Table of Contents **3**
List of Figures **8**
List of Tables **10**

Section 1: General Information **11**
1.0 Introduction 11
1.1 Description 11
1.2 Equipment Supplied 11
1.3 Specifications 12

Figures

Figure 1-

2.0 Introduction

This section provides information for the initial inspection, installation, and external connections for the RCP2/FPRC series redundant system controllers.

3.1 Local / Remote control

Control of the RCP/FPRC can be handled through Front Panel operation, or remotely through Parallel or Serial communication to a computer.

For local (front panel) operation of the controller, simply toggle the

3.3.1 Sys Info

This is the informative sublevel of the menu structure, as shown in **Figure 5**. This menu consist of seven pages of general system information that can be browsed by pressing the **Up Arrow** (≠) and **Down Arrow** (Ç) keys on the front panel keypad.

Figure 3

RCP firmware version 3.40 introduced additional navigational features to the System In-

address. For firmware prior to version 6.00, set this address value to 0.0.0.0 or 255.255.255.255 to disable this feature.
Starting with version 6.00, the Lock IP address function has been updated to allow ñBindingò and ñM

3.3.4.5 Fault Latch

3.3.5 Options Menu

- **RAM** —

- **4.SbyMode (Standby Mode)** –

4.1.1 LNA / LNB 1:1 Redundant System Operation

4.2.1.1 LNA/LNB Fault Tracking

To set up the RCP2-1200 for LNA/LNB fault tracking perform the following menu selections. Press the **Main Menu** key; select **4.Flt. Setup** and press the **Enter** key; select **1.Mjr. Faults** and press the **Enter** key; select **1.LNA/LNB** and press the **Enter** key. This puts the RCP2-1200 in LNA/LNB current monitor mode

4.2.1.2 LNA / LNB Current Calibration

After the RCP2-1100 has been put in the LNA/LNB fault tracking mode, the LNA or LNB nominal current should be calibrated by the controller6’ M0

4.4 Operation of 1:2 Fixed Phase Combined System with FPRC-1200

Table 4-2: Rack Mount SSPA Wiring Sn / SR 1 2: M

4.5.2 Using M&C Features of RCP to Control an SSPA System

All SSPA control-

4.5.2.4 Units

This option allows the user to select the RF Power measurement units (measured in either dBm or Watts%! e i]D' o я the

5.0.2 Digital Core Board

The Digital Core Board is operated by microcontroller unit. All digital I/O lines feature

6.2 Firmware Programming

6.2.3 Web Upgrade Procedure

The web upgrade is the preferred method of upgrading the firmware.

Upgrading unit with incompatible firmware image may damage the equipment hardware. To ensure the proper firmware image file is used, contact Teledyne Paradise

Re-calibration of LNB's fault wind Č e

6.4 Identifying and Replacing a Failed Power Supply

7.2.1.3 Source Address

The Response frame from the receiver will contain a Get Response designator in the Command field. If the receiver does not detect any errors in the Get Request frame, the requested data will be attached to the response frame. The length of the Get Response frame varies by the amount of attached data bytes. It may contain 11+N

7.2.2.5 Data Address / Error Status / Local Port Frame Length

7.2.2.6 Data Length

This byte value specifies amount of bytes attached in Data Filed. For Get command it

Table 7-7: System Settings Data Values

Data Address	# Bytes	Description	Limits and Byte Values
1	1	System Configuration	0 = 1:2 Controller; 1 = 1:1 Controller; 2 = 1:1 Phase combine; 3 = Dual 1:1 Controller; 4 = Maintenance Mode; 5 = 1:2 Phase combine (v. 6.00)
2	1	Switching mode	

Table 7-8: System Condition Data Values

Data Address	# Bytes	Description	Li tes

Table 7-9: System Threshold Data Values

7.4 Examples

7.4.2 Example 2

The host computer requests the RCP2-1200 system thresholds. The request string is:

The RCP2-

7.5 Terminal Mode Serial Protocol

7.6.4 SNMP Interface

7.6.4.1 Introduction

SNMP-based management was initially targeted for TCP/IP routers and hosts. However, the SNMP-

Table 7-11: Detailed Settings (continued from previous page)

7.6.4.2 SNMP V3 Issues in Teledyne Paradise Datacom RCP2 Controller

Simple Network Management Protocol (SNMP) is an interoperable standards

SNMP V2

SNMPv2 (RFC 1441–

conditions —

7.6.4.5 Connecting to a MIB Browser

For a MIB browser application example, we will use the freeware browser GetIf, version 2.3.1. Other browsers are available for download.

7.6.5.4 Extended SNMP MIB Tree Elements in Detail

deviceRevision — !

Section 8: Maintenance Switch Controller

8.2 Application of a Maintenance Switch Controller

Figure 8-3 shows a typical schematic for a stane h ey ʖ t at

This section describes the procedure for setting up the Ethernet IP interface through the RCP front panel interface. It also describes basic network setup of a Windows based host PC for a peer-to-peer network connection with the RCP unit.

Important!

C.1 Adding a New RCP Unit to the Universal M&C

To add a new unit, choose "Action->Add Unit" from the Main Menu. Then choose "RCP2 Redundancy Controller". When a unit type is chosen a "New RCP2" dialog win-

THIS PAGE LEFT INTENTIONALLY BLANK

Table D-1: Firmware Revision History

Version	Feature description
1.20	Dual 1:1 mode introduced (RCPD-1100 controller).
2.00	Terminal mode added to protocol stack; Improved management for LNA/ LNB power supplies.
2.20	Support for remote control of SSPA system added. Remote group muting and attenuation control; Remote Forward RF Sensing.

THIS PAGE LEFT INTENTIONALLY BLANK