Snippets

Version 0.6 from 2021-01-02

No.	Name	Clip	Code	Manual reference
1	main track		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \maintrack (A) (B);	topology Section 3.2.1 p. 5
2	main line (double track)		\coordinate (A1) at (0,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (B2) at (6, 0.5); \maintrack (A1) (B1); \maintrack (A2) (B2);	topology Section 3.2.1 p. 5
3	secondary track		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \secondarytrack (A) (B);	topology Section 3.2.1 p. 5
4	track number	No	<pre>\coordinate (A) at (0,0); \coordinate (X) at (3,0); \coordinate (B) at (6,0); * order is important \maintrack (A) (B); * first \tracklabel at (X) label (No.); * secound</pre>	topology Section 3.2.1 p. 5
5	bufferstop (forward)		\coordinate (A) at (0,0); \coordinate (B) at (3,0); \maintrack (A) (B); \bufferstop[forward] at (B);	topology Section 3.2.1 p. 6
6	bufferstop (backward)	[<pre>\coordinate (A) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \bufferstop[backward] at (A);</pre>	topology Section 3.2.1 p. 6
7	friction bufferstop (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (3,0); \maintrack (A) (B); \bufferstop[forward,friction=.5] at (B);</pre>	topology Section 3.2.1 p. 6

No.	Name	Clip	Code	Manual reference
8	friction bufferstop (backward)	• [<pre>\coordinate (A) at (3,0); \coordinate (B) at (6,0); maintrack (A) (B); \bufferstop[backward,friction=.5] at (A);</pre>	topology Section 3.2.1 p. 6
9	track closure		<pre>\coordinate (A) at (0,0); \coordinate (B) at (3,0); \maintrack (A) (B); \trackclosure at (B);</pre>	topology Section 3.2.1 p. 6
10	turnout left (forward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,1); \turnout[forward,branch=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
11	turnout left (backward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,1); \turnout[backward,branch=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
12	turnout right (forward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \turnout[forward,branch=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
13	turnout right (backward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,-1); \turnout[backward,branch=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
14	turnout left (forward) with fouling point indicator		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,1); \turnout[forward,branch=left,fouling point] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
15	turnout left (backward) with fouling point indicator		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,1); \turnout[backward,branch=left,fouling point] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
16	turnout right (forward) with fouling point indicator		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \turnout[forward,branch=right,fouling point] at (Y) label ();</pre>	topology Section 3.2.2 p. 6

No.	Name	Clip	Code	Manual reference
17	turnout right (backward) with fouling point indicator		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,-1); \turnout[backward,branch=right,fouling point] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
18	turnout left (forward) with points in right position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,1); \turnout[forward,branch=left,points=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
19	turnout left (forward) with points in left position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,1); \turnout[forward,branch=left,points=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
20	turnout left (forward) with moving points		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,1); \turnout[forward,branch=left,points=moving] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
21	turnout left (backward) with points in right position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,1); \turnout[backward,branch=left,points=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
22	turnout left (backward) with points in left position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,1); \turnout[backward,branch=left,points=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
23	turnout left (backward) with moving points		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,1); \turnout[backward,branch=left,points=moving] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
24	turnout right (forward) with points in right position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \turnout[forward,branch=right,points=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
25	turnout right (forward) with points in left position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \turnout[forward,branch=right,points=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 6

No.	Name	Clip	Code	Manual reference
26	turnout right (forward) with moving points		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \turnout[forward,branch=right,points=moving] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
27	turnout right (backward) with points in right position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,-1); \turnout[backward,branch=right,points=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
28	turnout right (backward) with points in left position		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,-1); \turnout[backward,branch=right,points=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
29	turnout right (backward) with moving points	—	<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(-1,-1); \turnout[backward,branch=right,points=moving] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
30	turnout left (forward) operated manually		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \secondarytrack (Y) ++(1,1); \turnout[forward,branch=left,operation=manual] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
31	turnout right (forward) operated manually		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \secondarytrack (Y) ++(1,-1); \turnout[forward,branch=right,operation=manual] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
32	turnout left (backward) operated manually		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \secondarytrack (Y) ++(-1,1); \turnout[backward,branch=left,operation=manual] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
33	turnout right (backward) operated manually		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \secondarytrack (Y) ++(-1,-1); \turnout[backward,branch=right,operation=manual] at (Y) label ();</pre>	topology Section 3.2.2 p. 6
34	double-slip turnout left	ab	\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++ (1, 1); \maintrack (Y) ++ (-1,-1); \slipturnout[branch=left] at (Y) label (ab) (cd);	topology Section 3.2.2 p. 7

