

The RadiSys logo is a blue rectangular button with the word "RadiSys." in a white serif font. A thin horizontal line with a small white circle at its left end extends from the right side of the button towards the title area.

RadiSys.

# **Stellar T1 PC Card RS-422 Driver/Utility User Guide**

## **Version 1.0**

[www.radisys.com](http://www.radisys.com)

World Headquarters  
5445 NE Dawson Creek Drive • Hillsboro, OR  
97124 USA  
Phone: 503-615-1100 • Fax: 503-615-1121  
Toll-Free: 800-950-0044

International Headquarters  
Gebouw Flevopoort • Televisieweg 1A  
NL-1322 AC • Almere, The Netherlands  
Phone: 31 36 5365595 • Fax: 31 36 5365620

RadiSys Microwave Communications Software Division, Inc.  
1500 N.W. 118th Street  
Des Moines, Iowa 50325  
515-223-8000

Revision A  
August 1999

## Copyright and publication information

This manual reflects version 1.0 of the Stellar T1 PC Card RS-422 Driver/Utility.

Reproduction of this document, in part or whole, by any means, electrical, mechanical, magnetic, optical, chemical, manual, or otherwise is prohibited, without written permission from RadiSys Microware Communications Software Division, Inc.

## Disclaimer

The information contained herein is believed to be accurate as of the date of publication. However, RadiSys Corporation will not be liable for any damages including indirect or consequential, from use of the OS-9 operating system, Microware-provided software, or reliance on the accuracy of this documentation. The information contained herein is subject to change without notice.

## Reproduction notice

The software described in this document is intended to be used on a single computer system. RadiSys Corporation expressly prohibits any reproduction of the software on tape, disk, or any other medium except for backup purposes. Distribution of this software, in part or whole, to any other party or on any other system may constitute copyright infringements and misappropriation of trade secrets and confidential processes which are the property of RadiSys Corporation and/or other parties. Unauthorized distribution of software may cause damages far in excess of the value of the copies involved.

---

August 1999  
Copyright ©1999 by RadiSys Corporation.  
All rights reserved.

EPC, INtime, iRMX, MultiPro, RadiSys, The Inside Advantage, and ValuPro are registered trademarks of RadiSys Corporation. ASM, Brahma, DAL, DAQ, MultiPro, SAIB, Spirit, and ValuePro are trademarks of RadiSys Corporation.

DAVID, MAUI, OS-9, and OS-9000, are registered trademarks of RadiSys Microware Communications Software Division, Inc. FasTrak, Hawk, SoftStax, and UpLink are trademarks of RadiSys Microware Communications Software Division, Inc.

† All other trademarks, registered trademarks, service marks, and trade names are the property of their respective owners.

---

# Table of Contents

---

<b>Chapter 1: Using the Stellar T1 PC Card RS-422 Driver/Utility</b>	<b>5</b>
6	Hardware Installation
7	Configuring the Stellar T1 PC Card Driver
7	Startup
8	Parameters
8	I/O Port
8	IRQ
8	Data Rate
10	Trouble Shooting
<b>Product Discrepancy Report</b>	<b>11</b>

---



---

# Chapter 1: Using the Stellar T1 PC Card RS-422 Driver/Utility

---

RadiSys Microware Communications Software Division, Inc. has written this Windows NT RS-422 driver for the Stellar T1 PC Card so that the card can be used with the DAVID UpLink Server software package.

Along with the driver there is also a utility which is used to configure the driver.

