Theobald's Yard

ASSIGNMENTS V12

Start Of Day (SOD) and Move/Route settings.

SOD, Event 9.

This sets points to a known start position and is also used to trigger all the sensor/producer modules.

14 Points affected:- 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 27 and 57.

Point	State	Event	Action	Sensor
13	CLOSED	13	OFF	101
14	CLOSED	14	OFF	102
15	CLOSED	15	OFF	111
16	CLOSED	16	OFF	112
18	CLOSED	18	OFF	114
19	THROWN	19	ON	115
20	CLOSED	20	OFF	116
21	CLOSED	21	OFF	131
22	THROWN	22	ON	132
23	CLOSED	23	OFF	151
24	THROWN	24	ON	152
25	CLOSED	25	OFF	153
27	CLOSED	27	OFF	155
57	CLOSED	57	OFF	171

SEND, Event 10.

This event is normally hidden in the mimic panel software so if a panel is plugged in to a live system the sensor/producer modules are triggered to return their current IP settings so automatically updating all panels.
.

MOVE/ROUTES.

6 ROUTES are provided which correspond to the layout MOVES;

Moves/Routes

Event	Event No.	Set	Route Set
SOD	9	SOD positions	NA
Route 1	1	NG FY to Loco Loop. Long to GW	301
Route 2	2	NG TT<>TT. NG to Brew Corner.	302
Route 3	3	O Gauge Through. NG TO Brew Loop	303
Route 4	4	NG Long to FY ACW	304
Route 5	5	O Gauge Through NG. Loco Loop to FY	305
Route 6	6	NG Short to FY. CWC	306

Event	Event No.	Action	Event	Event No.	Action
SOD	9	Set points and Send sensors	SEND	10	Send sensors

Theobald's Yard

TT BREW
BOARD N (1)
Designations

There are 2 servo controlled points on the front section of this board. The hidden section consists 2 hand operated turntables.

Modules

Name	Type	Software	Node	Events
MOTDRV1	CANACC5	2t	411	2
POSNIND1	CANACE8C	2qBeta100	412	2

Drivers

Module	OP Con	Point Or LED Ref	Input Event	ON Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV1	1 & 2	P13	13	Thrown	1	ON	2	OFF	OFF	NONE
MOTDRV1	3 & 4	P14	14	Thrown	3	ON	4	OFF	OFF	NONE
MOTDRV1	5	LOCO NG-TT	281	TT Set	5	ON	-	-	-	-
MOTDRV1	6	LOCO SG-TT	282	TT Set	6	ON	-	-	-	-
MOTDRV1	7	MOVE IND	See below				-	-	-	-
MOTDRV1	8	Not used.	-	-	-	-	-	-	-	-

Move Action.

Module	Point Ref	Move 1 Action	Move 2 Action	Move 3 Action	Move 4 Action	Move 5 Action	Move 6 Action
MOTDRV1	P13	-	Closed	-	-	-	-
MOTDRV1	P14	Closed	Thrown	Closed	Closed	-	-

Sensors

Module	Input No	Source Device Number (Pin)	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND1	1	P13 (7)	Thrown	LOW	101	0
POSNIND1	2	P14 (7)	Thrown	LOW	102	0
POSNIND1	3	BREW NG TT Set	Active	LOW	103	0
POSNIND1	4	BREW SG TT Set	Active	LOW	104	0
POSNIND1	5	None	Dummy 3	NA	273	1
POSNIND1	6	None	Dummy 4	NA	274	1
POSNIND1	7	Seq Decrement	Active	LOW	7*	1
POSNIND1	8	Seq Increment	Active	LOW	8*	1

MOTDRV1 Output 7 designations.

Sequence description	Number	Input Events	Action	Output from module
Move/Route SENT	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	ON	Output High
Move Route SET	1, 2, 3, 4, 5, 6	301, 302, 303, 304, 305, 306	OFF	Output low

* Also produces next or previous Move/Route numbers

Connection colours to points.

