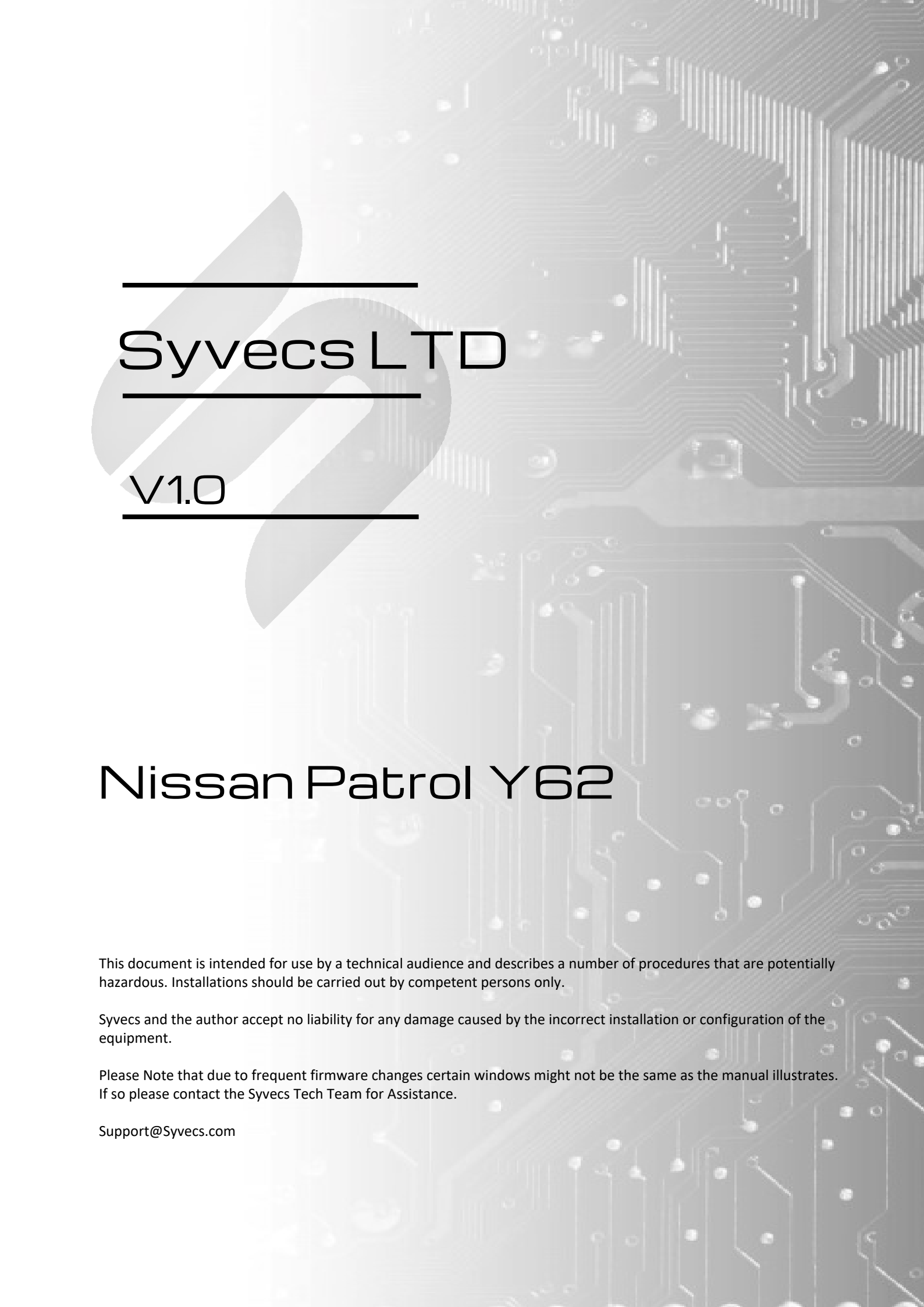




Syvecs LTD

V1.0

Nissan Patrol Y62

This document is intended for use by a technical audience and describes a number of procedures that are potentially hazardous. Installations should be carried out by competent persons only.

Syvecs and the author accept no liability for any damage caused by the incorrect installation or configuration of the equipment.

Please Note that due to frequent firmware changes certain windows might not be the same as the manual illustrates. If so please contact the Syvecs Tech Team for Assistance.

