

TRAMWAY AND LIGHT RAILWAY SOCIETY - MODELLING SCALES AND STANDARDS										
SCALE/GAUGE NAME		FULL SIZE	¼ " to ft	"Manchester"(⅝" to ft)	G	1 (⅜" to ft)	O (7mm to ft)	OO (4mm to ft)	HO (3.5mm to ft)	N (2mm to ft)
Scale		1:1	1:16	1:19	1:22.5	1:32	1:43.5	1:76	1:87	1:148
Track	Compromise gauge			62mm (2 7/16")	45mm			16.5mm		9mm
	Standard gauge	4' 8½"	3½"	75mm		45mm (1¾")	32mm		16.5mm	
	3'6" narrow gauge	3' 6"	2¾"			32mm	24.5mm			
Rail profile		Grooved girder	Flat Bottom gauge 1, Course scale gauge O G or ½" scale		LGB or Peco 250	10mm Bullhead	Code 100	Code 75	Code 75	Code 80 or Code 55
Groove width	straight track	1¼"	3/32"		3mm	1.25mm	1.25mm	1.25mm	1.25mm	1mm
	curved track	1½"	½"		3.5mm	1.5mm	1.5mm	1.5mm	1.5mm	1.25mm
Min radius	older systems	45'	3'		600mm	375mm (15")	250mm (10")	140mm (5½")	140mm (5½")	75mm
	modern systems	66' (20m)	5'		710mm	600mm (20")	330mm (13")	180mm (7¼")	180mm (7¼")	100mm
double track centre distance		8' 6"	8"		125mm Minimum	115mm (4½")	76mm (3")	45mm (1¾")	45mm (1¾")	25mm
Wheels	recommended		TLRS Model Eng Sec		Commercially available	OO gauge BRMSB	OO gauge BRMSB	OO gauge BRMSB	OO gauge BRMSB	Commercially available
Back to back meas					LGB 39.5mm			14.5mm	14.5mm	7.51mm
	standard gauge		3 5/16"			43.5mm	30.3mm			
	3' 6" narrow gauge		2 7/16"			30.5mm	22.7mm			
axle diameter			¼" or 5/16" stepped down to ¼"		LGB 6mm	2mm	2mm	2mm	2mm	
Overhead										
Ave height over road		20'	15¾"	12½"	270mm (LGB 226mm)	200mm	140mm	80mm	70mm	40mm
Wire type & diameter		Copper 0.32"	Phos Bronze 20swg		Phos Bronze 20swg or 0.8mm copper (LGB 2mm plated steel)	Nickel Silver 0.3mm	Nickel Silver 0.3mm	Nickel Silver 0.3mm	Nickel Silver 0.3mm	Nickel Silver 0.3mm
Traction pole height		25'	18¾"	15½"	340mm (LGB 300mm)	250mm (10")	178mm (7")	110mm (4¼")	96mm	55mm
Traction pole spacing	on straight track	120'	7' 6" average	7' 6" average	700mm (LGB 600mm)	400mm (16") average	280mm (11") ave	150mm (6")	150mm (6")	75mm