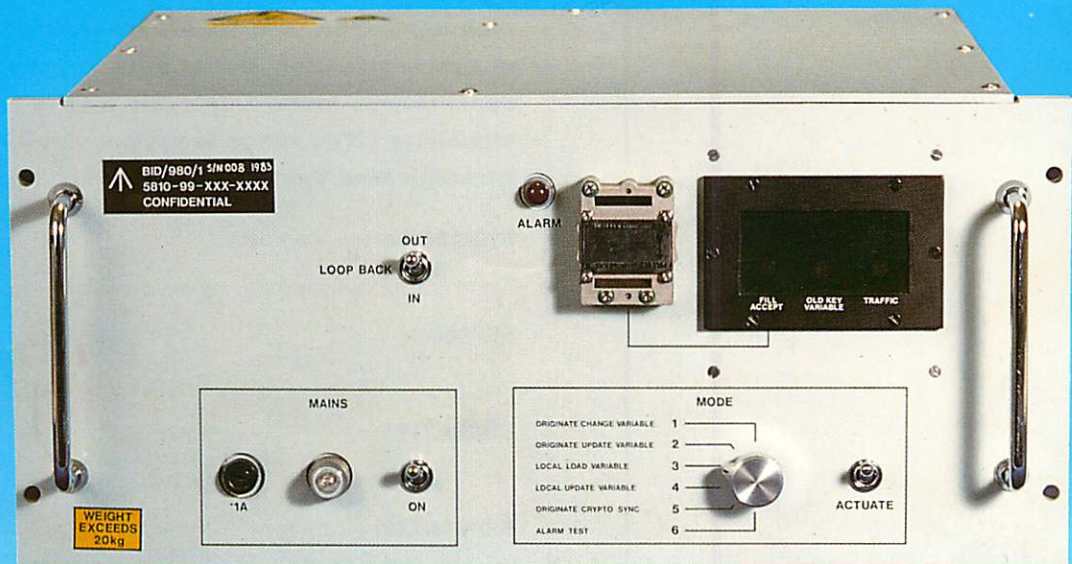


Bulk Encryption Equipment
BID 980 Series



The BID 980 Series of Equipments

The BID 980 series of equipments provides a range of bulk encryption devices developed and manufactured by Cossor Electronics Ltd., for the Ministry of Defence (UK). They are in Tri-Service use on a variety of communication networks, both line and radio, providing safe and secure data transmission on main trunk links. Operating at speeds from 32 kbit/sec to 2.048 Mbits/sec, the series covers a wide range of digital data transmission applications. □ All models are user friendly and require minimum operator interference in their normal running, whilst providing flexible key management facilities. □ The variable speed models in the range allow different data rates to operate simultaneously on Transmit and Receive channels. □ The equipments use one of two methods of synchronisation, either auto key mode or a synchronous mode employing end to end signalling. □ The range is system proven on both Strategic and Tactical (Ground Mobile) installations.

BID/980 Series Variants

There are six variants in the range of available equipments.

BID/980/1:	speed 2.048Mbits, internally clocked CCITT G.703 interface, ac power supply
BID/980/1V1:	speed 32kbits to 2.048Mbits, externally clocked CCITT V.11 (RS.422) interface, ac power supply
BID/980/1V2:	speed 64kbits to 2.048Mbits, externally clocked EUROCOM D/1 interface, ac power supply
BID/980/1V3:	as BID/980/1 except dc power supply
BID/980/1V4:	as BID/980/1V2 except dc power supply
BID/980/1V5:	as BID/980/1V2 except dc power supply

