

Wire Colors		Software		Pin Name			Software		Wire Colors			
OT02-P1	OT01-P1	Sim leds	Priority2	Priority1	Pin Name	Pin Name	Priority1	Priority2	Sim leds	OT01-P1	OT02-P1	
Ford 4R44E												
Orion2 TCU Layout												
P1 - 12 Way Input												
Green	Green			Low Range Input	Water Temp	7 1	Air Temp	Oil 10k		Yellow	Yellow	
Blue	Blue			Shifter In	Lambda	8 2	TPS	TPS		Yellow	Blue	
Red	N/C				-.5 Volt Out	9 3	MAP	4 Map Select		Red	Red	
Orange	Orange				+.12 Volt Ign	10 4	GND			White	White	
Blue	Blue			Speed	TDC Sensor	11 5	TDC Power			Red	Red	
Blue	Green			RPM	Crank Sensor	12 6	Crank Power			N/C	Red	
					Internal		3Bar Alt Sensor					
P2 - 10 Way Output												
E31	OT03 - P2										OT03 - P2	E31
Black/Red	Black/Red	N5		Shift Sol 1	Coil Negative 1	6 1	Coil Negative 2	Shift Sol 2	N6	Black/Purple	Black/Purple	
Black/Brown	Black/Brown	N7		Lockup Pressure	Coil Negative 3	7 2	Coil Negative 4	Line Pressure	N8	Black/Orange	Black/Orange	
Black/Yellow	Black/Yellow	N2		Retard	Negative 2	8 3	Negative 1	Starter Lockout	N1	Black/White	Black/White	
Green	Green	RPM		Speed Out	Negative 4	9 4	Negative 3	Relay Out	Relay	Blue	Blue/Black	
Blue/White	Blue/White	N4		Coast Clutch	Negative 6	10 5	Negative 5	Shift Sol 3	N3	Blue/Orange	Blue/Orange	
P3 - 8 Way Output												
	E36										E36	
	Red/White	P1		Lockup LED	Positive 1	5 1	Positive 2	Reverse Light	P2	Red/Yellow		
	Red/Orange	P3		GP1	Positive 3	6 2	Positive 4	GP2	P4	Red/Green		
	Red				+.12 Volt In	7 3	+.12 Volt In			Red		
	White	GP1		N/C	Coil Negative 5	8 4	Coil Negative 6	N/C	GP2	Blue		
P4 - 4 Way Serial												
				N/C	SDA	3 1	SCL	N/C				
				N/C	-.5 Volt Out	4 2	GND	N/C				
6 Way USB												
OT20	USB										USB	OT20
Green	N/C		Up Switch	Overdrive	Tuning Pot	4 1	Dual Map Sw	Second Start	Down Switch	N/C	Yellow	
Yellow	Yellow				Receive	5 2	Transmit			Green	Green	
Red	Red				-.5 Volt Out	6 3	GND			Blue	Blue	

Orion2 TCU Advance 14 Ford 4R44E Ver 3.6A

Firmware Class - Advance

Polarity in Transmission is Common Positive

2 GP outputs available.

Only 10K oil temperature sensor selection is allowed. The sensor is 16K @25°C.

When overdrive or second start is selected then the tiptronic buttons will be disabled and there functions changed to these functions.

Low range, Overdrive and Second Start could be used with different map selections without connections to the tranny or buttons.

Shifter	Gear allowed	Engine Break
P	1	
R	1	
N	1	
D	1,2,3,4	OD On 4
D	1,2,3	OD Off 2,3
2	2	2
1	1	1