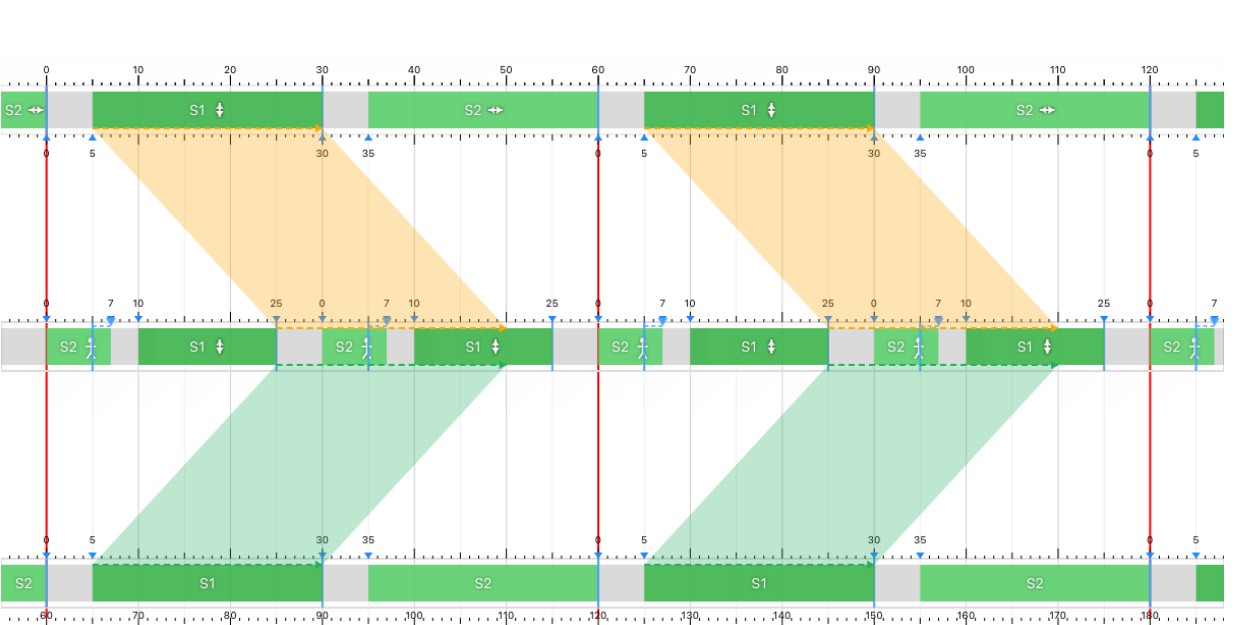


Signal Plan Checker 2.6

User Manual

David Key / OpenAI



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1. Overview

Signal Plan Checker helps you validate junction plans, visualise stage timings, and assess travel windows between junctions. This manual highlights the main screens and how to use them effectively.

Signal Plan Checker 2.0.0

Status Message: Validated ✓ — press Plot to render

Filename: file unsaved

DataPlot

Save...Load...

Init auto-loaded

Main cycle (s)

60

Junctions

3

View cycles

2

Validate

Plot

Junction A

Junction B

Junction C

Name

Junction A

Double cycle

To previous (↑)

20

To next (↓)

20

Stage count

2

Main UI at a glance

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2. Getting Started

Set the Main cycle, number of Junctions, and View cycles. Enter or adjust junction data on the Data tab. Click Validate to check constraints; then click Plot to render the timing diagram.

On opening the junction data self populates with some simple data to get you starte.

Use the save / load buttons to backup and reload your work.

The current file loaded and useful status update messages are displayed at the top of the display.

Signal Plan Checker 2.0.0

Status Message: Validated ✓ — press Plot to render

Filename: file unsaved

DataPlot

Save...Load...

Init auto-loaded

Main cycle (s)
60

Junctions
3

View cycles
2

Validate

Plot

Junction A

Junction B

Junction C

Name
Junction A

Double cycle
☐

To previous (↑)
20

To next (↓)
20

Stage count
2

Stages

Label	Min green (s)	Dir
S1	7	— ▾
S2	7	— ▾

Intergreen matrix (leading intergreen; -1 = not permitted)

From \ To	S1	S2
S1	-1	5
S2	5	-1

UTC Plan

Add change

To stage	Force Stage at (s)	
S1 ▾	0	Delete
S2 ▾	30	Delete

Top toolbar and controls

3. Data Tab — Junctions, Stages & Intergreens

Each individual junction tab allows you to:

- Edit the Junction Name (14char max)
- Double Cycle the junction.
- Edit up/down stream travel times
- Change the number of stages
- The area below this allow you to edit the stage information, labels, min greens, add direction arrows to the plotted stage.
- The stage to stage intergreen matrix is to the right of this, use -1 to indicate a none permitted move.

