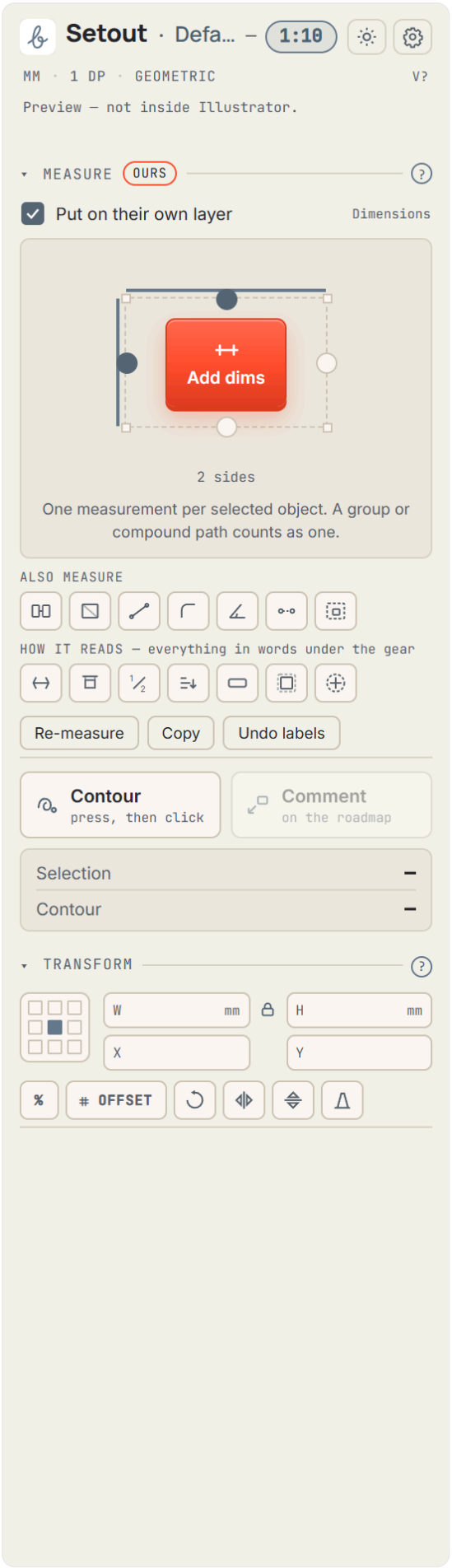
SETOUT · HELP

How to use Setout.

Select something, pick the sides, press the button. The sizes go on the drawing. Setout measures artwork and writes the sizes onto it, reading them at the scale you are drawing at. It also gives you the length round the outside of a shape, which is the number a neon or LED quote needs. Illustrator's own Transform, Align and Pathfinder sit in the same panel, so those three windows can stay closed.

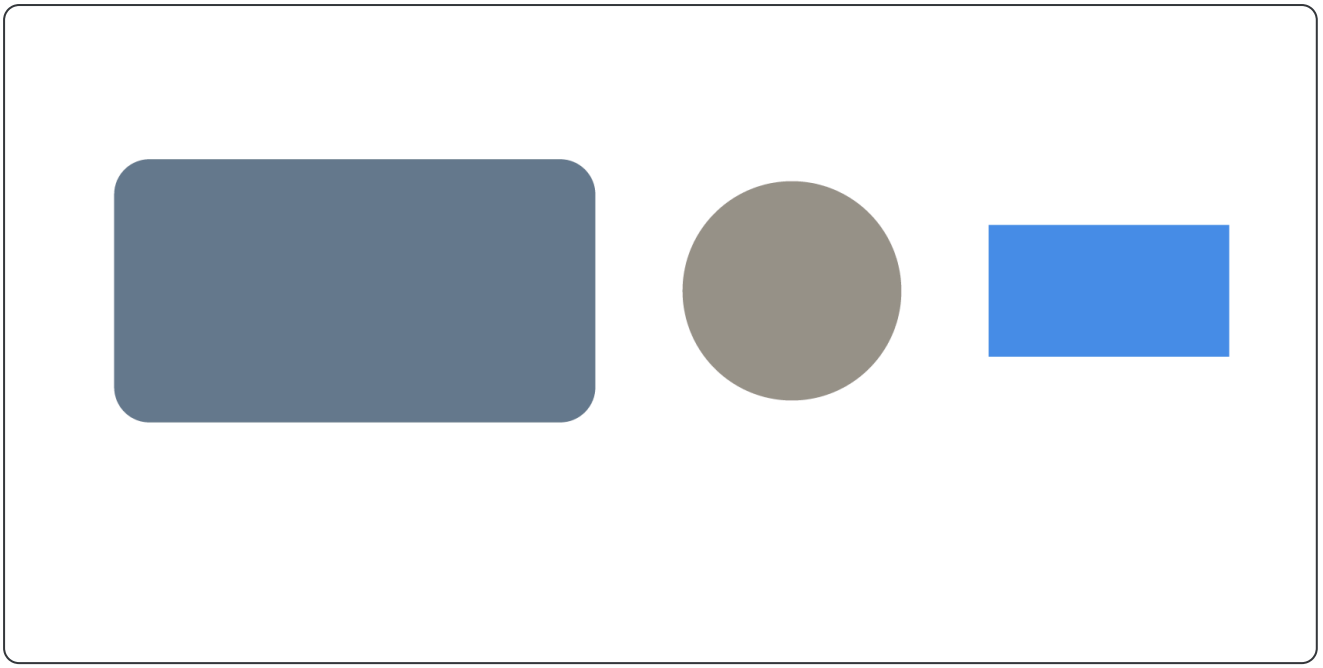
Open it from Window, then Extensions, then Setout.

Prefer paper? Download this guide as a PDF.

