

Ryder Towing

TF2324 SmartCan2 Fitting Guide

12N/12S version



Contents of the kit

- 1 x SmartCAN2 module
- 1 x 13-pin socket with seal and nut, bolts and washers
- 1 x complete set of wires
- 1 x fuse connector with crimps and 30 amp fuse
- 1 x butt connectors
- 1 x ring terminal (Battery connector)
- 4 x snap connectors (Scotchlocks)
- 3 x cable ties
- 2 x Gel push connectors for CANbus connections
- 1 x Scotch lock connector
- 1 x 5 pin Relay

Interfaces directly to CAN

The TF2324 SmartCan2 towing module connects directly to the vehicle's CAN bus network. All the signal and power data to the towing module comes from a direct connection to the vehicle's CAN HI, CAN LO wires (including an analogue brake line and second CAN connection wires for those vehicles that need that function).

Programmed to the vehicle

The Bootloader/Programmer interface programmes the module to the car. You may choose to have a Bootloader yourself, or we will programme your module to a specific vehicle before despatching it to you.

Warnings

- Disconnecting the battery: If you do disconnect the battery, make sure the ignition is switched off before you disconnect. Only disconnect for the shortest possible time.
- NOTE: The connections to CAN HI and CAN LO have to be excellent, and soldering is not recommended because of potential heat transfer to sensitive circuits in the car, so each kit includes two positap connectors. We strongly recommend their use for this interface.

Overload protection: As well as the fuse protection you put on the input cables, the module has on board protection against overloads – it will shut down any lighting circuit that shorts, etc. In service, making this a very durable unit.

The module sends trailer data back to the vehicle: Some vehicles automatically accept data back from the unit and alter some functions when a trailer is connected. Some require a recode before they do this and others react partially without a recode, adding new functions when they have been recoded.

WARNING - Please take note important information: The indicator tell buzzer/C2 system is inverted in this system so the buzzer won't sound unless there is an issue with the indicators on the trailer.

If an indicator bulb is out then the module will also temporarily substitute the corresponding side light bulb as a turn signal until the issue has been resolved. It is advised to wire the side lights separately because of this feature.

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Procedure

1. Look at vehicle specific instructions find CANbus connection points and select area to install the module into the vehicle and remove paneling as required.
2. Disconnect the battery.
3. Find a good earth point and connect the white wire from the module, using the ring terminal provided.
4. Thread the sleeved wires out of the car and connect to the 13-pin socket. Connect the socket to the mounting plate.
5. Lead the wires from the module through the vehicle to the appropriate CANbus connection points found earlier.
6. CAN 1: Use the instructional pictures provided to identify the CAN connection points, Cut the twisted pair from the module's CAN wires to length and connect to the vehicle's CAN wires using the push on connectors provided.
7. CAN 2 (Vehicle dependent option check compatibility list)
The extra CAN wires pin 5 (CAN lo - Purple) and pin 6 Can hi - Yellow and Purple) on the module plug.
Fit the other ends to the vehicle's CAN second set of CAN wires as indicated on the installation instructions if required.
8. Hard brake connection (If needed - See diagram on vehicle specific instructions)
Take the red wire from pin 7 of the module and connect it to one of the wires to the brake lights, using a snap connector (Scotchlok). This provides an optional analogue backup to the braking system. It is required in some European countries.)
9. Power connection
The red wire that runs from both pins 15 and 18 are for power that goes to the module, this all goes to a 15amp fuse and then to a 30amp fuse that also provides power to the switching relay.
Use the crimps for a hard battery connection and check your installation then insert the 15amp and 30amp fuses in the fuse holders and test.
10. If you are using AutoSCAN, make sure the module has been updated with latest software with **no vehicle program pre-installed**, turn on the vehicle ignition and turn on the hazard lights, plug in the module and press and hold the button by the white connector on the module and the LED will start flashing, after about 10 seconds the LED will stop flashing and stay on, stop pressing the button and autoSCAN will start and can take up to 60 seconds, once done the module will resume normal operation and be programmed to the vehicle, Run operation tests.
11. If you are re- Programming the module, if you are using the bootloader make sure the module has been updated and programmed correctly to the vehicle using the TX2303 and follow instructions (See note below)
12. Restore all paneling etc.

*Note: The module may have been programmed to the car by us before dispatch or you may have chosen to have your own Bootloader unit to set it up for the car you are fitting to.
Alternatively, you can programme it using the AutoSCAN feature.
If you scan the top QR code on the right, you will see a YouTube video showing how to do this.*

The programme codes can be found on the compatibility PDF lists on the Ryder Towing website at this address www.rydertowing.co.uk/download/car-data. Or scan the below QR code on the right.

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Warranty conditions

We would expressly point out that any installation not carried out by a competent installer will result in the cancellation of any right to damage compensation, in particular, those arising under the product liability act.

Contents of these kits and their fitting manuals are subject to alteration without notice.

Please ensure that the instruction manual is read and fully understood before commencing installation.

Do not overload circuits.

**Compatibility List
Downloads**



**You Tube Video for
AutoSCAN operation on
module.**

