

# INSTRUCTION MANUAL



## *A21 REL-12 Relay Driver*

Revision: 12/91

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Campbell Scientific, Inc.

# **Warranty and Assistance**

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The **A21 REL-12 RELAY DRIVER** is warranted by CAMPBELL SCIENTIFIC, INC. 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. Batteries have no warranty. CAMPBELL SCIENTIFIC, INC.'s obligation under this warranty is limited to repairing or replacing (at CAMPBELL SCIENTIFIC, INC.'s option) defective products. The customer shall assume all costs of removing, reinstalling, and shipping defective products to CAMPBELL SCIENTIFIC, INC. CAMPBELL SCIENTIFIC, INC. will return such products by surface carrier prepaid. This warranty shall not apply to any CAMPBELL SCIENTIFIC, INC. 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. CAMPBELL SCIENTIFIC, INC. is not liable for special, indirect, incidental, or consequential damages.

Products may not be returned without prior authorization. The following contact information is for US and International customers residing in countries served by Campbell Scientific, Inc. directly. Affiliate companies handle repairs for customers within their territories. Please visit [www.campbellsci.com](http://www.campbellsci.com) to determine which Campbell Scientific company serves your country. To obtain a Returned Materials Authorization (RMA), contact CAMPBELL SCIENTIFIC, INC., phone (435) 753-2342. After an applications engineer determines the nature of the problem, an RMA number will be issued. Please write this number clearly on the outside of the shipping container. CAMPBELL SCIENTIFIC's shipping address is:

**CAMPBELL SCIENTIFIC, INC.**

RMA# \_\_\_\_\_

815 West 1800 North

Logan, Utah 84321-1784

CAMPBELL SCIENTIFIC, INC. does not accept collect calls.

## A21 REL-12 RELAY DRIVER

### FUNCTION:

Provide drive capability for four external relays controlled by the CR10, 21X, or CR7 dataloggers. The A21 REL-12 is powered by a 12 V source on the relay coil.

### CONTACT RATING:

DC - 1 Amp at 20 V  
AC - 0.3 Amp at 120 V

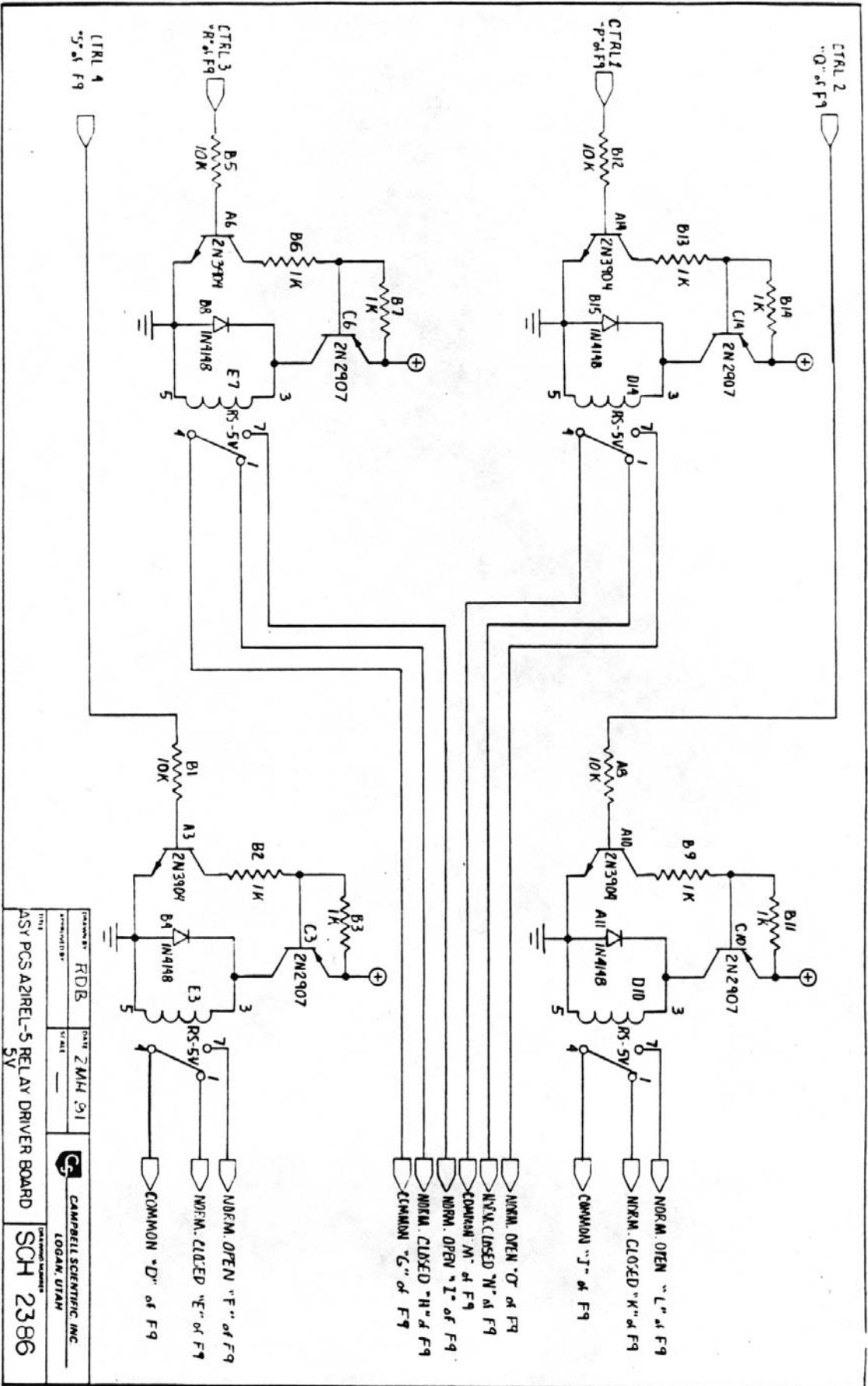
### COIL CURRENT:

13 mA/relay

### CONNECTIONS:

+12 V	External 12 V source
Ground	Low side of external source
REL COM	Low side of device under control
REL NC	Normally closed relay output to device under control
CTRL	To datalogger control port. When presented with 5 V, REL NC and REL NO invert their normal states until CTRL goes to 0V at which time REL NC and REL NO return to normal states.



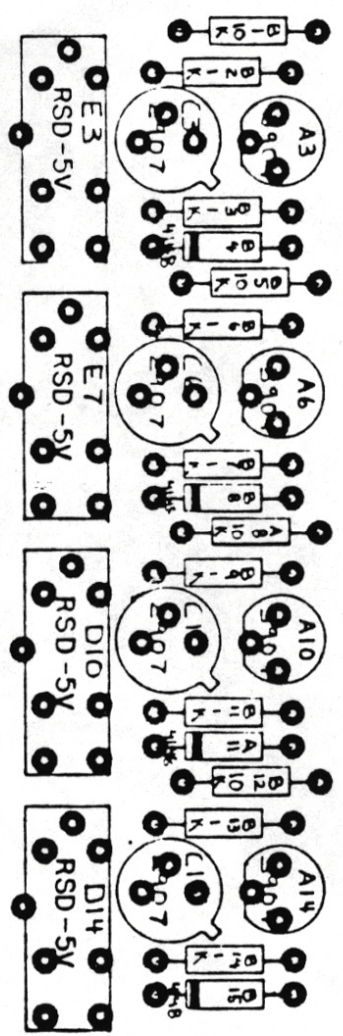


DRAWN BY: RDB  
 CHECKED BY: ZMH 91  
 TITLE: ASY PCS A21REL-5 RELAY DRIVER BOARD  
 5V  
 CAMPBELL SCIENTIFIC INC.  
 LOGAN, UTAH  
 SCH 2386