After editing / loading data hit validate and press plot to activate the plot area and draw the diagram.

Signal Plan Checker 2.0.0

Status Message: Validated ✓ — press Plot to render Filename: file unsaved

Data Plot Save... Load...

Init auto-loaded Main cycle (s) Junctions View cycles
60 3 2 Validate Plot

Junction A Junction B Junction C

Name Double cycle To previous (↑) To next (↓) Stage count
Junction A ☐ 20 20 2

Stages

Label	Min green (s)	Dir
S1	7	→
S2	7	→

Intergreen matrix (leading intergreen; -1 = not permitted)

From \ To	S1	S2
S1	-1	5
S2	5	-1

UTC Plan Add change

To stage	Force Stage at (s)	Delete
S1	0	Delete
S2	30	Delete

Stages

Label	Min green (s)	Dir
S1	7	→
S2	7	→

Intergreen matrix (leading intergreen; -1 = not permitted)

From \ To	S1	S2
S1	-1	5
S2	5	-1

UTC Plan Add change

To stage	Force Stage at (s)	Delete
S1	0	Delete
S2	30	Delete

Stages table and Intergreen matrix

4. UTC/CLF Fixed Plans

The last section of the junction data allows you to define the UTC/CLF plan sequence you wish to map.

Similar to UTC force stage simply enter the stage and time the force bit is sent 'Force Stage at (s)'.

You can add/delete rows using the 'Add change' and 'delete' buttons.

Times are cycle-relative; the diagram accounts for intergreens and min-green to compute realised changes.

