



CURTIS

CURTIS INSTRUMENTS, INC.

200 Kisco Ave.

Mount Kisco, New York 10549

914-666-2971 Tel

914-666-2188 Fax

www.curtisinstruments.com

CURTIS[®] MODEL 840

Serial Data Display



Read Instructions Carefully!



SAFETY INSTRUCTIONS

This instrument was manufactured and tested according to the applicable technical standards. It complies with all the safety regulations as shipped from the factory.

Installation and startup must be performed by skilled personnel.

Failure to install and operate the unit in accordance with these instructions may result in damage or injury.

If safe operation of the instrument can no longer be ensured, stop and secure it against accidental operation.

If instrument failure or malfunction may cause personal injury or material damage, use additional safety measures such as limit switches, guards, etc.

Read the Operating Instructions carefully before startup.

Note the safety instructions marked with this warning symbol in this manual!

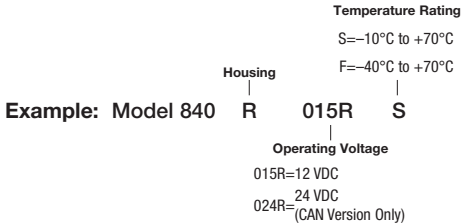


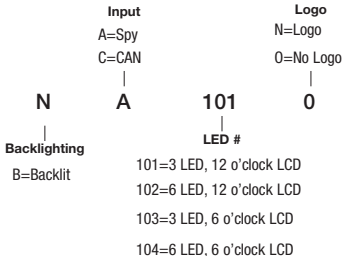
TABLE OF CONTENTS

1. Model Encodement	2
2. Technical Specifications	
2.1 Electrical	4
2.2 Mechanical	4
2.3 Environmental	5
3. Installation	6
4. Operation	8
5. Troubleshooting	9
6. Maintenance	10
7. Warranty	11



1. MODEL ENCODEMENT





2. TECHNICAL SPECIFICATIONS



2.1 Electrical Operating Voltage

Operating Current:

015R = 12.0 to 15.0 VDC

024R = 18.0 to 30.0 VDC

Signal Name	15V Models		24V Models	
	Typical (mA)	Max. (mA)	Typical (mA)	Max. (mA)
B+ Heater (+24V)	133	180	133	180
B+ Heater (+36V)	141	190	141	190
PWRIN (no backlight)	26	39	26	39
PWRIN (w/ backlight)	43	66	43	66

2.2 Mechanical

Display

8-character, alphanumeric, dot-matrix LCD

Molex 8-pin Mating Information:

Connector: 39-01-2085

Terminal (18–24 AWG): 39-00-0039

Terminal (16 AWG): 39-00-0078

Panel Cutouts

52mm, 2-1/16"



2.3 Environmental

Operating Temperature Range

-10°C to +70°C (Standard Model)

-40°C to +70°C (Freezer Model)

Enclosure Protection

IP65 (Face), IP40 (Rear)

Shock & Vibration

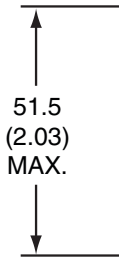
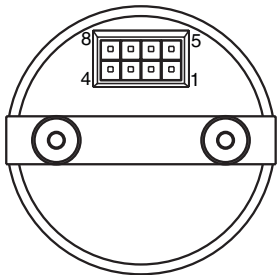
Meets SAE J 1378 (Jul 98)

3. INSTALLATION

Model 840 fits into a dash-panel cutout measuring 2-1/16" (52mm)



Pin Number	Function	
	"Spy" Version	CAN Version
1	No Connect	CAN Hi
2	No Connect	CAN Lo
3	B+ (Heater) 24VDC	B+ (Heater) 24VDC
4	B+ (Heater) 36VDC	B+ (Heater) 36VDC
5	B+ (Supply)	B+ (Supply)
6	Rx (Receive Data)	No Connect
7	No Connect	No Connect
8	B-	B-



4. OPERATION

Being a communication device, Model 840 will operate with user intervention based on signals received from a Curtis motor controller. Upon initial power-up, the instrument will go through a self-diagnostic routine in which all display elements will be illuminated for 1 second and then blanked for 1 second. The LCD will then display “all asterisks” until the first message is received. The information on the display will then be controlled by the Curtis motor controller.



5. TROUBLESHOOTING

For any deviation in operation as described in Section 4, verify model number to ensure that the voltage rating of the unit matches the power supply and check connector seating for full engagement.

6. MAINTENANCE

Model 840 is not serviceable in the field. Units returned to the factory within the warranty period (see inside backcover) without damage will be replaced without charge.



7. WARRANTY

Curtis Instruments' products and/or components are guaranteed against defects in workmanship and material for a period of one year, or as defined in the individual product literature, from date of shipment from our factory, when applied in a proper application within specified ratings. This guarantee is limited to repair or replacement F.O.B. our factory. There is no further warranty or implied representation, guarantee, promise or agreement as to any Curtis Instruments product and/or component. Curtis Instruments, Inc., cannot assume responsibility or accept invoices for unauthorized repairs to its products and/or components, even though defective. In no case will Curtis Instruments' responsibility extend to products, components or equipment not of its manufacture. Under no circumstances shall Curtis Instruments, Inc., be liable for any special or consequential damages or loss of profits or other damages. Returned goods will not be accepted unless identified by a Curtis Return Material Authorization (RMA).

**All specifications are subject to
change without notice.**