No.	Name	Clip	Code	Manual reference
35	double-slip turnout right	cd	\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \maintrack (Y) ++(-1, 1); \slipturnout[branch=right] at (Y) label (ab)(cd);	topology Section 3.2.2 p. 7
36	diamond crossing left		\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1, 1); \maintrack (Y) ++(-1,-1); \crossing[branch=left] at (Y) label ();	topology Section 3.2.2 p. 7
37	diamond crossing right		\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,-1); \maintrack (Y) ++(-1, 1); \crossing[branch=right] at (Y) label ();	topology Section 3.2.2 p. 7
38	derailer left (forward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \derailer[forward,branch=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 8
39	derailer left (backward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \derailer[backward,branch=left] at (Y) label ();</pre>	topology Section 3.2.2 p. 8
40	derailer right (forward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \derailer[forward,branch=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 8
41	derailer right (backward)		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \secondarytrack (A) (B); \derailer[backward,branch=right] at (Y) label ();</pre>	topology Section 3.2.2 p. 8
42	vehicles (parked)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (3,0); \secondarytrack (A) (B); \parkedvehicles[] at (T) label ();</pre>	vehicles Section 3.3 p. 8

No.	Name	Clip	Code	Manual reference
43	vehicles with label (parked)	label	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (3,0); \secondarytrack (A) (B); \parkedvehicles[] at (T) label (label);</pre>	vehicles Section 3.3 p. 8
44	vehicle (parked)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (3,0); \secondarytrack (A) (B); \parkedvehicles[length=0.5cm] at (T) label ();	vehicles Section 3.3 p. 8
45	train in shunting mode (direction forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \shunting[forward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
46	train in shunting mode (direction backward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \shunting[backward] at (T) label ();	vehicles Section 3.3 p. 9
47	train shunting (forward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \shunting[movement,forward] at (T) label ();	vehicles Section 3.3 p. 9
48	train shunting (backward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \shunting[movement,backward] at (T) label ();	vehicles Section 3.3 p. 9
49	train (direction forward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[forward] at (T) label ();	vehicles Section 3.3 p. 9
50	train (direction backward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \train[backward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
51	train moving (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[run=normal,forward] at (T) label ();</pre>	vehicles Section 3.3 p. 9

No.	Name	Clip	Code	Manual reference
52	train moving (backward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \train[run=normal,backward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
53	train moving slow (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[run=slow,forward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
54	train moving slow (backward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \train[run=slow,backward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
55	train moving fast (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[run=fast,forward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
56	train moving fast (backward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \train[run=fast,backward] at (T) label ();	vehicles Section 3.3 p. 9
57	train ghost (direction forward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[ghost,forward] at (T) label ();	vehicles Section 3.3 p. 9
58	train ghost (direction backward)	`	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (1,0); \maintrack (A) (B); \train[ghost,backward] at (T) label ();	vehicles Section 3.3 p. 9
59	train operated automatic (direction forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[operation=automatic,forward] at (T) label ();</pre>	vehicles Section 3.3 p. 9
60	train operated by human (direction forward)	•	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (5,0); \maintrack (A) (B); \train[operation=manual,forward] at (T) label ();</pre>	vehicles Section 3.3 p. 9

