



## ViSi Genie Magic: Page Transition Effects

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Description

This Application note demonstrates the page transition effect that you can use while changing forms on Diablo16 and Pixxi displays.

Before getting started, the following are required:

Hardware

- Any [4D Systems display module](#) powered by any of the following processors:
  - o Diablo16
  - o Pixxi28/44
- [Programming Adaptor for target display module](#)
- [uSD Card](#)
- [USB Card Reader](#)

Software

- [Workshop4](#)

This application note comes with one (1) ViSi-Genie project:

- PageTransitionEffect.4DGenie

**Note:** Using a non-4D programming interface could damage the processor and void the warranty.

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## Application Overview

This application note shows how to implement a page transition effect using ViSi-Genie Magic. It uses the command **gfx\_Contrast()** to adjust the brightness of the Diablo16 display, and the command **ActivateForm()** to navigate forms.

## Setup Procedure

For instructions on how to launch Workshop 4, how to open a **ViSi** project, and how to change the target display, kindly refer to the section “**Setup Procedure**” of the application note:

- [ViSi-Genie Getting Started - First Project for Diablo16 Display Modules](#)
- [ViSi Genie Getting Started – First Project for Pixxi Display Modules](#)

## Create a New Project

For instructions on how to create a new **ViSi** project, please refer to the section “**Create a New Project**” of the application note:

- [ViSi-Genie Getting Started - First Project for Diablo16 Display Modules](#)
- [ViSi Genie Getting Started – First Project for Pixxi Display Modules](#)

## Design the Project

### Designing Forms

In Form0, *statictext* and *button* is placed in the GUI. When the button is pressed, it will navigate to the next form.

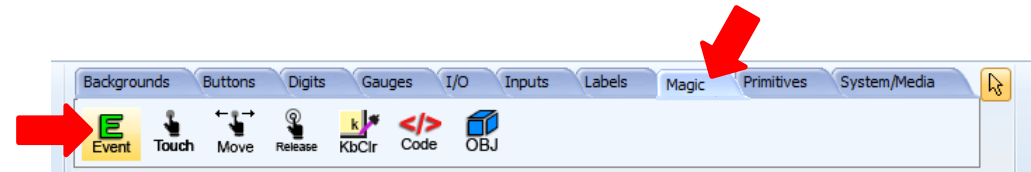


In Form1, *statictext* and *button* is placed in the GUI. When the button is pressed, it will go back to the previous form.



### Magic Event

To add a magic event on the project, navigate to the **Magic** Tab, and select **Event**.



On the *MagicEvent0.inc*, insert the following code:

```
1  func MagicEvent0(var newval)
2
3
4  var c;
5  var private form;
6
7      if (!newval)
8          form:= !form;
9          for(c:=15; c >= 0;c--)
10             gfx_Contrast(c);
11             pause(20);
12         next
13
14         if(form) ActivateForm(1);
15         if(! (form)) ActivateForm(0);
16
17         for(c:=0; c <= 15;c++)
18             gfx_Contrast(c);
19             pause(20);
20         next
21
22     endif
23
24 endfunc
25
```

The Magic Event will trigger whenever the state of the button changes. Initially the variable form is set to zero. If the button is released, it will toggle the value of the form which then navigates to form 1. Similarly, if it is in form 1, when a button is released it will toggle the value of the form resulting to navigating back to form 0.

```
8 | form:= !form;
```

The screen backlight will then dim slowly.

```
9 | for(c:=15; c >= 0;c--)
10 |     gfx_Contrast(c);
11 |     pause(20);
12 | next
```

The form is then changed.

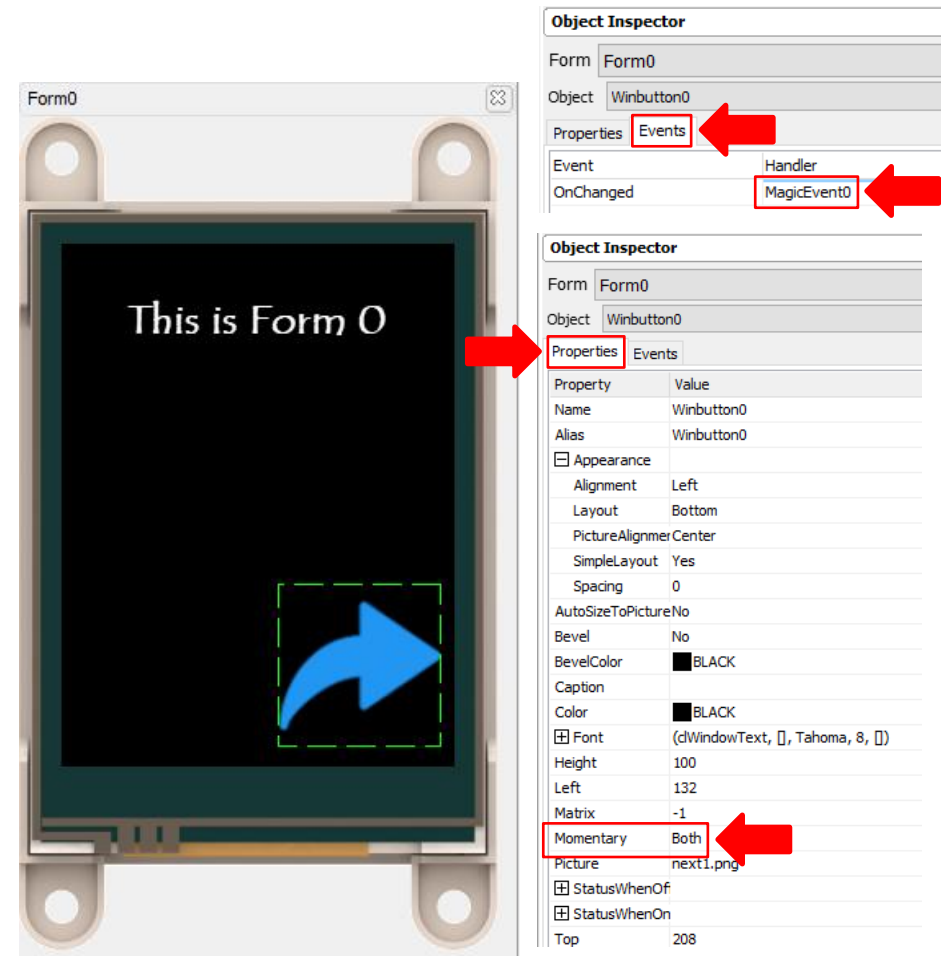
```
14 | if(form) ActivateForm(1);
15 | if(!(form)) ActivateForm(0);
```