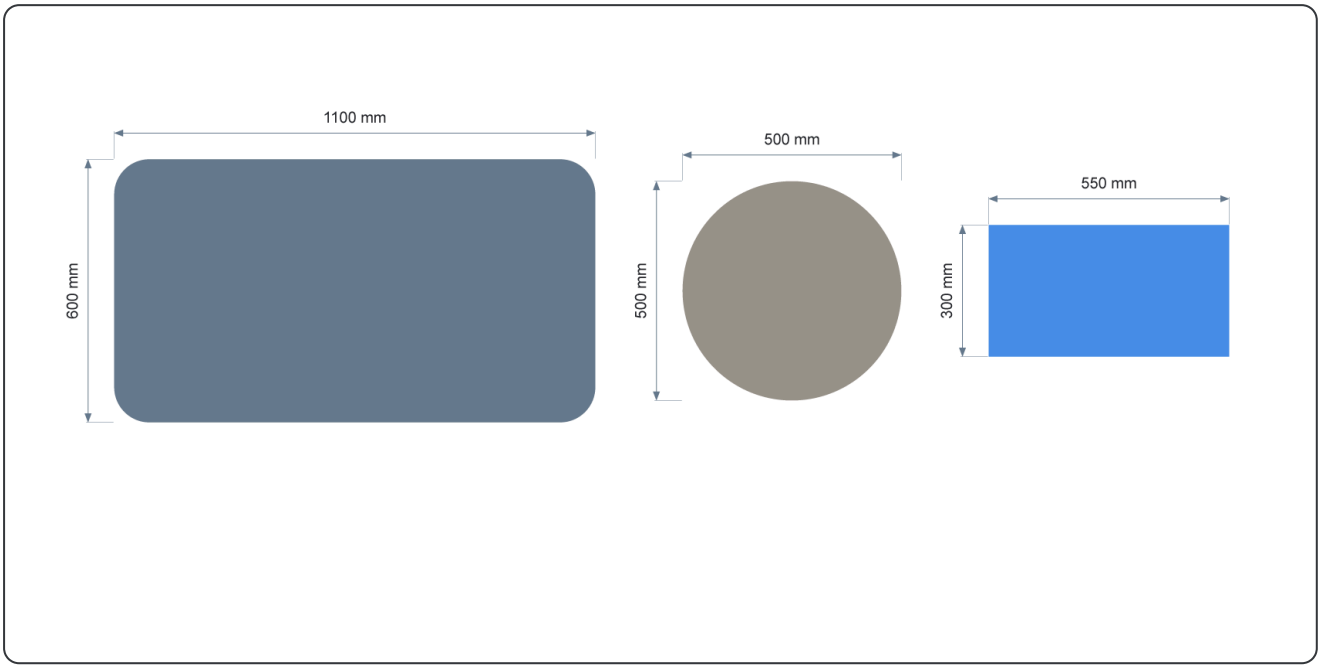


The panel, top to bottom. Press a number to jump to its section, or go straight to every

button, in one place.



Three parts, drawn at 1:10.



One press of Add dims: top and left sizes on every part, labelled at the real size.
The artwork is untouched.

Your first measurement

Select something, pick the sides, press the button. The sizes go on the drawing.

01 **Select your artwork** in Illustrator.

02 **Pick the sides you want a size on.** Press the small circles on the box in the middle of the panel: top, bottom, left, right. Hover one and it names itself.

03 **Press Add dims.** The sizes land on the drawing.

That is the whole job. Everything else in the panel changes how those numbers look, or measures something other than width and height.

One measurement per selected object. A group counts as one object. A compound path counts as one object, so a letter P gets one measurement and nothing inside its counter.

Every button, in one place

The icon on this page is the same drawing as the icon in the panel. Hover a button in the panel and it says the same words.

40 buttons, grouped the way the panel groups them. Each one's tooltip, word for word.

Also measure

	Gaps	Gaps between the selected objects
	Area	Area of each object
	Segment length	Segment length — every straight and curved segment
	Corner radius	Corner radius of circular arcs
	Angle	Angle at every corner between straight segments
	Centre to centre	Midpoint to midpoint — centre to centre of neighbours
	To artboard	Distance to the artboard's left and top edges

How it reads

↔	Line style	Line style
⊼	Where the line stops	Where the line stops
½	Second metric	Second metric
≡↓	Extra info	Extra info — a summary line under the selection: count, total contour, largest, smallest
▭	Label background	Label background — a solid block behind the number
⊡	Bounds	Bounds — geometric measures the path, visual includes the stroke
⊕	Decimals	Decimals — how many places the number shows

Transform

%	Resize by percentage	Resize by percentage
# Offset	Offset path	Offset path — inside or outside, at your scale
↻	Rotate 90 clockwise	Rotate 90° clockwise
⇔	Flip horizontal	Flip horizontal
⇕	Flip vertical	Flip vertical
⧍	Shear	Shear by an angle

Align

	Align left	Align left
	Align horizontal centres	Align horizontal centres
	Align right	Align right
	Align top	Align top
	Align vertical centres	Align vertical centres
	Align bottom	Align bottom
	Distribute horizontally	Distribute horizontally — equal gaps, three or more objects
	Distribute vertically	Distribute vertically — equal gaps, three or more objects
	Set the gap	Set the gap — type the real spacing

Shape modes

	Unite	Unite
	Minus front	Minus front — the knockout
	Intersect	Intersect
	Exclude	Exclude

Pathfinders

	Divide	Divide
	Trim	Trim
	Merge	Merge
	Crop	Crop
	Outline	Outline
	Minus back	Minus back
	Compound path	Make / release compound path

The working scale

The scale changes what a measurement says, never what the artwork is.

Tap the scale pill in the top bar: chips for the common ratios, or type any other. The line underneath spells out what the current one means.

Most sign artwork is drawn small. The top bar shows the scale you are working at, 1:10 by default.

> **At 1:10, a 100 mm object on the artboard is labelled 1000 mm.** The object is not touched. The label reports the real sign.
>
> **What the scale applies to:** every dimension label, the contour length, area, the Copy table and the material price.
>
> **What it never applies to:** Transform, Offset and the align gap. Those move artwork, so they work in document units, exactly as Illustrator's own panels do. Type 100 into the width box and the artwork becomes 100 mm on the artboard, whatever the scale says.

That split is the same one Illustrator uses in its own Dimension tool, where Scale sits under Dimension Text and nowhere else.

Tap the scale in the top bar to change it. There are chips for 1:1, 1:2, 1:5, 1:10, 1:20 and 1:50, and you can type any ratio into the box. The panel spells out what the current one means.

