



Traffic Controller Emulation

Run controller firmware on your PC
and prove the design
before running on street



The Microsense Emulator uses
the same firmware that runs on
our Sentinel Controller

A user interface lets the user set
and modify controller inputs,
And verify the responses.



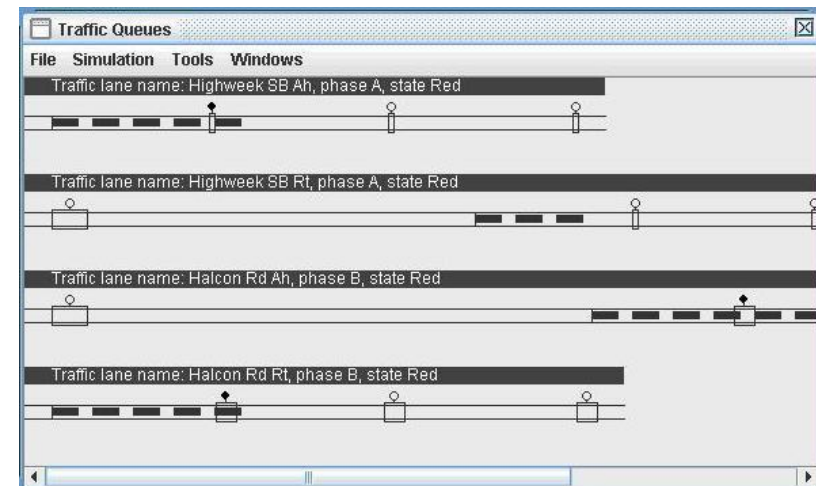
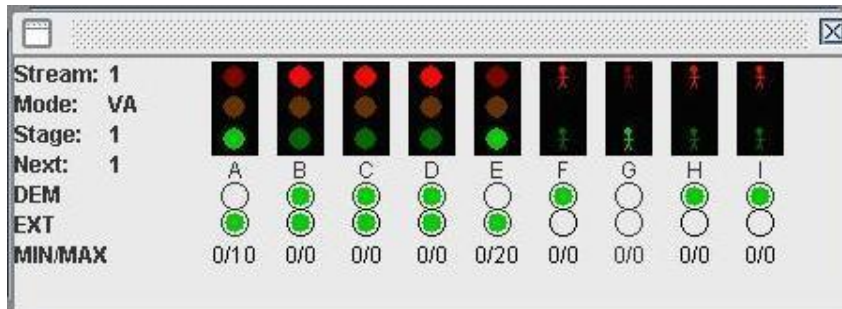
Junction designs can be checked before any investment is made in real equipment.

Each junction reads its own configuration file and sets the user interface accordingly.



An integral traffic simulator lets the user set up traffic flows based on real data from the street.

These simulated flows trigger the controller inputs.



Running the emulator faster than real time allows extensive testing of different traffic loads.



Central Simulator Hub

File Simulation Window Tools View Help

HS MP GI CFG GO UTC PS RM SS LRT TQ SW Special Condi

Start Step Stop at SMU Manager 1

Output Status : SMU ...

0	16	32	48
1	17	33	49
2	18	34	50
3	19	35	51
4	20	36	52
5	21	37	53
6	22	38	54
7	23	39	55
8	24	40	56
9	25	41	57
10	26	42	58
11	27	43	59
12	28	44	60
13	29	45	61
14	30	46	62
15	31	47	63

General Inputs : SMU : 1

P01	AKY1ED	32	48	64
P02	BKY2ED	33	49	65
P03	CKY3ED	34	50	66
P04	DKY4ED	35	51	67
DO2	EKY2ED	36	52	68
DO3	AK1	37	53	69
DO4		38	54	70
DOX1		39	55	71
DOQ1	FBF	40	56	72
9	FBG	41	57	73
10	FBI	42	58	74
TS	FBI	43	59	
12	28	44	60	
13	29	45	61	
14	30	46	62	
15	31	47	63	

Stream: 1

Mode: VA

Stage: 1

Next: 1

DEM

EXT

MIN/MAX

A	B	C	D	E	F	G	H	I
0/10	0/0	0/0	0/0	0/20	0/0	0/0	0/0	0/0

Remote Monitoring : SMU : 1 [3116-01]

Name	Reg	Rep	Item	Value
Current (Co...)	✓	1	Issue No.	No data
Current (Inst)	✓	1	Main voltage	No data
Current (Ref)	✓	1	Active faults	No data
Lamp Failu...		1	Detector faults	No data
Lamp History		1	Active detectors	No data
Main voltage...		1	Active detector inputs	No data
Active Faults		1		
Warning Co...		1		

RLM Channel	I (comp)	I (Inst)	I (Ref)	Lamp Failures
TPA	1250	1250	1250	0
TPB	1250	1250	0	1250
TPC	1250	1250	0	1250
TPD	1250	1250	0	1250
TPE	1250	1250	1250	0



Central Simulator Hub

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Bits T/C Start Step Stop at SMU Manager 1

Output Status : SMU : ...

0	16	32	48
1	17	33	49
2	18	34	50
3	19	35	51
4	20	36	52
5	21	37	53
6	22	38	54
7	23	39	55
8	24	40	56
9	25	41	57
10	26	42	58
11	27	43	59
12	28	44	60
13	29	45	61
14	30	46	62
15	31	47	63

General Inputs : SMU : 1 [...]

F01	AXYZ10	32	48	64
F02	BXYZ20	33	49	65
F03	CXYZ30	34	50	66
F04	DXYZ40	35	51	67
D02	EXYZ50	36	52	68
D03	AR1	37	53	69
D04		38	54	70
DX1		23		
SO1	PBF			
9	PBG			
10	PBH			
TS	PBI			
12		28		
13		29		
14		30		
15		31		

Stream: 1

Mode: VA

Stage: 2

Next: 2

DEM

EXT

MIN/MAX

A	B	C	D	E	F	G	H	I
0/0	0/0	0/0	0/0	0/25	0/0	0/0	0/0	0/0

Traffic Queues

File Simulation Tools Windows

Traffic lane name: Highweek SB Ah, phase A, state Red

Traffic lane name: Highweek SB Rt, phase A, state Red

Traffic lane name: Halcon Rd Ah, phase B, state Red

Traffic lane name: Halcon Rd Rt, phase B, state Red

A decorative graphic in the top right corner consisting of a grid of images. The top row shows a traffic light, a close-up of traffic lights, and a worker in a high-visibility vest. The bottom row shows a pedestrian crossing sign and a traffic light.

The emulator allows multiple junctions to be run at the same time.

When linked to a micro-simulation tool this allows modelling of a road network not just a junction.

If you have any questions please ask.
This presentation repeats in a few seconds.