METEOROLOGICAL INSTRUMENTS

MODEL 05631
WIND LINE DRIVER
INSTRUMENTS

CE

MANUAL PN 05631-90

YOUNG

WARRANTY AND ASSISTANCE

R.M. YOUNG PRODUCTS are warranted by CAMPBELL SCIENTIFIC (CANADA) CORP. ("CSC") to be free from defects in materials and workmanship under normal use and service for **twelve (12) months** from date of shipment unless specified otherwise. CSC's obligation under this warranty is limited to repairing or replacing (at CSC's option) defective products. The customer shall assume all costs of removing, reinstalling, and shipping defective products to CSC. CSC will return such products by surface carrier prepaid. This warranty shall not apply to any CSC products which have been subjected to modification, misuse, neglect, accidents of nature, or shipping damage. This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability or fitness for a particular purpose. CSC is not liable for special, indirect, incidental, or consequential damages.

Products may not be returned without prior authorization. To obtain a Return Merchandise Authorization (RMA), contact CAMPBELL SCIENTIFIC (CANADA) CORP., at (780) 454-2505. An RMA number will be issued in order to facilitate Repair Personnel in identifying an instrument upon arrival. Please write this number clearly on the outside of the shipping container. Include description of symptoms and all pertinent details.

CAMPBELL SCIENTIFIC (CANADA) CORP. does not accept collect calls.

Non-warranty products returned for repair should be accompanied by a purchase order to cover repair costs.

CAMPBELLSCIENTIFIC
CANADA CORP.
11564 - 149 street - edmonton - alberta - T5M 1W7
tel 780.454.2505 fax 780.454.2655
www.campbellsci.ca

MODEL 05631B
WIND LINE DRIVER

INSTRUCTION SHEET 05631B-90
REV 09-99

INTRODUCTION

The Wind Line Driver converts raw signals from the wind sensors to proportional 4 to 20 mA current loop values. The Line Driver acts like a variable resistance that draws 4 - 20 mA when powered with 12 to 30 VDC. Although it has only one PC board, the Line Driver contains two completely independent circuits - one for wind speed and the other for wind direction. See wiring diagram below.

IMPORTANT!
The Wind Line Driver provides a calibrated current signal for wind speed and wind direction. Externally connected devices should be reviewed for compatibility and correct signal scaling.

Repairs should be attempted only by qualified service personnel.

WARRANTY

This product is warranted to be free of defects in materials and construction for a period of 12 months from date of initial purchase. Liability is limited to repair or replacement of defective item. A copy of the warranty policy may be obtained from R. M. Young Company.

CE COMPLIANCE

This product has been tested and shown to comply with European CE requirements for the EMC Directive. Please note that shielded cable must be used.

Declaration of Conformity

Application of Council Directives:
89/336/EEC

Standards to which Conformity is Declared:
EN 50082-1 (IEC 801-2, 3, 4)

Manufacturer's Name and Address:
R. M. Young Company
Traverse City, MI, 49686, USA