No.	Name	Clip	Code	Manual reference
61	train running over a junction	TI	\coordinate (A1) at (0,-0.5); \coordinate (Y1) at (2.5,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (Y2) at (3.5, 0.5); \coordinate (B2) at (6, 0.5); \coordinate (B2) at (5, 0.5); \coordinate (T) at (5, 0.5); \maintrack (A1) (B1); \maintrack (A2) (B2); \maintrack (Y1) (Y2); \turnout[forward, branch=left] at (Y1) label (Y1); \turnout[backward, branch=right] at (Y2) label (Y2);	vehicles Section 3.3 p. 9
			<pre>\train[run=slow, forward, bend left at={(Y1)}, bend right at={(Y2)}, shift label={(-2,-0.5)} % relative coordinate] at (T) label (T1);</pre>	
62	distant signal (forward)	d1 d1	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \distantsignal[forward] at (S) label (d1);</pre>	trafficcontrol Section 3.4.1 p. 10
63	distant signal with speed indicator		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \distantsignal[forward,distant speed={8}] at (S) label (); % replace the 8 with desired speed or remove tikz key</pre>	trafficcontrol Section 3.4.1 p. 10
64	distant signal (backward)	d2	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \distantsignal[backward] at (S) label (d2);	trafficcontrol Section 3.4.1 p. 10
65	distant signal with speed indicator		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \distantsignal[backward, distant speed={8}] at (S) label (); \frac{* replace the 8 with desired speed or remove tikz key}	trafficcontrol Section 3.4.1 p. 10
66	speed signal (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \speedsignal[forward,speed={8}] at (S) label (); % replace the 8 with desired speed</pre>	trafficcontrol Section 3.4.1 p. 11
67	speed signal (backward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \speedsignal[backward, speed={8}] at (S) label (); * replace the 8 with desired speed</pre>	trafficcontrol Section 3.4.1 p. 11

No.	Name	Clip	Code	Manual reference
68	block signal (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \blocksignal[forward] at (S) label (1);</pre>	trafficcontrol Section 3.4.1 p. 11
69	block signal (backward)	2	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \blocksignal[backward] at (S) label (2);	trafficcontrol Section 3.4.1 p. 11
70	route signal (forward)	R1	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \routesignal[forward] at (S) label (R1);</pre>	trafficcontrol Section 3.4.1 p. 12
71	route signal (backward)	∞ <u></u> F	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \routesignal[backward, speed={8}] at (S) label (F); % replace the 8 with desired speed or remove tikz key</pre>	trafficcontrol Section 3.4.1 p. 12
72	combined signal (distant, block and route signal)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \signal[distant,block,route,forward,distant speed=8,speed=8] at (S) label (K1); * replace the 8 with desired speed or remove tikz key</pre>	trafficcontrol Section 3.4.1 p. 10
73	shunt signal (forward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \shuntsignal[forward] at (S) label ();	trafficcontrol Section 3.4.1 p. 12
74	shunt signal (backward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \shuntsignal[backward] at (S) label ();	trafficcontrol Section 3.4.1 p. 12
75	shunt signal locked (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \shuntsignal[forward,locked] at (S) label ();</pre>	trafficcontrol Section 3.4.1 p. 12
76	shunt signal locked (backward)	Φ	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \shuntsignal[backward,locked] at (S) label ();	trafficcontrol Section 3.4.1 p. 12

No.	Name	Clip	Code	Manual reference
77	block and shunt signal (forward)	sı	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \signal[block, shunting, forward] at (S) label (S1);	trafficcontrol Section 3.4.1 p. 10
78	block and shunt signal (backward)	sı	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \signal[block, shunting, backward] at (S) label (S1);</pre>	trafficcontrol Section 3.4.1 p. 10
79	route and shunt signal (forward)	SILOO	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \signal[route, shunting, forward] at (S) label (S1);</pre>	trafficcontrol Section 3.4.1 p. 10
80	route and shunt signal (backward)	<u> </u>	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \signal[route, shunting, backward] at (S) label (S1);	trafficcontrol Section 3.4.1 p. 10
81	shunt limit (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \shuntlimit[forward] at (S) label ();</pre>	trafficcontrol Section 3.4.1 p. 13
82	shunt limit (backward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \shuntlimit[backward] at (S) label ();</pre>	trafficcontrol Section 3.4.1 p. 13
83	train berth sign (forward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \berthsignal[forward] at (S) label ();</pre>	trafficcontrol Section 3.4.1 p. 13
84	train berth sign (backward)	<u> </u>	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \berthsignal[backward] at (S) label ();</pre>	trafficcontrol Section 3.4.1 p. 13

