# 1 General Description

Individual control modules are designed to be mounted as part of the Processor Electronics Unit for desk mounted monitor displays (see Chapter 4), or on a separate panel when used in a split-cabinet or customer specified console, see Chapters 2 and 3.

A simple control panel is configured from the following modules:

- ON/OFF Switch module
- Pointer module (joystick or trackerball)
- Memory Card module (optional)
- Brilliance Control module

An extended control panel will include a keyboard module.

Refer to Figures 5.1 to 5.5 for details of individual control modules.

## 1.1 Control Functions

The control offered by each module is as follows:

### 1.1.1 ON/OFF Control Module

Used to control power to the radar display (Monitor and Processor Electronics Unit).

### 1.1.2 Pointer Module

Joystick/Trackerball: Used to move the screen cursor within the radar picture, and to position the arrowed cursor over menu items. It is also used to control primary operational functions of the radar, such as clutter and gain.

Left/Right Push Button Keys: The left key is used to select (turn ON or OFF) the option over which the screen cursor is placed. The right key is used where appropriate to reveal an options menu for the selected facility, or to cancel a selection.

### 1.1.3 Memory Card Module

Memory Cards: The memory card module will accept one or two memory cards wich are used for the storage and retrieval of data such as map information.

Duplicate Left key: This key is available when a memory card unit is fitted. Its operation is identical to that of the left key described above. However, its location within the control panel allows for two handed operation.

### 1.1.4 Brilliance Control Module

A rotary control used for controlling the brilliance of the radar's display monitor.

### 1.1.5 Keyboard

The dedicated keyboard contains a number of rotary controls and push buttons which are used for direct selection and control of specific radar parameters.

Rotary Analogue Controls: Used to control primary operational functions of the radar, such as clutter and gain.

- Gain
- Anti-clutter Rain
- Anti-clutter Sea
- EBL 1
- VRM 1
- Panel Brightness

Push Button Keys: Used to select the various secondary functions of the radar.

- Range Up
- Range Down
- Centre
- TM/RM
- True/Relative Vectors
- Acknowledge Alarms

# 2 Installation and Commissioning

## 2.1 Installation

Individual control modules are mounted as part of the Processor Electronics Unit assembly or on a separate panel when used in a split-cabinet or customer specified console, see Chapters 2 and 3.

- Refer to Figures 5.1 to 5.5 for installing the Keyboard, ON/OFF Switch, Pointer, Memory Card and Brilliance modules. The pointer module installation drawing (Figure 5.3) is applicable to both Trackerball and Joystick pointer modules.

- Refer to Figure 5.6 for information on interconnecting cables required to connect the modules to the Processor Electronics Unit, and the 340 Monitor.

- All items required for securing the modules are supplied with the units.

## 2.2 Initialisation and Commissioning

The control modules and keyboard are only part of a complete BridgeMaster E Series Radar, and cannot be operated independantly. For details of complete system installations refer to the BridgeMaster E, Ship's Manual 65800010B.

After a complete system has been installed it must be Initialised and Commissioned as detailed in Chapter 4 of the BridgeMaster E, Ship's Manual.

