

BUTTON

The Button is one of the most commonly used fundamental components of AAVA Play. It is not just a click target. It's the pulse of the interface—alive, intentional, and radiant with purpose.

The

`<aava-button>`

component provides a highly customizable clickable element with advanced visual effects including glass morphism, multiple interaction states, and comprehensive theming options. It supports various variants, sizes, icons, and custom styling while maintaining accessibility standards.

How to use

import

{

AavaButtonComponent

}

from

"@aava/play-core"

;

Interactive Matrix

Explore all button combinations with our interactive playground.

`<div class="matrix-demo">`

`<div class="demo-header">`

`<!-- Matrix Table -->`

`<div class="matrix-table-container">`

`<!-- Size Headers -->`

`<div id="size-tabs" class="size-tabs">`

`<aava-tabs`

`[tabs]="sizeTabs"`

```

[activeTabId]="selectedSize"

variant="button"

size="sm"

[showContentPanels]="false"

(tabChange)="onSizeTabChange($event)"

class="size-tabs-container"

></aava-tabs>

</div>

<!-- Matrix Grid -->

<div class="matrix-grid">

<!-- Column Headers -->

<div class="matrix-header">

<div class="mode-header">Mode</div>

<div class="fill-header" *ngFor="let fill of fills">{{ fill }}</div>

</div>

<!-- Matrix Rows -->

<div class="matrix-row" *ngFor="let mode of modes">

<div class="mode-label">{{ mode }}</div>

<div class="button-cell" *ngFor="let fill of fills">

<ng-container

*ngIf="getButtonConfig(mode, fill, selectedSize) as config"

>

<aava-button

*ngIf="config.available"

```

```

[label]="config.label"

[pill]="config.pill"

[outlined]="config.outlined"

[clear]="config.clear"

[size]="getSizeMapping(selectedSize)"

[iconName]="config.iconName"

[iconPosition]="config.iconPosition || 'left'"

variant="primary"

class="matrix-button"

></aava-button>

<div *ngIf="!config.available" class="unavailable">

  ■ Not Available

</div>

</ng-container>

</div>

</div>

</div>

</div>

</div>

</div>

</div>

```

Basic Usage

Basic button implementation with default settings.

```

<aava-button

label="Primary"

```

```

variant="primary"

(userClick)="onButtonClick($event)"

[pill]="true"

>

</aava-button>

<aava-button

label="Primary"

variant="primary"

(userClick)="onButtonClick($event)"

>

</aava-button>

```

Variants

The button component supports 9 semantic variants that control the visual appearance and meaning of the button.

```

<aava-button label="Primary" variant="primary"></aava-button>

<aava-button label="Secondary" variant="secondary"></aava-button>

<aava-button label="Success" variant="success"></aava-button>

<aava-button label="Warning" variant="warning"></aava-button>

<aava-button label="Danger" variant="danger"></aava-button>

<aava-button label="Info" variant="info"></aava-button>

<avaa-button label="Tertiary" variant="tertiary"></avaa-button>

```

Available Variants

- primary- Main call-to-action button (pink/brand color)
- secondary- Outlined style with transparent background
- success- Positive actions (green)

- warning- Cautionary actions (orange)
- danger- Destructive actions (red)
- info- Informational actions (blue)
- tertiary- Text-only action (transparent)

Sizes

Five size options to fit different layout requirements and visual hierarchies.

```
<aava-button label="Extra Small" variant="primary" size="xs"></aava-button>
```

```
<aava-button label="Small" variant="primary" size="sm"></aava-button>
```

```
<aava-button label="Medium" variant="primary" size="md"></aava-button>
```

```
<aava-button label="Large" variant="primary" size="lg"></aava-button>
```

```
<aava-button label="Extra Large" variant="primary" size="xl"></aava-button>
```

Available Sizes

- xs (Extra Small)- Extra compact size for very dense interfaces
- sm (Small)- Compact size for dense interfaces
- md (Medium)- Standard size for most use cases (default)
- lg (Large)- Prominent size for primary actions
- xl (Extra Large)- Extra large size for hero sections and CTAs