Importer's Name and Address:
See Shipper or Invoice

Type of Equipment:
Meteorological Instruments

Model Number / Year of Manufacture:
05631B/1996

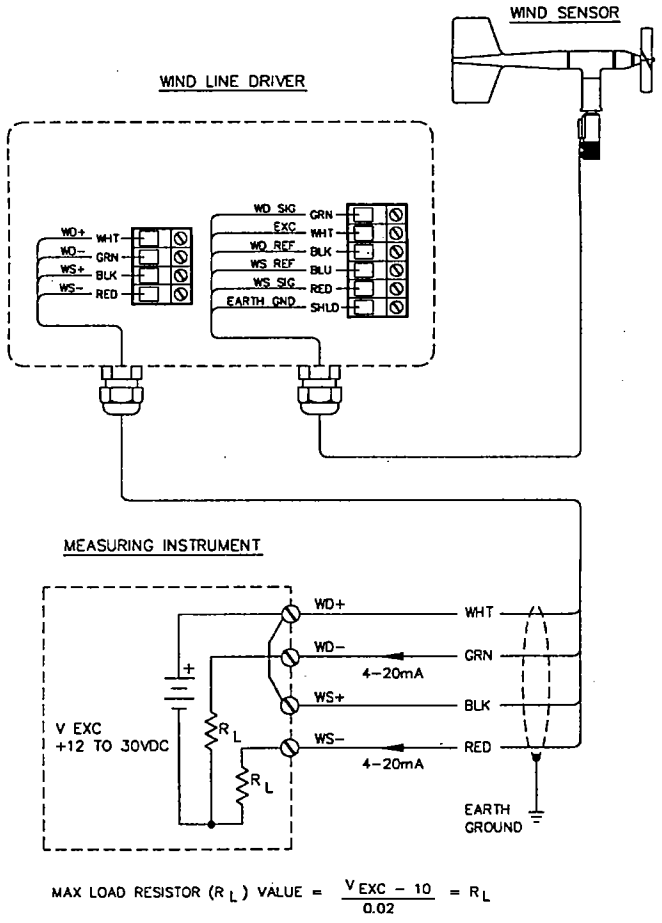
I, the undersigned, hereby declare that the equipment specified conforms to the above Directives and Standards.

Date / Place:
Traverse City, Michigan, USA February 19, 1996

David Poinsett
R & D Manager, R. M. Young Company

SPECIFICATIONS

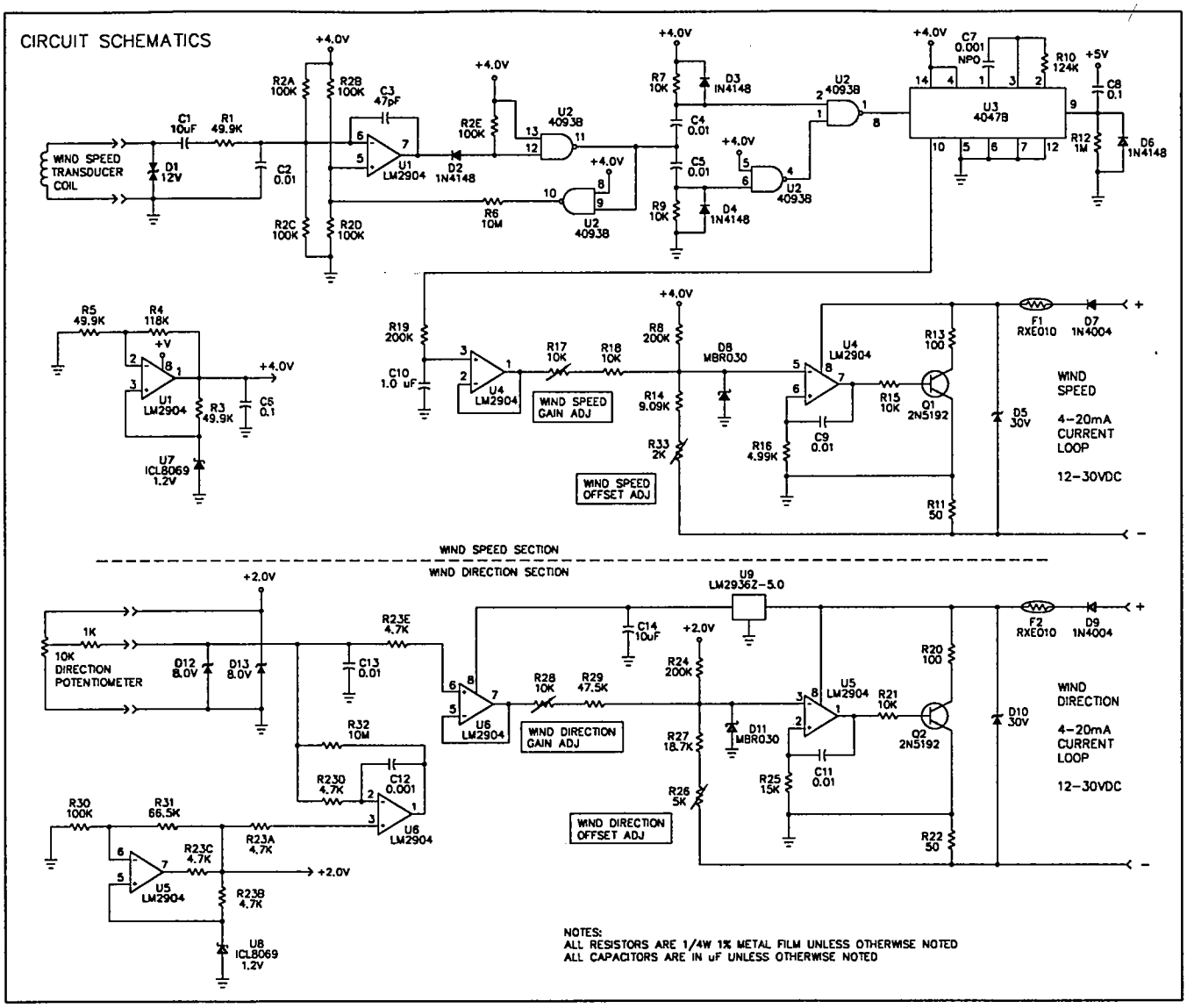
Power Requirement:	12-30 VDC
Temperature Range:	-50 to 50°C (-58 to 122°F)
Inputs:	YOUNG Wind Monitor series of sensors
Wind Speed	AC sine wave, Frequency proportional to wind speed. 3 pulses per revolution. Input sensitivity nom. 40 mV p-p
Wind Direction	Analog voltage from azimuth potentiometer. Regulated excitation voltage is supplied from interface circuit to potentiometer.
Outputs:	
Wind Speed	4 to 20 mA full scale Circuit time constant 0.2 second
Wind Direction	4 to 20 mA for 0 to 360°
Overall accuracy:	± 1% of full scale over temperature and supply voltage range
Dimensions:	110 mm (4.3 in) W x 75 mm (2.9 in) H x 56 mm (2.2 in) D
Mounting:	U-bolt for vertical pipe 25-50mm (1-2 in) Dia

