PRODUCT SPECIFICATION

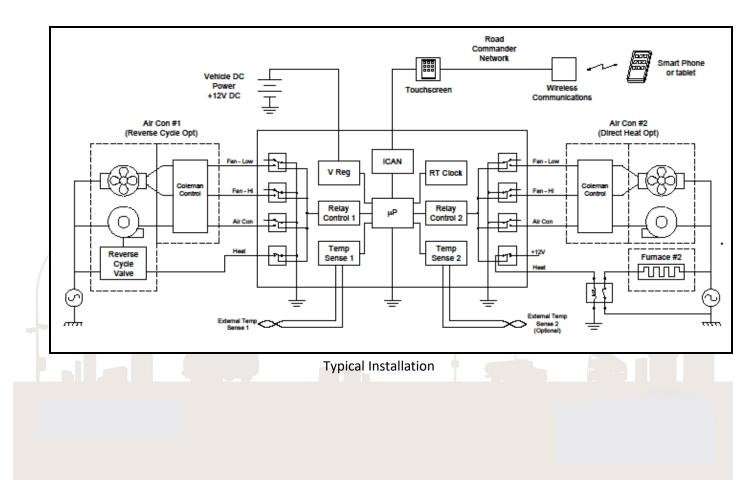# Road Commander
HVAC Interface

Part number: 00-01105-000

Description:

The Road Commander HVAC module provides an interface between new or existing Road Commander systems and vehicle heating, ventilation, and air conditioning systems. It is intended to operate seamlessly with industry standard HVAC components and allows operation of these systems via touchscreens or smart device Wireless Communications applications.   Each interface module can control two HVAC units with high and low fan speeds, heating, and air conditioning. Additional modules may be installed to control addition HVAC units. Settings for all HVAC units may be linked or controlled as independent zones.   System software provides manual and automatic control and "set back" functions. The HVAC module provides direct heat control for reverse cycle installations. All installations require a standard analog control for each HVAC unit, and an external relay is required for direct electric heat applications.

Typical Installation

Intellitec

Product Features:

- Independent control of two HVAC units.

- Compatible with Road Commander 1106 Touchscreen and Generator Control module.

- Compatible with SMART phones and tablets via Road Commander Wireless Communication interface.

- Uses standard external HVAC unit power interface.

- Supports Heat, Cool, and two speed fan and automatic modes for heating and cooling

- Heating may be reverse cycle or direct electric. (Direct electric requires external relay)

- Additional modules may be added to network to control any number of HVAC units.

- Any HVAC unit may be "slaved" to first unit of first module.

- Support Heating, Cooling, and Automatic modes.

- Automatic control of fan speed.

- Four heating and cooling set-points automatically adjust temperature throughout the day.

- "Hold Temperature" feature overrides set back functions.

- Various parameters may be configured by installer.

- Fan Off Delay allows fan to run after compressor turns off to improve HVAC efficiency.

- Compressor short-cycle delay prevents damage to compressor.

- Safety mode operates circulation fan after interruption of power.

- Automatic detection of temperature sensor faults.

- On-board indicators show status of all inputs, outputs and network status.

Environmental Specifications:

Operating temp:	-40/50 deg C	(-40/122 deg F)
Storage temp:	-40/125 deg C	(-40/260 deg F)
Intrusion Rating:	None	

Agency approvals: None

Electrical Specifications	Unit	Min	Typ	Max
Operating supply voltage	V	10	12	20
Reverse supply voltage	V			-36
Quiescent Current Draw	mA			50
Control Current (Per Output)	A			5
Control circuit voltage	V		12	30

Temperature Set-point Range	deg C	10	32
	deg F	50	90
Temperature Display Range	deg C	0	37
	deg F	32	99

Temperature Sensor: Thermistor, 00-00569-000 or equivalent

10K ohm at 25 deg C (77 deg F)

19.9K ohm at 10 deg C (50 deg F)

7.3K ohm at 32 deg C (90 deg F)

External HVAC Interface: Coleman 8330-752 "Analog Control Board" or equivalent

Mechanical Specifications

Housing: 5.0 x 3.5 x 1.5 in. / 127 x 89 x 38 mm

Harness: Pig-tail and/or terminator part numbers

Configuration adapter harness	11-01094-012
12-way wiring pigtail (J1)	11-01094-112
8-way wiring pigtail (J2/J3)	11-01105-008
Network terminator, 12-way	11-01105-212

Connectors: J1, 12-way Molex Mini-Fit Jr, Network Connections

1	Battery	7	Input 4 / Temp sense 2-
2	iCAN H	8	n/c
3	iCAN L	9	RS232 TX
4	Input 1 / Temp sense 1+	10	RS232 RX
5	Input 2 / Temp sense 1-	11	n/c
6	Input 3 / Temp sense 2+	12	DC Ground

J2, 8-way Molex Mini-Fit Jr, HVAC Unit #1

1	#1 Fan – Lo (GRN)	5	#1 Fan – Hi (GRN/YLW)
2	#1 Air Con (YLW)	6	#1 Control Common (BLK)
3	#1 Control Common (BLK)	7	#1 Control Common (BLK)
4	#1 Heat (WHT)	8	#1 Heat Common (WHT)

J3, 8-way Molex Mini-Fit Jr, HVAC Unit #2

1	#2 Fan – Lo	5	#2 Fan – Hi
2	#2 Air Con	6	#2 Control Common
3	#2 Control Common	7	#2 Control Common
4	#2 Heat	8	#2 Heat Common

Available Product Literature and Guides:

Brochure: 53-01105-000

Product Specification: 53-01105-001

User's Guide: 53-01105-100

Installation and Applications: 53-01105-200

Supporting Documents: 53-01105-300

Available Accessory Items and Kits:

USB Program Adapter Kit: 10-01079-000

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