

					Aisin A650E									
Wire Colors			Software		Orion2 TCU Layout					Software			Wire Colors	
		Sim leds	Priority2	Priority1	Pin Name				Pin Name	Priority1	Priority2	Sim leds		
OT02-P1	OT01-P1					P1 - 12 Way Input								OT01-P1
Green	Green			Low Range Input	Water Temp	7	1	Air Temp	Oil Temperature 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						
E31	OT03 - P2				P2 - 10 Way Output								OT03 - P2	E31
Black/Red	Black/Red	N5		SLT Line Pressure	Coil Negative 1	6	1	Coil Negative 2	SLU Lockup Pressure			N6	Black/Purple	Black/Purple
Black/Brown	Black/Brown	N7		SLN Shift Pressure	Coil Negative 3	7	2	Coil Negative 4	Lockup LED			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	Reverse Light	GP2	Negative 6	10	5	Negative 5	GP1	Overdrive LED		N3	Blue/Orange	Blue/Orange
	E36				P3 - 8 Way Output								E36	
	Red/White	P1		Shift1	Positive 1	5	1	Positive 2	Shift2			P2	Red/Yellow	
	Red/Orange	P3		Shif3	Positive 3	6	2	Positive 4	Shift4			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					
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	Yelllow
Yellow	Yellow				Receive	5	2	Transmit					Green	Green
Red	Red				.+5 Volt Out	6	3	GND					Blue	Blue

Orion2 TCU Combo 1 Lexus A650E Ver 3.6A

Firmware Class - Advance Intermediate

Polarity in Transmission is Common Negative

2 GP outputs available.

Only 10K oil temperature sensor selection is allowed. The sensor is 3.5K @20°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	Gears Allowed	Engine Break
P	1	
R	1	
N	1	
D	1,2,3,4,5	3,4,5
2	1,2,3	2,3
1	1,2	1,2