Support@Syvecs.com



Contents

The kit comes with the following:

1 x Syvecs S7Plus

1 x Syvecs DI12

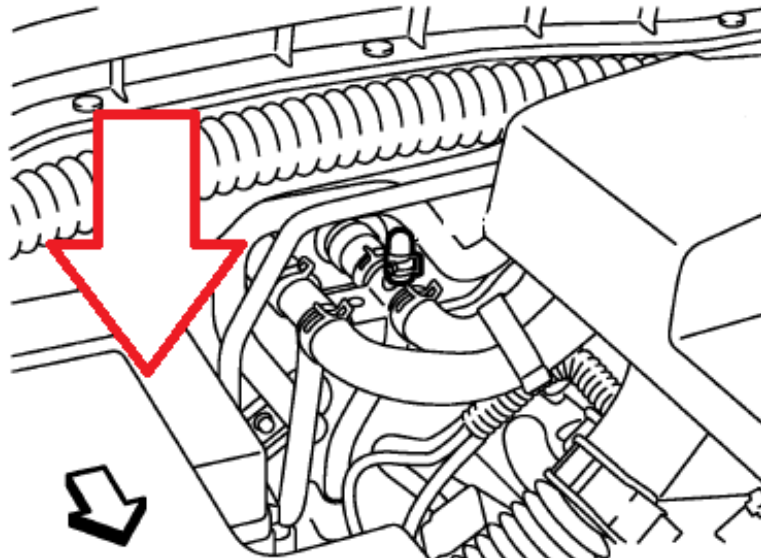
1 x Y62 Loom adapter

Installation

- 1.) Remove the Negative Terminal from the battery on the Vehicle.
- 2.) Unplug the OEM Engine control module which is found behind the battery and the fuse box in the engine bay



- 3.) Remove the OEM Ecu from the holder by removing the 4 x M6 Bolts found at top and bottom
- 4.) Carefully fit the Y62 Loom adapter case into the OEM ECU Bracket and connect the cables out the back behind the fuse box.
- 5.) Run the wires from the adapter box through the large bulkhead connector going from the engine bay to the cabin area in the passenger footwell. This route is found behind the lower fuse box as shown below



- 6.) In the passenger footwell, plug in the Syvecs S7 ECU (**PAY ATTENTION TO MAKE SURE CONNECTORS SAY ECU ON THEM**) and DI12 Connectors
- 7.) Reconnect the Battery Terminal
- 8.) Connect the supplied Ethernet cable to the wiring loom and KEY ON the ignition. Use Scal to Load the base calibration which Syvecs provides

FAQ and Help

Q) Do you control the OEM VVT

A) Yes, this is adjustable via Variable Valve timing calibrations, Can Change Intake and Exhaust Cam Targets

Q) Do you control the OEM VVEL

A) Yes, this is adjustable via Fan8 (VVEL Target)

Q) Do you support the Auto Transmission

A) Yes

Q) Can you Adjust the Launch

A) Yes, its fully adjustable in stage and after also where a Limiter can be set based on Time or Speed

Q) Do you Supply a Base map for the Kit

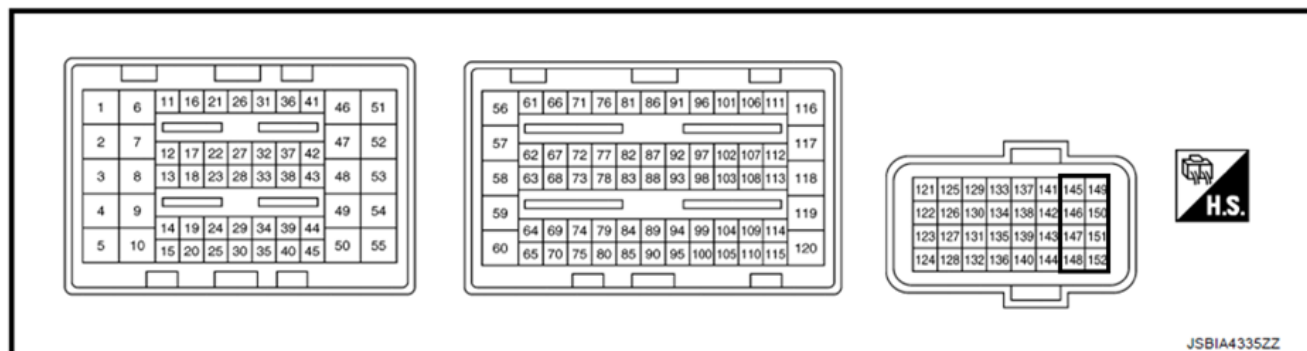
A) Yes as with all our kits we supply a very good base calibration to get everything working for you

Q) Can we use the OBD port still to Log, Read Codes and Clear them on other ecus on the car like ABS?

A) Yes via OEM Tools

Email Support@syvecs.co.uk for a base map to suit your setup.

