

Script.CAN.EV.BYD.K9UB.POS5.LC06S44R\_L4.ACK\_ENBL.v1.0.1.5\_MG

BYD K9UB Electric Bus CAN Script



**The compatibility if this script can only be guaranteed for:**

1. BYD K9UB Electric Bus model
2. Vehicles with a VIN Number that starts with: **LC06S44R\_L4**

This script can be used with the following devices:

1. MiX 4000
2. MiX 6000
3. FM3316 and FM3306 Communicators
4. FM3517i and FM3507i Communicators
5. FM3617i and FM3607i Communicators
6. FM3717i and FM3707i Communicators
7. FM3817i and FM3807i Communicators

## Version History

Reference	Version	Changes
<a href="#">SCR-2635</a>	v1.0.0.4	Replaced EBCST with EVICS and added energy calculations
<a href="#">SCR-2666</a>	v1.0.1.5	Updated previous version by adding signals, Engine Speed, Maximum & Minimum cell voltage, Bus Door Position Status, Retarder Status, Brake Pedal Position, High-Res Trip Distance, HV Battery Pack 1 & 2 Nominal Capacity, Motor 1 & Motor 2 Engine Speed & Temperature.
<a href="#">SCR-2666</a>	v1.0.1.5	Convert Script to Production and Enabled Odo sync

## Supported Parameters

ACRONYM	PARAMETER NAME	PARAMETER DESCRIPTION	Return values/states (if applicable)
ECMST	System.ECMST	Electronic Control Module Status	
CAN_N	System.Scratch40C	Engine RPM	
HRES	FMS.HRES	FMS High resolution odometer	0 to 21 055 400 km
CAN_V	System.Scratch40D	Road speed	
DOORS	CAN.DOORS	Bus Door Position Status	0 = At least 1 door is open 1 = closing last door 2 = all doors closed 3-13 = not defined 14 = Error 15 = not available
EBIEN	System.FM.CAN.EBIEN	EV CAN: Battery current charge power	0 to 500 kW
EBOEN	System.FM.CAN.EBOEN	EV CAN: Battery current discharge power	0 to 1000 kW
EBVST	System.FM.CAN.EBVST	EV CAN: Battery voltage status	0 = Battery Normal/Not Available 1 = Low Battery 2 = Reserved 3 = Reserved
EVICS	System.FM.CAN.EVICS	EV CAN: Charging status	-1 = Not Available 0 = Not charging 1 = Charging
EVDRA	System.FM.CAN.EVDRA	EV CAN: Driver Aircon	0 = On/Not Available 1 = Off
BOKWH	System.FM.CAN.BOKWH	EV CAN: Energy consumed	0 to 4 294 967 295 kWh
AOKWH	System.FM.CAN.AOKWH	EV CAN: Energy consumed by auxiliaries	
BIKWH	System.FM.CAN.BIKWH	EV CAN: Energy generated	0 to 4 294 967 295 kWh
HV1NC	System.FM.CAN.HV1NC	EV CAN: HV Battery Pack 1 Nominal Capacity	0 to 500 Ah
HV2NC	System.FM.CAN.HV2NC	EV CAN: HV Battery Pack 2 Nominal Capacity	0 to 500 Ah
HVCUR	System.FMS.CAN.HVCUR	EV CAN: HVESS current	-1000 to 2000 A

HVVOL	System.FMS.CAN.HVVOL	EV CAN: HVESS voltage level	0 to 10000 V
MAXCT	System.FM.CAN.MAXCT	EV CAN: Maximum battery cell temperature	-40 to 210 °C
CVMAX	System.FM.CAN.CVMAX	EV CAN: Maximum cell voltage	0 to 5 V
MINCT	System.FM.CAN.MINCT	EV CAN: Minimum battery cell temperature	-40 to 210 °C
CVMIN	System.FM.CAN.CVMIN	EV CAN: Minimum cell voltage	0 to 5 V
EVMC1	System.FM.CAN.EVMC1	EV CAN: Missing cells group 1	0 = Normal/Not Available 1 = Error 2 = Reserved 3 = Reserved
M1RPM	System.FM.CAN.M1RPM	EV CAN: Motor 1 speed	0 to 20000 RPM
M1TMP	System.FM.CAN.M1TMP	EV CAN: Motor 1 temperature	-40 to 210 °C
M2RPM	System.FM.CAN.M2RPM	EV CAN: Motor 2 speed	0 to 20000 RPM
M2TMP	System.FM.CAN.M2TMP	EV CAN: Motor 2 temperature	-40 to 210 °C
EBSOC	System.FM.CAN.EBSOC	EV CAN: State of charge	0 to 100 %
EVSOH	System.FM.CAN.EVSOH	EV CAN: State of health	0 to 100 %
TNETE	System.FM.CAN.TNETE	EV CAN: Trip net energy usage	0 to 429 496 729.5 kWh
EVRNG	System.FM.CAN.EVRNG	EV CAN: Vehicle range remaining	0 to 4 294 967 295 km
AMBAT	System.FM.CAN.AMBAT	FM CAN: Ambient Air Temperature	-273 to 1 734.968 75 °C
FMAPP	FMS.FMAPP	FMS AcceleratorPedalPosition	0 to 100 %
BDFMS	FMS.BDFMS	FMS Back Door Status	0 = Closed 1 = Open
FMSBV	FMS.FMSBV	FMS Battery Voltage	0 to 40 V
FMSPP	FMS.FMSPP	FMS Brake Pedal Position	0 to 100 %
FMBPS	FMS.FMBPS	FMS Brake Pedal Switch	0 = Brake pedal released 1 = Brake pedal depressed 2 = Error 3 = Not Available
FMSCI	FMS.FMSCI	FMS Cab Interior Temperature	-273 to 1 734.968 75 °C
FMSGR	FMS.FMSGR	FMS Current Gear	-1 to 1
FDFMS	FMS.FDFMS	FMS Front Door Status	0 = Closed 1 = Open

FMSPB	FMS.FMSPB	FMS Parking brake switch	0 = Parking brake not set 1 = Parking brake set 2 = Error 3 = Not available
HRTRP	FMS.HRTRP	High-Res Trip Distance	0 to 21 055 400 km
ERETS	System.FM.CAN.ERETS	Retarder Status	1 = Level 1 2 = Level 2 3 = Level 3 4 = Level 4

## Installation Notes

1. **The script is NOT compatible with TRACERS**
2. The CAN jumpers must be in a position to ONLY allow **read** actions on the CAN bus (Passive Mode)
3. The script supports 29 bit CAN with J1939 transport protocol active CAN headers.
4. The script only supports a CAN bus with a speed of 250 kb/s
5. Device Drivers: [BAS 1.70k - E15.08.27.xx](#) or later sets are supported

## Wiring and Installation Instructions

CAN bus location	5) Other
Wire colours & details	
Can bus speed	CAN_250_kbps