No.	Name	Clip	Code	Manual reference
85	train berth		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (H) at (3,0); \coordinate (S1) at (1,0); \coordinate (S2) at (5,0); \maintrack (A) (B); \berth[forward] at (H) length (); \berth[backward] at (H) length (); \berthsignal[backward] at (S1) label (); \berthsignal[forward]] at (S2) label ();</pre>	trafficcontrol Section 3.4.1 p. 13 & measures Section 3.7 p. 24
86	view point (forward)	<u></u>	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \viewpoint[forward] at (S);	trafficcontrol Section 3.4.2 p. 14
87	view point (backward)	₩,	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \viewpoint[backward] at (S);	trafficcontrol Section 3.4.2 p. 14
88	braking point (forward)	<u>+</u> 4	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \brakingpoint[forward] at (S) label ();</pre>	trafficcontrol Section 3.4.2 p. 14
89	braking point (backward)	⊳ ¬	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \brakingpoint[backward] at (S) label ();</pre>	trafficcontrol Section 3.4.2 p. 14
90	end of movement authority (forward)	<u> </u>	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \movementauthority[forward] at (S) label ();</pre>	trafficcontrol Section 3.4.2 p. 14
91	end of movement authority (backward)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \movementauthority[backward] at (S) label ();</pre>	trafficcontrol Section 3.4.2 p. 14
92	danger point (forward)	*	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \dangerpoint[forward] at (S) label ();</pre>	trafficcontrol Section 3.4.2 p. 15

No.	Name	Clip	Code	Manual reference
93	danger point (backward)	→	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0);	trafficcontrol Section 3.4.2 p. 15
			\maintrack (A) (B);	Section 5. 1.2 p. 15
			\dangerpoint[backward] at (S) label ();	
94	clearing point		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (CP) at (3,0);	trafficcontrol
			\maintrack (A) (B);	Section 3.4.3 p. 15
			\clearingpoint[backward] at (CP) label ();	
95	block clearing point (forward)		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (CP) at (3,0);	trafficcontrol
	block clearing point (forward)	*	\maintrack (A) (B);	Section 3.4.3 p. 16
			\blockclearing[forward] at (CP) label ();	
			\coordinate (A) at (0,0);	
0.6		♦	\coordinate (B) at (6,0); \coordinate (CP) at (3,0);	trafficcontrol
96	block clearing point (backward)	<u> </u>	\maintrack (A) (B);	Section 3.4.3 p. 16
			\blockclearing[backward] at (CP) label ();	
			\coordinate (A) at (0,0);	
			\coordinate (B) at (6,0); \coordinate (CP) at (3,0);	trafficcontrol
97	route clearing point (forward)	<u> </u>	\maintrack (A) (B);	Section 3.4.3 p. 16
			\routeclearing[forward] at (CP) label ();	
			<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (CP) at (3,0);</pre>	trafficcontrol
98	route clearing point (backward)	<u> </u>		Section 3.4.3 p. 16
			\maintrack (A) (B);	
			\routeclearing[backward] at (CP) label (); \coordinate (A) at (0,0);	
			\coordinate (B) at (6,0);	
99	route (forward & backward)		\coordinate (R1) at (2,0); \coordinate (R2) at (4,0);	trafficcontrol
			\maintrack (A) (B); \route[backward] at (R1); \route[forward] at (R2);	Section 3.4.4 p. 17
		<i>/</i> _	\coordinate (A) at (0,0); \coordinate (DC) at (3,0);	
100	direction control		\coordinate (B) at (6,0);	trafficcontrol Section 3.4.4 p. 17
			<pre>\maintrack (A) (B); \directioncontrol[bidirectional] at (DC);</pre>	Section 5.4.4 p. 17
			\coordinate (A) at (0,0); \coordinate (DC) at (3,0);	
101	direction control	<u> </u>	\coordinate (B) at (6,0);	trafficcontrol Section 3.4.4 p. 17
	granted forward	-	<pre>\maintrack (A) (B); \directioncontrol[forward] at (DC);</pre>	Section 5.4.4 p. 17
_				