Hover Effects

Dynamic hover effects that enhance user interaction feedback.

```
<aava-button
```

```
label="Torch (Recommended)"
```

```
variant="primary"
```

```
hoverEffect="torch"
```

```
[pill]="true"
```

```
>  
  
</aava-button>  
  
<aava-button  
  
label="Glow Effect"  
  
ariant="warning"  
  
hoverEffect="glow"  
  
[pill]="true"
```

```
>  
  
</aava-button>  
  
<aava-button  
  
label="Tint Effect"  
  
variant="success"  
  
hoverEffect="tint"  
  
[pill]="true"
```

```
>  
  
</aava-button>  
  
<aava-button  
  
label="Scale Effect"  
  
variant="danger"  
  
hoverEffect="scale"  
  
[pill]="true"
```

```
>  
  
</aava-button>
```

Available Hover Effects

- torch- Internal semicircular sunrise effect (default)

- glow- Outer glow with elevation
- tint- Color overlay with brightness increase
- scale- Scale transformation with elevation

Pressed Effects

Visual feedback for button press interactions with various animation styles.

```
<aava-button
```

```
label="Ripple (Recommended)"
```

```
variant="primary"
```

```
pressedEffect="ripple"
```

```
[pill]="true"
```

```
>
```

```
</aava-button>
```

```
<aava-button
```

```
label="Inset Effect"
```

```
variant="warning"
```

```
pressedEffect="inset"
```

```
[pill]="true"
```

```
>
```

```
</aava-button>
```

Available Pressed Effects

- ripple- Multi-layered ripple animation (default)
- inset- Inset shadow effect

Icons

Comprehensive icon support with flexible positioning and customization options.


```
<aava-button  
label="Left Icon"  
iconName="star"  
iconPosition="left"  
variant="primary"  
iconColor="#fff"  
>
```

```
</aava-button>
```

```
<aava-button  
label="Right Icon"  
iconName="star"  
iconPosition="right"  
variant="primary"  
iconColor="#fff"  
>
```

```
</aava-button>
```

```
<aava-button  
iconName="star"  
iconPosition="icon-only"  
variant="primary"  
iconColor="#fff"  
>
```

```
</aava-button>
```

Icon Properties

- iconName- Lucide icon name
- iconPosition- Position relative to text:left,right,icon-only
- iconColor- Custom icon color (defaults to currentColor)
- iconSize- Icon size in pixels (default: 20)

States

Interactive states for different user scenarios and feedback.

```
<aava-button label="Default State" variant="primary" size="md" [pill]="true">
```

```
</aava-button>
```

```
<aava-button
```

```
label="Processing State"
```

```
variant="primary"
```

```
[processing]="true"
```

```
size="md"
```

```
[pill]="true"
```

```
iconName="loader"
```

```
iconColor="white"
```

```
iconPosition="left"
```

```
>
```

```
</aava-button>
```

```
<aava-button
```

```
label="Disabled State"
```

```
variant="primary"
```

```
[disabled]="true"
```

```
size="md"
```

```
[pill]="true"
```

```
>
```

```
</aava-button>
```

Available States

- default- Programmatically active state
- processing- Loading/async operation state with pulse animation
- disabled- Non-interactive state

Shapes & Styles

Shape modifiers and style variants for different design requirements.

```
<aava-button
```

```
label="Primary"
```

```
variant="primary"
```

```
[pill]="true"
```

```
[customStyles]="{ 'max-width': '100px' }"
```

```
></aava-button>
```

```
<aava-button
```

```
label="Secondary"
```

```
variant="secondary"
```

```
[pill]="true"
```

```
[customStyles]="{ 'max-width': '100px' }"
```

```
></aava-button>
```

```
<aava-button
```

```
label="Primary"
```

```
variant="primary"
```

```
[customStyles]="{ 'max-width': '100px' }"
```

```
></aava-button>
```

```
<aava-button
```

```
label="Secondary"
```

```
variant="secondary"
```

```
[customStyles]="{ 'max-width': '100px' }"
```

```
></aava-button>
```

Available Shapes

- default- Standard rectangular with border radius
- pill- Fully rounded corners (50px border radius)

Style Variants

- outlined- Transparent background with colored border
- clear- Transparent background with no border, uses variant text colors
- customStyles- Allows to apply inline CSS styles directly to the component.

This property accepts a key-value pair object where the key is the CSS property name and the value is the corresponding CSS value.