The screen will then light up slowly showing the new form.

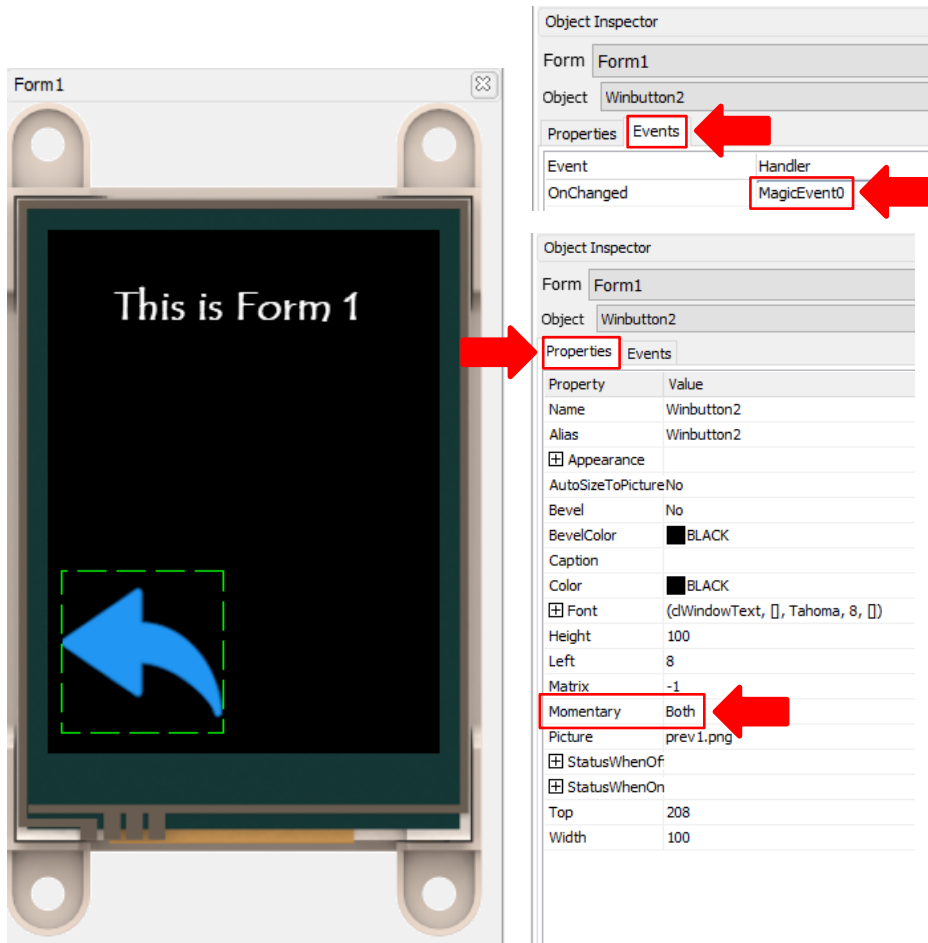
```
17 | for(c:=0; c <= 15;c++)
18 |     gfx_Contrast(c);
19 |     pause(20);
20 | next
```

## Setting Buttons Event

In Form0, select the WinButton0 widget. In *Events* tab, change the OnChanged Event to **MagicEvent0**. In *Properties* tab, set the Momentary to **Both**.



In Form1, select the WinButton1 widget. In *Events* tab, change the OnChanged Event to **MagicEvent0**. In *Properties* tab, set the Momentary to **Both**.



## Build and Upload the Project

For instructions on how to build and upload a ViSi-Genie project to the target display, please refer to the section “**Build and Upload the Project**” of the application note:

- [ViSi-Genie Getting Started - First Project for Diablo16 Display Modules](#)
- [ViSi Genie Getting Started – First Project for Pixxi Display Modules](#)

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