Type size and the distance a dimension line sits from a shape are artboard sizes, not real ones. They belong to the drawing. An 8 pt label is 8 pt on the page whatever scale you work at.

4.0 · THE TOP BAR

The top bar

Five things, left to right.

The name, the profile, the scale, the theme, the gear. Under them: what is set, then what the panel just did.

Setout. The name. Always there.

The profile name. Which set of saved settings is in use. Press it to open the profile list. **It shows only when there is room for it.** On a narrow panel it steps aside and the profile is reached through the settings instead. The name and the scale never fight for space.

The scale. Tap to change.

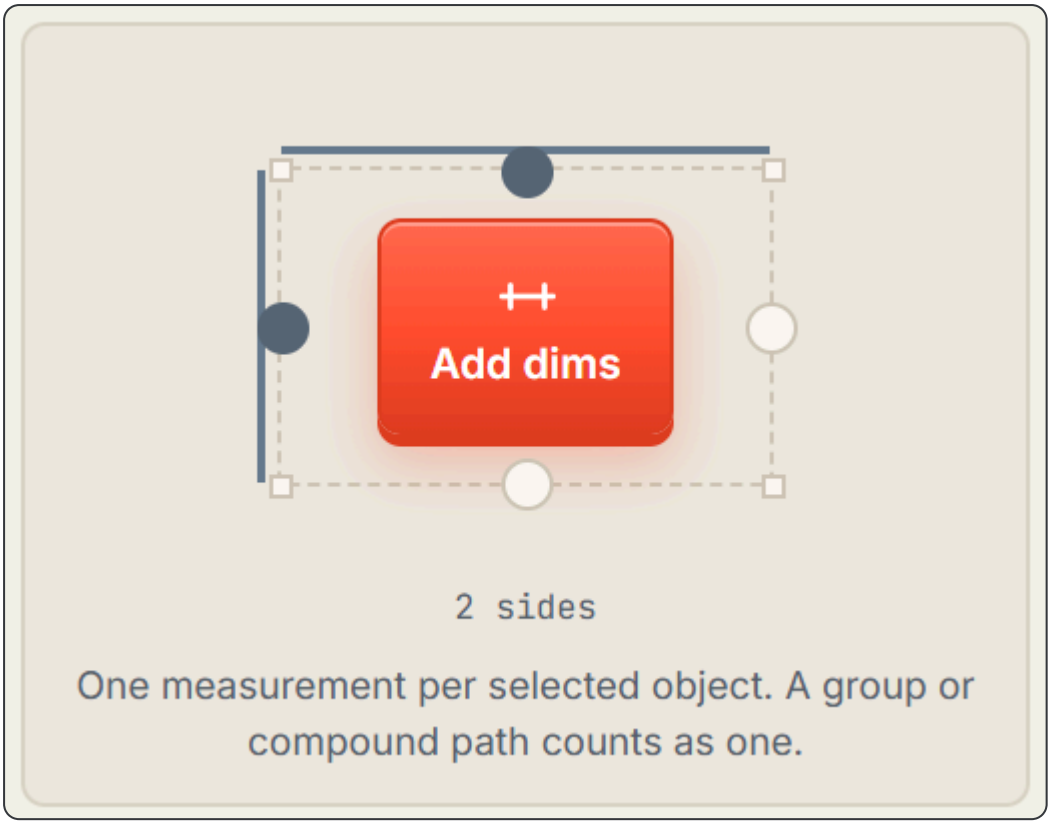
Sun or moon. One tap walks light, dark, then follow Illustrator.

The gear. Settings. It is the only way in.

Underneath sits a quiet line of what is currently set: the unit, the decimal places, the bounds mode, and a Canvas x10 flag on a large canvas document. Below that, the panel tells you what it just did, or why it will not do something. That line wraps rather than cutting off.

Measure

Press Add dims and the sizes land on the drawing.



Top and left picked: two sizes on every selected object when you press Add dims.
A filled circle is a picked side.

The box in the middle is the picker. Press a circle to say you want a size on that side. Press it again to change your mind. The panel counts what you have picked underneath.

The dimensions are drawn to the same anatomy as Illustrator's own Dimension tool: extension lines at half the weight of the dimension line, the offset and overrun growing with the text size, and parallel dimensions stacking by text height with the shortest nearest the shape. Numbers sit clear of the line and out of the way of the artwork and of each other.

Put on their own layer is on by default. Every label goes on a layer called Dimensions, which keeps them out of the way and makes them easy to hide or remove. Turn it off and the labels sit on the artwork's own layer instead.

Three buttons sit under the picker.

Re-measure rebuilds every Setout label in the document from the artwork as it is now. Use it after you have resized something.

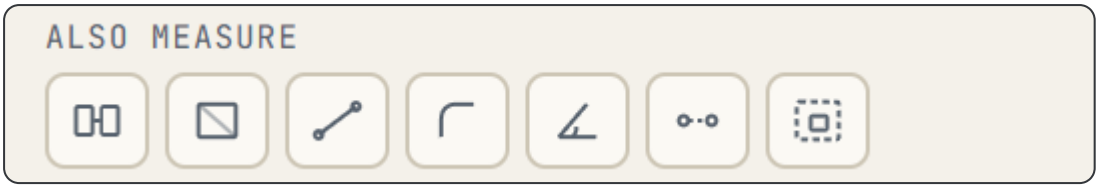
Copy puts a table of the selection's sizes and contour lengths on the clipboard, ready to paste into a quote or a spreadsheet.

Undo labels removes every Setout label in the document in one step. **It takes labels from an earlier session with it**, so on a drawing you have come back to, be sure. One undo puts them back.

A fresh panel opens with Measure showing and everything else folded, so it fits its window without a scrollbar. Press any section heading to open it. Setout remembers what you leave open.

Also measure

Seven things Setout can add besides width and height. Turn one on, then press Add dims.



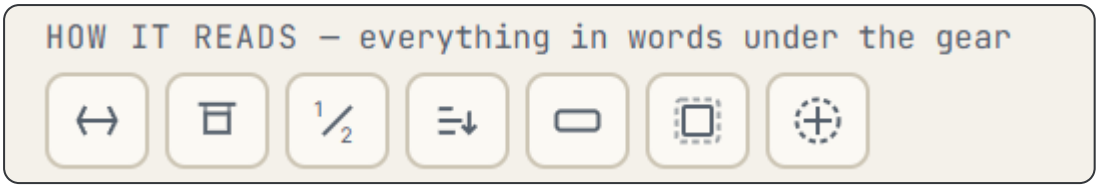
The seven extras. A filled button is on. Their names and tooltips are in the button list above.