UTC Plan Add change

To stage	Force Stage at (s)	
S1 ▾	0	Delete
S2 ▾	30	Delete

UTC Plan editor with compact inputs

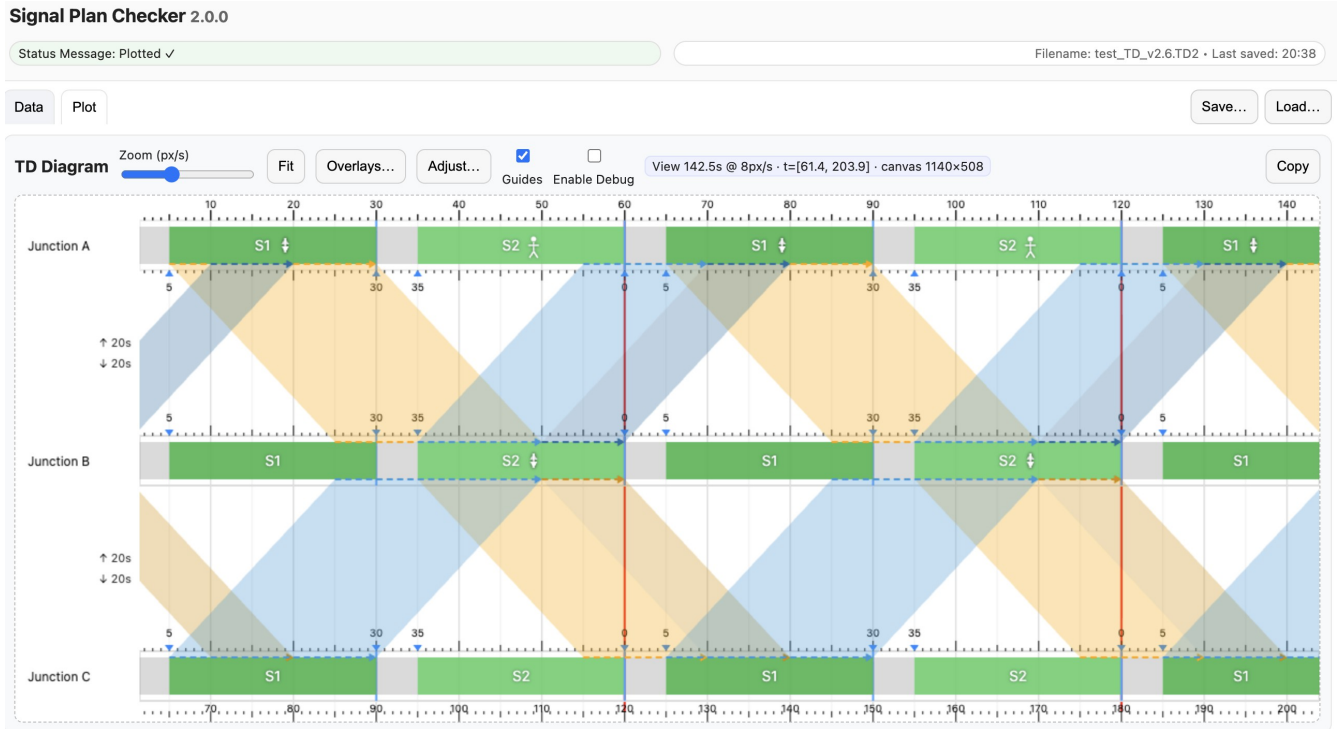
5. Plot Tab — Diagram, Ticks & Guides

The TD diagram shows per-junction green bars, mirrored tick bars for the top row to avoid overlap, blue markers at start/end ticks, and subtle gridlines. Zoom and Fit provide quick navigation.

Use your mouse/scroll wheel/pinch/hold to zoom and pan the time line. Fit auto set the visible area to 0-120's.

Guides turns the grid lines and internal timing ticks on/off.

Copy will place the plot on the clipboard for use in documentation.



6. Overlays — Windows & Travel

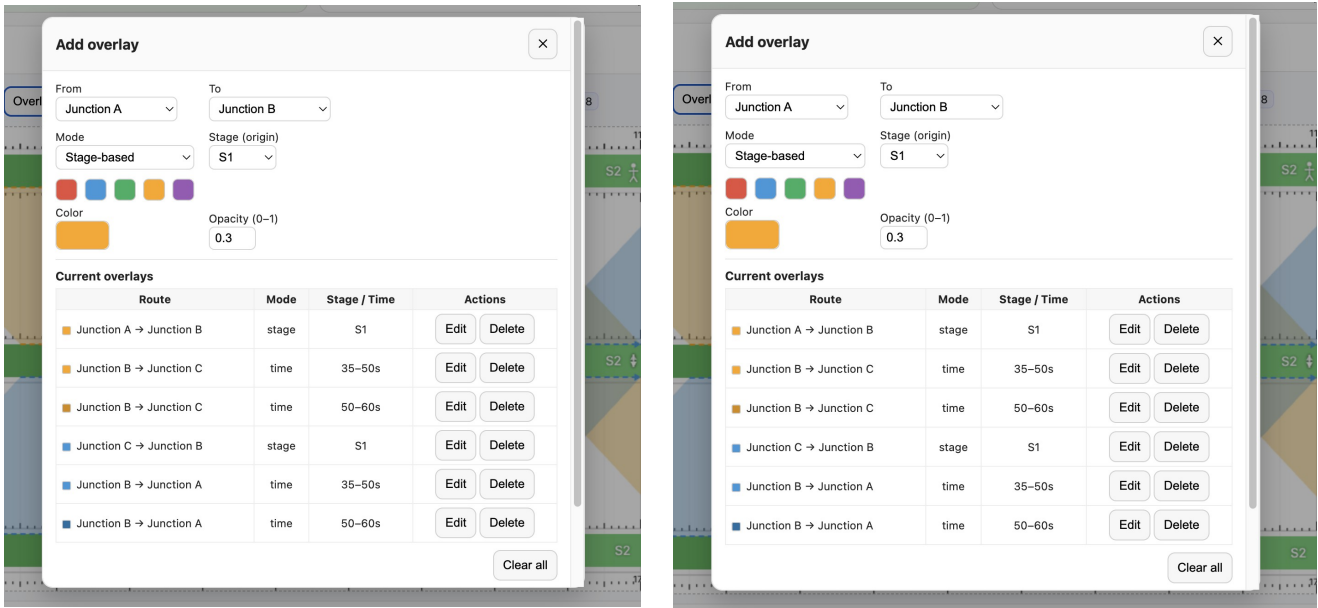
Add overlays to the diagram using the Overlays button to open the overlays tab shown below.

These help visualise journey times between junctions for a particular release window, and shows the arrival window, shaded between selected junctions.

Use quick colour presets and a refined iOS-friendly colour input.

The mode selection allow you to switch between adding stage based and time based overlays.

Overlays are stored in any saved data files.



Overlay polygon with dashed window lines

7. Adjustments — Offsets & Boundaries

Temporarily adjust UTC plans using junction offsets and boundary nudges. You can commit adjustments to update the plan timings, or reset them. The status bar confirms actions.

Offsets shift the whole stage sequence back or forwards in time.

Vary allow the stage times to be adjusted within the plot overlay.

All Adjustments are temporary unless the 'update utc plans' button is selected, but will be stored with any save file.

