

DISPLAY SYSTEMS JZQ/JZR

JZQ/JZR

SUMMARY OF DATA

PURPOSE

The system provides a display of real time radar information used for target detection, manual tracking or supervision of the auto track facility, and a display of synthetic data from information stored within an associated computer for purposes of threat evaluation and weapon assignment.

BRIEF DESCRIPTION

Display System JZQ is the display equipment associated with the Data Processing System DAD used in Action Data Automated Weapon Systems Mk 4 (ADAWS4). Similarly Display System JZR is associated with Data Processing System DAE used in ADAWS5. Each system consists of a single Display Control Processing Equipment (DCE) cabinet and series of display consoles. Radar data provided from the ship fitted sensor systems and synthetic data provided by the sensors or data links from other ships and sources are processed by the DCE and routed to three types of display known as Labelled Plan Display (LPD), Tote Display and Tactical Display. The LPD displays information from both radar and synthetic data whilst the Tote Display, displays information from synthetic data only. The Tactical Display combines the capabilities of both the LPD and Tote Display, and provides the track information on large horizontal screens. Manual injection key boards, Tracker Ball control units and selection panels are available at each display position.

MAJOR UNITS AND PHYSICAL DATA

	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>
DCE	203.2 cm (80.25 in)	127 cm (50 in)	69.5 cm (27 in)	703.1 kg (1550 lb)
Display, Tactical	141.6 cm (55.75 in)	134.6 cm (53 in)	182.9 cm (72 in)	479 kg (1056 lb)
LPD	152.4 cm (60 in)	52.1 cm (20.5 in)	132.1 cm (52 in)	284 kg (625 lb)
Display, Tote	152.4 cm (60 in)	52.1 cm (20.5 in)	132.1 cm (52 in)	268 kg (590 lb)

POWER REQUIREMENTS

Tactical Display:-	200 V 400 Hz 3-phase - 1250 VA 115 V 60 Hz 3-phase - 350 VA 115 V 60 Hz 1-phase - 200 VA 50 V dc - 1 A
LPD/Tote Display:-	200 V 400 Hz 3-phase - 1350 VA 115 V 60 Hz 3-phase - 350 VA 115 V 60 Hz 1-phase - 300 VA 50 V dc - 1 A
DCE:-	200 V 400 Hz 3-phase - 1250 VA 115 V 60 Hz 3-phase - 200 VA 115 V 60 Hz 1-phase - 200 VA 50 V dc - 0.5 A

COOLING AND HEAT DISSIPATION

Each of the cabinets or display consoles is cooled by passing cooled air over the electronic sub-assemblies. Chilled water at a nominal 7°C is applied to heat exchangers in each major assembly, which dissipate heat as detailed below for an increase in water temperature of approximately 5°C.

<u>Assembly</u>	<u>Flow Rate</u>	<u>Dissipation</u>
DCE	4.5 litre (1.0 gal)/min	1200 W
LPD/Tote Displays	3.4 litre (0.75 gal)/min	900 W
Tactical Display	4.5 litre (1.0 gal)/min	1200 W

HANDBOOK

BR 4127

ESTABLISHMENT LISTS

S 1623 - JZQ
S 1624 - JZR

INSTALLATION SPECIFICATION

B 1166 - JZQ
B 1167 - JZR