Events

The button component emits events for user interactions.

```
<aava-button
```

```
label="Click Handler"
```

```
variant="primary"
```

```
(userClick)="onButtonClick()"
```

```
[customStyles]="{ 'max-width': '200px' }"
```

```
[pill]="true"
```

```
>
```

</aava-button>

Available Events

- userClick- Emitted on button click or keyboard activation (Enter/Space)

Accessibility

The button component follows WAI-ARIA accessibility guidelines:

- Proper keyboard navigation (Enter and Space key support)
- ARIA attributes for screen readers (aria-disabled,aria-pressed)
- Focus management with visible focus indicators
- Semantic button element usage

API Reference

Inputs

[TABLE]

Property	Type	Default	Description
label	string	"	Button text content
variant	ButtonVariant	'default'	Visual variant: 'default' , 'primary' , 'secondary' , 'success' , 'warning' , 'danger' , 'info'
size	ButtonSize	'md'	Button size: 'xs' , 'sm' , 'md' , 'lg' , 'xl'
state	ButtonState	'default'	Interaction state: 'default' , 'hover' , 'active' , 'disabled' , 'processing' , 'focus'
hoverEffect	ButtonHoverEffect	'torch'	Hover effect: 'torch' , 'glow' , 'tint' , 'scale' , 'none'
pressedEffect	ButtonPressedEffect	'ripple'	Pressed effect: 'ripple' , 'inset' , 'solid' , 'none'
processingEffect	ButtonProcessingEffect	'pulse'	Processing effect: 'pulse' , 'none'
focusEffect	ButtonFocusEffect	'border'	Focus effect: 'border' , 'none'
disabledEffect	ButtonDisabledEffect	'dim'	Disabled effect: 'dim' , 'none'
disabled	boolean	false	Whether button is disabled

processing	boolean	false	Whether button is in processing state
pill	boolean	false	Whether to use pill shape
outlined	boolean	false	Whether to use outlined style variant
clear	boolean	false	Whether to use clear style variant (transparent, no border)
width	string	"	Custom width value
height	string	"	Custom height value
gradient	string	undefined	Legacy – use customStyles instead
background	string	undefined	Legacy – use customStyles instead
color	string	undefined	Legacy – use customStyles instead
dropdown	boolean	false	Legacy – use separate dropdown component
glassVariant	ButtonGlassVariant	'glass-10'	Default recommended glass intensity
customStyles	Record<string, string>	{}	CSS custom properties override
iconName	string	"	Lucide icon name
iconColor	string	"	Custom icon color
iconSize	number	20	Icon size in pixels
iconPosition	'left' 'right' 'only' 'left'		Icon position relative to text

[/TABLE]

Outputs

[TABLE]

Event	Type	Description
userClick	EventEmitter<Event>	Emitted when button is clicked or activated via keyboard

[/TABLE]

Design Tokens & Theming

AAVA Play buttons use semantic design tokens for all surfaces, spacing, radius, and motion. While global tokens define the visual language of the system, buttons expose a set of

scoped override tokens

that allow you to fine-tune appearance without breaking consistency.

Use these

only when necessary

—for instance, to adjust a button's vertical padding inside a dense UI or to sharpen the radius for compact layouts.

Available Design Tokens for Button

[TABLE]

Token	Purpose	Default Value
--button-size-xsm-padding	Padding for extra small size buttons	Theme-based
--button-size-sm-padding	Padding for small size buttons	Theme-based
--button-size-md-padding	Padding for medium size buttons	Theme-based
--button-size-lg-padding	Padding for large size buttons	Theme-based
--button-size-xlg-padding	Padding for extra large size buttons	Theme-based
--button-size-xsm-height	Height for extra small size buttons	Theme-based
--button-size-sm-height	Height for small size buttons	Theme-based
--button-size-md-height	Height for medium size buttons	Theme-based
--button-size-lg-height	Height for large size buttons	Theme-based
--button-size-xlg-height	Height for extra large size buttons	Theme-based
--button-border-radius	Border radius for default shape	Theme-based

[/TABLE]

[TABLE]

Token	Purpose	Default Value
--button-font-weight	Font weight for button text	Theme-based
--button-transition	Default transition animation	Theme-based

[/TABLE]

[TABLE]

Token | Purpose | Default Value

--button-icon-margin | Margin around icons | Theme-based

[/TABLE]

Token Override Example

You can define overrides in your theme configuration or component styles:

```
/* Custom button theming */
```

```
.my-compact-buttons
```

```
{
```

```
--button-size-md-padding
```

```
:
```

```
8
```

```
px
```

```
16
```

```
px
```

```
;
```

```
--button-border-radius
```

```
:
```

```
4
```

```
px
```

```
;
```

```
--button-transition
```

```
:
```

```
100
```


ms

ease

;

}

This would make buttons more compact, sharper, and snappier—ideal for dense interfaces or admin tools.