Point 13: Pink to 1 White to 2
Point 14: Pink to 3 White to 4

Theobald's Yard

BREWERY
BOARD A (2)
Designations

There are 6 servo controlled points on the front section of this board and 2 Juicer driven crossovers on the industrial section.

Modules

Name	Type	Software		Node	Events
MOTDRV2	CANACC5	2t		421	4
MOTDRV2A	CANACC5	2t		422	2
POSNIND2	CANACE8C	2q		423	6

Drivers

Module	Point Ref	Input Event	ON Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV2	P15	15	Thrown	1	ON	2	OFF	OFF	NOR
MOTDRV2	P16	16	Thrown	3	ON	4	OFF	-	REV
MOTDRV2	P17	17	Thrown	5	ON	6	OFF	-	REV
MOTDRV2	P18	18	Thrown	7	ON	8	OFF	-	REV
MOTDRV2A	P19	19	Thrown	1	ON	2	OFF	ON	NOR
MOTDRV2A	P20	20	Thrown	3	ON	4	OFF	OFF	NOR
MOTDRV2A	Spare	-	-	5	-	6	-	-	-
MOTDRV2A	Spare	-	-	7	-	8	-	-	-

Move Action.

Module	Point Ref	Move 1 Action	Move 2 Action	Move 3 Action	Move 4 Action	Move 5 Action	Move 6 Action
MOTDRV2	P15	-	Closed	-	Closed	-	-
MOTDRV2	P16	Closed	Thrown	Closed	Thrown	-	-
MOTDRV2	P17	-	-	Closed	-	Closed	-
MOTDRV2	P18	-	Closed	Thrown	Closed	Thrown	-
MOTDRV2A	P19	Thrown	Closed	Closed	Closed	Closed	Thrown
MOTDRV2A	P20	Closed	Closed	Closed	Closed	Closed	Closed
MOTDRV2A	Spare	-	-	-	-	-	-
MOTDRV2A	Spare	-	-	-	-	-	-

Sensors

Module	Input No	Source Device Number (Pin)	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND2	1	P15 (7)	Thrown	LOW	111	0
POSNIND2	2	P16 (6)	Thrown	LOW	112	0
POSNIND2	3	P17 (7)	Thrown	LOW	113	0
POSNIND2	4	P18 (6)	Thrown	LOW	114	0
POSNIND2	5	P19 (6)	Thrown	LOW	115	0
POSNIND2	6	P20 (7)	Thrown	LOW	116	0
POSNIND2	7	None	Dummy 1	NA	271	1
POSNIND2	8	None	Dummy 2	NA	272	1

Connection colours to points.

Point 15:	Pink to 1	White to 2	**Point 18:**	Pink to 8	White to 7
Point 16:	Pink to 4	White to 3	**Point 19:**	Pink to 2	White to 1
Point 17:	Pink to 5	White to 6	**Point 20:**	Pink to 3	White to 4

Juicer for X2 and X3. Link 1 fitted. Link 2 not fitted. Outputs 5 and 6 not used.

Theobald's Yard

FLOUR MILL
BOARD B (3)
Designations

There are 2 servo controlled points on the front section of this board and 2 Juicer driven crossovers on the industrial section.

Modules

Name	Type	Software	Node	Events
MOTDRV3	CANACC5	2t	431	2
POSNIND3	CANACE8C	2q	432	2

Drivers

Module	Point Ref	Input Event	ON Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV3	P21	21	Thrown	1	ON	2	OFF	OFF	NOR
MOTDRV3	P22	22	Thrown	3	ON	4	OFF	ON	REV
MOTDRV3	Spare	-	-	5	-	6	-	-	-
MOTDRV3	Spare	-	-	7	-	8	-	-	-

Move Action.

