Syvecs LTD

V1.2

KT8

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.

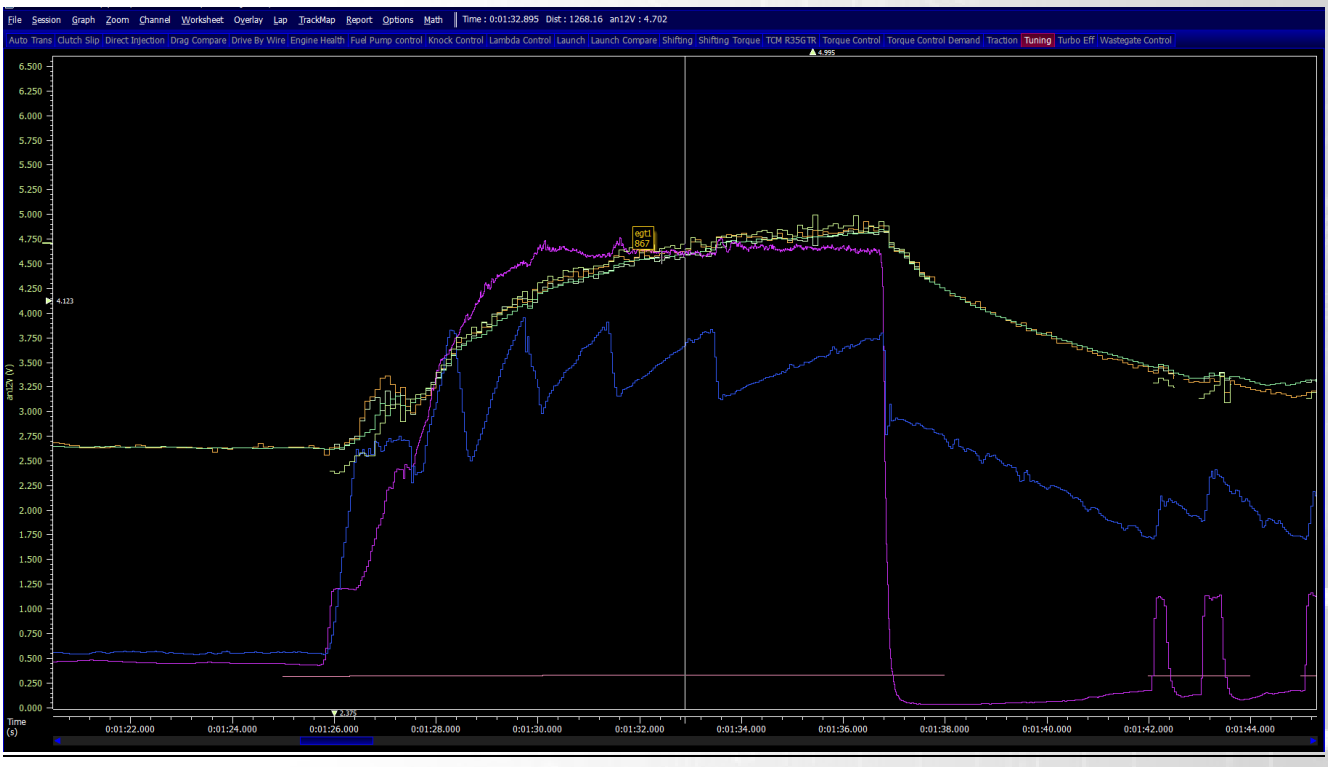
Please Note that due to frequent firmware changes certain windows might not be the same as the manual illustrates. If so please contact the Syvecs Tech Team for Assistance.

Support@Syvecs.com

The KT8 Can Module is designed to provide even more data to our engine control units with accurate K Type thermocouple sensor readings over Can-bus on either a 1mb or 500kb bus.

KType temperature range from 0-1250c

Packaged in a lightweight CNC billet aluminium case with a 18way JAE Connector.
Mating Socket Connector - JAE - MX23A18SF1
KT Connector - Phoenix Contact 1778832



Wiring

Pin Number	Pin Function
3 or 4	Ground
5	CAN1 LOW - 500kb
6	CAN0 LOW - 1mb
7	Ground
12	12V Supply
14	CAN1 Hi - 500kb
15	CAN0 HI - 1mb

S6Plus with PNP Kits connect KT8 Can1 to S6Plus Can1 (C8/C9) - Generic S6+ ECU Speak to Support@Syvecs.com
S7Plus connect KT8 Can0 to S7Plus Can2 (B2/B3) - if X10 Expander is wired to Can2 then speak to Support@Syvecs.com
S8 & S12 connect KT8 Can0 to Either ECU Can1 or Can2

No Termination Resistor is set on the KT8 Module so the GPS needs to be wired as a Node on the Canbus

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The KT connectors feature a push-lock system where after a wire is pushed into the appropriate hole its locked and a connection is made. To remove the wire the release latch needs to be pushed in and then the wire gentle pulled on as shown below.