These tokens are opt-in overrides. If not set, the button will inherit global styles via the design system tokens.

Best Practices

Design Guidelines

- Use semantic variants- Choose variants that match the action's intent (primary for main actions, danger for destructive actions)
- Default variant- Use default variant for standard buttons; primary for main CTAs
- Size selection- Use medium as the default size; extra small/extra large for extreme cases only
- Effects system- Default effects work well together; customize only when needed
- Icon usage- Use icon-only for compact interfaces, left/right for labeled actions
- Consistent sizing- Match button sizes to surrounding elements and visual hierarchy

Accessibility

- Always provide meaningful labels- Even for icon-only buttons, use proper ARIA labels
- Keyboard navigation- Ensure all interactive elements are keyboard accessible
- Focus indicators- Maintain clear focus states for navigation
- Screen reader support- Use semantic HTML and proper ARIA attributes
- Color contrast- Ensure sufficient contrast for all variants and states

Performance

- Avoid excessive custom styling- Use built-in variants when possible

- Debounce rapid clicks- Prevent accidental multiple submissions
- Optimize icon loading- Use icon systems efficiently
- Consider bundle size- Import only needed effects and variants

TEXTBOX

The

```
<aava-textbox>
```

component provides a highly sophisticated text input element with glass morphism effects, advanced content projection system, multiple processing animations, and comprehensive Angular forms integration. It supports semantic variants, validation states, and extensive customization options.

How to use

```
import
```

```
{
```

```
  AavaTextboxComponent
```

```
}
```

```
from
```

```
"@aava/play-core"
```

```
;
```

Basic Usage

Simple textbox implementation with label, placeholder, and two-way data binding.

```
<aava-textbox
```

```
  label="Basic Input"
```

```
  placeholder="Enter text here"
```

```
  (change)="onTextboxChange($event)"
```

```
></aava-textbox>
```

Variants

The textbox component supports 6 semantic variants that control visual appearance and focus colors.

```
<aava-textbox
```

```
  label="Default Variant"
```

placeholder="Default variant..."

variant="default"

(change)="onTextboxChange(\$event)"

></aava-textbox>

<aava-textbox

label="Primary Variant"

placeholder="Primary variant..."

variant="primary"

(change)="onTextboxChange(\$event)"

></aava-textbox>

<aava-textbox

label="Success Variant"

placeholder="Success variant..."

variant="success"

(change)="onTextboxChange(\$event)"

></aava-textbox>

<aava-textbox

label="Error Variant"

placeholder="Error variant..."

variant="error"

(change)="onTextboxChange(\$event)"

></aava-textbox>

<aava-textbox

label="Warning Variant"

placeholder="Warning variant..."

```
variant="warning"
```

```
(change)="onTextboxChange($event)"
```

```
></aava-textbox>
```

```
<aava-textbox
```

```
label="Info Variant"
```

```
placeholder="Info variant..."
```

```
variant="info"
```

```
(change)="onTextboxChange($event)"
```

```
></aava-textbox>
```

Available Variants

- default- Standard neutral appearance with brand primary focus
- primary- Primary variant with enhanced brand focus color
- success- Positive states and confirmations (green)
- error- Error states and validation failures (red)
- warning- Warning states and cautions (orange/yellow)
- info- Informational states and tips (blue)

Sizes

Five size options to accommodate different interface densities and layout requirements.

```
<aava-textbox
```

```
label="Extra Small"
```

```
placeholder="Extra Small..."
```

```
size="xs"
```

```
></aava-textbox>
```

```
<aava-textbox label="Small" placeholder="Small..." size="sm"></aava-textbox>
```

```
<aava-textbox label="Medium" placeholder="Medium..." size="md"></aava-textbox>
```

```
<aava-textbox label="Large" placeholder="Large..." size="lg"></aava-textbox>
```

```
<aava-textbox
```

```
label="Extra Large"
```

```
placeholder="Extra Large..."
```

```
size="xl"
```

```
></aava-textbox>
```

Available Sizes

- xs (Extra Small)- Extra small size for very compact interfaces
- sm (Small)- Small size for dense interfaces
- md (Medium)- Medium size for most use cases (default)
- lg (Large)- Large size for prominent inputs
- xl (Extra Large)- Extra large size for emphasis and accessibility