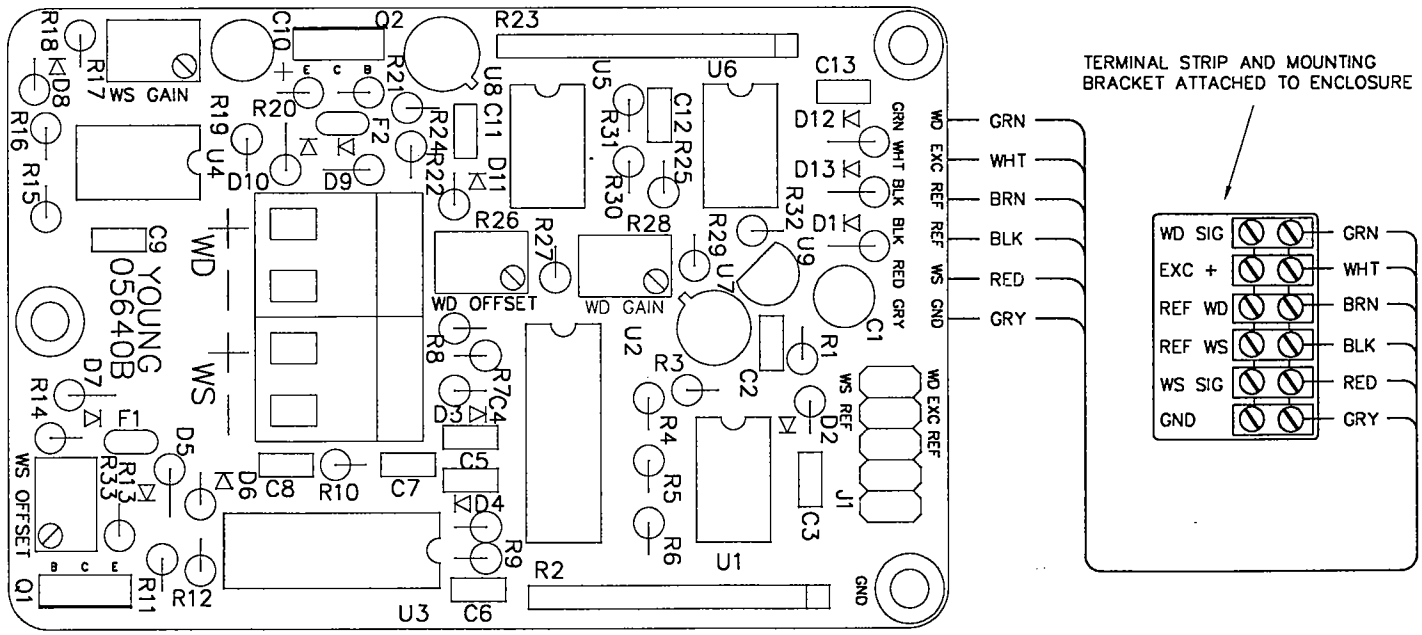


MAX LOAD RESISTOR (R_L) VALUE = $\frac{V_{EXC} - 10}{0.02} = R_L$

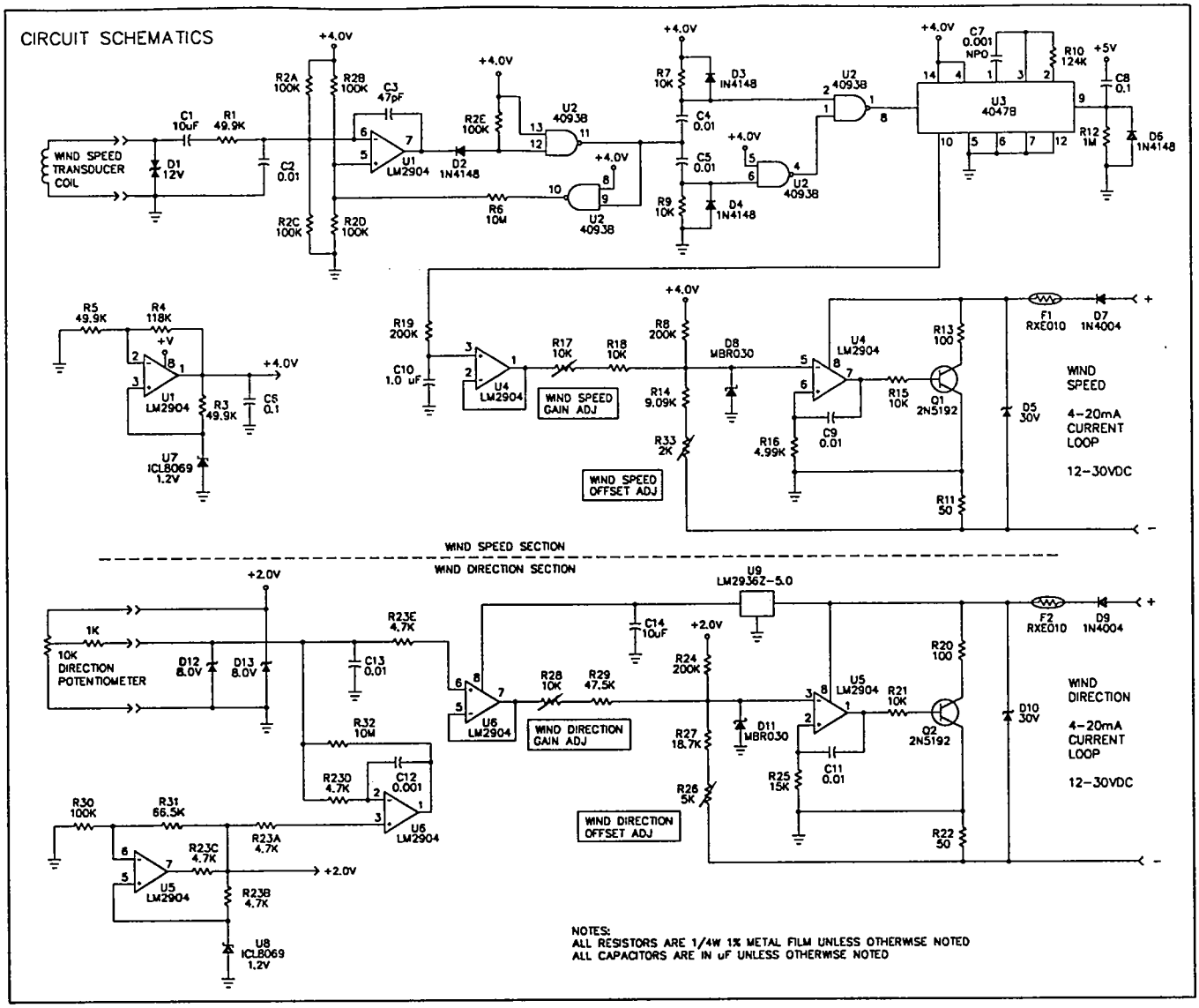
R. M. YOUNG COMPANY 2801 Aero Park Drive, Traverse City, Michigan 49686 USA
TEL: 231-946-3980 FAX: 231-946-4772

