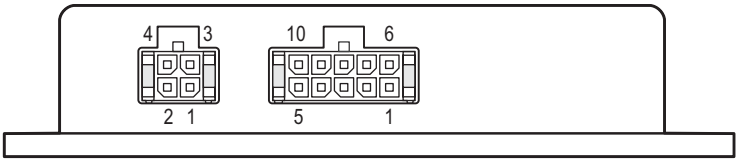
RX7 FUEL INJECTOR SUMMER BY AQUAMIST

(V2 - NOVEMBER 2007)

THE I/O PORTS OF THE AQUAMIST INJECTOR SUMMER FOR THE rx7

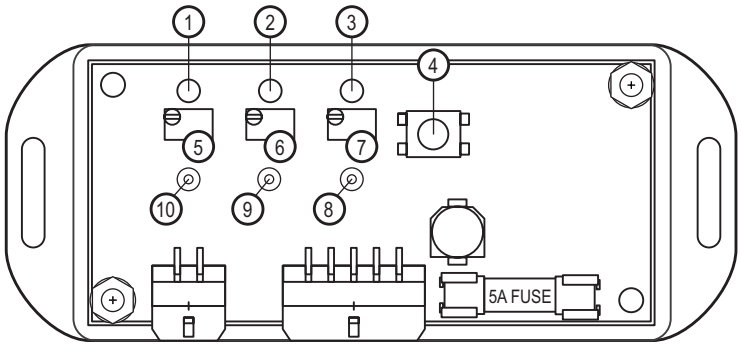


4-CHANNEL DATA LOGGING		
#	COL	OUTPUT FUNCTION
1	YEL	FLOW SENSOR (0-5V)
2	WHT	PRI FIDC (0-5V)
3	GRY	SEC RIDC (0-5V)
4	PUR	SUMMER (0-5V)
USAGE (OPTIONAL)		

10-PIN CONNECTOR (#1-5)			
#	COL	FUNCTION	AWG
1	RED	INJECTOR +12V	# 20
2	BWN	HSV- SW. GND	# 22
3	GRN	DDS3- PIN #17 *	-
4	YEL	DDS3- PIN #15 *	-
5	BLK	GROUND (0V)	# 20

10-PIN CONNECTOR (#6-10)			
#	COL	FUNCTION	AWG
6	RED	HSV+ (FUSED +12V)	#22
7	RED	DDS3-PIN #23 (+12V) *	-
8	WHT	PRIMARY INJECTOR-	#22
9	GRY	SECONDARY INJ -	#22
10	BLU	DDS3- PIN #25 *	-

* 4-CORE CABLE TOP DDS3v8 JUNCTION BOARD



CALIBRATING THE SUMMER TO MATCH THE INJECTOR SIZE (REQUIRES A DIGITAL VOLTMETER)

1. Red led: Actives when water/methanol injection is trigger by the DDS3's trigger input #17
2. Yellow led: Activate as soon as the secondary fuel injector is active. regardless of water/methaol injection.
3. Green led: Activate as soon as the primary fuel injector is active. regardless of water/methaol injection
4. 100% DC: This button is used for calibrating the three potentiometers, it simulates a 100% duty cycle when pressed.
5. Primary injector potentiometer: 10-turn trimmer for calibrating the cc/min of the primary injector.
6. Secondary injector potentiometer: 10-turn trimmer for calibrating the cc/min of the primary injector.
7. Summer potentiometer: 10-turn trimmer for calibrating the combined cc/min of the primary injector.
8. Test point 8: voltage readout pad for primary injector size. Trim to 1000cc =1v with button depressed.
9. Test point 9: voltage readout pad for secondary injector size. Trim to 1000cc =1v with button depressed
10. Test point 10: after trimming 8, 9. Trim pot 5 until readout pad is set at 5.0VDC for 1:1 fuel/water ratio. It is possible to alter the ratio to above or below 1:1. 5.5V = 10% extra or 4.5V 10% less. Great care when trimming for more gain. Do not increase gain to go over 100% fuel duty cycle.

LIMITATION OF THE FUEL INJECTION and IMPORTANT NOTES FOR THE SUMMER MODULE

1. The maximum output drive of the module is for one Aquamist High speed valve only.
2. The injector detection circuitry can only read saturated injector drive outputs (16 ohm)
3. The unit can only be used with the DDS3v8 failsafe system.
4. The maximum input load current for the data logging device is 5mA.
5. The +12V positive supply for must be from the fuel injector positive to minimise accidental triggering.
6. A good chassis ground is require for the optimum system performance.
7. DO NOT install the unit in engine compartment due to heat and water ingress.