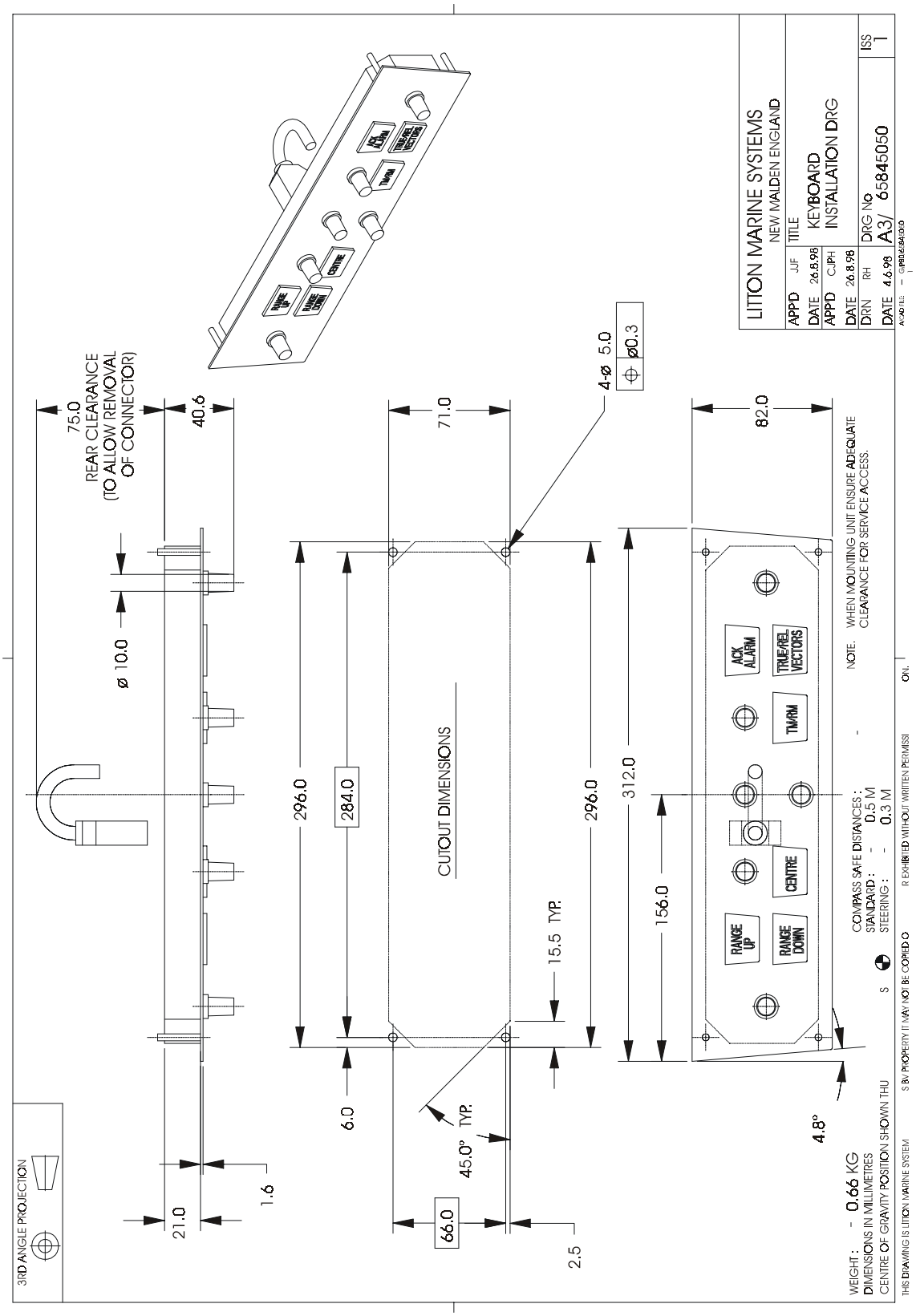


**Figure 5.1** - Keyboard Installation Drawing

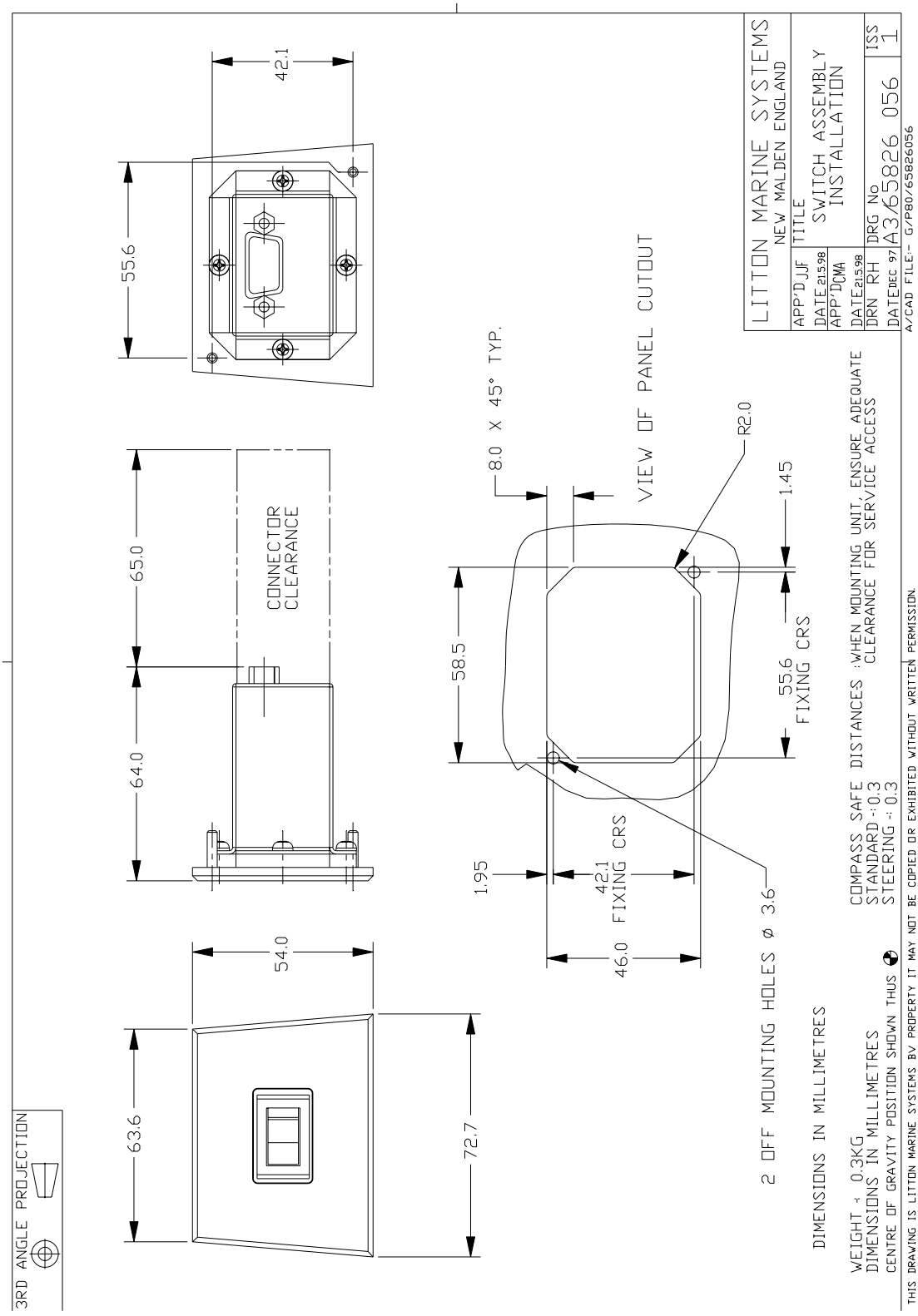


**Figure 5.2** - ON/OFF Switch Module Installation

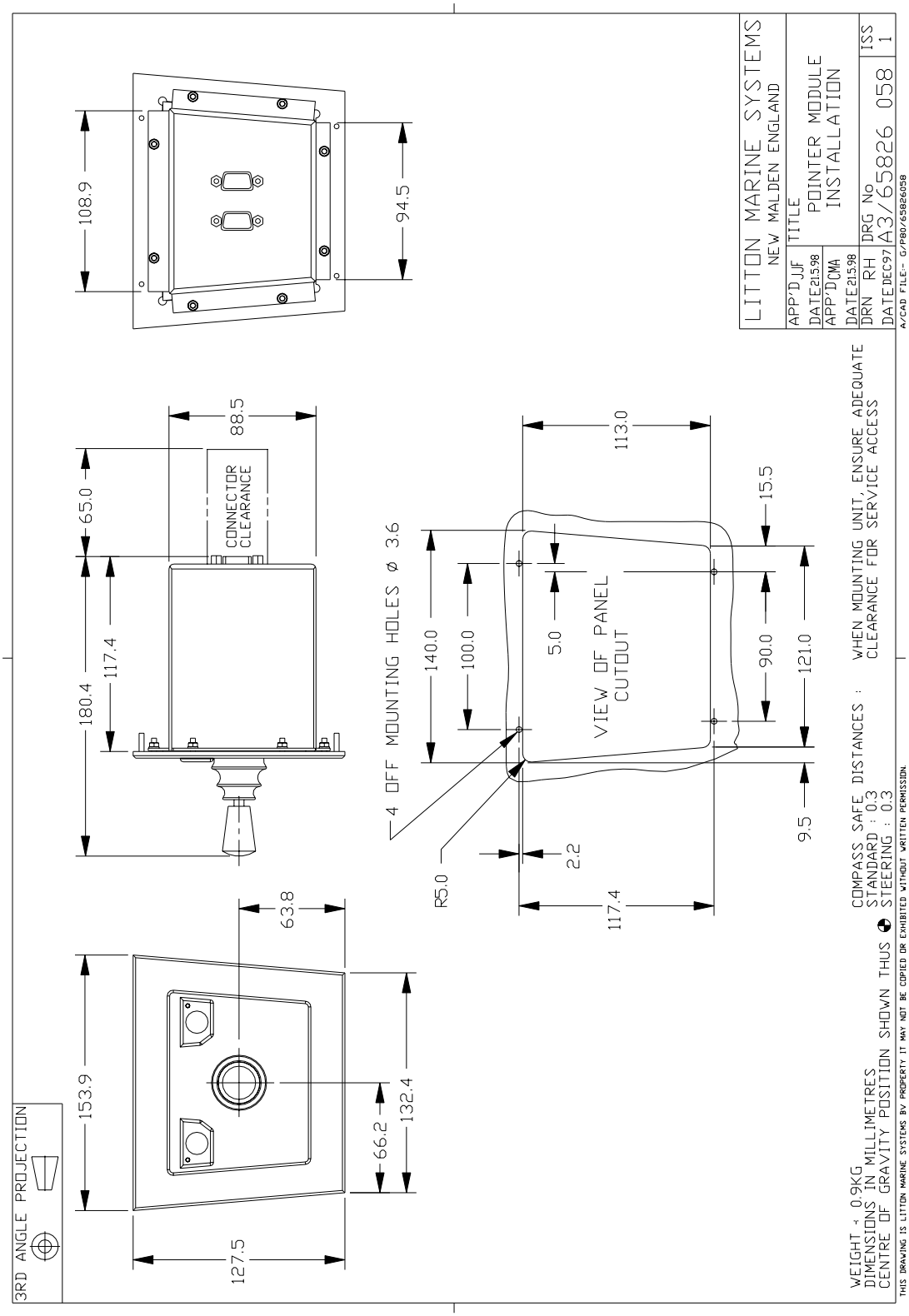


**Figure 5.3 -** Pointer Module (Joystick/trackerball) Installation

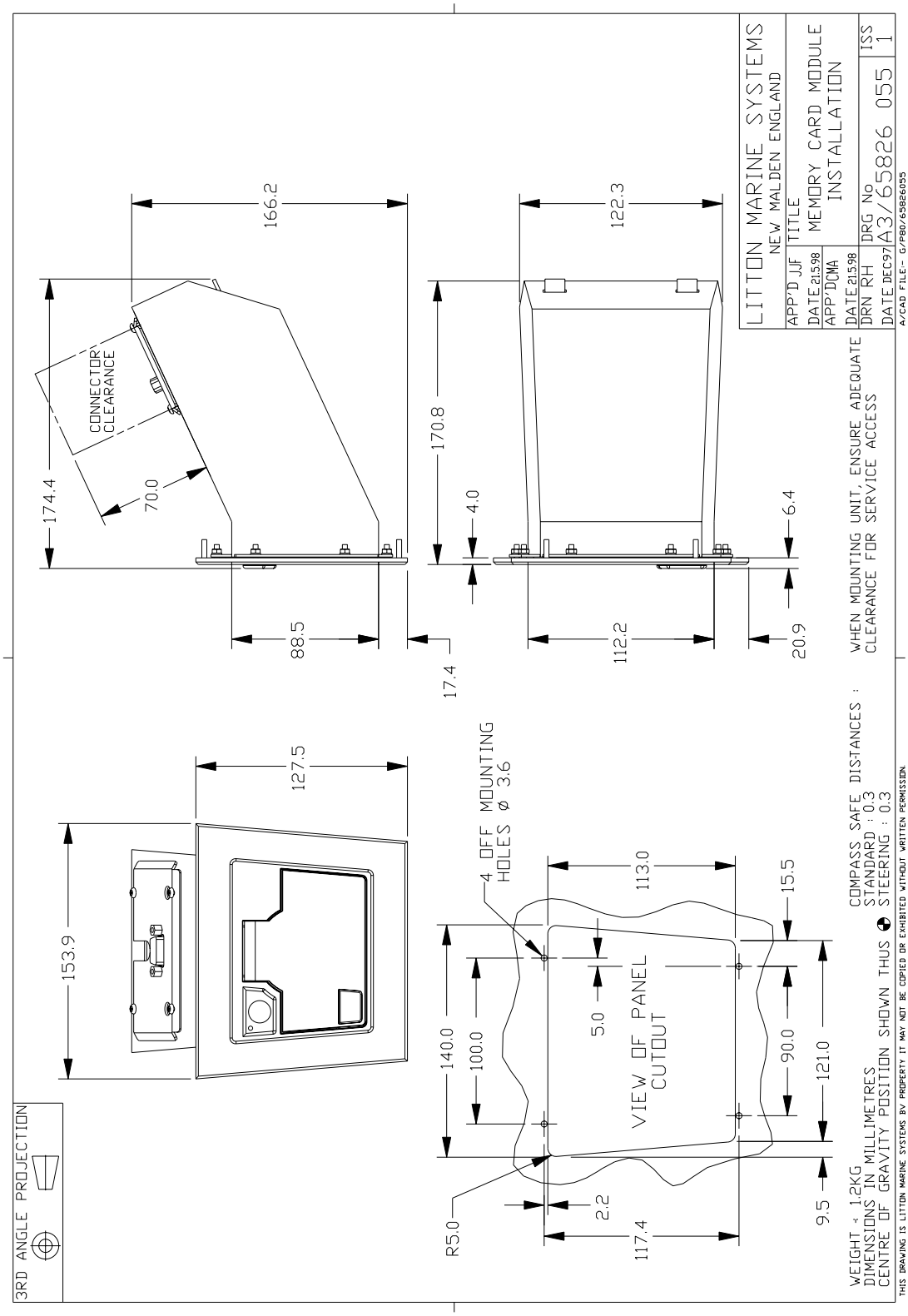


