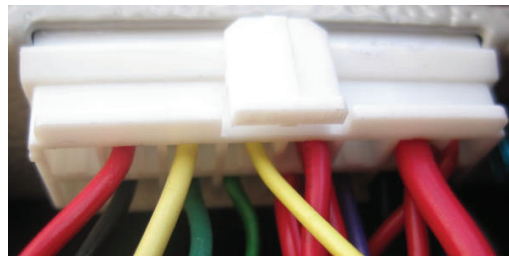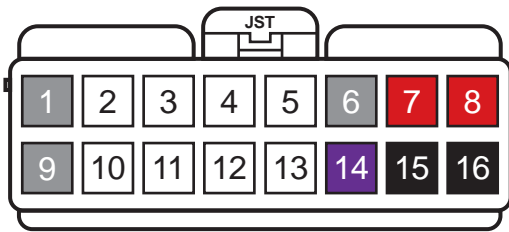# SIMPLE UPGRADE WIRING HARNESS
FOR RM-32D CONTROLLER

With radar gun & VMS computer option connectors. No separate control panel used. From legacy model RM-32 to current model RM-32D. For connection to DS-Live™

JST

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

RADAR JST-4

VMS KEYBOARD

JST CONNECTOR – 16 PIN

Pin	Description		
Pin 1	Do not connect		
Pin 9	Do not connect		
Pin 2	Radar +VE 12 V **switched output**		RED pin 1 Radar JST-4
Pin 10	Radar GND	*Only compatible with Data Signs supplied radar.*	BLACK pin 4 Radar JST-4
Pin 3	Radar RS-232 TX		YELLOW pin 3 Radar JST-4
Pin 11	Radar RS-232 RX		GREEN pin 2 Radar JST-4
Pin 4	RS-232 TX output to Keyboard		YELLOW
Pin 12	RS-232 RX input to Keyboard		GREEN
Pin 5	Fan +VE 12V	⚠ **ONLY CONNECT TO FANS!**	RED Fig.8
Pin 13	Fan GND		Black Fig.8
Pin 6	Do not connect		
Pin 14	See Tamper Function on last page		
Pin 7	+VE 12 Volts	Sign power input	THICK RED
Pin 8	+VE 12 Volts	Sign power input	THIN RED
Pin 15	GND	Sign Power input	THICK BLACK
Pin 16	GND	Sign Power input	THIN BLACK

LABEL INCLUDED

Connector for Radar fitted

Connector for VMS Computer fitted

Data Signs
AUSTRALIA
Since 1976

datasigns.com
1300 850 785

CONTROLLER, SIMPLE UPGRADE WIRING INSTRUCTIONS

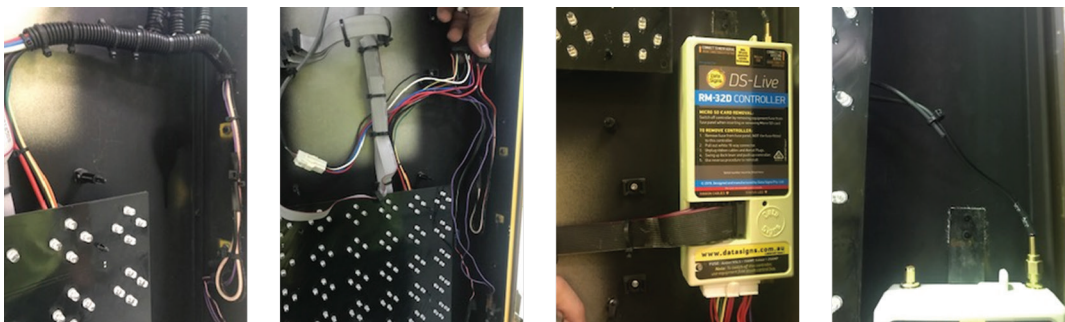1. **Remove ALL fuses from the batteries.**

2. Remove the old controller and other parts and brackets holding the controller.

3. Remove the LED panel next to the controller, **carefully** unplug all ribbon cables and connectors and the aerial connectors from the controller and take it out of the sign head.

