit
<u>SegmentColor</u>	Defines the colour of <u>LED</u> segments in the on state
<u>SegmentWidth</u>	Defines the pixel width of each segment
<u>Value</u>	Defines the current value of the <u>LED</u> digit

AutoSize Property

The AutoSize property controls automatic scaling of the SegmentWidth property to match the physical height and width of the control.

When set to true, the SegmentWidth property will increase as the control is sized in either programmatically or in the design time environment.

The default value of the property is True.

BackColor Property

The BackColor property defines the colour of the background of the individual LED digit.

The default value is clBlack.

To change the value, select a colour from the drop down list or double click the property in the property editor to display the colour selection dialog.

BackwardConnect Property

The BackwardConnect property allows the optional connection of one LED digit component to another LED digit component.

If this property is set to the name of another LED digit component then the Decrement method of the backward connected component is executed when the value of the current LED digit component is decremented below its minimum allowed value.

This property allows the programmer to build fully connected LED panels from individual LED digit components.

BlankWhenZero Property

The BlankWhenZero property defines what is displayed when the value property of the LED digit component is set to zero.

If set to true then nothing is displayed. If set to false then the digit zero is displayed.

The default value is False.

CascadeValue Property

The CascadeValue property allows the setting of the value properties of multiple LED Digit components with a single value property assignment.

To make use of the CascadeValue property, two or more LED digit components should be connected using the ForwardConnect property.

e.g.

If LEDDigit1 is ForwardConnected to LEDDigit2 and
LEDDigit2 is ForwardConnected to LEDDigit3

and the CascadeValue properties of LEDDigit1 and LEDDigit2 are set to True

and the value 123 is assigned to LEDDigit1

then LEDDigit1 will have a value of 3
LEDDigit2 will have a value of 2
LEDDigit3 will have a value of 1

The default value of the property is False.

ForwardConnect Property

The ForwardConnect property allows the optional connection of one LED digit component to another LED digit component.

If this property is set to the name of another LED digit component then the Increment method of the forward connected component is executed when the value of the current LED digit component is Incremented above the maximum allowed value.

This property allows the programmer to build fully connected LED panels from individual LED digit components.

GhostColor Property

The GhostColor property defines the colour of the each segment of and individual LED digit which is in the off state.

When you look at a real LED digit on a television or hi-fi system it is usually possible to make out the segments which are not lit (or in the off state). Setting the GhostColor property allows you to achieve this same effect with your Delphi LED digit controls.

The default value is clGreen.

To change the value, select a colour from the drop down list or double click the property in the property editor to display the colour selection dialog.

LEDDisplayType Property

The LEDDisplayType property defines the type of LED digit which is displayed. The LEDDisplayType property is an enumerated property which allows the following settings :

dtDigit: A normal numeric digit is displayed as defined by the value property.

dtColon: A colon symbol is displayed. The value property is ignored.

dtStop: A single decimal point is displayed. The value property is ignored.

dtPlus: A plus (+) sign is displayed.

dtMinus A minus (-) sign is displayed

MinValue Property

The MinValue property defines the minimum allowable value of the value property of the LED digit component.

Use this property to define specialized LED panels in your programs.

If the decrement method is executed when the value property is already at the minimum value then the following actions occur :

1. The value property is set to the MaxValue.
2. The OnRollBackward event is fired.
3. The decrement method of any Backward Connected control is executed.

The default value is 0.

The minimum value is 0.

The maximum value is 9.

MaxValue Property

The MaxValue property defines the maximum allowable value of the value property of the LED digit component.

Use this property to define specialized LED panels in your programs.

If the Increment method is executed when the value property is already at the maximum value then the following actions occur :

1. The value property is set to the MinValue.
2. The OnRollForward event is fired.
3. The Increment method of any ForwardConnected properties is executed.

The default value is 9.

The minimum value is 0.

The maximum value is 9.

SegmentColor Property

The SegmentColor property defines the colour of the each segment of and individual LED digit which is in the on state.

The default value is ciYellow.

To change the value, select a colour from the drop down list or double click the property in the property editor to display the colour selection dialog.

SegmentWidth Property

The segment width property defines the width of each of the LED segments which comprise an entire LED digit control.

The segment width is specified as a number of pixels.

if the AutoSize property is set to true then the SegmentWidth value is altered automatically as the height and width properties are changed.

The default value is 2.

Value Property

The value property defines the current display value of the LED digit control.

The Value property can be any value between the MinValue and MaxValue properties (inclusive).

If the Value property is set set to any value greater than 9 and the CascadeValue property is set to True then any higher order digits are passed on to the value properties of ForwardConnected properties.

The default value is 0.

L.E.D. stands for Light Emitting Diode. The LED is commonly used in electrical equipment to display numeric and alphanumeric values.

L.C.D stands for Liquid Crystal Display. LCD displays are commonly used in computers and calculators. However the LED display is preferred in common home entertainment equipment.

BisonWare LED Digit Control V7.0 - Custom Methods

The BisonWare LED digit VCL control for Delphi has the following special methods;

Decrement

Decrements the Value property of the LED digit by 1 unit

Increment

Increments the Value property of the LED digit by 1 unit

Decrement Method

The Decrement method provides a programmatic way of decreasing the current value of a LED digit control by 1 unit.

If the Decrement method is executed when the Value property is already at the minimum value then the following actions occur :

1. The value property is set to the MaxValue property.
2. The OnRollBackward event is fired.
3. The Decrement method of any BackwardConnected properties is executed.

Increment Method

The Increment method provides a programmatic way of increasing the current value of a LED digit control by 1 unit.

If the Increment method is executed when the Value property is already at the maximum value then the following actions occur :

1. The value property is set to the MinValue.
2. The OnRollForward event is fired.
3. The Increment method of any ForwardConnected properties is executed.

OnRollForward Event

The OnRollForward event occurs when the value property of a LED digit control has been incremented above the value of the MaxValue property.

BisonWare LED Digit Control V7.0 - Custom Events

The BisonWare LED digit VCL control for Delphi has the following special events;

OnRollBackward

Occurs when the digit value is decremented below MinValue

OnRollForward

Occurs when the digit value is incremented above MaxValue

OnRollBackward Event

The OnRollBackward event occurs when the value property of a LED digit control has been decremented below the value of the MinValue property.