**Figure 5.4** - Memory Card Module Installation

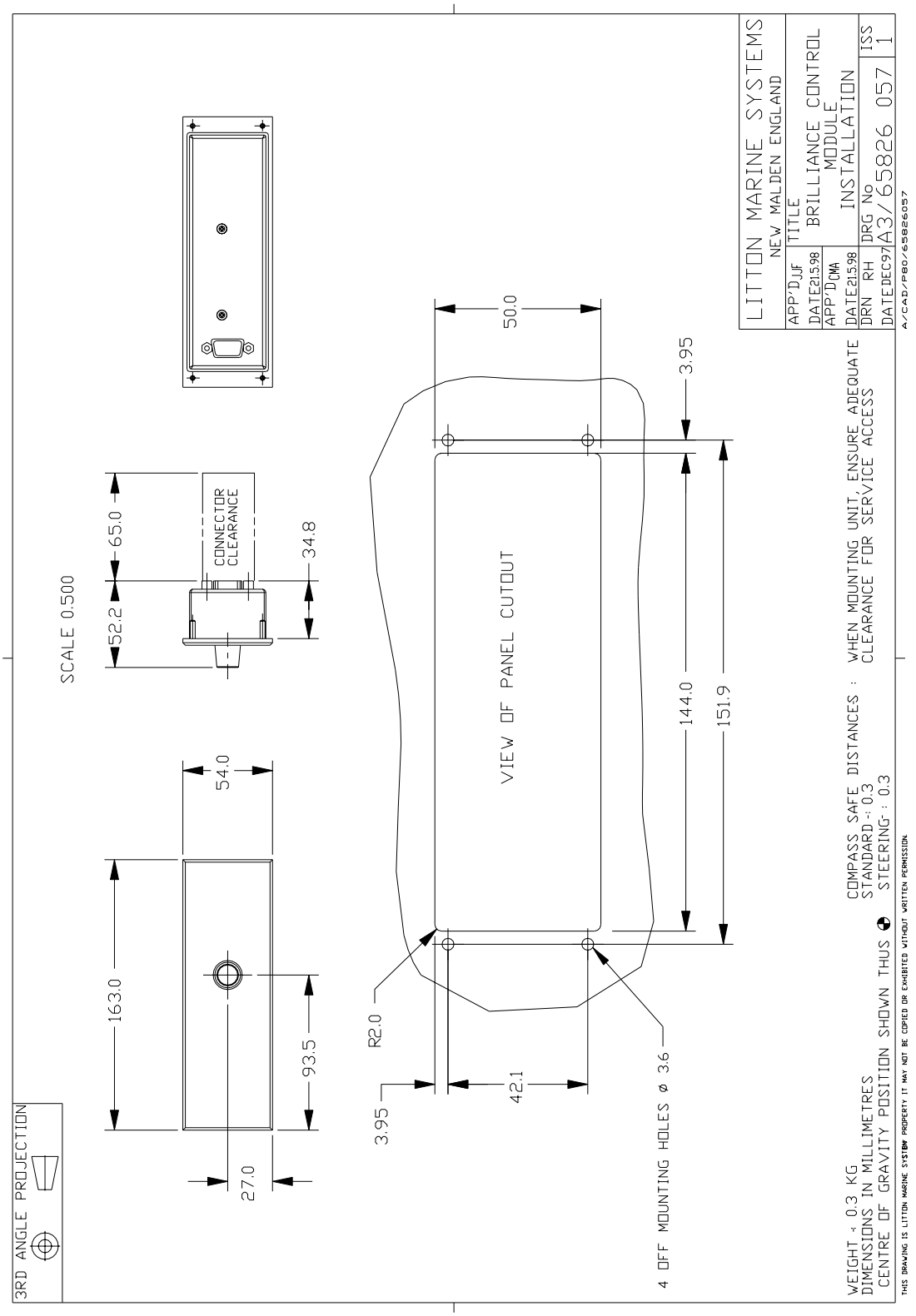


**Figure 5.5 -** Brilliance Control Module Installation

# 3 Technical Specification

## 3.1 Weights and Dimensions

| Component | Height (mm) | Depth (mm) | Width (mm) | Weight (kg) |
|---|---|---|---|---|
| Brilliance Module | 54 | 52.2 | 163 | 0.3 |
