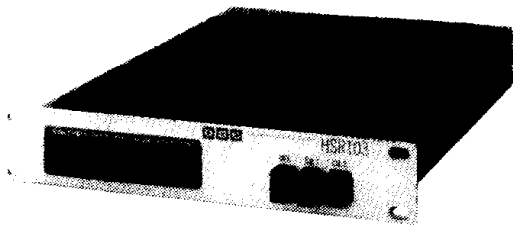


±.005° SYNCHRO AND RESOLVER ANGLE INDICATOR Converts Synchro and Resolver Signals to BCD Angle

FEATURES

- **DOES NOT REQUIRE VOLTAGE OR FREQUENCY PROGRAMMING:**
Automatically adjusts to reference levels of 10–150V and signal levels of 10–100V
Broadband 47–1000 Hz frequency range
- **RESOLUTION AND ACCURACY:**
SR-103 has 0.01° resolution and ±0.03° accuracy
HSR-103 has 0.001° resolution and ±0.005° accuracy
- **TRANSFORMER ISOLATION FOR SIGNAL AND REFERENCE INPUTS**
- **TYPE II SERVO TRACKING LOOP:**
No velocity lag and continuously available output for rates up to 2 rps (720°/sec)
- **LOGIC CONTROLS:**
Converter Busy, Inhibit, High/Low Bandwidth, Unipolar/Bipolar display, Lamp Test
- **FAULT MONITOR INDICATES FAILURE TO TRACK**
- **DUAL SYNCHRO/RESOLVER INPUT CHANNELS WITH FRONT PANEL SELECTOR SWITCH**
- **TRANSFORMER ISOLATION FROM LINE VOLTAGE:**
115/230V and 47–440 Hz power input



DESCRIPTION

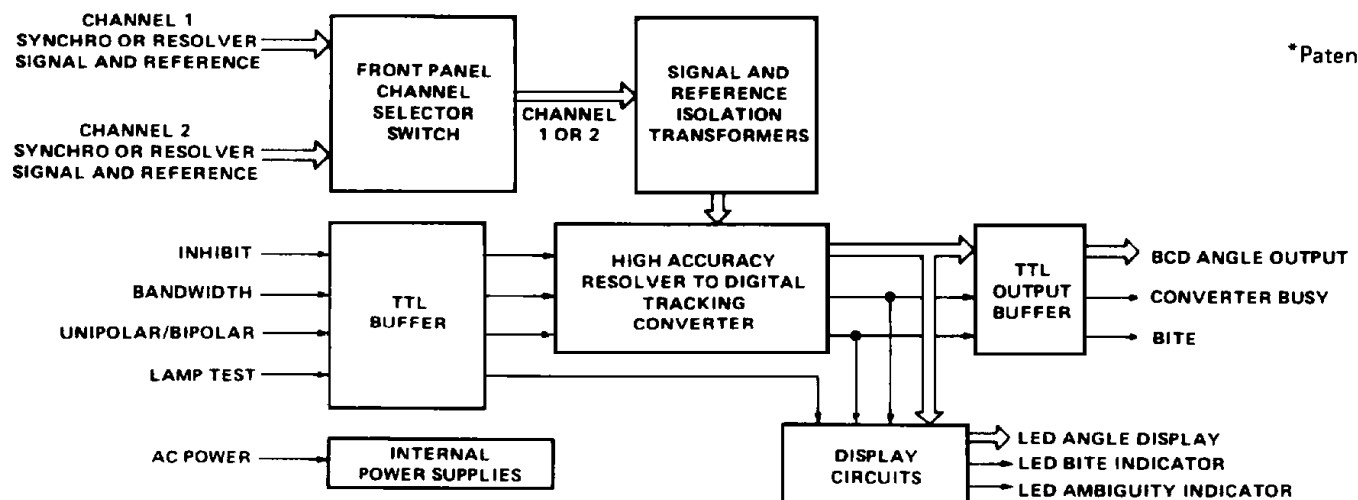
The SR-103 and HSR-103 are improved high quality angle indicators used in precision synchro and resolver test equipment. They accept synchro or resolver signals at the rear connector and provide BCD angle output which is also displayed on the front panel. Intended primarily for dedicated applications, the SR-103 and HSR-103 are logic programmable via the rear connector and easily interfaced with computers and digital control equipment. An IEEE-488 bus adaptor is a standard option. Because they can accept a broad range of voltages and frequencies without programming and signal-to-reference phase shifts of up to ±50°, the SR-103 and HSR-103 are ideal for situations in which a variety of different inputs must be accommodated quickly.

