

ZF 4HP24 - 4Sol

Orion Input / Outputs

| 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 |
| | | | | P2-10 Way Output | | | | | | OT03 - P2 | E31 |
| Black/Red | Black/Red | | MV1 Shift 1 | Coil1 | 6 | 1 | Coil2 | MV2 Shift2 | | Black/Purple | Black/Purple |
| Black/Brown | Black/Brown | | MV3 Lockup Pres | Coil3 | 7 | 2 | Coil4 | MV5 Line Pres | | 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 |
| | | | | P3-8 Way Output | | | | | | E36 | |
| | Red/White | | N/C | P1 | 5 | 1 | P2 | N/C | | Red/Yellow | |
| | Red/Orange | | N/C | P3 | 6 | 2 | P4 | N/C | | Red/Green | |
| | Red | | | .+12 Volt In | 7 | 3 | .+12 Volt In | | | Red | |
| | White | | N/C | Coil5 | 8 | 4 | Coil6 | N/C | | 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 | Yellow |
| Yellow | Yellow | | | Receive | 5 | 2 | Transmit | | | Green | Green |
| Red | Red | | | .+5 Volt Out | 6 | 3 | GND | | | Blue | Blue |

Orion TCU Combo 27 ZF 4HP24 4Sol Ver 3.3C

Firmware Class - Advance Intermediate Standard

Polarity in Transmission is Common Positive

2 GP outputs available. Depending on features used.

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 | 3,4 |
| 2 | 1,2,3 | 2,3 |
| 1 | 1,2 | 1,2 |