   Take the SIM card out of the controller before it is discarded, this SIM card should be returned to your Telco to take it off the plan you are on as it is no longer needed.
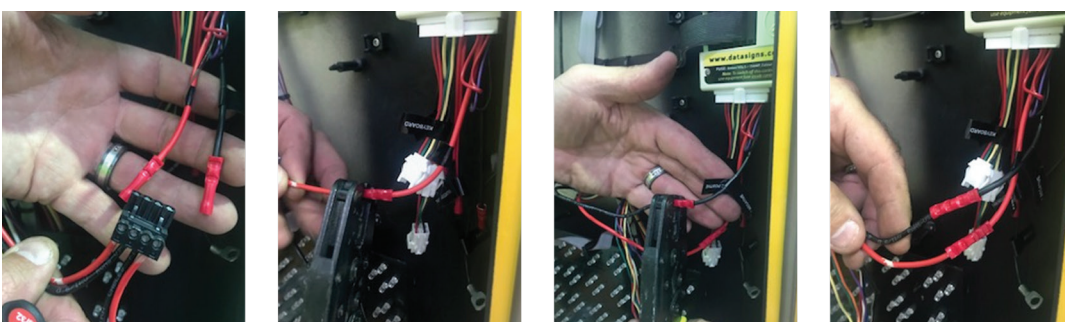

4. • If fitted, remove the small battery inside sign head below controller, disconnect wires.
   • Proceed to remove the cable covering (it fitted) to expose the wires.
   • Fit the New Controller (with the wiring harness fitted) into the sign and **carefully** plug the 4 Ribbon Cables back into the new Controller.

   Plug the original aerial wire into the right side aerial connector as shown. Cut off the small GPS cable and tie to the cable as shown.

5. On the existing wiring harness, unscrew +Ve (red) wire on 4 way connector pin 1 and crimp to "12v DC Positive" labelled crimp connector of new wire harness.
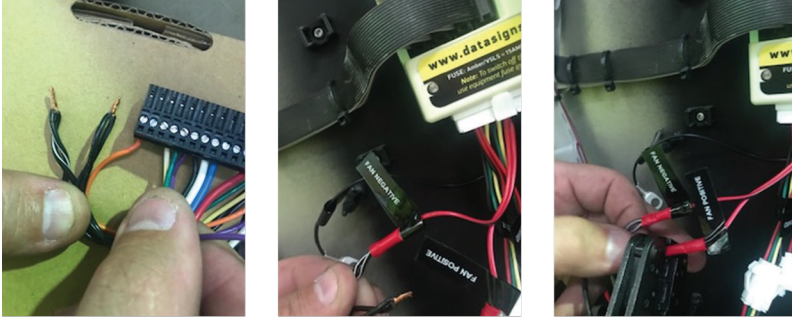
   Then unscrew -Ve (black) wire on 4 way connector pin 2 and crimp to "12v DC Negative" labelled crimp connector of new wire harness.

6. Also, on the existing old wiring harness, unscrew Fan -Ve (striped) wire from 14 way connector pin 2 and crimp to "Fan Negative" Labelled wire connector of new wire harness, (the Negative wire is the one with the black stripe on the actual wire)

Then unscrew Fan +Ve (red) wire from 14 way connector pin 3 and crimp to "Fan Positive" Labelled connector of new wire harness
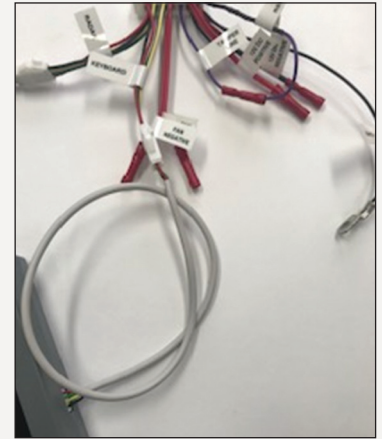

IF A RADAR IS FITTED

Unplug 4 way connector and plug into new wiring harness connector.

