



AiM Webinar
"Practical CAN Bus Basics"
3.2.21
Edited Q&A

1 **Q:** Is it possible to add new channels to an existing protocol in the AiM software?

A: [Answered live at 19:51]

2 **Q:** As someone who is just learning CAN, where is a good place to start and what are some things to keep in mind as you learn?

A: [Answered live at 29:18 and 1:03:53]

3 **Q1:** If CAN is an international automotive standard, what is implied by "AiM Private CAN"?

A1: The communication type is an automotive standard, but the coding of those messages is proprietary to AiM. The AiM CAN bus ("CAN0") is for AiM devices to communicate with each other. For example, when you connect a GPS09 to an MXP, the information from the GPS is transmitted to the MXP via AiM CAN.

Q2: Does that affect how we use another manufacturers CAN interface?

A2: No, the other CAN interfaces should be on CAN1 or CAN2.

4 **Q1:** Do you publish your own protocols? If I wanted to add a privately designed device, can I?

A2: No, AiM CAN is not published. You can add our own custom CAN protocols on CAN1 (and CAN2 if applicable) though.



Q2: Are you likely to ever publish it?

A2: No, it's a bus that supports dynamic addressing and a bus we prefer to keep for AiM plug and play devices, while reserving certain ID's.

5 Q: What is AiM's standard for how the scaling factor is applied to transmitting and receiving data? In all the years, there does not seem to be a standard for this across data systems.

A: [Answered live at 57:25]

6 Q: Can an AiM device transmit data to other devices. Is there a DBC file available?

A: Yes, you can transmit on CAN1 and CAN2 depending on your device. There are no DBC files for import or export with AiM at the moment.

7 Q: What would be best for shielding CAN wires?

A: Twisting the pair of wires, shielding is not required.

8 Q: Is AiM considering adding a diagnostics tool so that the raw CAN bus data can be viewed? This would make having a CAN sniffer less important.

A: We ourselves use a 3rd party CAN sniffer (Vehicle Spy). We have designed an internal tool for viewing raw CAN data, and while it works, there are many other tools available that have MUCH more power than just viewing data streams. It's something that may be added at a later date, but it's low on the priority list.



9 **Q:** Would the SmartyCam and PodiumConnect be restricted to same 16 channels available on the SmartyCam stream?

A: Yes, but we ultimately do not recommend any 3rd party device on AiM proprietary CAN. It is better to use CAN1 or CAN2.

10 **Q:** What devices have CAN2 available?

A: Evo5, MXS 1.2, MXP, MXG 1.2, and MXL2.

11 **Q:** Is it possible to stream the GPS signal from 1 AiM logger to another AiM logger?

A: In theory, yes. You would need to write a transmitting protocol for the “master” logger and the receiving protocol on the “slave” logger but I’m not sure the receiving device would treat it the same as a connected sensor. It would need to be tested to know for sure how it would work.