No.	Name	Clip	Code	Manual reference
102	direction control granted backward	←	<pre>\coordinate (A) at (0,0); \coordinate (DC) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \directioncontrol[backward] at (DC);</pre>	trafficcontrol Section 3.4.4 p. 17
103	transmitter (right & left)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T1) at (2,0); \coordinate (T2) at (4,0); \maintrack (A) (B); \balise[] at (T1) label (); \balise[position=left] at (T2) label ();</pre>	trafficcontrol Section 3.4.5 p. 17
104	transmitter (right) with signal	——————————————————————————————————————	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (S) at (3,0); \maintrack (A) (B); \routesignal[forward] at (S) label (); \balise[] at (S) label ();</pre>	trafficcontrol Section 3.4.5 p. 17 & Section 3.4.1 p. 12
105	transmitter (right & left) effective forward		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T1) at (2,0); \coordinate (T2) at (4,0); \maintrack (A) (B); \balise[forward] at (T1) label (); \balise[forward,position=left] at (T2) label ();	trafficcontrol Section 3.4.5 p. 18
106	transmitter (right & left) effective backward	4	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T1) at (2,0); \coordinate (T2) at (4,0); \maintrack (A) (B); \balise[backward] at (T1) label (); \balise[backward,position=left] at (T2) label ();</pre>	trafficcontrol Section 3.4.5 p. 18
107	transmitter (right & left) effective bidirectional		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T1) at (2,0); \coordinate (T2) at (4,0); \maintrack (A) (B); \balise[bidirectional] at (T1) label (); \balise[bidirectional,position=left] at (T2) label ();</pre>	trafficcontrol Section 3.4.5 p. 18
108	loop transmitter		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (T) at (3,0); \maintrack (A) (B); \transmitter[type=loop] at (T) label ();</pre>	trafficcontrol Section 3.4.5 p. 18
109	platform (left)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (P) at (3,0); \maintrack (A) (B); \platform[side=left] at (P);</pre>	constructions Section 3.5 p. 18

No.	Name	Clip	Code	Manual reference
110	platform (right)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (P) at (3,0); \maintrack (A) (B); \platform[side=right] at (P);</pre>	constructions Section 3.5 p. 18
111	platform (middle)		\coordinate (A1) at (0,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (B2) at (6, 0.5); \coordinate (P1) at (3, 0.5); \coordinate (P2) at (3,-0.5); \maintrack (A1) (B1); \maintrack (A2) (B2); \platform[side=right] at (P1); \platform[side=left] at (P2);	constructions Section 3.5 p. 18
112	level crossing (single track)	<u>+ </u> +•	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (X) at (3,0); \maintrack (A) (B); \levelcrossing[barrier=semi] at (X);</pre>	constructions Section 3.5 p. 19
113	level crossing (secondary track) without barrier		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (X) at (3,0); \secondarytrack (A) (B); \levelcrossing[] at (X);</pre>	constructions Section 3.5 p. 19
114	level crossing (double track)	•+ 	\coordinate (A1) at (0,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (B2) at (6, 0.5); \coordinate (X1) at (3, 0.5); \coordinate (X2) at (3,-0.5); \maintrack (A1) (B1); \maintrack (A2) (B2); \levelcrossing[barrier=semi,side=left] at (X1); \levelcrossing[barrier=semi,side=right] at (X2);	constructions Section 3.5 p. 19
115	level crossing (double track) with full closure	•++• 	\coordinate (A1) at (0,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (B2) at (6, 0.5); \coordinate (X1) at (3, 0.5); \coordinate (X2) at (3,-0.5); \maintrack (A1) (B1); \maintrack (A2) (B2); \levelcrossing[barrier=full, side=left] at (X1); \levelcrossing[barrier=full, side=right] at (X2);	constructions Section 3.5 p. 19
116	bridge		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (X) at (3,0); * order is important \bridge[] at (X); * first \maintrack (A) (B); * secound</pre>	constructions Section 3.5 p. 19