BUTTON	WHAT YOU GET
Gaps	The distance between the objects you selected
Area	The area of each object
Segment	The length of every straight and curved segment
Radius	The corner radius of circular arcs
Angle	The angle at every corner between straight segments
Centre to centre	Midpoint to midpoint, neighbour to neighbour
To artboard	The distance to the artboard's left and top edges

Gaps and centre to centre need at least two objects. With three or more, they measure neighbour to neighbour across the row rather than every possible pair, because that is what reads on a drawing.

How it reads

Seven quick switches for the look of the numbers.



The display switches. Everything they change is also written out in words in the settings, so use whichever you prefer.

The three worth knowing about:

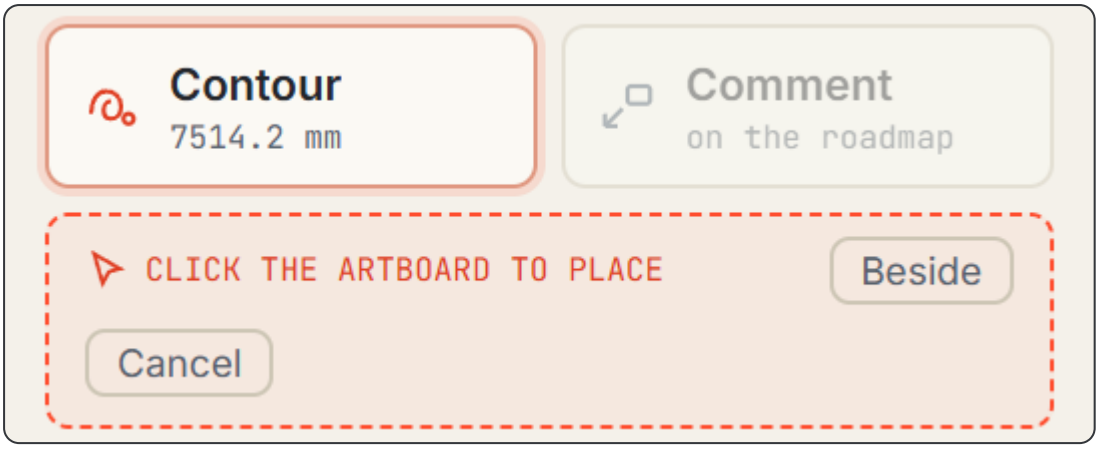
Second metric puts a second line on every label in another unit, for a drawing that crosses the Atlantic.

Extra info adds a summary line under the selection: how many, the total contour, the largest and the smallest.

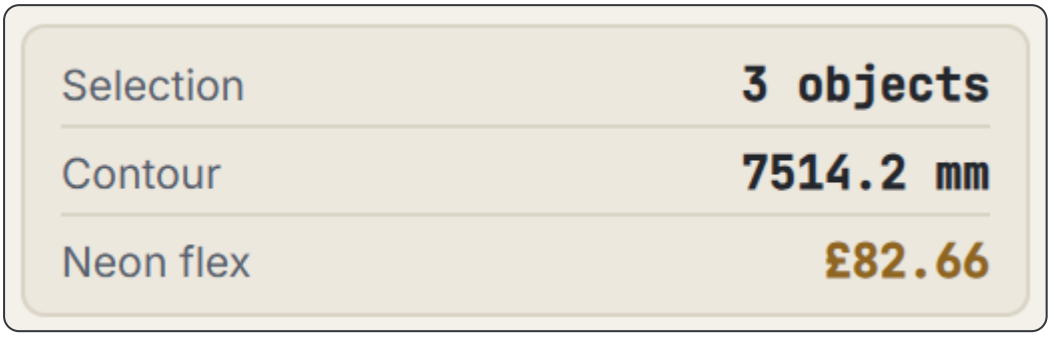
Label background puts a solid block behind the number so it stays readable over busy artwork.

Contour length

The length round the outside of what you have selected.



Contour pressed: the length is already on the button, and the panel waits for your click on the artboard.



With a rate per metre in the settings, the length is priced for you.

For neon flex, LED strip or trim cap, it is the number that decides the price.

It is always the whole selection. Grouped or not, compound or not, you get one number, not one per shape.

01 **Select the artwork.**

02 **Press Contour.** The length appears on the button straight away, and the button lights up.

03 **Click the artboard where you want the number.** The label lands there.

Beside puts the label just outside the selection instead, ready to drag. **Cancel** or the Escape key stops.

Three things to know.

Click on empty canvas. If you click on a shape's outline, Illustrator turns that line into a text box. Setout refuses the click and tells you so. Press Ctrl+Z once and the line comes back.

It is not instant. A panel cannot see your mouse, so Setout watches for the click. It takes about a sixth of a second.

Undo takes two presses. The first removes the label. The second clears the empty text box the click made. In between, your cursor is in that box and the panel's buttons go grey, because Illustrator will not let anything else be selected while you are typing. Press Escape and they come back.

To price it, put a rate per metre in the settings. The cost then appears under the length.