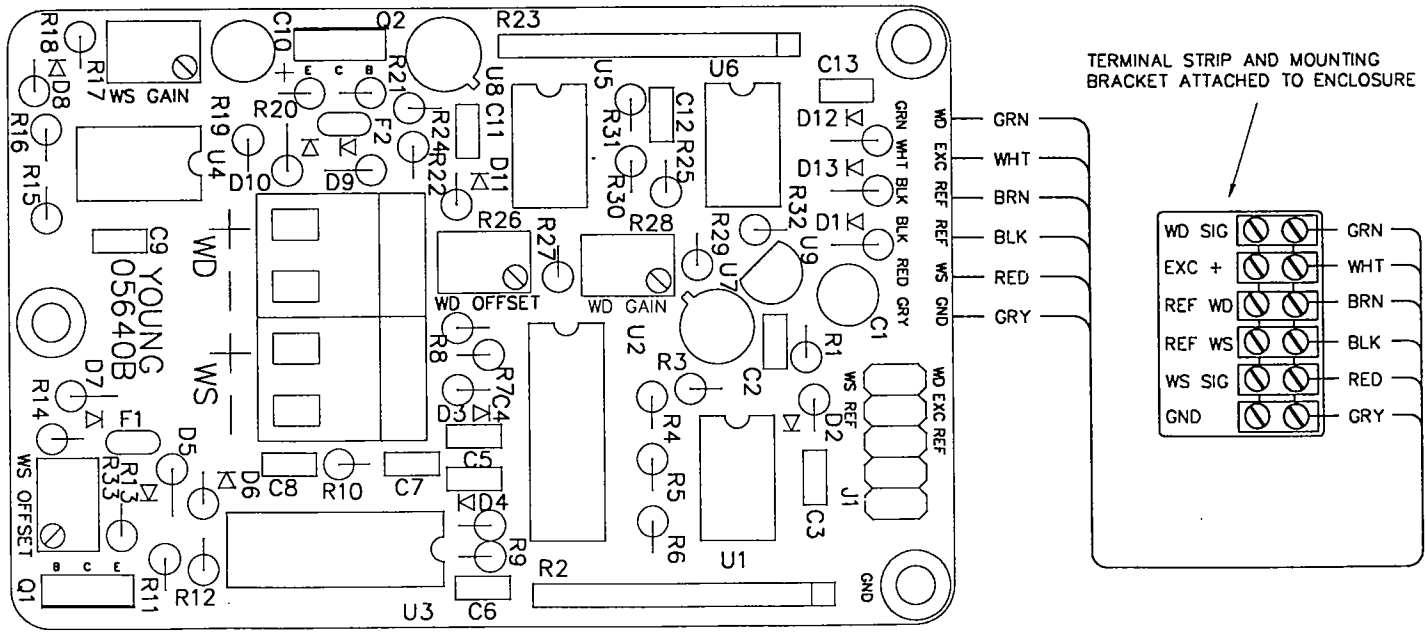
CIRCUIT SCHEMATICS





MODEL 05631B WIND LINE DRIVER	DWG A	PRD 12-96
CIRCUIT DIAGRAM AND COMPONENT LAYOUT	DWN KL	DWG 10-99
	CHK RC	C05631B
R.M. YOUNG CO. TRAVERSE CITY, MI 49686 U.S.A. 231-946-3980		





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