

AiM InfoTech

WorldSSP600 2019/2020
MX Series/EVO5
Connection kit

Release 1.00





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Models and years

This manual explains how to connect MX Series and EVO5 devices to the WorldSSP600 bikes Engine Control Unit (ECU). Compatible models are:

- WorldSSP600 bikes (with MecTronik – MKE7 ECU) 2019/2020

2 Kit content and part numbers

AiM provides the specific connector to the WorldSSP600 bikes ECU. Cabling the devices 37pins Deutsch main harness free wires, it is possible to read transmitted data from the ECU via CAN and, at the same time, to power up the system.

N.B.: to allow a correct installation, when placing the order of your instrumentation, opt for the 37pins Deutsch harness with straight cables (shown on the right; not 90° version).



The part number of the MX Series/EVO5 connection kit for WorldSSP600 bikes, shown below, is **X012KC6ZK**.

Connection kit contains:

- x1 6pins male Sumitomo connector **(1)**
- x4 Sumitomo connector male pins **(2)**
- x4 rubber wire seals **(3)**
- x2 dummy plugs **(4)**



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Connection

The recommended wiring harness for these bikes models is expected to feature three 6pins male Sumitomo connectors, labelled "Logger/Dash", "Calibration" and "CAN Spare", accessible in different locations of the bike.

For this installation refer to the following pinout of the bike connector (front view) and connection table. The



Sumitomo connector pin	Function	AiM cable (37pins Deutsch connector pin)
1	Ground	GND (2)
2	CAN L	CAN- (9)
4	12V switched	9-15VDC (1)
5	CAN H	CAN+ (8)

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Race Studio 3 configuration

Before connecting the ECU to AiM device set this up using AiM Race Studio 3 software. The parameters to select in the device configuration are:

- ECU manufacturer: **MecTronik**
- ECU Model: **WSS 2019 V5** (RS3 only)

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"MecTronik – WSS 2019 V5" protocol

Received channels by AiM devices configured with "MecTronik – WSS 2019 V5" protocol are:

CHANNEL NAME	FUNCTION
RPM	RPM
VIRTUAL RPM	Virtual RPM
GEARPOS VOLT	Gear voltage
GEAR POS	Active gear
SPEED VEHICLE	Vehicle speed
SPEED REAR	Rear wheel speed
SPEED FRONT	Front wheel speed
BIKE VERT ACC	Bike vertical acceleration
WTS	Water temperature
ATS	Air temperature
OTS	Oil temperature
LAMBDA TEMP	Lambda temperature
BOARD TEMP	Board temperature
OPS	Oil pressure
BRAKE REAR	Rear brake pressure



BRAKE FRONT	Front brake pressure
FPS	Fuel pressure
BAP	Barometric air pressure
MAP	Manifold air pressure
SUSP REAR	Rear suspension position
SUSP FRONT	Front suspension position
BIKE LEAN ANGLE	Lean angle
TPS	Throttle position sensor
DEMAND	Throttle demand
GAS	Handgrip throttle position
CUT LEVEL	Cut level
CLUTCH SLIP	Clutch slip
SHIFT LIGHT	Shift light
LAP TIME	Lap time
VBAT	Battery voltage
VREF 1	Reference voltage 1 (5V)
VREF 2	Reference voltage 2 (5V)
LAMBDA	Lambda
TORQUE REAR	Rear torque
CUT FUNCTION	Cut function
INJ CORR LAMBDA	Lambda injection corrector
TEAM CRC	Team CRC
STEPPER COUNTER	Stepper counter
WORKMODE	Work mode
ENG REVS	Engine revolutions
GEARSHIFT UP SM	Gearshift up state machine
GEARSHIFT DN SM	Gearshift down state machine
LAP INFO	Lap info
LOADCELL	Load cell
MANUFACTURER CRC	Manufacturer CRC
ENG STATE 1	Contains the following status messages:



= 1	STALL
= 2	MOVING
= 3	SYNC
= 4	PHASED
ENG STATE 2	Contains the following status messages:
= 1	TARTED
= 2	SEQUENTIAL
= 3	TOO SLOW
DROPOFF STATE 1	Contains the following status messages:
= 1	ENABLED
= 2	IMU CHECK
= 3	OPS CHECK
= 4	TILT CHECK
= 5	ARMED
= 6	IMU DROP
= 7	OPS DROP
= 8	TILT DROP
DROPOFF STATE 2	Contains the following status messages:
= 1	ENGINE OFF
= 2	LATCH OFF
= 6	IMU SET
= 7	OPS SET
= 8	TILT SET
RBW STATE 1	Contains the following status messages:
= 1	ENABLED
= 5	RECOVERY
RBW STATE 2	Contains the following status messages:
= 1	ERR GAS
= 2	ERR TPS
= 3	ERR PID
= 4	ERR HBR