No.	Name	Clip	Code	Manual reference
117	bridge with track beneath		\coordinate (A1) at (0, 0); \coordinate (B1) at (6, 0); \coordinate (A2) at (2,-1); \coordinate (B2) at (4, 1); \coordinate (X) at (3,0); * order is important \maintrack (A2) (B2); * first \bridge[shift left=0.25cm, shift right=-0.25cm] at (X); * secound \maintrack (A1) (B1); * third	constructions Section 3.5 p. 19
118	interlocking		\coordinate (I) at (3,0); \interlocking at (I);	constructions Section 3.5 p. 20
119	hump	.illi. 	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (H) at (3,0); \secondarytrack (A) (B); \hump at (H);	constructions Section 3.5 p. 20
120	pylons (right)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (P1) at (1,0); \coordinate (P2) at (3,0); \coordinate (P3) at (5,0); \maintrack (A) (B); \pylon[side=right] at (P1); \pylon[side=right] at (P2); \pylon[side=right] at (P3);</pre>	constructions Section 3.5 p. 20
121	pylons (left)	- 0 0	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (P1) at (1,0); \coordinate (P2) at (3,0); \coordinate (P3) at (5,0); \maintrack (A) (B); \pylon[side=left] at (P1); \pylon[side=left] at (P2); \pylon[side=left] at (P3);	constructions Section 3.5 p. 20
122	pylons (both sides)		<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (P1) at (1,0); \coordinate (P2) at (3,0); \coordinate (P3) at (5,0); \maintrack (A) (B); \pylon[side=both] at (P1); \pylon[side=both] at (P2); \pylon[side=both] at (P3);</pre>	constructions Section 3.5 p. 20

No.	Name	Clip	Code	Manual reference
123	pylons (middle)		\coordinate (A1) at (0,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (B2) at (6, 0.5); \\$ \coordinate (P1) at (1,-0.5); \coordinate (P2) at (3,-0.5); \coordinate (P3) at (5,-0.5); \coordinate (P4) at (1, 0.5); \coordinate (P5) at (3, 0.5); \coordinate (P6) at (5, 0.5); \maintrack (A1) (B1); \maintrack (A2) (B2); \pylon[side=left] at (P1); \pylon[side=left] at (P2); \pylon[side=right] at (P4); \pylon[side=right] at (P5); \pylon[side=right] at (P6);	constructions Section 3.5 p. 20
124	distant power off (forward)	dP-	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \distantpoweroff[forward] at (E) label (dP);</pre>	electrics Section 3.6 p. 21
125	distant power off (backward)	♣¬dP	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \distantpoweroff[backward] at (E) label (dP);	electrics Section 3.6 p. 21
126	power off (forward)	off-	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \poweroff[forward] at (E) label (off);	electrics Section 3.6 p. 21
127	power off (backward)	off	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \poweroff[backward] at (E) label (off);</pre>	electrics Section 3.6 p. 21
128	power on (forward)	on to	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \poweron[forward] at (E) label (on);</pre>	electrics Section 3.6 p. 22
129	power on (backward)	on	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \poweron[backward] at (E) label (on);	electrics Section 3.6 p. 22

No.	Name	Clip	Code	Manual reference
130	distant pantograph down (forward)	dP dP	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \distantpantographdown[forward] at (E) label (dP);	electrics Section 3.6 p. 22
131	distant pantograph down (backward)	d₽	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \distantpantographdown[backward] at (E) label (dP);	electrics Section 3.6 p. 22
132	pantograph down (forward)	down-	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \pantographdown[forward] at (E) label (down);</pre>	electrics Section 3.6 p. 23
133	pantograph down (backward)	down	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \pantographdown[backward] at (E) label (down);	electrics Section 3.6 p. 23
134	pantograph up (forward)	ир	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \pantographup[forward] at (E) label (up);	electrics Section 3.6 p. 23
135	pantograph up (backward)	↓ ¬up	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \pantographup[backward] at (E) label (up);</pre>	electrics Section 3.6 p. 23
136	wire limit (forward)	limit 🍑	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \wirelimit[forward] at (E) label (limit);</pre>	electrics Section 3.6 p. 24
137	wire limit (backward)	∳ ¬limit	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (E) at (3,0); \maintrack (A) (B); \wirelimit[backward] at (E) label (limit);</pre>	electrics Section 3.6 p. 24

