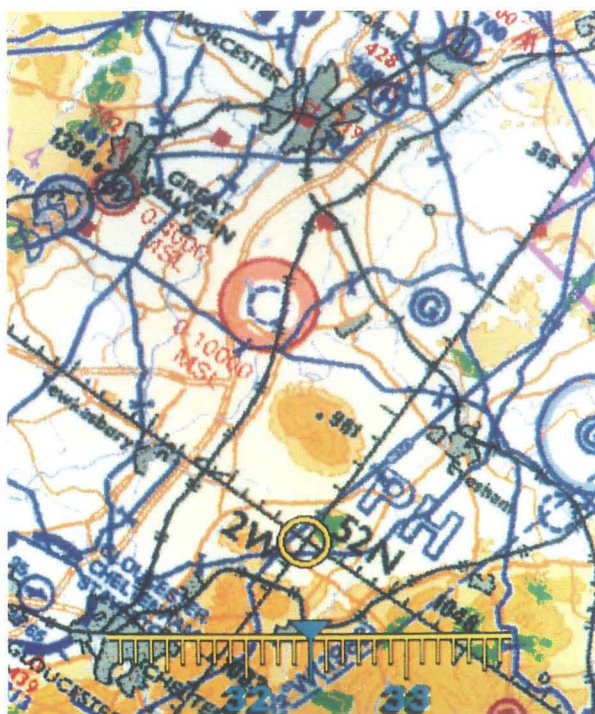


# Digital Colour Map for Rotary Wing and Fixed Wing Aircraft

In production and delivered to the Ministry of Defence United Kingdom for the Royal Air Force Harrier GR7 Night Attack variant aircraft



**GEC AVIONICS**  
Digital Colour Map

The Digital Colour Map Unit (DCMU) as part of an onboard navigation mission system reduces pilot workload and increases mission effectiveness. Displayed on a colour Head Down Display the image scrolls smoothly relative to the helicopter's and aircraft's movements. The DCMU comprises a map manipulator and an on aircraft removable database unit.

#### Capabilities:

- Instant scale change
- Zoom
- Night/Day/NVG colour palettes
- Declutter
- Overlay
- Offset
- Track/Heading/North Up
- Present position
- Heading ribbon

The DCMU comprises a map manipulator unit and a database unit housed in a single line replaceable unit. The database unit may be updated and/or to change the contents of the database without removing the DCMU from the helicopter or aircraft.

Successful extensive flight trials of the DCMU in fixed and rotary wing aircraft in the USA and UK have led to GEC Avionics winning the production contract for the digital colour map for the RAF's Harrier Night Attack variant aircraft.

In particular the DCMU has been successfully operating in a Wessex helicopter at the Royal Aerospace Establishment Bedford UK since 1984 as part of their mission system. It has exhibited high reliability in the severe helicopter environment. GEC Avionics also has the production contract to supply the DCMU for the British Army's Phoenix Remotely Piloted Vehicle Ground Station.

The Digital Colour Map Unit has proven to be rugged and reliable.

#### Status:

Type Approval Tested.  
Safety of Flight Tested.  
Production deliveries have commenced.

**Specification:**

Area of map coverage is 538 sq ft  
(50 sq m) of paper chart.

Database store utilises digitised paper charts and  
photographs.

Scale change within 0.8 secs.

Various map scales accommodated

1:50,000 , 1:250,000 , 1:500,000 , 1:1M.

Overlay of 200 symbols and 200 line  
segments is available.

Declutter up to 6 features.

Storage medium is UVEPROM.

Dimensions: 15.3 x 7.65 x 9.0 inches

(38.86 x 19.43 x 22.86 cms).

Weight 44lbs (20 kgs) max.

Video output is 525 lines 60Hz 250VA ,

RGB (625 lines 50Hz can be offered).

Interface is 1553B (ARINC 419/429 can be  
offered).

MTBF 2000 hours.

Built in Test.

Cooling by internal fan.

**Environmental:**

Temperature range: operates continuously over the  
range -26°C to +70°C.

Vibration range: operates under the vibration  
spectrum of the Harrier.

Shock, sand and dust, explosive atmosphere,

humidity and free moisture: MIL-STD-810C.

Salt fog and contamination: MIL-STD-810C, BS3G100.

Electromagnetic Capability: fully tested to MOD(UK),

CAA approval.

This document gives only a general description of the product(s) and shall not form any part of any contract.  
From time to time changes may be made in the product(s) or in the condition of supply.

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