| Memory Card Module | 166.2 | 174.4 | 153.9 | 1.2 |
| On-Off Switch Module | 54 | 64 | 72.7 | 0.3 |
| Joystick Module | 127.5 | 180.4 | 153.9 | 0.9 |
| Trackerball Module | 127.5 | 130.3 | 153.9 | 1.1 |
| Keyboard | 82 | 40.6 | 296 | 0.66 |

## 3.2 Compass Safe Distances

| Component | Type No. | Standard | Steering |
|---|---|---|---|
| Brilliance Module | 65826657 | 0.3 m | 0.3 m |
| Memory Card Module | 65826655 | 0.3 m | 0.3 m |
| On-Off Switch Module | 65826656 | 0.3 m | 0.3 m |
| Joystick Module | 65826658 | 0.3 m | 0.3 m |
| Trackerball Module | 65826654 | 0.3 m | 0.3 m |
| Keyboard | 65845050 | 0.5 m | 0.3 m |

## 3.3 Environmental Specification

To the requirements of the International Standard for Marine Navigational Equipment CEI/IEC 945 (1988) and Amendment 1 (1992).

# 4 Replacement Spares

Refer to Chapter 6 for a full list of replacement spares.

# 5 Wiring Diagrams

Refer to Ship's Manual 65800010B Chapter 3 for complete system installation diagrams.