Module	Point Ref	Move 1 Action	Move 2 Action	Move 3 Action	Move 4 Action	Move 5 Action	Move 6 Action
MOTDRV3	P21	Closed	Closed	Closed	Closed	Closed	Closed
MOTDRV3	P22	Thrown	Closed	Closed	Closed	Closed	Thrown
MOTDRV3	Spare	-	-	-	-	-	-
MOTDRV3	Spare	-	-	-	-	-	-

Sensors

Module	Input No	Source Device Number	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND3	1	P21 ()	Thrown	LOW	131	0
POSNIND3	2	P22 ()	Thrown	LOW	132	0
POSNIND3	3	None	Dummy 1	NA	271	1
POSNIND3	4	None	Dummy 2	NA	272	1
POSNIND3	5	None	Dummy 3	NA	273	1
POSNIND3	6	None	Dummy 4	NA	274	1
POSNIND3	7	None	Dummy 5	NA	275	1
POSNIND3	8	None	Dummy 6	NA	276	1

Connection colours to points.

Point 21: Pink to 1 White to 2
Point 22: Pink to 4 White to 3 (Rev)

Juicer for X3 and X4. Link 1 fitted. Link 2 not fitted. Outputs 5 and 6 not used.

Theobald's Yard

LOCO YARD
BOARD C (4)
Designations

There are 5 servo controlled points on the front section of this board and 2 Juicer driven crossovers on the industrial section.

Modules

Name	Type	Software	Node	Events
MOTDRV4	CANACC5	2t	441	4
MOTDRV4A	CANACC5	2t	442	1
POSNIND4	CANACE8C	2q	443	5

Drivers

Module	Point Ref	Input Event	ON Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV4	P23	23	Thrown	1	ON	2	OFF	-	NOR
MOTDRV4	P24 A	24	Thrown	3	ON	4	OFF	ON	REV
MOTDRV4	P24 B	24	Thrown	5	ON	6	OFF	ON	NOR
MOTDRV4	P25	25	Thrown	7	ON	8	OFF	-	REV
MOTDRV4A	P26	26	Thrown	1	ON	2	OFF	-	REV
MOTDRV4A	P27	25 & 27	Thrown	3	ON	4	OFF	-	NOR
MOTDRV4A	Spare	-	-	5	-	6	-	-	-
MOTDRV4A	Spare	-	-	7	-	8	-	-	-

Move Action.

Module	Point Ref	Move 1 Action	Move 2 Action	Move 3 Action	Move 4 Action	Move 5 Action	Move 6 Action
MOTDRV4	P23	-	Closed	Thrown	Closed	Thrown	-
MOTDRV4	P24 A	-	Closed	-	Closed	Thrown	Thrown
MOTDRV4	P24 B	-	Closed	-	Closed	Thrown	Thrown
MOTDRV4	P25	-	Closed	-	Closed	-	-
MOTDRV4A	P26	-	-	-	-	-	-
MOTDRV4A	P27	-	Closed	-	Closed	-	-
MOTDRV4A	Spare	-	-	-	-	-	-
MOTDRV4A	Spare	-	-	-	-	-	-

Sensors

Module	Input No	Source Device Number (Pin)	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND4	1	P23 (7)	Thrown	LOW	151	0
POSNIND4	2	P24 (A6 – B7)	Thrown	LOW	152	0
POSNIND4	3	P25 (6)	Thrown	LOW	153	0
POSNIND4	4	P26 (7)	Thrown	LOW	154	0
POSNIND4	5	P27 (7)	Thrown	LOW	155	0
POSNIND4	6	None	Dummy 1	NA	271	1
POSNIND4	7	None	Dummy 2	NA	272	1
POSNIND4	8	None	Dummy 3	NA	273	1

Connection colours to points.

Point 23:	Pink to 1	White to 2	**Point 25:**	Pink to 8	White to 7
Point 24A:	Pink to 4	White to 3	**Point 26:**	Pink to 1	White to 2
Point 24B:	Pink to 6	White to 5	**Point 27:**	Pink to 3	White to 4

Juicer for X5 and X6. Link 1 fitted. Link 2 not fitted. Outputs 5 and 6 not used.

Theobald's Yard

TT LOCO
BOARD D (5)
Designations

There is 1 servo controlled point on the front section of this board. The hidden section consists 2 hand operated turntables.