USER OUTPUT 1	Contains the following messages:
= 1	FAN COOLER
= 2	VACUUM PUMP
= 3	BACK LIGHTS
= 4	TRUMPETS
WORKMODE MASK 1	Contains the following messages:
= 2	RAIN LIGHT
= 3	DROP OFF
= 5	TYRE A
= 6	TYRE B
= 7	TYRE C
= 8	AUX SPROKETS
WORKMODE MASK 2	Contains the following messages:
= 1	DEMAND A
= 2	DEMAND B
= 5	ANGBRAKE A
= 6	ENGBRAKE B
WORKMODE MASK 3	Contains the following messages:
= 8	ANTIJERK
ENGINE FUNCT 1	Contains the following messages:
= 1	ENG KILL
= 2	ENG STOP
= 3	ENG DROPOFF
= 4	RPM LIMIT
= 5	IDLE CTRL
= 6	LAMBDA CTRL
SENSORS DIAG 1	Contains the following diagnostic messages:
= 1	PICKUP
= 2	PHASE SIG
= 3	GAS
= 4	TPS



= 5	MAP
= 6	BAP
= 7	OPS
= 8	FPS
SENSORS DIAG 2	Contains the following diagnostic messages:
= 1	WTS
= 2	ATS
= 3	OTS
= 4	LAMBDA
= 5	DRUMPOS
= 6	LOADCELL
= 7	SPEED FRONT
= 8	SPEED REAR
SENSORS DIAG 3	Contains the following diagnostic messages:
= 1	BRAKE FRONT
= 2	BRAKE REAR
SENSORS DIAG 4	Contains the following diagnostic messages:
= 6	VREF 1
= 7	VREF 2
= 8	VBATTERY
ACTUATORS DIAG 1	Contains the following diagnostic messages:
= 1	COIL 1
= 2	COIL 2
= 3	COIL 3
= 4	COIL 4
= 5	INJECTOR 1
= 6	INJECTOR 2
= 7	INJECTOR 3
= 8	INJECTOR 4
ACTUATORS DIAG 2	Contains the following diagnostic messages:
= 1	INJECTOR 5



= 2	INJECTOR 6
= 3	INJECTOR 7
= 4	INJECTOR 8
= 5	HBRIDGE 1
= 6	HBRIDGE 2
= 7	PWM 1
= 8	PWM 2
ACTUATORS DIAG 3	Contains the following diagnostic messages:
= 1	PWM 3
= 2	PWM 4
= 3	PWM 5
= 4	PWM 6
= 5	PWM 7
= 6	PWM 8
= 7	PWM 9
= 8	PWM 10
ACTUATORS DIAG 4	Contains the following diagnostic messages:
= 1	PWM 11
= 2	PWM 12
= 3	MFO 1
= 4	MFO 2
= 5	MFO 3
= 6	MFO 4
= 7	MFO 5
USER INPUT 1	Contains the following messages:
= 1	BUTTON 1 PRESS
= 2	BUTTON 2 PRESS
= 3	BUTTON 3 PRESS
= 4	BUTTON 4 PRESS
= 5	BUTTON 5 PRESS
= 6	BUTTON 6 PRESS



ENGINE FUNCT 2	Contains the following messages:
= 8	FIM LOCKED
STR FUNCTION 1	Contains the following messages:
= 2	SPEED LIMIT
= 3	GEAR SHIFTUP
= 4	GEAR SHIFTDN
= 5	ENGINEBRAKE CTRL
= 6	ENTIJERK CTRL
LAMBDA FLAGS 1	Contains the following messages:
= 1	LAMBDA ENABLED
= 2	LAMBDA READING
= 3	LAMBDA WRITING
= 5	LAMBDA ACTIVE
= 6	LAMBDA FREEZED
USER INPUT 2	Contains the following messages:
= 1	BUTTON 1 TRIGGER
= 2	BUTTON 2 TRIGGER
= 3	BUTTON 3 TRIGGER
= 4	BUTTON 4 TRIGGER
= 5	BUTTON 5 TRIGGER
= 6	BUTTON 6 TRIGGER
AUX LIGHT	Auxiliary light
CALIB INFO 1	Contains the following messages:
= 1	ENGINE RAM
= 2	ENGINE FLASH
= 3	STRATEGY RAM
= 4	STRATEGY FLASH
CALIB INFO 2	Contains the following messages:
= 7	WARNING
= 8	ERROR
STEPPER STATE 1	Contains the following messages:



= 1	ENABLED
= 2	INIT
= 3	MANUAL
= 4	CALIBRATION
= 5	FEEDBACK
= 6	CLOSEDLOOP
= 7	RECOVERY
WORKMODE MASK 4	Contains the following messages:
= 1	SHIFT UP
= 2	SHIFT DOWN
= 3	LAMBDA CTRL
= 4	INJ CORR CYL
= 5	INJ CORR MAIN
= 6	INJ CORR SPEED
= 7	IGN CORR A
= 8	IGN CORR B