Pin1 = K-Type + (Green Or Yellow)
Pin2 = K-Type - (White Or Red)

CAN Output Description - All in Big Endian Format

Can0 - 1MB Speed (S7 / S8 / S12)

0x0000 = 0c
0x30D0 = 1250c

Frame ID 0xF6 - KT1-4

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
KT1 (Signed Value) DegC - Divide by 10		KT2 (Signed Value) DegC - Divide by 10		KT3(Signed Value) DegC - Divide by 10		KT4 (Signed Value) DegC - Divide by 10	

Frame ID 0xF7 - KT5-8

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
KT5 (Signed Value) DegC - Divide by 10		KT6 (Signed Value) DegC - Divide by 10		KT7 (Signed Value) DegC - Divide by 10		KT8 (Signed Value) DegC - Divide by 10	

Can1 - 500kb Speed (S6Plus / S7plus Can1)

0x0000 = 0c
0x30D0 = 1250c

Frame ID 0xF6 - KT1-4

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
KT1 (Signed Value) DegC - Divide by 10		KT2 (Signed Value) DegC - Divide by 10		KT3(Signed Value) DegC - Divide by 10		KT4 (Signed Value) DegC - Divide by 10	

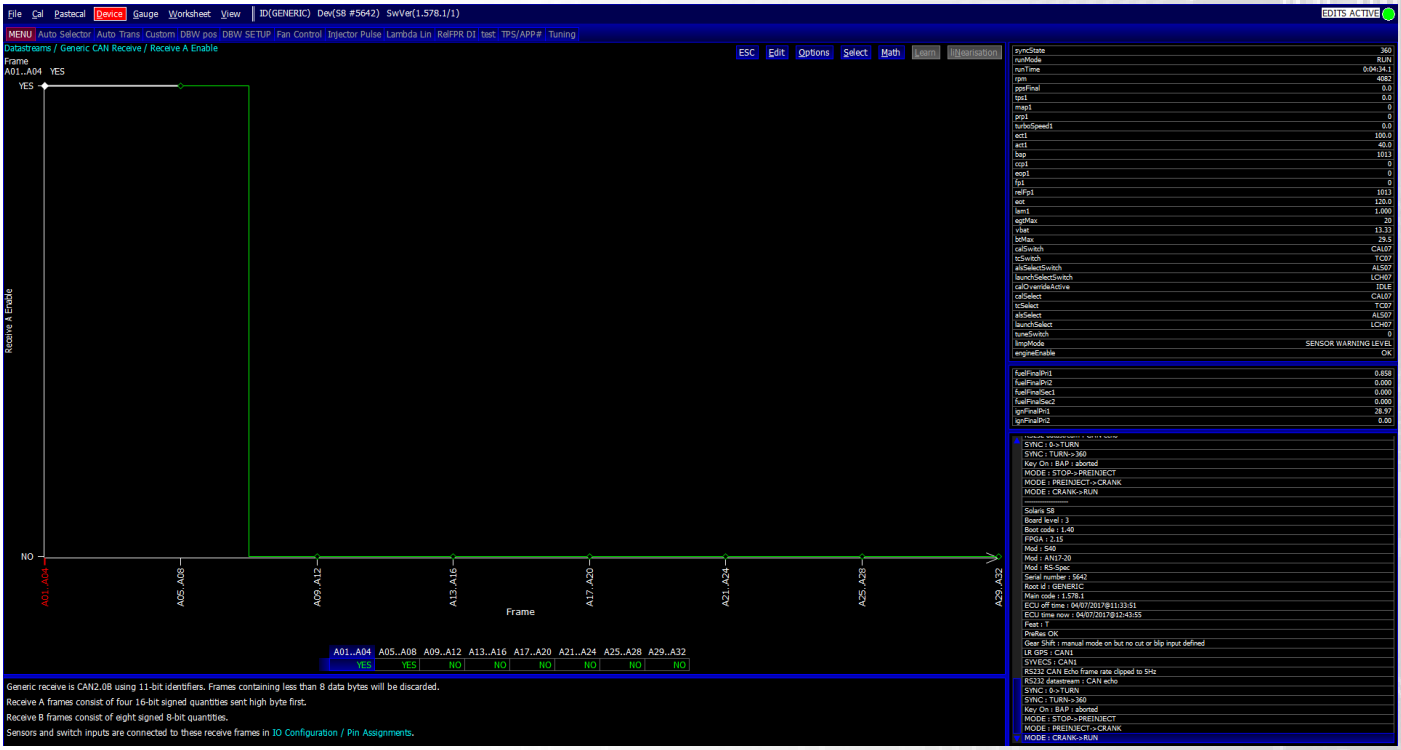
Frame ID 0xF7 - KT5-8

Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
KT5 (Signed Value) DegC - Divide by 10		KT6 (Signed Value) DegC - Divide by 10		KT7 (Signed Value) DegC - Divide by 10		KT8 (Signed Value) DegC - Divide by 10	