Modules

Name	Type	Software	Node	Events
MOTDRV5	CANACC5	2t	451	1
POSNIND5	CANACE8C	2qBeta100	452	1

Drivers

Module	OP Con	Point Or LED Ref	Input Event	ON Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV5	1 & 2	P57	57	Thrown	1	ON	2	OFF	OFF	NONE
MOTDRV5	3 & 4	Spare	-	-	3	-	4	-	-	-
MOTDRV5	5	BREW NG-TT	283	TT Set	5	ON	-	-	-	-
MOTDRV5	6	BREW SG-TT	284	TT Set	-	-	6	ON	-	-
MOTDRV5	7	MOVE IND	See below	MOVE SET	7	OFF	-	-	-	-
MOTDRV5	8	Not used.	-	-	-	-		-	-	-

Move Action.

Module	Point Ref	Move 1 Action	Move 2 Action	Move 3 Action	Move 4 Action	Move 5 Action	Move 6 Action
MOTDRV5	P57	-	Thrown	-	Closed	Closed	Closed

Sensors

Module	Input No	Source Device Number (Pin)	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND5	1	P57 (6)	Thrown	LOW	171	0
POSNIND5	2	None	Dummy 1	NA	271	1
POSNIND5	3	LOCO NG TT Set	Active	LOW	173	0
POSNIND5	4	LOCO SG TT Set	Active	LOW	174	0
POSNIND5	5	None	Dummy 2	NA	272	1
POSNIND5	6	SOD Request	Active	LOW	285	1
POSNIND5	7	Seq Decrement	Active	LOW	7	1
POSNIND5	8	Seq Increment	Active	LOW	8	1

MOTDRV1 Output 7 designations.

Sequence description	Number	Input Events	Action	Output from module
Move/Route SENT	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	ON	Output High
Move Route SET	1, 2, 3, 4, 5, 6	301, 302, 303, 304, 305, 306	OFF	Output low

Connection colours to points.
Point 57: Pink to 2 White to 1

Theobald's Yard

GASOMETER
BOARD E (6)
Designations

This board houses the main power supply, the CANWEB computer and the 2 CANCOND units.

Modules

Name	Type	Software	Node	Events
CONDMOD6	CANCOND8	2n	634	-
CONDMOD6A	CANCOND8	2n	635	-

Theobald's Yard

FIDDLE YARD LOCO
BOARD G (8)
Designations

There are 2 servo controlled points on this board controlled by an ACC5 driver which is configured to give the three states OUTER, CENTRE and INNER. Positions are monitored via switch outputs on the Tortoise motors and the 4 options are decoded via hardware logic to produce the three route states.

Modules

Name	Type	Software	Node	Events
MOTDRV8	CANACC5	2t	481	3
POSNIND8	CANACE8C	2q	482	8

Drivers

Module	Point Ref	Input Event	ON event Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV8	P60	61	Thrown	1	ON	2	OFF	ON	None
MOTDRV8	P61	61	Thrown	3	ON	4	OFF	OFF	None
MOTDRV8	P60	62	Thrown	1	ON	2	OFF	ON	None
MOTDRV8	P61	62	Closed	3	OFF	4	ON	OFF	None
MOTDRV8	P60	63	Closed	1	OFF	2	ON	ON	None
MOTDRV8	P61	63	Closed	3	OFF	4	ON	OFF	None
MOTDRV8	Outer	201	Outer Set	5	OFF	-	-	-	-
MOTDRV8	Centre	202	Centre Set	-	-	6	OFF	-	-
MOTDRV8	Inner	203	Inner Set	7	OFF	-	-	-	-
MOTDRV8	Spare	-	-	-	-	8	-	-	-

Route commands.