Icons & Affixes

Advanced content projection system supporting icons, prefixes, and suffixes through Angular's content projection.

```
<aava-textbox label="Amount" placeholder="0.00" type="number" (on)>
```

```
<span slot="prefix">$</span>
```

```
<span slot="suffix">USD</span>
```

```
</aava-textbox>
```

```
<aava-textbox
```

```
label="Password"
```

```
[type]="showPassword ? 'text' : 'password'"
```

```
placeholder="Enter password"
```

```
>
```

```
<aava-icon  
slot="icon-end"  
[iconName]="showPassword ? 'eye' : 'eye-off'"  
(click)="togglePasswordVisibility()"  
></aava-icon>  
  
</aava-textbox>  
  
<aava-textbox  
label="With Icon Separator (Start)"  
placeholder="Search..."  
[iconSeparator]="true"  
>  
  
<aava-icon slot="icon-start" iconName="search"></aava-icon>  
  
</aava-textbox>  
  
<aava-textbox  
label="With Icon Separator (End)"  
placeholder="Clear..."  
[iconSeparator]="true"  
>  
  
<aava-icon slot="icon-end" iconName="x"></aava-icon>  
  
</aava-textbox>
```

Content Projection Slots

- icon-start- Icons at the beginning of the input
- icon-end- Icons at the end of the input
- prefix- Text or elements before the input text
- suffix- Text or elements after the input text

Input Masking

Advanced input masking system powered by ngx-mask for formatted input patterns like phone numbers, dates, currency, and credit cards.

```
<!-- Phone Number Masking -->
```

```
<aava-textbox
```

```
label="Phone Number"
```

```
placeholder="(123) 456-7890"
```

```
[mask]="maskPhone"
```

```
>
```

```
</aava-textbox>
```

```
<!-- Currency Masking -->
```

```
<aava-textbox
```

```
label="Currency"
```

```
placeholder="0.00"
```

```
[mask]="maskCurrency"
```

```
[maskThousandSeparator]="thousand"
```

```
[maskDecimalMarker]="decimal"
```

```
>
```

```
<span slot="prefix">$</span>
```

```
</aava-textbox>
```

```
<!-- Date Masking -->
```

```
<aava-textbox label="Date" placeholder="MM/DD/YYYY" [mask]="maskDate">
```

```
</aava-textbox>
```

```
<!-- Custom Pattern Masking -->
```

```
<aava-textbox
```

```
label="Custom Pattern (AA-0000)"
```

```
placeholder="AB-1234"
```

```
[mask]="customMask"
```

```
[maskPatterns]="customPatterns"
```

```
>
```

```
</aava-textbox>
```

```
<aava-textbox
```

```
label="Phone Number (with Built-in Dropdown)"
```

```
[placeholder]="currentCountryPlaceholder"
```

```
[(ngModel)]="countryPhoneValue"
```

```
[mask]="currentCountryMask" [
```

```
prefixDropdown]="true"
```

```
[prefixDropdownOptions]="countryOptions"
```

```
[selectedPrefixOption]="selectedCountry"
```

```
(prefixDropdownSelect)="onCountrySelect($event)"
```

```
>
```

```
</aava-textbox>
```

```
<aava-textbox
```

```
label="Phone Number (with Custom Slot Dropdown)"
```

```
[placeholder]="slotCurrentPlaceholder"
```

```
[(ngModel)]="slotCountryPhoneValue"
```

```
[mask]="slotCurrentMask"
```

```
(clickOutside)="closeSlotDropdown()"
```

```
>
```

```

<!-- Custom dropdown projected into prefix slot -->

<div slot="prefix" class="custom-country-dropdown">

<div class="dropdown-trigger" (click)="toggleSlotDropdown()" tabindex="0" role="button"

[attr.aria-expanded]="slotIsDropdownOpen">

<span class="country-label">{{ slotSelectedCountry.label }}</span>

<svg class="chevron-icon" [class.open]="slotIsDropdownOpen" width="16" height="16" viewBox="0 0
24 24"

fill="none" stroke="currentColor">

<polyline points="6 9 12 15 18 9"></polyline>

</svg>

</div>

</div>

<div slot="dropdown" class="custom-country-dropdown">

<div class="dropdown-menu" *ngIf="slotIsDropdownOpen" role="listbox" tabindex="-1">

<div *ngFor="let option of countryOptions" class="dropdown-item"

[class.selected]="option.value === slotSelectedCountryCode"

(click)="selectSlotCountry(option); $event.stopPropagation()" (keydown.enter)="

selectSlotCountry(option); $event.stopPropagation()

" (keydown.space)="

selectSlotCountry(option); $event.stopPropagation()

" tabindex="0" role="option" [attr.aria-selected]="option.value === slotSelectedCountryCode">

{{ option.label }}

</div>

</div>

</div>