No.	Name	Clip	Code	Manual reference
138	track distance (in m)	4,50 V	\coordinate (A1) at (0,-0.5); \coordinate (X1) at (3,-0.5); \coordinate (B1) at (6,-0.5); \coordinate (A2) at (0, 0.5); \coordinate (X2) at (3, 0.5); \coordinate (B2) at (6, 0.5); \maintrack (A1) (B1); \maintrack (A2) (B2); \trackdistance between (X2) and (X1) distance (4,50);	measures Section 3.7 p. 24
139	train berth shape	:▶······-750 m ······-	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (H) at (3,0); \maintrack (A) (B); \berth[forward] at (H) length (\SI{750}{\metre});</pre>	measures Section 3.7 p. 24
140	train berth shape bidirectional	;·· ◄··································	<pre>\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (H) at (3,0); \maintrack (A) (B); \berth[bidirectional] at (H) length (\SI{750}{\metre});</pre>	measures Section 3.7 p. 24
141	train berth with special shape		\coordinate (A) at (0,0); \coordinate (B) at (6,0); \coordinate (H1) at (3.25,0); \coordinate (H2) at (3,0); \maintrack (A) (B); \berth[forward ,length=3.0cm] at (H1) length (\SI{550}{\metre}); \berth[backward,length=3.5cm] at (H2) length (\SI{650}{\metre});	measures Section 3.7 p. 24
142	measure line	•	\coordinate (A) at (0,0); \coordinate (B) at (6,0); \measureline (A) (B); \trackclosure at (A); \trackclosure at (B);	measures Section 3.7 p. 25
143	hectometer (in km)	4.500	<pre>\coordinate (A) at (0,0); \coordinate (X1) at (3,0); \coordinate (X2) at (3.5,0); \coordinate (B) at (6,0); \coordinate (hb) at (0,-2); \maintrack (A) (B); \tikzset{hectometer base={(hb)},orientation=right} \hectometer[] at (A) mileage (0.000); \hectometer[] at (X1) mileage (4.000); \hectometer[shift label={(0.3,0)}] at (X2) mileage (4.500); \hectometer[] at (B) mileage (6.000);</pre>	measures Section 3.7 p. 25

No.	Name	Clip	Code	Manual reference
	measure line with hectometer (in km)		\coordinate (A1) at (0,0); \coordinate (X1) at (3,0); \coordinate (B1) at (6,0); \coordinate (A2) at (0,3); \coordinate (X2) at (2,3); \coordinate (X3) at (5,3); \coordinate (B2) at (6,3);	
144		·	\coordinate (hb) at (0,-2); \maintrack (A1) (B1); \maintrack (A2) (B2);	measures Section 3.7 p. 25
			\measureline (A2) (A1); \measureline (X2) ++(0,-1) ++(1,-1) (X1); \measureline (X3) ++(0,-1) ++(1,-1) (B1);	
		6.000 4.000	<pre>\tikzset{hectometer base={(hb)},orientation=right} \hectometer[] at (A) mileage (0.000); \hectometer[] at (X1) mileage (4.000); \hectometer[] at (B) mileage (6.000);</pre>	
145	track marking		\coordinate (A) at (0,0); \coordinate (X) at (3,0); \coordinate (B) at (6,0);	measures Section 3.7 p. 26
			\maintrack (A) (B); \trackmarking[green] (A) (X); \trackmarking[red] (X) (B);	1
146	track marking with turnout		<pre>\coordinate (A) at (0,0); \coordinate (Y) at (3,0); \coordinate (B) at (6,0); \maintrack (A) (B); \maintrack (Y) ++(1,1); \turnout[forward,branch=left] at (Y) label ();</pre>	measures Section 3.7 p. 26
			\trackmarking[yellow] (A) (Y) ++(1,1); \trackmarking[blue] (Y) (B);	

1 Revision History

Revision	Date	Author(s)
0.1	2018-09-14	MS
0.2	2018-12-19	MS
0.3	2019-04-04	MS
0.4	2019-07-21	MS
0.5	2020-01-14	MS
0.5.1	2020-02-10	MS
0.6	2021-01-02	MS

Description

Basic concept of a library with railway topology symbols and some examples.

Added transmitters and minor improvements.

Moved snippet folder to root folder and defined and used color foreground and background.

Reworked library for common tikz library layout.

Introducing new syntax and providing a documentation.

Modified symbol "end of movement authority"; added symbols "braking point" and "danger point".

Added symbols for "direction control", "track marking", "pylons" and electric wiring; changed symbol for "friction bufferstop"; created an encapsulating package for future flexibilty - changed load command for library to \usepackage{tikz-trackschematic}.