# box shadow and text shadow in css (+, -)

`box-shadow` and `text-shadow` are two CSS properties used to add shadow effects around elements and text. Both accept positive and negative values for their offset parameters, which determine the direction and positioning of the shadow.

## box-shadow

**box-shadow syntax**:

```
box-shadow: [horizontal offset] [vertical offset] [blur radius] [spread radius] [color] [
```

- **Horizontal offset (x):**
    - Positive value (+) → shadow moves **right**.
    - Negative value (-) → shadow moves **left** [1] [2] [3] [4] .
- **Vertical offset (y):**
    - Positive value (+) → shadow moves **down**.
    - Negative value (-) → shadow moves **up** [1] [2] [3] [4] .
- **Blur radius:**
    - Positive only; increases blur with higher values [5] .
    - `0` for a sharp edge.
- **Spread radius:**
    - Positive value (+) → shadow **expands** outward.
    - Negative value (-) → shadow **contracts** inward [1] [2] [5] .
    - Default is `0`.
- **Color:** Any CSS color value (e.g., `rgba(0,0,0,0.2)`). If omitted, defaults to current text color [1] [2] [5] .
- **Inset:**
    - When used, the shadow appears **inside** the element [2] [3] [5] .

**Examples:**

```
/* Shadow right and down, 5px blur, spread by 2px */
box-shadow: 8px 8px 5px 2px rgba(0,0,0,0.3);

/* Shadow left and up, strong blur */
box-shadow: -10px -10px 20px #888;
```

```
/* Inner shadow, up, blurred, contracted */
box-shadow: inset 0px -4px 8px -2px rgba(0,0,0,0.5);
```

**text-shadow**

**text-shadow syntax**:

```
text-shadow: [horizontal offset] [vertical offset] [blur radius] [color];
```

- **Horizontal offset (x):**
    - Positive (+) → shadow moves right.
    - Negative (-) → left.
- **Vertical offset (y):**
    - Positive (+) → shadow moves down.
    - Negative (-) → up.
- **Blur radius:**
    - Optional, positive values; increases blur with higher values.
- **Color:** Any CSS color. If omitted, defaults to current color (black in most browsers).

**Examples:**

```
/* Shadow right and down, blurred */
text-shadow: 2px 2px 4px #888;

/* Shadow left and up, no blur */
text-shadow: -3px -3px 0 #f00;
```

## Plus (+) and Minus (−) in Shadow Offsets

| Parameter | Positive Value (+) | Negative Value (−) |
|---|---|---|
| Horizontal offset | Shadow right | Shadow left |
| Vertical offset | Shadow down | Shadow up |
| Spread (box-shadow) | Expands shadow | Contracts shadow |

## Additional Notes

- Multiple shadows can be added to both properties by separating shadow definitions with commas [3] [4] [5].
- Blur and spread support **positive values**; spread can be negative, blur cannot [5].
- The same logic applies to both shadows for direction.

**In summary:**

- Use **positive and negative values** for offsets in both `box-shadow` and `text-shadow` to position shadows in any direction [1] [2] [3] [4].

- For **spread** (box-shadow only), positive expands the shadow, negative contracts it [1] [5].

- Blur only supports positive numbers.

⁂

1. https://css-tricks.com/almanac/properties/b/box-shadow/
2. https://www.w3schools.com/css/css3_shadows_box.asp
3. https://developer.mozilla.org/en-US/docs/Web/CSS/box-shadow
4. https://www.geeksforgeeks.org/css/css-box-shadow-property/
5. https://refine.dev/blog/box-shadow-css/