9.0 · COMMENT

Comment

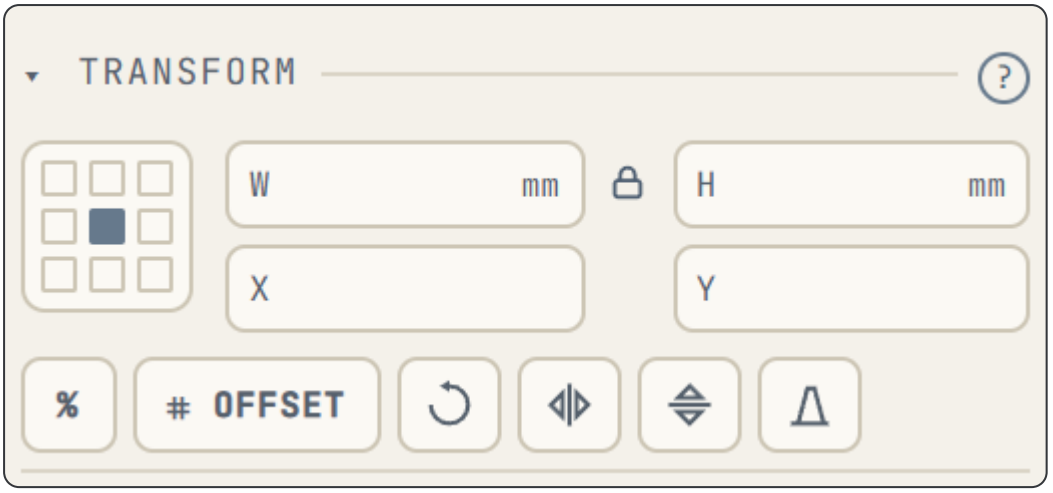
This is on the roadmap and the button is greyed out.

Point at something on the drawing and write a note against it.

It will drop an arrow where you drag one and let you type at the end of it, with its own line and text style so a comment never reads as a measurement.

Transform

It works in document units, not at the scale.



W, H, X and Y in document units. The nine-point grid on the left picks which corner or edge the change happens about.

One signed value: 10 offsets outward, -10 inward. The Miter limit wakes only while Miter is chosen.

Illustrator's own transform, in the same panel. Type 100 into the width box and the artwork becomes 100 mm on the artboard. The scale changes what a label says, never what a transform does.

Width, height, X and Y. The nine point grid on the left is the reference point, so a change happens about the corner or edge you choose. The padlock keeps the

proportions.
X and Y are measured from the top left corner of the active artboard, with Y downwards. That is the same convention as Illustrator's own Transform panel.

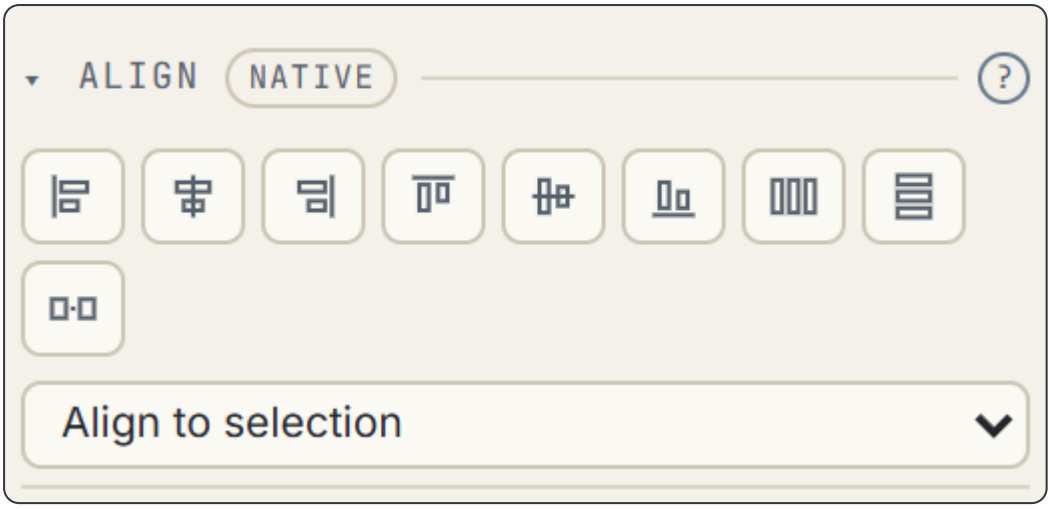
Six buttons underneath.

- **%** resizes by a percentage, with 50, 75, 150 and 200 one press away.
- **Offset** offsets the path. **One value: positive offsets outward, negative inward**, in document units. Choose **Miter, Round or Bevel**, with a miter limit that is live only while Miter is chosen. Your original stays where it is and the offset copy is selected. The geometry is Illustrator's own Offset Path, so the joins are its maths, not ours.
- **Rotate** turns the selection 90 degrees clockwise.
- **Flip horizontal** and **flip vertical.**
- **Shear** leans the selection by an angle.

There is no preview on Offset, deliberately. Illustrator has no scratch space outside the undo stack, so a preview you cancel still costs two undo steps, every time you change the value. Apply is one step.

Align

Illustrator's own aligning, in the same panel.



Six aligns, two distributes, and Set the gap. The dropdown picks what you align to.

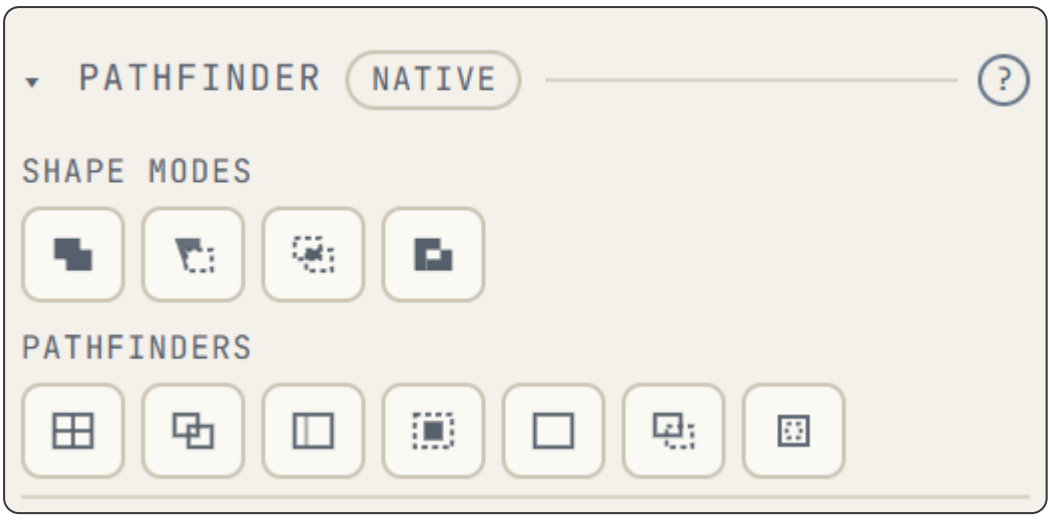
Six aligns, then distribute horizontally and vertically, which need three or more objects.