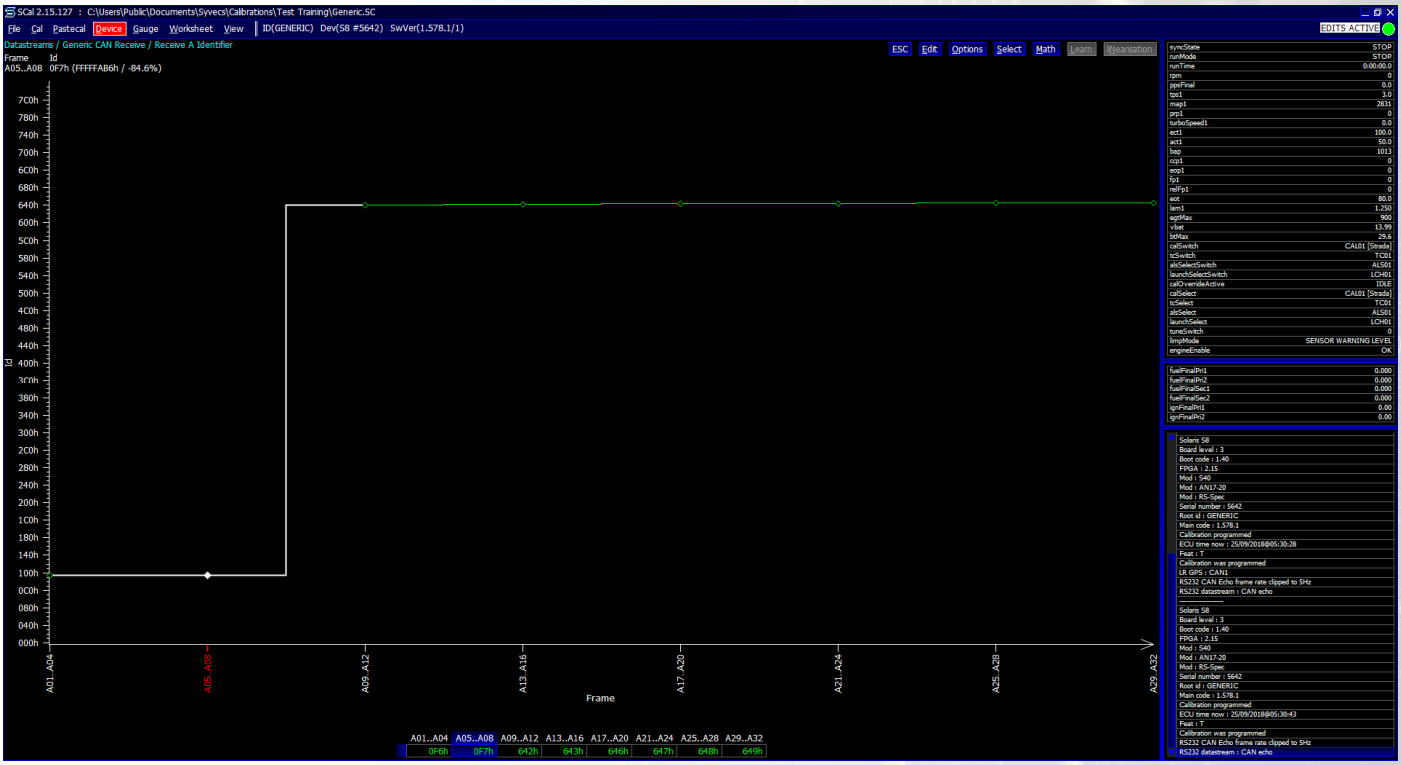
Syvecs Calibration Setup

S7Plus / S8 / S12

The EGT frames can be picked up on any of the Generic Recieve A assignments, Below its enabled on A01-A08



The frames are set for A01-04 as F6h and A05-06 on F7h



8 User Defined sensors are setup for EGT1-EGT8, a help video on this can be found below
https://www.youtube.com/watch?v=IVIdYESOuOQ&t=252s

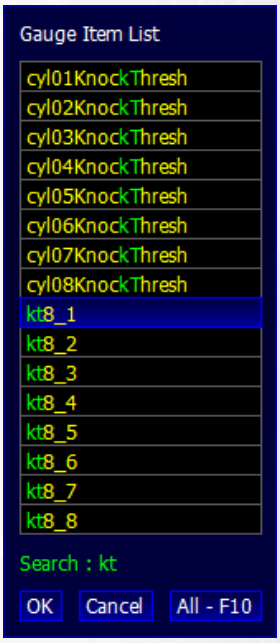
A example calibration can also be provided by support@syvecs.com

The X:Can Recieve items are then set in the pin assignments to the Inputs

S6-I & S6Plus / S7-I & S7Plus

The KT8 Data is picked up automatically on the S6-I/S6Plus & S7-I after wiring onto the Can Wires on C8 & C9 which is the 500kb Canbus in PNP Kits.

KT1-8 parameters can then be found in Scal with firmware version 1.82+



Please email support@syvecs.com for additional help or custom can requests