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st.slider



Streamlit Version ▼

Display a slider widget.

This supports int, float, date, time, and datetime types.

This also allows you to render a range slider by passing a two-element tuple or list as the `value`.

The difference between `st.slider` and `st.select_slider` is that `slider` only accepts numerical or date/time data and takes a range as input, while `select_slider` accepts any datatype and takes an iterable set of options.

Note

Integer values exceeding $\pm (2^{53} - 1)$ cannot be accurately stored or returned by the widget due to serialization constraints between the Python server and JavaScript client. You must handle such numbers as floats, leading to a loss in precision.

Function signature[\[source\]](#)

`st.slider(label, min_value=None, max_value=None, value=None, step=None, format=None, key=None, help=None, on_change=None, args=None, kwargs=None, *, disabled=False, label_visibility="visible")`

Parameters

label (str)	A short label explaining to the user what this slider is for. The label can optionally contain GitHub-flavored Markdown of the following types: Bold, Italics, Strikethroughs, Inline Code, Links, and Images. Images display like icons, with a max height equal to the font height.
-------------	---

Returns

(int/float/date/time/datetime or tuple of int/float/date/time/datetime)	The current value of the slider widget. The return type will match the data type of the value parameter.
---	--

Function signature[\[source\]](#)

```
st.slider(label, min_value=None, max_value=None, value=None, step=None, format=None, key=None, help=None, on_change=None, args=None, kwargs=None, *, disabled=False, label_visibility="visible")
```

Unsupported Markdown elements are unwrapped so only their children (text contents) render. Display unsupported elements as literal characters by backslash-escaping them. E.g., "1\\. Not an ordered list".

See the body parameter of [st.markdown](#) for additional, supported Markdown directives.

For accessibility reasons, you should never set an empty label, but you can hide it with `label_visibility` if needed. In the future, we may disallow empty labels by raising an exception.

<code>min_value</code> (a supported type or None)	The minimum permitted value. Defaults to 0 if the value is an int, 0.0 if a float, value - <code>timedelta(days=14)</code> if a date/datetime, <code>time.min</code> if a time
<code>max_value</code> (a supported type or None)	The maximum permitted value. Defaults to 100 if the value is an int, 1.0 if a float, value + <code>timedelta(days=14)</code> if a date/datetime, <code>time.max</code> if a time
<code>value</code> (a supported type or a tuple/list of supported types or None)	The value of the slider when it first renders. If a tuple/list of two values is passed here, then a range slider with those lower and upper bounds is rendered. For example, if set to <code>(1, 10)</code> the slider will have a selectable range between 1 and 10. Defaults to <code>min_value</code> .
<code>step</code> (int, float, timedelta, or None)	The stepping interval. Defaults to 1 if the value is an int, 0.01 if a float, <code>timedelta(days=1)</code> if a date/datetime, <code>timedelta(minutes=15)</code> if a time (or if <code>max_value - min_value < 1 day</code>)
<code>format</code> (str or None)	A printf-style format string controlling how the interface should display numbers. This does not impact the return value. Formatter for int/float supports: <code>%d %e %f %g %i</code> Formatter for date/time/datetime uses Moment.js notation: https://momentjs.com/docs/#/displaying/format/
<code>key</code> (str or int)	An optional string or integer to use as the unique key for the widget. If this is omitted, a key will be generated for the widget based on its content. No two widgets may have the same key.
<code>help</code> (str)	An optional tooltip that gets displayed next to the widget label. Streamlit only displays the tooltip when <code>label_visibility="visible"</code> .
<code>on_change</code> (callable)	An optional callback invoked when this slider's value changes.
Returns	
(int/float/date/time/datetime or tuple of int/float/date/time/datetime)	The current value of the slider widget. The return type will match the data type of the value parameter.

```
st.slider(label, min_value=None, max_value=None, value=None, step=None, format=None, key=None, help=None,
on_change=None, args=None, kwargs=None, *, disabled=False, label_visibility="visible")
```

args (tuple)	An optional tuple of args to pass to the callback.
kwargs (dict)	An optional dict of kwargs to pass to the callback.
disabled (bool)	An optional boolean that disables the slider if set to <code>True</code> . The default is <code>False</code> .
label_visibility ("visible", "hidden", or "collapsed")	The visibility of the label. The default is "visible". If this is "hidden", Streamlit displays an empty spacer instead of the label, which can help keep the widget aligned with other widgets. If this is "collapsed", Streamlit displays no label or spacer.
Returns	
(int/float/date/time/datetime or tuple of int/float/date/time/datetime)	The current value of the slider widget. The return type will match the data type of the value parameter.

