

TO STUDY POTENTIOMETER **ERROR DETECTOR**

OMEGATYPE ICT-908

OMEGA TYPE ICT-908 is designed to study the important characteristics of a 2-potentiometer angular position error detector. These include (i) linearity, (ii) sensitivity and (iii) maximum angle of rotation. Good quality wire wound servo potentiometers with full 360° rotation have been used for this purpose. Accurately marked dials with least count of 1° are marked on panel for position indication. The error voltage is read on a built-in 3½ digit DVM. An I.C. regulated internal reference voltage is available for D.C. studies. When used with an A.C. reference, the unit also demonstrates the phase reversal of the error signal which is important in applications involving a 2-phase servomotor as actuator.

OBJECT

- 01 To Study Linearity & Range of the potentiometers with D.C. Excitation
- 02 To calculate error detector coefficient with D.C. Excitation
- 03 To Study Linearity & Range of the potentiometers with A.C. Excitation
- 04 To calculate error detector coefficient with A.C. Excitation

FEATURES

- 01 Built-in signal and power sources
- 02 DC/AC both operations
- 03 High quality 360° shaft rotation servo potentiometer
- 04 AC excitation at 800Hz approx
- 05 Built in balanced demodulator circuit
- 06 3.5 digits DPM for carrying measurements
- 07 Separate test-points to observe waveforms after each block
- 08 Phase reversal of error in AC operation
- 09 Closed loop position control system
- 10 Self contained and easy to operate
- 11 Built-in DC Power Supply
- 12 Functional blocks indicated on-board Mimics
- 13 Exhaustive Learning Material



TECHNICAL SPECIFICATIONS

01 No. of Potentiometer : 2 nos.

02 Type of Potentiometer : 360° Shaft rotation 1K

Servo Potentiometer.

03 Inbuilt Carrier Frequency: 800Hz(Approx).

04 Potentiometer Excitation: +5 volts D.C.

05 Digital panel meter

: +20 & -20 volts display

range

06 Power Supply

: 230V+5%, 50Hz

07 Interconnections

: 4mm banana sockets

08 Power Consumption 09 Operating Conditions : 10 VA (approximately)

10 Dimension

: 0-40 °C, 85% RH

: W 340 x H125 x D210

11 Weight

: 1.5Kg (approximately)

LIST OF ACCESSORIES:

01 Patch Cord 4mm length 50cm Red & Black....04

OTHER APPARATUS REQUIRED:

01 Requires an external CRO OMEGA TYPE CRO-20 for a.c. studies

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice

OMEGA ELECTRONICS

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