Set the gap takes a spacing and applies it between the selected objects, in document units.

The dropdown chooses what you are aligning to: the selection, the artboard, or a key object.

Pathfinder

Illustrator's own pathfinder, in the same panel, so that window can stay closed.



Shape modes on the top row, pathfinders below. Minus front is the knockout.

Shape modes: Unite, Minus front, Intersect, Exclude. Minus front is the knockout, which is the one most sign work needs.

Pathfinders: Divide, Trim, Merge, Crop, Outline, Minus back, and make or release a compound path.

These call Illustrator's own commands, so they behave exactly as they always have, and each is a single undo.

Live text

Select live text, press Add dims, and you get the size of the letters rather than the box around them.

Setout outlines a copy you never see, measures that, and throws it away. Your text stays live and editable.

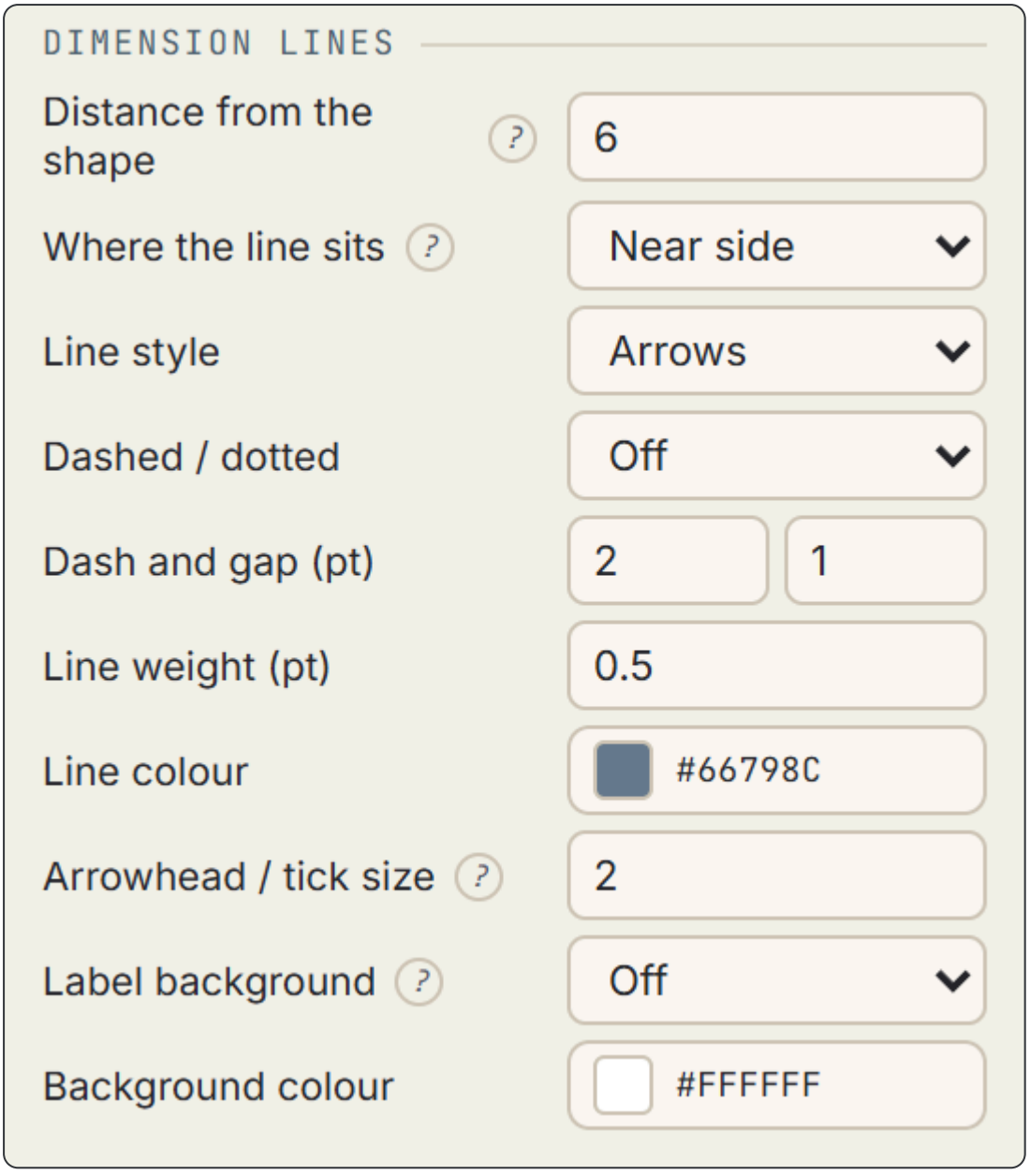
It works on point text and on area text. On area text the difference is large, because the box you dragged is nothing like the letters inside it.

Contour, area, segments and angles still need the text outlined first. Only width and height read the live letters.