```

</aava-textbox>

Masking Features

- Pattern-Based Input: Define custom input patterns using mask syntax
- Real-time Formatting: Automatic formatting as users type
- Special Character Handling: Control how special characters are processed
- Prefix/Suffix Support: Add currency symbols, units, or other prefixes/suffixes
- Validation Integration: Works seamlessly with existing validation system
- Accessibility: Maintains proper ARIA attributes and keyboard navigation

Common Mask Patterns

- Phone Numbers:(000) 000-0000for US format
- Dates:00/00/0000for MM/DD/YYYY format
- Currency:separator.2with thousand separators and decimal places
- Credit Cards:0000 0000 0000 0000for card number format
- Custom Patterns: Define your own patterns using0,9,A,Splaceholders

States & Validation

Comprehensive validation system with error messages, helper text, and various input states.

<aava-textbox

label="Comments"

placeholder="Share your thoughts..."

helper="Please provide detailed feedback to help us improve our service."

(change)="onTextboxChange(\$event)"

></aava-textbox>

<aava-textbox

label="Email"

placeholder="Enter your email..."

error="Please enter a valid email address."

(change)="onTextboxChange(\$event)"

></aava-textbox>

<aava-textbox

label="Required Field"

placeholder="This field is required..."

[required]="true"

(change)="onTextboxChange(\$event)"

></aava-textbox>

Available States

- Normal- Default input state
- Focused- Active input with enhanced border and shadow
- Disabled- Non-interactive state with dimmed appearance
- Readonly- Display-only state with modified styling
- Error- Validation error state with red styling and error message
- Required- Indicates mandatory fields with asterisk

Validation Features

Error Handling:

- Error messages- Display validation errors with icon
- ARIA compliance- Properaria-invalidandaria-describedbyattributes
- Visual feedback- Error variant styling with red colors
- Icon integration- Alert icons automatically shown with errors

Helper Text:

- Guidance messages- Helpful instructions below input

- Icon support- Info icons automatically shown with helper text
- Conditional display- Helper text hidden when errors are present
- Accessibility- Proper ARIA relationships

Required Fields:

- Visual indicators- Asterisk (*) displayed for required fields
- Label integration- Required indicator integrated with label
- Form validation- Works with Angular form validation

Processing Effects

Advanced processing states with multiple animation options for loading and async operations.

```
<aava-textbox
```

```
[(ngModel)]="processingValue"
```

```
label="Processing State"
```

```
placeholder="Processing..."
```

```
[processing]="true"
```

```
(change)="onProcessingChange($event)"
```

```
></aava-textbox>
```

```
<aava-textbox
```

```
[(ngModel)]="shimmerValue"
```

```
label="Shimmer Effect"
```

```
placeholder="Validating..."
```

```
[processing]="true"
```

```
processingEffect="shimmer"
```

```
(change)="onShimmerChange($event)"
```

```
></aava-textbox>
```

```
<aava-textbox  
[(ngModel)]="gradientValue"  
label="Gradient Border"  
placeholder="Submitting..."  
[processing]="true"  
[processingGradientBorder]="true"  
(change)="onGradientChange($event)"  
></aava-textbox>
```

Available Processing Effects

- border-pulse- Pulsing border animation (default)
- shimmer- Text shimmer effect within input
- gradient-border- Animated multi-color border gradient

Effects System

Modern effects system following Text Input Specifications for consistent visual behavior and accessibility.