Adjust junction

Junction

Offset (s)

Junction A

0

Vary by moving boundaries

Boundary	Δ (s)
S1 → S2	0
S2 → S1	0

Current adjustments

No adjustments yet.

Offset shifts the UTC plan for this junction. Boundary deltas move the change points (e.g., between S1 → S2). These are temporary and only affect the plot/overlays.

Clear

Update UTC plans

Apply

Adjustments modal with inline numeric inputs

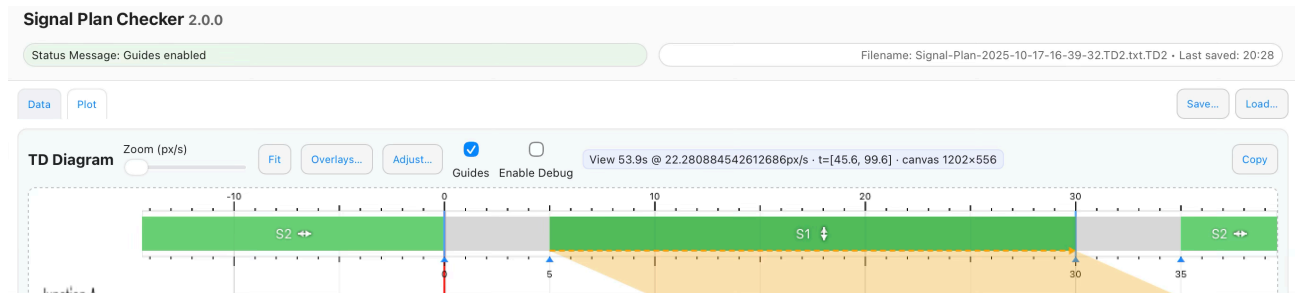
8. Saving & Loading TD2 Files

Use Save... to export a human-readable .TD2 file (commented JSON) containing main settings, junctions, overlays, and uncommitted adjustments. Use Load... to restore a previous state.

Save/Load and filename label

9. Status Bar & Filename

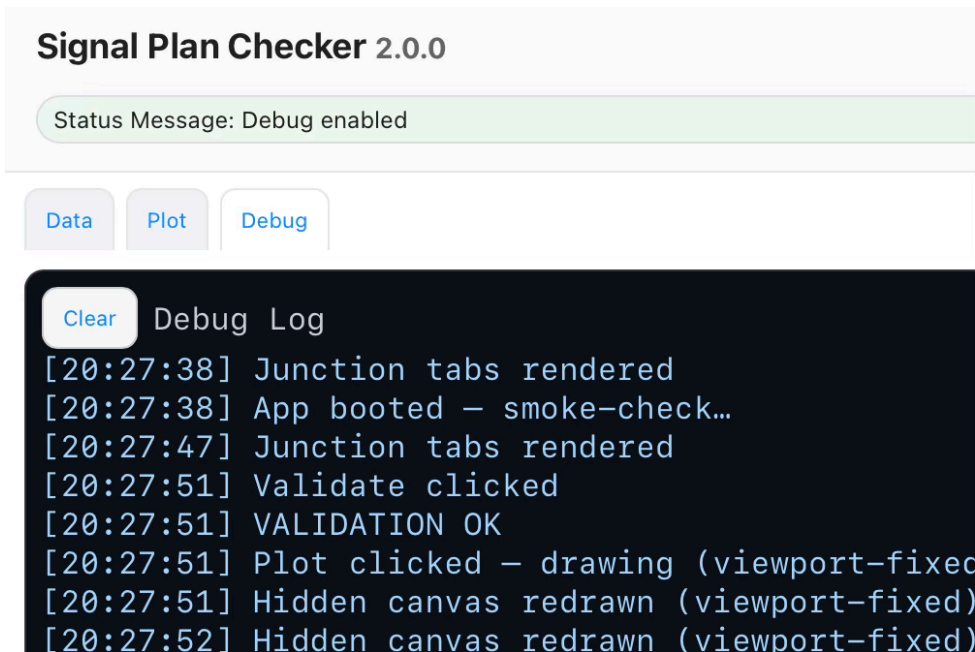
The left side shows Status Message updates after validation, plotting, copies, and commits. The right side shows the current filename and last-saved time.



Status message (LHS) and Filename (RHS)

10. Debug Toggle

Enable Debug adds the Debug tab for logs and diagnostics. It's hidden by default and can be toggled from the Plot toolbar.



Debug panel (hidden by default)

Credits

Built by David Key with assistance from OpenAI.

October 2025 final release version 2.6.

Additional reference screenshot