

## SliderDualActing

INHERITS FROM	Slider: Control : View : Responder : Object
REQUIRES HEADER FILES	SliderDualActing.h
DEFINED IN	Acme Gizmos, version 1.0

### CLASS DESCRIPTION

SliderDualActing is a Control that combines a textField and slider as one logical object, knows how to "undo" itself, synchronize its displays, and validate and reset the slider if the user types in values higher than **maxValue** or lower than **minValue**.

### INSTANCE VARIABLES

<i>Inherited from Object</i>	Class	isa;
<i>Inherited from Responder</i>	id	nextResponder;
<i>Inherited from View</i>	NXRect NXRect id id id struct __vFlags	frame; bounds; superview; subviews; window; vFlags;
<i>Inherited from Control</i>	int id struct _conFlags	tag; cell; conFlags;
<i>Inherited from Slider</i>	(none)	
<i>Declared in SliderDualActing</i>	id id SEL id int double	textPal; upTarget; upAction; undoTarget; undoPosition; lastValue;

### METHOD TYPES

Initializing SliderDualActing Factory	+ initialize
Creating and initializing a SliderDualActing	+ newFrame: - setUpTarget:action: - setUpTarget:action:isContinuous - setAltStep: whole: default:

	- setMax:allowHigher:min:allowLower:
Drone TextField Methods	- setFormat:left:right: - isDecimal
Interface Builder Methods	- sendTextAction: - incrementDecrement:
Setting SliderDualActing Values	- setIntValue: - seFloatValue:
Undo Methods	- undo - setUndoTarget:position - setLastThing:
Handling Events	- mouseDown:

## CLASS METHODS

### **newFrame:**

+ **newFrame:**(const NXRect \*)*frameRect*

Creates a new SliderDualActing. Does not create the textfield or the button matrix. These must be created in IB and the textfield connected to the **textPal** outlet. This allows you to set attributes of the textfield in IB, as well as its location, font, and other attributes.

### **initialize**

+inialize

This method initializes the subclass of SliderCell used in implementing SliderDualActing. The default is SliderCellFine. Use this when you subclass SliderCellFine to modify the behaviour of a SliderDualActing.

## INSTANCE METHODS

### **incrementDecrement:**

- **incrementDecrement:** *sender*

The matrix of buttons sends this message to the slider. The slider increments or decrements (depending on the button's tag) by the **altStep** instance variable.

### **isDecimal:**

- **isDecimal:**(BOOL)*flag*

Returns whether the SliderDualActing's **textPal** is formatted to show decimal places.

### **mouseDown:**

- **mouseDown:**(NXEvent \*)*theEvent*

Calls **trackMouse:inRect:ofView:** on the Slider's cell. Overridden to set undo variable before changing the slider and to send the **upAction:** when mouse goes up.

#### **read:**

- **read:**(NXTypedStream \*)*stream*

Reads the SliderDualActing from the typed stream *stream*.

#### **sendTextAction:**

- **sendTextAction:**(id)*sender*

This method is provided for the **textPal** when you connect it to the slider in IB. It sends the **upAction** to the **upTarget**, after validating the entry for exceeding limits.

#### **setAltStep:whole:default:**

- **setAltStep:**(float)*aFloat* **whole:**(BOOL)*flag* **default:**(float)*aFloat2*

Sets the value by which SliderDualActing increments and decrements, whether the field is an integer value, and the default value to which the slider should be reset when command-clicked. It also initializes the slider's value to the default value.

#### **setDefault:**

- **setDefault:**(float)*aFloat*

Sets the default value of the SliderDualActing.

#### **setFloatValue:**

- **setFloatValue:**(float)*aFloat*

Sets both the slider and textfield.

#### **setFormat:left:right:**

- **setFormat:**(BOOL)*auto* **left:**(unsigned short)*aShort* **right:**(unsigned short)*aShort*

Sets the text formatting of the slider's **textPal**. It is a cover method for TextField's

**setFloatingPointFormat:left:right:**, but without peeking inside the object.

NOTE: this may need to be called after **appDidInit:**; if the **textPal** is not initialized when the slider gets initialized, your message will not get sent.

#### **setIntValue:**

- **setIntValue:**(int)*anInt*

Sets both the slider and textfield to *anInt*.

#### **setLastThing:**

- **setLastThing:**(int)*poundDefinedTag*

Caches value of SliderDualActing before it changes. See **Undo**.

#### **setMaxValue:allowHigher:setMin:allowLower:**

- **setMaxValue:**(float)*max* **allowHigher:**(BOOL)*hi* **setMin:**(float)*min*  
**allowLower:**(BOOL)*lo*

Sets the maximum and minimum value of the SliderDualActing. Sets the flags which allow user to exceed or not to exceed these values.

### **setUndoTarget:tag:**

- **setUndoTarget:(id)targ tag:(int)tag**

Sets the **undoTarget** and the pound-defined tag used by the **undoTarget** if it's sent an **undo** message. By default, we handle the undo, and the tag is 0. See **undo**.

### **setUpAction:**

- **setUpAction:(SEL)action**

Sets the **upAction** which gets sent to the **upTarget** on mouseUp, or if **scfFlags.sendContinuously** is YES, continuously.

### **setUpTarget:**

- **setUpTarget:(id)targ**

Sets the **upTarget** which will receive the action **upAction** on mouseUp, or if **scfFlags.sendContinuously** is YES, continuously while the slider is dragged.

### **setUpTarget:action:**

- **setUpTarget:(id)targ action:(SEL)action**

Sets the **upTarget** and **upAction** of the SliderDualActing. **scfFlags.sendContinuously** is NO.

### **setUpTarget:action:isContinuous:**

- **setUpTarget:(id)targ action:(SEL)action isContinuous:(BOOL)flag**

Sets the **upTarget** and **upAction** of the SliderDualActing. **scfFlags.sendContinuously** is set to flag.

### **textPal**

-**textPal**

Returns the SliderDualActing's textField instance, **textPal**.

### **undo**

-**undo**

Restores the SliderDualActing to its previous state. Sends a display method to

the NXApp mainWindow as a default. If the user has set the **undoTarget** variable, the slider will notify this target of an impending change with **setLastThing:last\_id** before changing the value of the slider.

The default is for the undoTarget to be self, in which case we cache the last value and respond to the undo message by restoring **lastValue**'s value.

### **write:**

- **write:(NXTypedStream \*)stream**

Writes the receiving SliderDualActing to the typed stream *stream*.