Using a Type II servo loop for continuous tracking, these instruments have no velocity lag up to the specified

tracking rates. There can be no hangup 180° away from the input angle. A fault indicator shows when the unit is not tracking the input signal, and an ambiguity indicator shows when the output data is changing. The SR-103 and HSR-103 require no adjustments or calibrations and logic is TTL compatible.

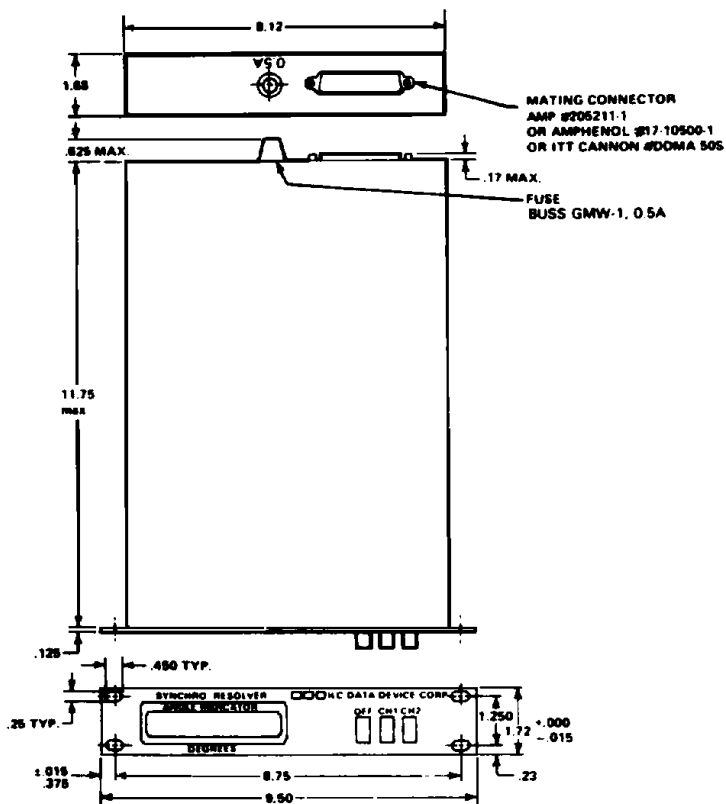
APPLICATIONS

The SR-103 and HSR-103 can be used wherever accurate angle information is required for display, control, testing purposes, or computation. Applications include production testing of synchros and resolvers, information translators in quality control systems, machine tool control, ship and aircraft navigation systems, and antenna positioning. The IEEE-488 adaptor option is convenient for interfacing these units with other instruments, for automatic test equipment (ATE) (see DBA-488 data sheet).



SR-103 OR HSR-103 BLOCK DIAGRAM

MECHANICAL OUTLINE FOR SR-103 AND HSR-103



ORDERING INFORMATION

All instruments are supplied with a mating connector and an instruction manual.

SR - 103 -3- DBA-488

IEEE-488 Data Bus Adaptor:
Blank = SR-103 or HSR-103 only
DBA-488 = SR-103 or HSR-103 mounted together
with a DBA-488 on a 3-1/2" high, 19"
wide rack mounting panel, including
cable connections

Options:

Blank = SR-103

3 = OPTION 3 (Center Rack Mount)

Resolution and Accuracy:

SR = .01° resolution and ±.03° accuracy

HSR = .001° resolution and ±.005° accuracy