This chapter contains the following sections:

- **Hardware Installation**
- **Configuring the Stellar T1 PC Card Driver**
- **Trouble Shooting**



MICROWARE SOFTWARE

# Hardware Installation

---

Using the manual that arrived with the Stellar T1 PC Card, perform the following steps:

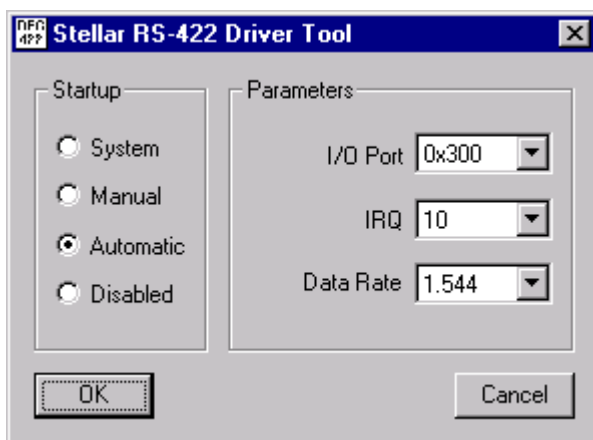
- 
- Step 1. Make sure all of the jumpers are in their default positions, as defined on pages 7 and 8 of the Stellar manual.
  - Step 2. Set the IRQ jumper (JU-7) as appropriate for your PC. The jumper may be set to IRQ5, IRQ9, IRQ10, IRQ11, IRQ12 or IRQ15. See Table 5 in the Stellar manual for jumper settings to select a particular IRQ. Select an IRQ which is not already in use on your PC. On some PC's it may be necessary to reserve the IRQ using the BIOS setup program supplied with the PC.
  - Step 3. Set the I/O address jumper (JU-12) as appropriate for your PC. See Table 7 in the Stellar manual for available address settings and associated jumper settings. Select an I/O address which is not already in use on your PC.
  - Step 4. Plug the card into an ISA slot in your PC.
-

## Configuring the Stellar T1 PC Card Driver

Before changing the Stellar T1 PC Card driver configuration, stop the device STEL422 using the Windows NT Devices control panel.

Launching the utility `reg422.exe` brings up the dialog in [Figure 1-1](#).

**Figure 1-1 Stellar RS-422 Driver Tool Dialog**



There are two configurable sections in the dialog: Startup and Parameters. [Figure 1-1](#) shows the default settings.

### Startup

The Startup section of the dialog is used to select when the device starts up. This characteristic of the device can also be set using the Windows NT Devices control panel.

The device in the Devices control panel will be named STEL422. The device path for the Stellar card is `\\\\.\\DOS422`.

## Parameters

The Parameters section of the dialog is used to configure the driver to match the address and IRQ settings of the Stellar T1 PC Card. This section also adjusts the speed at which the card should transmit data.

### I/O Port

This drop-down menu is used to select the address that the Stellar T1 PC Card jumper (JU-12) has been set to.

### IRQ

This drop-down menu is used to select the IRQ that the Stellar T1 PC Card jumper (JU-7) has been set to.

### Data Rate

This drop-down menu is used to select the rate at which the Stellar T1 PC Card will transmit data. This should be set to match the bit rate of the MPEG transport stream. The values listed in the menu are in millions of bits/second. The available speeds are shown in [Table 1-1](#).

**Table 1-1 Stellar T1 PC Card Transmission Rates**

#### Data Rates

---

1.536 Mb/s
1.544 Mb/s
3.072 Mb/s
3.088 Mb/s
6.144 Mb/s
6.176 Mb/s

---



To change the data rate after the initial installation, complete the following steps:

- 
- Step 1. Stop the `STEL422` device using the Devices control panel.
  - Step 2. Change the data rate using the `reg422.exe` utility. Click **OK** to save new values.
  - Step 3. Start the `STEL422` device using the Devices control panel.
-

## Trouble Shooting

---

- The 1.536, 1.544, 3.072, and 3.088 data rates have been tested on a 233MHz Pentium II.
- The 6.144 and 6.176 clock speeds will likely require at least a 300MHz Pentium II.
- Make sure that the I/O address and IRQ setting used for the Stellar card are not being used by any other device in the system.

---

# Product Discrepancy Report

---

To: Microware Customer Support

FAX: 515-224-1352

From: \_\_\_\_\_

Company: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Product Name:

Description of Problem:

---

---

---

---

---

---

---

---

---

---

---

---

Host Platform \_\_\_\_\_

Target Platform \_\_\_\_\_



MICROWARE SOFTWARE