The wiring diagrams Included in this section are as follows:

Figure 5.6 Kit Display Unit Inter-Module Cabling Connections

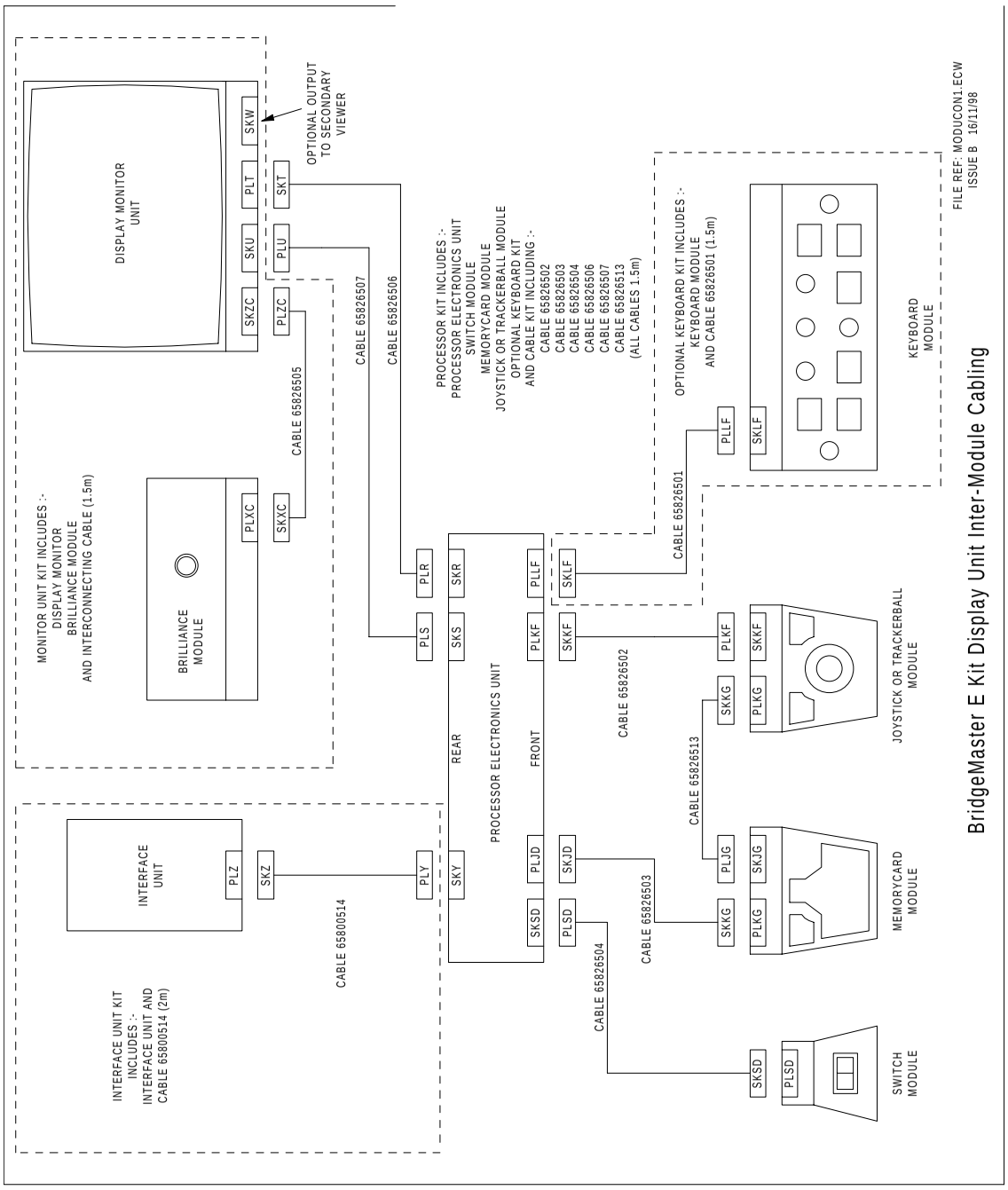


**Figure 5.6 -** Kit Display Unit Inter-Module Cabling