Examples

```
import streamlit as st

age = st.slider("How old are you?", 0, 130, 25)
st.write("I'm ", age, "years old")
```

And here's an example of a range slider:

```
import streamlit as st

values = st.slider("Select a range of values", 0.0, 100.0, (25.0, 75.0))
st.write("Values:", values)
```

This is a range time slider:

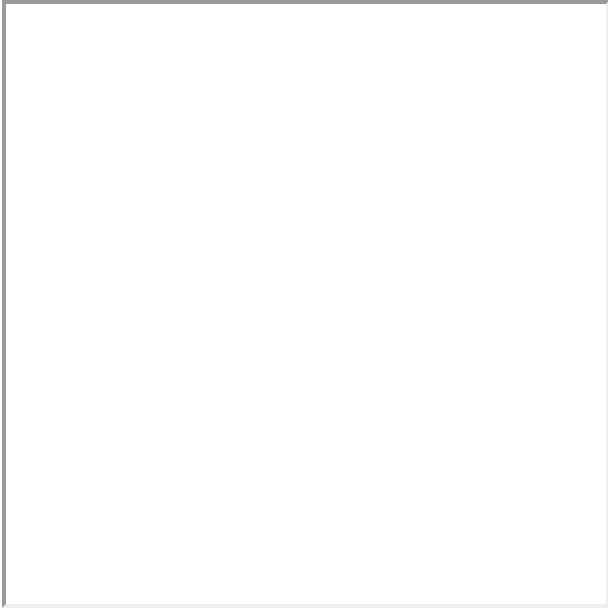
```
import streamlit as st
from datetime import time


appointment = st.slider(
    "Schedule your appointment:", value=(time(11, 30), time(12, 45))
)
st.write("You're scheduled for:", appointment)
```

Finally, a datetime slider:

```
import streamlit as st
from datetime import datetime

start_time = st.slider(
    "When do you start?",
    value=datetime(2020, 1, 1, 9, 30),
    format="MM/DD/YY - hh:mm",
)
st.write("Start time:", start_time)
```

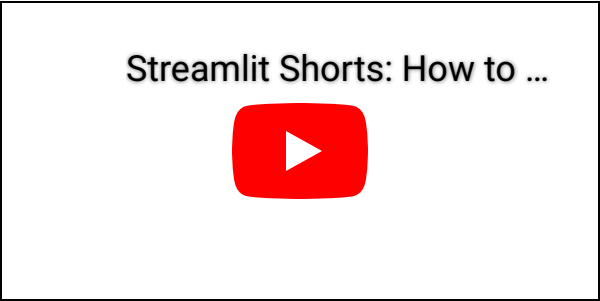


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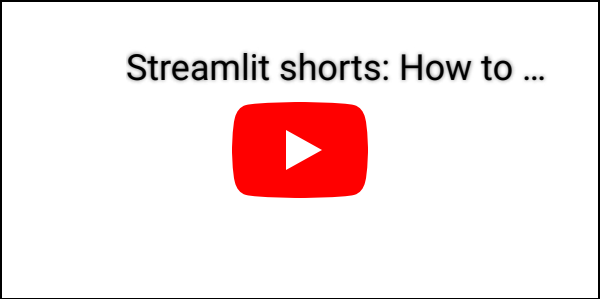
Featured videos



Check out our video on how to use one of Streamlit's core functions, the slider!



In the video below, we'll take it a step further and make a double-ended slider.



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forum

Still have questions?

Our [forums](#) are full of helpful information and Streamlit experts.

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