#### **TESTING:**

Testing the 168F series is simple and straightforward, just follow the guide in figure 2. All that is required is; three power supplies,  $\pm 15V$  and  $\pm 5V$ , an accurate source of synchro or resolver signals such as a Synchro Standard, an A.C. ref-

+5V FIGURE 2: LED LAMP -5V +15V GND S S1 S2 S2 S/D S3 \$3 CONVERTER SYNCHRO LED UNDER TEST STANDARD LAMP RH 14 RL R2 REFERENCE **EXCITATION** 

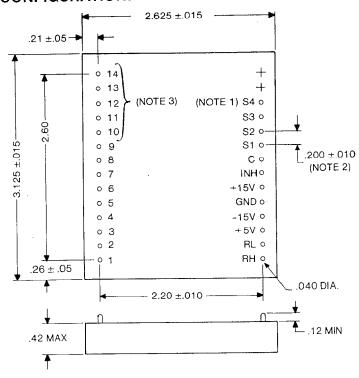
erence supply and a display to read the digital output. The Synchro Standard is set to the test angles. The angles corresponding to the lights which are on are added and compared with the standard angle. A table of angles versus bits is given in figure 3.

### FIGURE 3: BIT WEIGHTS

ANGLE VS. BITS

	Deg/Bit	Min/Bit
MSB 1	180	10,800
2	90	5,400
3	45	2,700
4	22.5	1,350
5	11.25	675
6	5.625	338
7	2.813	168.8
8	1.406	84.36
9	0.7031	42.86
10	0.3516	21.096
11	0.1758	10.548
12	0.08799	5.279
13	0.04395	2.637
LSB 14	0.02197	1.318

### **CONFIGURATION:**



## NOTES:

- 1. S4 pin appears on multiple input and resolver input models only.
- 2. Non-cumulative.
- 3. 14 bit units have 14 bit pins.
  - 12 bit units have 12 bit pins.
  - 10 bit units have 10 bit pins.

WEIGHT: 3.5 oz.

# **ORDERING INFORMATION:**

168F SUFFIX	INPUT TYPE	L-L VOLTAGE	LOGIC TYPE
X00	SYNC	11.8V	TTL
X01	SYNC	90V	TTL
X02	RSVR	11.8V	TTL
X03	RSVR	90V	TTL
X24	SYNC	11.8V	HC
X25	SYNC	90V	HC
X26	RSVR	11.8V	HC
X27	RSVR	90V	HC
X08	SYNC	11.8V	LSTTL
X09	SYNC	90V	LSTTL
X10	RSVR	11.8V	LSTTL
X11	RSVR	90V	LSTTL
X12	SYNC	11.8V	CMOS
X13	SYNC	90V	CMOS
X14	RSVR	11.8V	CMOS
X15	RSVR	90V	CMOS

X in part number determines resolution

X = 1 for 14 bit converter

X = 2 for 10 bit converter

X = 3 for 12 bit converter

Standard temperature range (0° to 70°C), add suffix ET to part number for extended temperature range (-55° to 105°C)

For multiple input option consult factory.

#### **WARRANTY:**

All units warranteed against defects in materials and workmanship for 1 year from date of shipment. Liability is limited to servicing, adjusting, or replacing any CSI product returned to our factory with delivery charges prepaid. In no case shall our liability exceed the original purchase price.