ECU Pinout



A	DESCRIPTION	CONNECTOR A	
	PART NUMBER	4-1437290-0	
	NOTES:	34 Way - Key1	
<i>Syvecs Description</i>	<i>Syvecs Pinout</i>	<i>Patrol Pins</i>	<i>Patrol Notes</i>
PWR CTR OUT	A1	88	Main Relay
H-Bridge1 / SlaveOut1	A2	108	DBW+
H-Bridge2 / SlaveOut2	A3	107	DBW-
H-Bridge3 / SlaveOut3	A4	106	Evap - PWM
H-Bridge4 / SlaveOut4	A5	90, 93	VVEL Trigger & Fuel Pump Relay
H-Bridge5 / SlaveOut5	A6		
H-Bridge6 / SlaveOut6	A7	External	Extenal FAN
H-Bridge7 / SlaveOut7	A8	57	Multiway +
H-Bridge8 / SlaveOut8	A9	58	Multiway -
FUEL1	A10	GDI12 - Pin 13	CYL 1 INJECTOR
FUEL2	A11	GDI12 - Pin 22	CYL 2 INJECTOR
FUEL3	A12	GDI12 - Pin 23	CYL 3 INJECTOR
FUEL4	A13	GDI12 - Pin 19	CYL 4 INJECTOR
FUEL5	A14	GDI12 - Pin 29	CYL 5 INJECTOR
FUEL6	A15	GDI12 - Pin 14	CYL 6 INJECTOR
FUEL7	A16	GDI12 - Pin 30	CYL 7 INJECTOR
FUEL8	A17	GDI12 - Pin 17	CYL 8 INJECTOR
PWM1 /*FUEL9	A18	126	Tacho
PWM2 /*FUEL10	A19	External	Secondary Injector 1
PWM3 /*FUEL11	A20	136	Fuel Pump Computer
PWM4 /*FUEL12	A21	External	Secondary Injector 2
PWM5 /*FUEL13	A22	114	Vvti 1EX -Flyback Solder Bridge Set
PWM6 /*FUEL14	A23	115	Vvti 2Ex -Flyback Solder Bridge Set
PWM7 /*FUEL15	A24	112	Vvti 1 -Flyback Solder Bridge Set
PWM8 /*FUEL16	A25	113	Vvti 2 -Flyback Solder Bridge Set
IGN1	A26	95 & 94	Ign 1 & 6
IGN2	A27	91 & 92	Ign 2 & 3
IGN3	A28	104 & 105	Ign 4 & 7
IGN4	A29	102 & 101	Ign 5 & 8
IGN5	A30	99	Throttle Control Relay
IGN6	A31	GDI12 - Pin 21	Di Pump Signal
PWRGND	A32		
PWRGND	A33	50	ECU GND
PWRGND	A34	55	ECU GND

B	DESCRIPTION	CONNECTOR B	
	PART NUMBER	3-1437290-7	
	NOTES:	26 Way - Key1	
PWRGND	B1	10	PWR GND
EGT2 +	B2	17	EGT2
EGT2 -	B3		
KNOCK	B4	15	KNOCK SENSOR INPUT
KNOCK 2	B5	18	Knock 2
PVBAT	B6	120	Constant 12v
IVBAT	B7	145	12v from ECM
LAM1A	B8	79	2.2
LAM1B	B9	74	1.8v Varies
LAM1C	B10		
LAM1D	B11		
LAM1HEATER	B12	116	Heater
IVBAT	B13	111	12v from ECM
LAM2A	B14	69	2.2
LAM2B	B15	70	1.8v Varies
LAM2C	B16		
LAM2D	B17		
LAM2HEATER	B18	117	Heater
IVBAT	B19		Can Bridge 12v
KLINE	B20		
RS232RX / Can L	B21		
RS232TX / Can H	B22		
LANRX-	B23	Orange/White	
LANRX+	B24	White/Orange	
LANTX-	B25	Green/White	
LANTX+	B26	White/Green	

C	DESCRIPTION	CONNECTOR C	
	PART NUMBER	4-1437290-1	
	NOTES:	34 Way - Key2	
KNOCK GROUND	C1	20	Knock Ground
ANGND	C2	13,42,43,44, 45	SENSOR GND
ANGND	C3	63, 85, 135, 144, 151	Cam and Crank Ground
ANGND	C4		SENSOR GND
5V OUT	C5	27, 28, 29, 30	5V OUTPUT FOR SENSORS
5V OUT	C6	73, 83, 142, 146	5V OUTPUT FOR SENSORS
5V OUT	C7		5V OUTPUT FOR SENSORS
CAN L	C8	123	CANL
CAN H	C9	124	CANH
AN01	C10	31	Cooling Fan Speed
AN02	C11	41	Cam1 Ex
AN03	C12	68	Cam2 Ex
AN04	C13	25	DI Pressure
AN05	C14	33	Crank
AN06	C15	40	Cam 1
AN07	C16	66	Cam2
AN08	C17		Map
AN09	C18	78	Tps1A
AN10	C19	80	Tps1B
AN11	C20	150	PPSA
AN12	C21	143	PPsB
AN13	C22	35	COOLANT TEMP INPUT
AN14	C23	36	AIR TEMP INPUT
AN15	C24	134	Steering wheel Sw
AN16	C25	23	Engine Oil Pressure
Can3 L	C26	137	
Can3 H	C27	138	
PWR CTR IN	C28	133	Ignition Sw
AN S1 / Slave An01	C29	Join to C24	Steering wheel Output Buttons
AN S2 / Slave An02	C30		
AN S3 / Slave An03	C31	22	Engine Oil Temp
AN S4 / Slave An04	C32	61	Multiway Position
AN S5 / Slave An05	C33	12	A/C Pressure
AN S6 / Slave An06	C34	128	Fuel Temp