

NTC3 Gear Combinations

This chart consists of all the ratios that are available from Associated Electrics for our Nitro TC3 kits and RTRs.

The NTC3 RTR #2040 kit comes stock with a 54 spur and 24 tooth clutch bell. That gives you a final drive of 5.63, which has good takeoff and top end speed. You change either the spur or clutch bell gear or both to achieve either higher or lower final drive ratios to increase takeoff power or top end speed.

By checking this chart you will see the final drive ratios for whatever gear combinations that you may have or want to have installed in your kit. The final drive can be calculated with the following formula, and with the NTC3/RTR include the transmission ratio of 2.5.

If you use the formula below, you can calculate the gears in your kit yourself, which can help you to gain more performance from your NTC3 kit.

$$\text{Spur gear size} \div \text{clutch bell gear} \times \text{transmission ratio} = \text{final drive}$$

Example: $54 \div 24 \times 2.5 = 5.63$

- With a higher numerical final drive ratio (5.0, 6.0, 7.0, and so on), you will find increased acceleration.
- With a lower final drive (6.0, 5.0, 4.0, and so on), you gain more top end speed.

Standard gear sizes:

NTC3 RTR (single speed)		
single speed	Spur Gear 54T	Clutch Bell Gear 24T
NTC3 RTR+, #2042		
1 st gear	Spur Gear 54T	Clutch Bell Gear 22T
2 nd gear	50T	26T
NTC3 Team kits #2034 & 2035		
1 st gear	Spur Gear 54T	Clutch Bell Gear 22T
2 nd gear	50T	26T
NTC3 Factory Team kit #2033		
1 st gear	Spur Gear 54T	Clutch Bell Gear 21T
2 nd gear	50T	27T

Gear Ratio Chart for the NTC3

Spur	Clutch Bell	Final Drive Ratio
54	20 Silver	6.75
54	(FT) 21 Gray	6.43
1ST 54	(Team & +) 22 Blue	6.14
54	23 Gold	5.87
54	(RTR) 24 Red	5.63
54	25 Green	5.40
54	26 Black	5.19
54	27 Purple	5.00

52	20	6.50
52	21	6.19
52	22	5.91
52	23	5.65
52	24	5.42
52	25	5.20
52	26	5.00
52	27	4.81

50	20	6.25
50	21	5.95
50	22	5.68
50	23	5.43
50	24	5.21
50	25	5.00
2nd: 50	(Team & +) 26	4.81
50	(FT) 27	4.63

48	20	6.00
48	21	5.71
48	22	5.45
48	23	5.22
48	24	5.00
48	25	4.80
48	26	4.62
48	27	4.44