Hover Effects

- tint- Subtle color tinting on hover (recommended)
- glow- Enhanced glow effect on hover (for interactive elements)

Processing States

- Default Processing- Border pulse animation with customizable colors
- Shimmer Effect- Text shimmer animation as alternative to border pulse
- Gradient Border- Animated multi-color gradient border for processing state
- Custom Colors- Configurable gradient colors for brand consistency

Accessibility Features

- High Contrast Support- Effects respect high contrast mode settings

- Reduced Motion- Animations respect user's motion preferences
- Focus Indicators- Clear focus states maintained with all effects
- Screen Reader Support- Proper ARIA attributes for all interactive states

API Reference

Inputs

[TABLE]

Property	Type	Default	Description
label	string	"	Visible label text above input
placeholder	string	"	Placeholder text shown when empty
variant	TextboxVariant	'default'	Visual variant: 'default' , 'primary' , 'success' , 'error' , 'warning' , 'info'
size	TextboxSize	'md'	Input size: 'xs' , 'sm' , 'md' , 'lg' , 'xl'
disabled	boolean	false	Whether input is disabled
readonly	boolean	false	Whether input is read-only
error	string	"	Error message to display
helper	string	"	Helper text to display
required	boolean	false	Whether input is required
fullWidth	boolean	false	Whether input takes full container width
type	string	'text'	HTML input type
maxlength	number	"	Maximum character length
minlength	number	"	Minimum character length
autocomplete	string	"	HTML autocomplete attribute
id	string	"	Custom element ID
name	string	"	HTML name attribute
icon	string	"	Icon name to display

iconPosition	'start' 'end' 'start'	Position of the icon relative to input
iconSeparator	boolean false	Whether to show separator between icon and input
iconSpacing	'compact' 'normal' 'relaxed' 'normal'	Icon spacing variant
inputKind	'text' 'phone' 'currency' 'password' 'text'	Type of input for specialized behavior
inputKindLabel	string ""	Label for specialized input types (e.g., country code)
phone	boolean false	Enable phone input functionality
labelPosition	'start' 'end' 'start'	Position of country prefix label for phone inputs

Masking Properties

Property	Type	Default	Description
mask	string null	null	Input mask pattern (e.g., "(000) 000-0000" for phone)
maskPrefix	string ""		Prefix to add before masked value (e.g., "\$" for currency)
maskSuffix	string ""		Suffix to add after masked value (e.g., "%" for percentage)
maskDropSpecialCharacters	boolean string[]	true	Whether to drop special characters from value
maskShowMaskTyped	boolean	false	Show mask characters as user types
maskThousandSeparator	string ""		Thousand separator character (e.g., "," for numbers)
maskDecimalMarker	'.' ',' ['.', ',']	'.'	Decimal marker character
maskPatterns	Record<string, object>	{}	Custom mask patterns for special characters
maskValidation	boolean	false	Enable mask validation
maskAllowNegativeNumbers	boolean	false	Allow negative numbers in numeric masks
maskLeadZeroDateTime	boolean	false	Show leading zeros in date/time masks

Effects System Properties

[TABLE]

Property | Type | Default | Description

hoverEffect | 'tint' | 'glow' | '' | Hover effect: Tint (recommended) or Glow

pressedEffect | 'solid' | 'solid' | Pressed effect: Solid (recommended and only allowed)

processing | boolean | false | Processing state - triggers border pulse by default

processingEffect | 'shimmer' | '' | Alternative processing effect: Text shimmer animation

processingGradientBorder | boolean | false | Show animated gradient border for processing state

processingGradientColors | string[] | ['#e91e63', '#fee140', '#ff9800', '#047857', '#ff9800', '#fee140', '#e91e63'] | Colors for processing gradient border

decorativeEffect | 'glowBox' | 'borderFlow' | 'attention' | 'wave' | '' | Ambient decorative effects for future use

disabledState | 'grey' | 'grey' | Disabled state appearance: Grey (recommended and only allowed)

customStyles | Record<string, string> | '' | CSS custom properties override for advanced theming

[/TABLE]

Outputs

[TABLE]

Event | Type | Description

iconStartClick | EventEmitter<Event> | Emitted when the start icon is clicked

iconEndClick | EventEmitter<Event> | Emitted when the end icon is clicked

clickOutSide | EventEmitter<boolean> | Emitted when a click occurs outside the input

change | EventEmitter<Event> | Emitted when the input value changes

blur | EventEmitter<Event> | Emitted when the input loses focus

focus | EventEmitter<Event> | Emitted when the input gains focus

input | EventEmitter<Event> | Emitted on every input event

prefixSelect | EventEmitter<{ label: string; value: string; }> | Emitted when a prefix option is selected

suffixSelect | EventEmitter<{ label: string; value: string; }> | Emitted when a suffix option is selected

[/TABLE]

Properties

[TABLE]

Property | Type | Description

value | string | Current input value

isFocused | boolean | Whether input currently has focus

hasError | boolean | Whether input has error state

hasHelper | boolean | Whether input has helper text

[/TABLE]