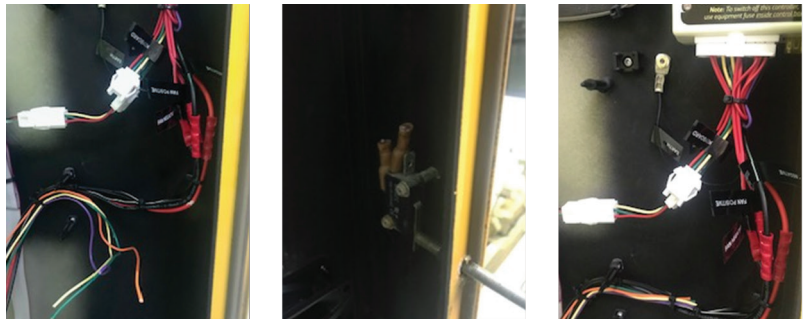Use the additional adaptor if required. (if old style radar connector is fitted)

IF LOCAL VMS COMPUTER IS STILL REQUIRED

The VMS Keyboard is normally connected in the control box via the control panel, see the last page for wiring instructions.
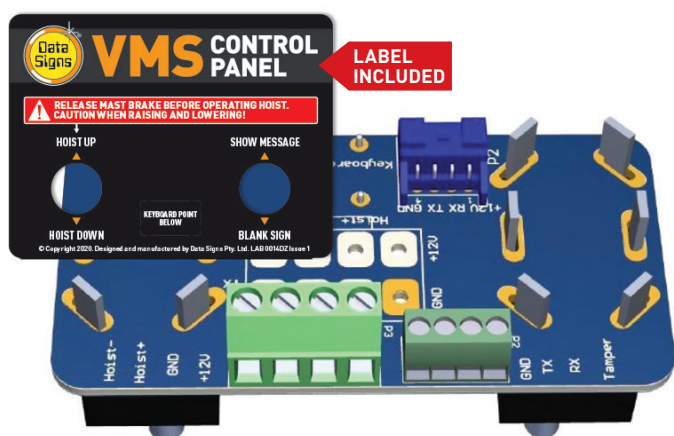

CLEAN UP WIRING PROCESS:

1. Remove / cut back all other wiring from the 14 way connector, terminate ends with tape to prevent unwanted short circuits.

2. Cut off wires from the lid switch also. This function is no longer used

3. Tidy up all cable as shown, put LED panel back

CONTROL PANEL INSTALLATION AND WIRING INSTRUCTIONS

A CONTROL PANEL IS SUPPLIED WITH THE UPGRADE KIT AS PER ILLUSTRATION SHOWN.

A LABEL IS ALSO SUPPLIED WITH THIS.

WIRING FOR THE CONTROL PANEL IS AS PER BELOW.

- There are 2 separate screw terminal connectors on this board, the larger one is for battery + & - input and the hoist control outputs.

- Connect the +12V from the Battery via a Fuse 25Amp Rating.

- If using a Hydraulic hoist system use the Hoist + for the Hoist lift solenoid and the Hoist - for the release valve

- The smaller terminal is used to connect the Tamper/Voltage sensor line from the sign head (pin 14 of the JST16 connector) and the local keyboard TX and RX wires.

- Connect wires as per below:

- Tamper = wire connected to the JST pin 14 of the Sign Controller (Purple wire)

- RX = Keyboard wire connected to the JST pin 4 of the Sign Controller (Yellow wire)

- TX = Keyboard wire connected to the JST pin 12 of the Sign Controller (green wire)

- To connect the VMS Keyboard plug this into the 4 Pin connector fitted on the control board

SIM CARD OPTIONS

- If you are using your own SIM Card, you will first need to change it over to the Micro SIM and plug it into the controller.

- If you have opted for the Data Signs SIM card subscription, this will already be fitted and no further action is necessary, the old SIM card will be provided back to you to hand back to your old Telco provider or deactivated and discarded.

Go through the complete upgrade procedure again ensure everything is as per instructions.
Re insert fuses to power up the new controller.

The sign when switched on will be connected to the DS-Live™ platform.
You can also use the AppVMS™ Mobile Phone App to control the sign.

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