PCB A2IREL RELAY DRIVER BOARD

538

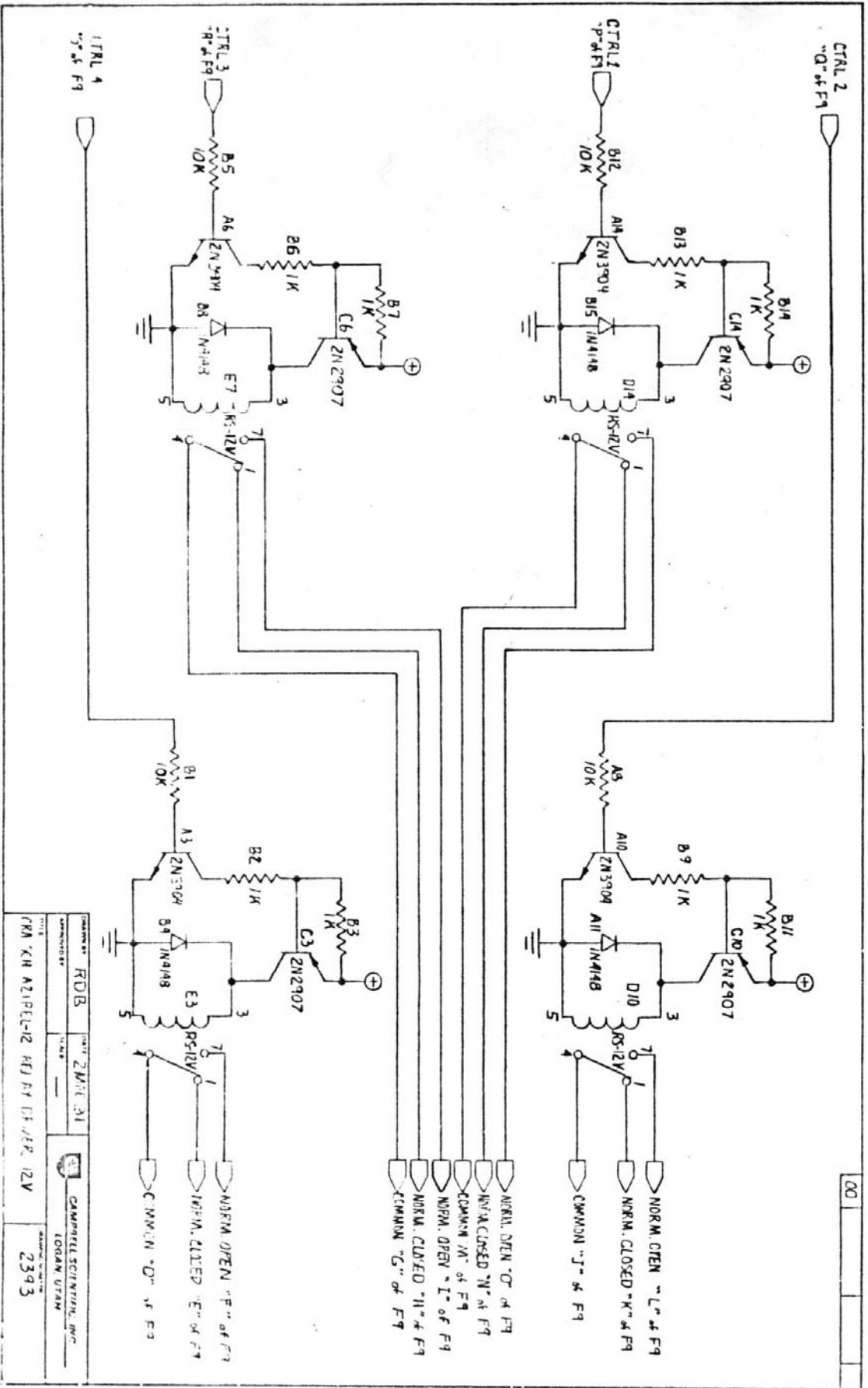
5382-00



A	+12V	B	±	C	±	D	W 1	E	NC 1	F	NO 1	G	W 2	H	NC 2	I	NO 2	J	W 3	K	NC 3	L	NO 3	M	W 4	N	NC 4	O	NO 4	P	CTR 4	Q	CTR 3	R	CTR 2	S	CTR 1
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WEIDMULLER CONNECTOR # 5705.6

DESIGNED BY	RM	DATE	3 MAR. 81	CAMPBELL ELECTRONICS, INC.
APPROVED BY		BY		LOGAN, UTAH
TITLE				DRIVING BOARD
ASY PCS A2IREL - 5 RELAY DRIVER BOARD				ADR 2386
5V				



COMPANY	RDB	DATE	ZM:EM
APPROVED BY		NO.	
CAMPBELL SCIENTIFIC, INC.			
LOGAN UTAH			
2393			

12V 12V







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