Methods

[TABLE]

Method | Parameters | Return Type | Description

setValue() | value: string | void | Set input value programmatically

writeValue() | value: string | void | Set input value (ControlValueAccessor)

registerOnChange() | fn: (value: string) => void | void | Register change callback

registerOnTouched() | fn: () => void | void | Register touched callback

setDisabledState() | isDisabled: boolean | void | Set disabled state

[/TABLE]

Content Projection Slots

[TABLE]

Slot | Description

icon-start | Icons displayed at the start of the input

icon-end | Icons displayed at the end of the input

prefix | Content displayed before the input text

suffix | Content displayed after the input text

[/TABLE]

CSS Custom Properties

[TABLE]

Property	Description
--textbox-glass-default-background	Background color with glass effect
--textbox-glass-default-blur	Backdrop blur amount for glass effect
--textbox-glass-default-border	Border color for default state
--textbox-glass-default-shadow	Box shadow for glass effect
--textbox-border-radius	Border radius of the input container
--textbox-transition	Transition animation duration
--textbox-input-font	Font properties for input text
--textbox-input-color	Text color for input
--textbox-input-padding	Padding inside the input
--textbox-input-min-height	Minimum height of the input
--textbox-label-font	Font properties for label
--textbox-label-color	Text color for label
--textbox-label-weight	Font weight for label
--textbox-placeholder-color	Color for placeholder text
--textbox-error-color	Color for error messages and state
--textbox-helper-color	Color for helper text
--textbox-icon-color	Color for icons in normal state
--textbox-icon-focus-color	Color for icons when focused
--textbox-variant-default	Colors for default variant
--textbox-variant-primary	Colors for primary variant

--textbox-variant-success | Colors for success variant

--textbox-variant-error | Colors for error variant

--textbox-variant-warning | Colors for warning variant

--textbox-variant-info | Colors for info variant

--textbox-size-xs-padding | Padding for extra small size

--textbox-size-sm-padding | Padding for small size

--textbox-size-md-padding | Padding for medium size

--textbox-size-lg-padding | Padding for large size

--textbox-size-xl-padding | Padding for extra large size

--textbox-size-xs-height | Height for extra small size

--textbox-size-sm-height | Height for small size

--textbox-size-md-height | Height for medium size

--textbox-size-lg-height | Height for large size

--textbox-size-xl-height | Height for extra large size

[/TABLE]

Best Practices

Design Guidelines

- Choose appropriate variants- Use semantic variants that match the context
- Provide clear labels- Always include descriptive labels for accessibility
- Use helper text wisely- Provide guidance without cluttering the interface
- Handle errors gracefully- Show clear, actionable error messages
- Optimize for touch- Ensure adequate touch targets for mobile users
- Consider glass intensity- Use glass-10 for most cases, glass-50 for emphasis
- Select appropriate sizes- Use xs for very compact layouts, xl for emphasis and accessibility

- Implement masking thoughtfully- Choose mask patterns that match user expectations and data format
- Balance effects and performance- Use effects system for enhanced UX while maintaining performance

Accessibility

- Proper labeling- Label elements correctly associated with inputs
- ARIA attributes- Use aria-invalid, aria-describedby, aria-required
- Error announcement- Error messages announced to screen readers
- Keyboard navigation- Full keyboard support for all interactions
- Focus management- Visible focus indicators and proper focus order
- Icon accessibility- Icons properly labeled and keyboard accessible

Performance

- Validate appropriately- Use client and server validation together
- Debounce input events- For real-time validation and API calls
- Optimize re-renders- Use OnPush change detection strategy
- Efficient icon handling- Load icons efficiently and cache appropriately

Form Integration

- Test with forms- Ensure proper integration with your form handling
- Handle validation- Implement comprehensive validation strategies
- Consider reset behavior- Define clear reset and initial state behavior
- Support reactive forms- Proper FormControlValueAccessor implementation

Masking Best Practices

- Choose intuitive patterns- Use mask patterns that users expect (e.g., phone formats)
- Handle edge cases- Consider what happens when users paste or clear masked input
- Provide clear examples- Use placeholders that show the expected format
- Test accessibility- Ensure screen readers can properly announce masked input

- Consider internationalization- Use appropriate separators and formats for different locales
- Balance flexibility- Allow users to edit parts of masked input without losing context