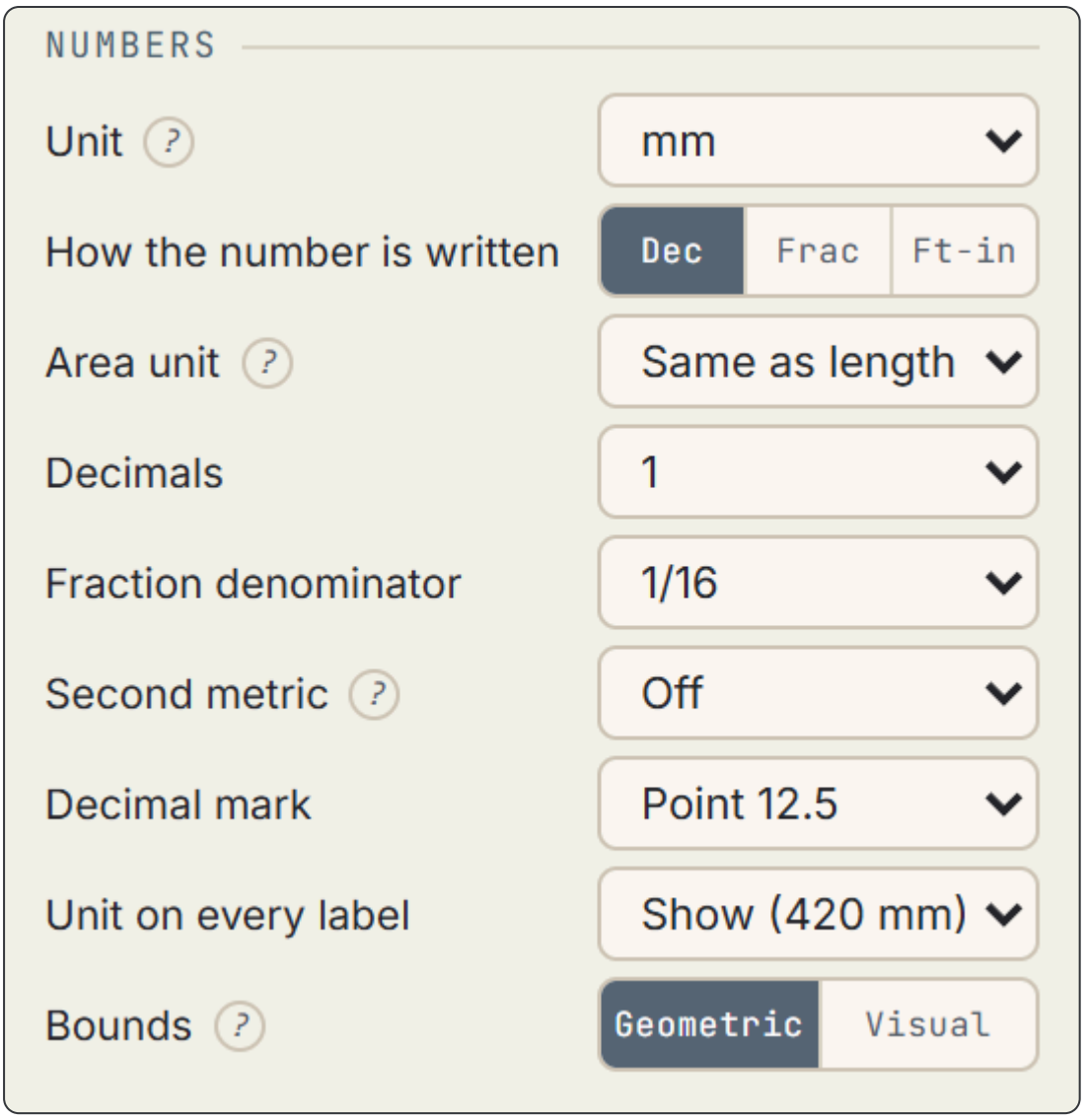
Setout will name a problem rather than give you a wrong number. It stops, and says so, for a **missing font**, for **text with a warp** while you are in geometric bounds, for an **envelope**, for **text on a path**, and for **threaded text**.

Settings

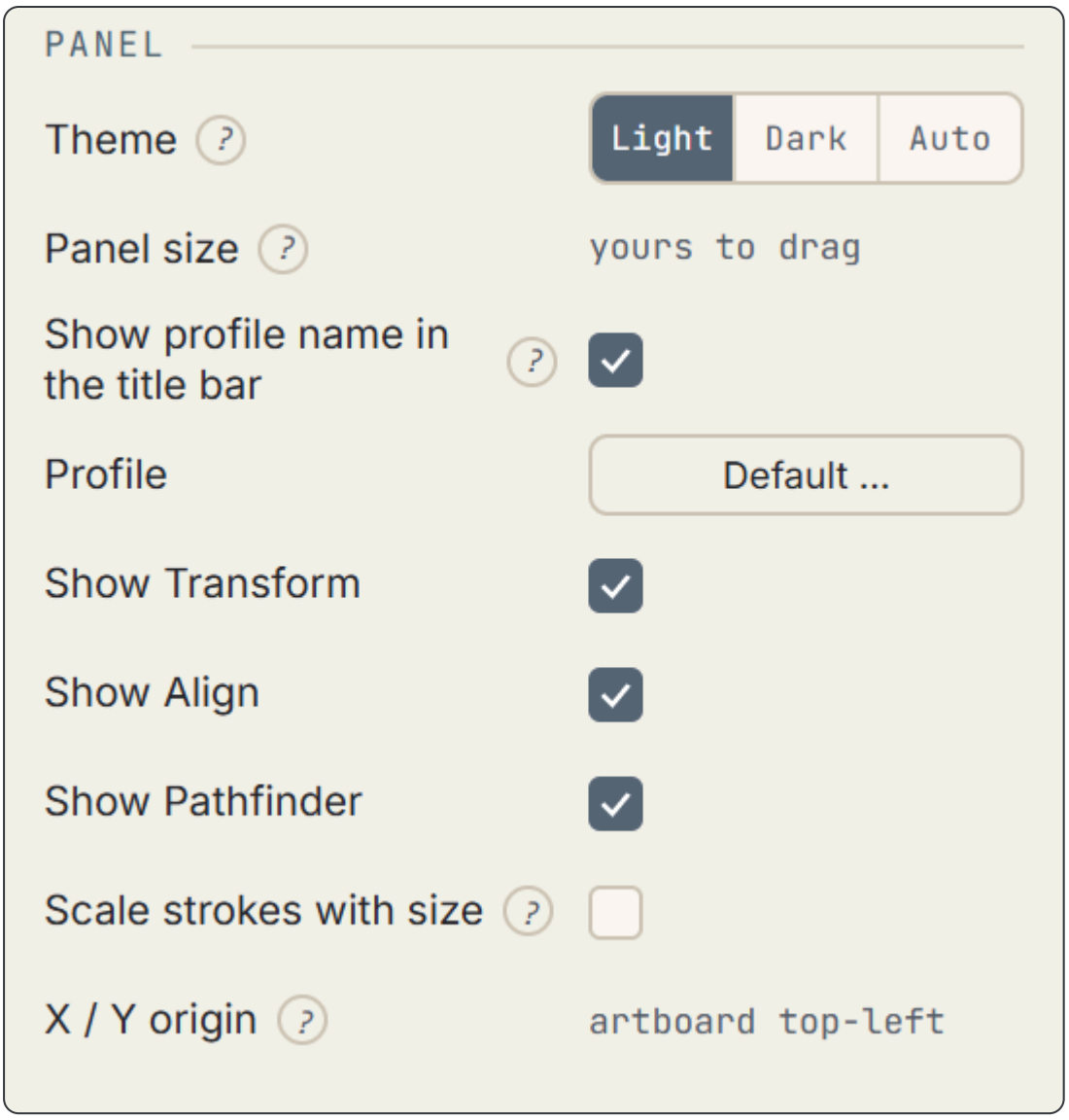
Everything is behind the gear, written in words, with a question mark beside anything that needs a sentence of explanation.