Route	TRACK	Point Ref	Action	OP A	OP B	Point Ref	Action	OP A	OP B
Route 1	INNER	P60	Closed	OFF	ON	P61	Closed	OFF	ON
Route 2	INNER	P60	Closed	OFF	ON	P61	Closed	OFF	ON
Route 3	INNER	P60	Closed	OFF	ON	P61	Closed	OFF	ON
Route 4	INNER	P60	Closed	OFF	ON	P61	Closed	OFF	ON
Route 5	OUTER	P60	Thrown	ON	OFF	P61	Thrown	ON	OFF
Route 6	CENTRE	P60	Thrown	ON	OFF	P61	Closed	OFF	ON

Sensors

Module	Input No	Source	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND8	1	Outer Logic	Outer	LOW	201	0
POSNIND8	2	Centre Logic	Centre	LOW	202	0
POSNIND8	3	Inner Logic	Inner	LOW	203	0
POSNIND8	4	None	Dummy 1	NA	271	1
POSNIND8	5*	Outer drive	Outer	LOW (ON Only)	61	1
POSNIND8	6*	Centre drive	Centre	LOW (ON Only)	62	1
POSNIND8	7*	Inner drive	Inner	LOW (ON Only)	63	1
POSNIND8	8	None	Dummy 2	NA	272	1

* POSIND8 inputs 5, 6 and 7 connected to local push buttons to operate fiddle yard entry/exit.

Theobald's Yard

FIDDLE YARD BREW
BOARD K (11)
Designations

There are 2 servo controlled points on this board controlled by an ACC5 driver which is configured to give the three states OUTER, CENTRE and INNER. Positions are monitored via switch outputs on the Tortoise motors and the 4 options are decoded via hardware logic to produce the three route states.

Modules

Name	Type	Software	Node	Events
MOTDRV11	CANACC5	2t	511	3
POSNIND11	CANACE8C	2q	512	3

Drivers

Module	Input Event	Input Action	Point Ref	ON event Action	OP A	State	OP B	State	SOD	FROG FEED
MOTDRV11	64	OUTER	P62	Closed	1	OFF	2	ON	ON	None
MOTDRV11	64	OUTER	P63	Closed	3	OFF	4	ON	OFF	None
MOTDRV11	65	CENTRE	P62	Thrown	1	ON	2	OFF	ON	None
MOTDRV11	65	CENTRE	P63	Closed	3	OFF	4	ON	OFF	None
MOTDRV11	66	INNER	P62	Thrown	1	ON	2	OFF	ON	None
MOTDRV11	66	INNER	P63	Thrown	3	ON	4	OFF	OFF	None
MOTDRV11	231	OUTER	Outer	Outer Set	5	OFF	-	-	-	-
MOTDRV11	232	CENTRE	Centre	Centre Set	-	-	6	OFF	-	-
MOTDRV11	233	INNER	Inner	Inner Set	7	OFF	-	-	-	-
MOTDRV11	-	-	Spare	-	-	-	8	-	-	-

Route commands.

Route	TRACK	Point Ref	Action	OP A	OP B	Point Ref	Action	OP A	OP B
Route 1	OUTER	P62	Closed	OFF	ON	P63	Closed	OFF	ON
Route 2	CENTRE	P62	Thrown	ON	OFF	P63	Closed	OFF	ON
Route 3	CENTRE	P62	Thrown	ON	OFF	P63	Closed	OFF	ON
Route 4	INNER	P62	Thrown	ON	OFF	P63	Thrown	ON	OFF
Route 5	OUTER	P62	Closed	OFF	ON	P63	Closed	OFF	ON
Route 6	OUTER	P62	Closed	OFF	ON	P63	Closed	OFF	ON

Sensors

Module	Input No	Source Device Number	Active State	Input Active State	Produced Event	Inhibit SoD.
POSNIND11	1	Outer Logic	Outer	LOW	231	0
POSNIND11	2	Centre Logic	Centre	LOW	232	0
POSNIND11	3	Inner Logic	Inner	LOW	233	0
POSNIND11	4	None	Dummy 1	NA	271	1
POSNIND11	5*	Outer drive	Outer	LOW (ON Only)	64	1
POSNIND11	6*	Centre drive	Centre	LOW (ON Only)	65	1
POSNIND11	7*	Inner drive	Inner	LOW (ON Only)	66	1
POSNIND11	8	None	Dummy 2	NA	272	1

* POSIND11 inputs 5, 6 and 7 connected to local push buttons to operate fiddle yard entry/exit.