Features

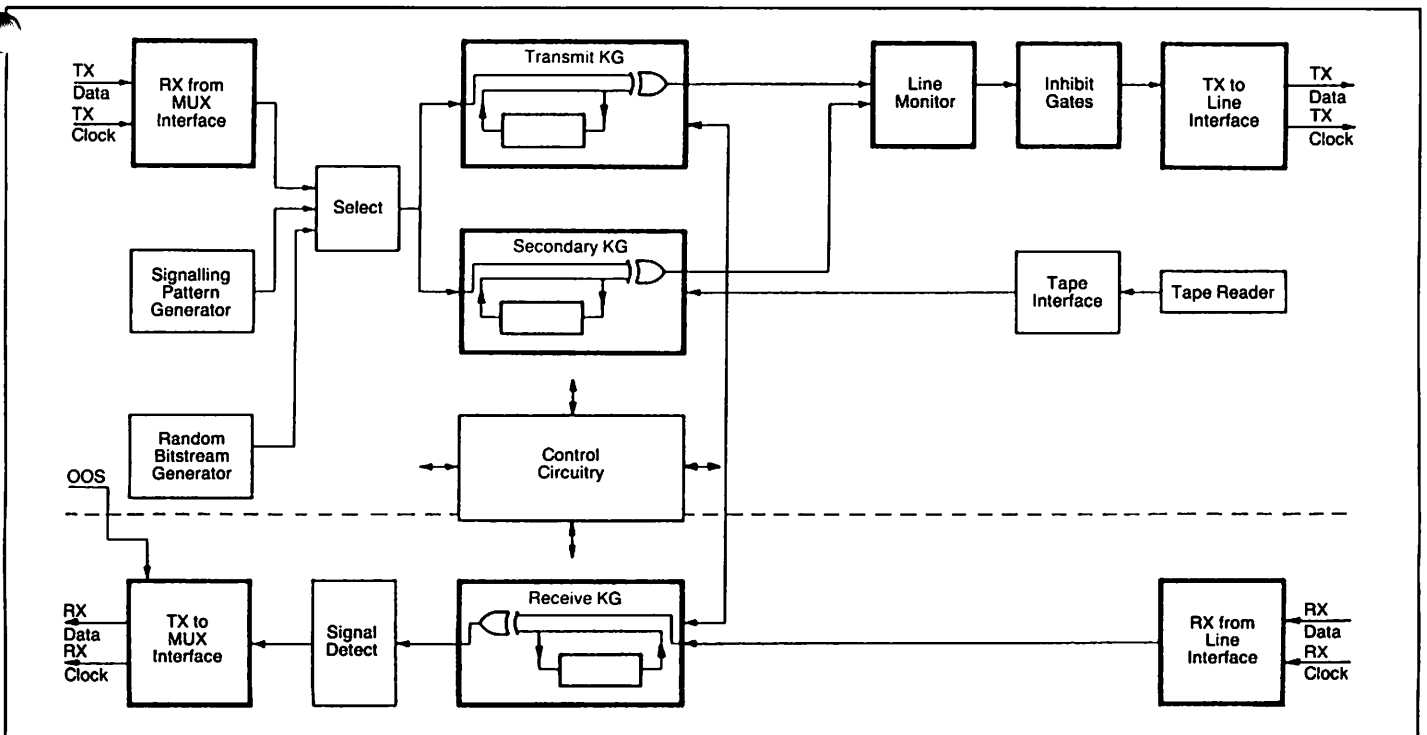
- BID/980 employs HAIRPIN (TED/PERTH) Key Generator
- BID/980 is NATO HISPEED compatible
- BID/980 Key Management
 - 2 Main Key Stores
 - Local and Remote control facilities for both UPDATE and CHANGE
- Communication interfaces for:
 - CCITT G.703
 - CCITT V.11 (RS.422)
 - EUROCOM D/1
- BITE
- Alarm Monitor and Indicators, Local and Remote facilities
- Simple Operator Controls
- MTBF greater than 14,000 Hours
- 19 inch Rack Mounting

Qualification

BID/980 Series

- Meets the UK and NATO TEMPEST Standards
- SECAN Approved
- Full type approval to UK DEF STAN 07.55 for Strategic and Tactical Environments
- EMC to UK Specifications DEF STAN 59-41
- Designed to meet UK EMP Specification DEF STAN 07-55 Part 2 Section 5
- Air transportable to an altitude of 9,000 metres
- Equipment security classification — CONFIDENTIAL

BID 980 Circuit Schematic



Technical Specification

	BID/980/1 & 1V3	BID/980/1V1 & 1V4	BID/980/1V2 & 1V5
Communications			
Interface	CCITT G.703	CCITT V.11 (RS.422)	Eurocom D/1
Data Rate	2.048 MBit/sec	32 kbit-2.048 Mbit/sec	64 kbit-2.048 Mbit/sec
Clock	Internal	External	External
Mode	Full Duplex	Full Duplex	Full Duplex
Environmental Specification			
Specification	DEF STAN 07-55 Part 2 Categories, B1, B4, B7, B9, A4, A8	DEF STAN 07-55 Part 2 Categories, B1, B4, B7, B9, A4, A8	DEF STAN 07-55 Part 2 Categories, B1, B4, A1, A4, A5
Operating Temperature Range	- 10°C to + 40°C	- 10°C to + 40°C	- 30°C to + 55°C
Storage Temperature Range (Non Operating)	- 40°C to + 70°C	- 40°C to + 70°C	- 40°C to + 70°C
Humidity	90% non condensing	90% non condensing	90% non condensing
Power Requirements			
	all models		
	AC. 220-240 volts, 50/60 Hz		
	DC. 20-60 volts		
	45 watts maximum power dissipation		
Dimensions			
	all models		
	Height 215 mm		
	Width 480 mm		
	Depth 450 mm (including connectors)		
	Weight 22 kg		

Cossor policy is one of continuous improvement and the right to change specification at any time, without notice is reserved. Whilst every care has been taken to ensure that the contents of this pamphlet are correct and realistic. Cossor's responsibility and liability shall be limited to that arising under any contract with Cossor which results from this pamphlet.



Registered in England Number 406809
 Listed in the Department of Trade & Industry's Register of Quality
 Assessed United Kingdom companies as assessed to Defence
 Standard 05-21