The Dimension lines group: where the line sits, its style, weight, colours and the block behind the number.



The Numbers group: unit, format, a separate area unit, decimals and bounds.



The Panel group: theme, the profile name, and switches to hide the sections you do not use.

Press a question mark and the sentence opens under the setting, so it is never cut off by the edge of the panel.

One type style is shared by every dimension label. One font, one size, one text colour, one line colour. Comments have their own style, so a note never reads as a measurement.

The groups, in order:

Dimension lines. How far the line sits from the shape, where it sits, its style, dashes, weight, colour, arrowhead or tick size, and the background block behind the number.

Numbers. The unit, decimal or fraction or feet and inches, a separate **area unit** so area can read in square metres while lengths read in millimetres, decimal places, a second metric, the decimal mark, whether the unit is printed on every label, and

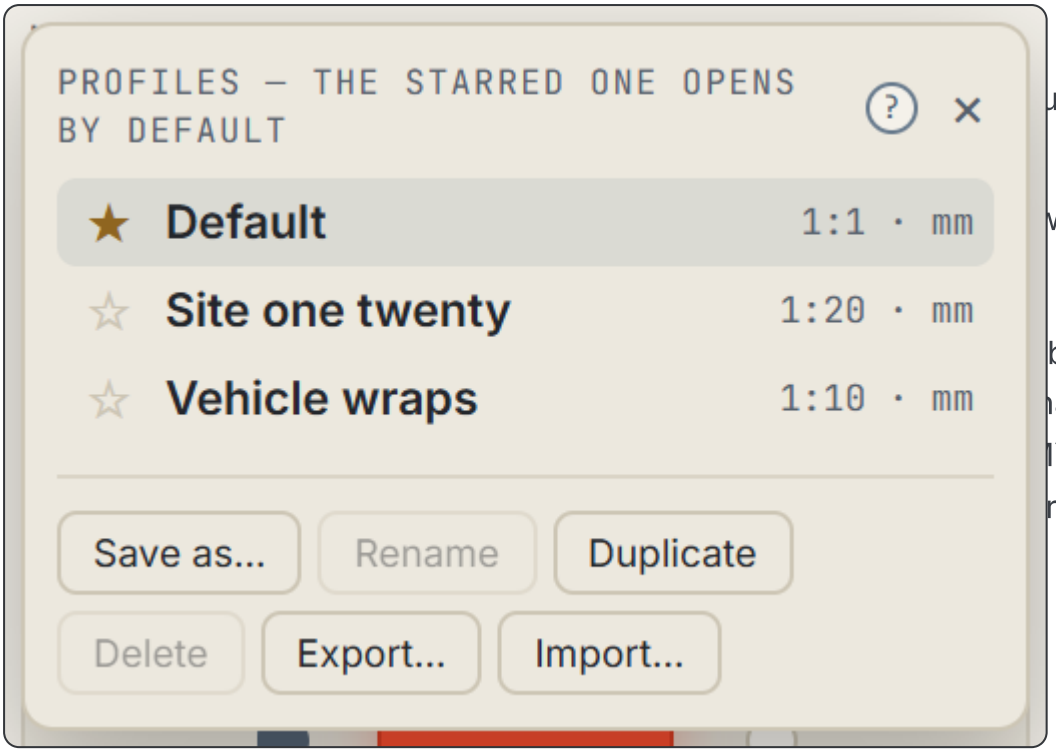
Profiles

bounds. Bounds is worth understanding: geometric measures the path itself, visual includes the stroke. Up to 10 mm can differ.

A profile is a whole set up saved under a name: the scale, the unit, the number format, the line and type styles, the material rate, and which sections are hidden.

Type. The font, size, the gap between the number and the line, and the text colour. Two buttons copy the text colour to the line or the line colour to the text.

Comment style. Its own line, weight, dashes, arrowhead size and which end it sits,



ur length is

vitches to hide

box to type a hex
atever is
IYK document
r is flattened, and

The starred profile is the one Setout opens with. Export hands your set up to the rest of the team.

Press the profile name in the top bar to open the list. If the panel is too narrow to show the name, the Profile row in the settings opens the same list.

Save as keeps the current settings as a new profile.

Rename, **Duplicate** and **Delete** do what they say. Default allows none of them.

Export writes a profile to a file. **Import** reads one in. That is how you give the rest of the team your set up.

The starred profile is the one Setout opens with. One star at a time.

16.0 · WHEN SOMETHING DOES NOT LOOK RIGHT

When something does not look right

Every button has gone grey and the panel says "Editing text". Your cursor is in a text box, so Illustrator will not let anything else be selected. Press Escape. This normally

happens one undo after placing a contour label.

I clicked to place a contour and a shape turned into a text box. The click landed on the outline. Press Ctrl+Z once and the shape comes back, then press Contour again and click on empty canvas.

Add dims did nothing. Check something is selected, and that you have picked at least one side on the picker.

A label reads ten times the size of the artwork. That is the scale doing its job. The label reports the real sign; the artwork is drawn small. Check the ratio in the top bar.

I typed a width and the artwork did not change by the scale. It is not meant to. Transform works in document units.

The size includes the outline and I did not want it to. Settings, Numbers, Bounds. Geometric measures the path, visual includes the stroke.

My labels have gone. Undo labels removes every Setout label in the document, including ones from an earlier session. One undo brings them back.

The panel will not grow to fit its contents. Illustrator owns the size of a panel and ignores a request to change it. Drag the panel's edge to the size you want, or dock it, and it stays there. The contents scroll.

The profile name is missing from the top bar. The panel is too narrow to show it. Widen it, or use the Profile row in the settings.