

GM 4L80E															
Wire Colors		Software				Orion Input / Outputs						Software		Wire Colors	
		Priority2	Priority1							Priority1	Priority2				
OT02-P1	OT01-P1					P1-12 Way Input								OT01-P1	OT02-P1
Green	Green			Oil 2k	Water Temp	7	1	Air Temp		Low Range Input			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	
E31	OT03 - P2					P2-10 Way Output								OT03 - P2	E31
Black/Red	Black/Red				Coil1	6	1	Coil2					Black/Purple	Black/Purple	
Black/Brown	Black/Brown				Coil3	7	2	Coil4					Black/Orange	Black/Orange	
Black/Yellow	Black/Yellow			Retard	N2	8	3	N1		Starter Lockout			Black/White	Black/White	
Green	Green			Speed Out	N4	9	4	N3		Relay Out			Blue	Blue/Black	
Blue/White	Blue/White	Lockup Led		GP2	N6	10	5	N5		GP1	Reverse Light		Blue/Orange	Blue/Orange	
	E36					P3-8 Way Output								E36	
	Red/White			Shift A	P1	5	1	P2		Shift B			Red/Yellow		
	Red/Orange			Lockup Pressure	P3	6	2	P4		Line Pressure			Red/Green		
	Red				+.12 Volt In	7	3	+.12 Volt In					Red		
	White				Coil5	8	4	Coil6					Blue		
						P4-4 Way Serial									
					SDA	3	1	SCL							
					+.5 Volt Out	4	2	GND							
OT20	USB					6 Way 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	

Orion TCU Combo 7 GM 4L80E Ver 3.3C

Firmware Class - Advance Intermediate

2 GP outputs available. Depending on features used.

The ECU will give 12 volt retard signal during shifts.

Only 2K oil temperature sensor selection is allowed.

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.

Starter lockout on this shifter switch is not possible. You need a mechanical switch in the shifter.

Shifter	GearS allowed	Engine Break
P	1	
R	1	
N	1	
D	1,2,3,4	1,2,3,4
3	1,2,3	1,2,3
2	1,2	1,2
1	1	1