



Micro-Manager and Micro-Manager Pro

WINDOWS SOFTWARE FOR DOWNLOADING AND CONTROLLING MICROZ GPS RECEIVERS

INTRODUCTION

Micro-Manager™ (μ -Manager) is the most recent addition to the powerful Thales Reference Station Software product line. Micro-Manager is also available in the Pro version. Micro-Manager and Micro-Manager Pro allow you to quickly and easily: (1) Inspect receiver health & status; (2) Configure receiver parameters; (3) Download data files; and (4) Upload firmware to Thales' reference GPS receiver - the μ Z-CGRS™ (Continuous Geodetic Reference Station). Our enhanced version, Micro-Manager Pro, comprises all Micro-Manager features plus provides support for modem connections to a remote GPS receiver. The Pro version allows you to directly control an iCGRS™ receiver through the receiver's IP connection.

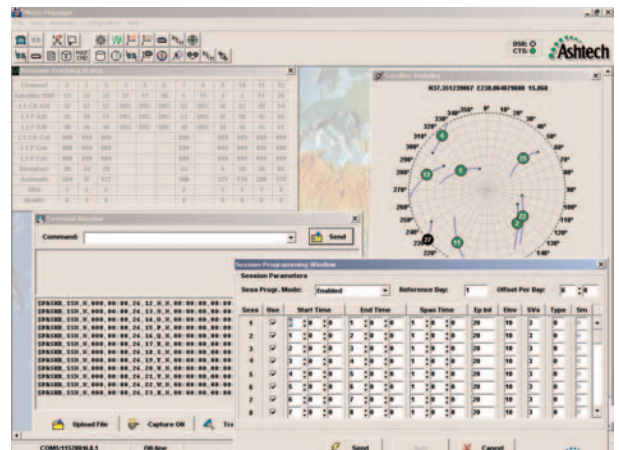
μ -Manager from Thales works seamlessly with all members of the Thales μ Z family including μ Z-CGRS, iCGRS, Z-Max™, Z-Xtreme™, Z-Surveyor™ and Z-FX™, if the latest firmware is installed. μ -Manager exploits the multitasking and multithreading capabilities of 32-bit Windows® operating systems. Manual (GUI) and automatic (command line) modes are provided.

GRAPHICAL USER INTERFACE

The intuitive Graphical User Interface (GUI) of Micro-Manager simplifies getting your work done. The Main Screen is user-configurable and can be set up quickly for your particular application. Many real-time informational screens can be opened that provide current information on the health and status of the GPS receiver and its data. μ -Manager has been built around a point-and-click architecture which provides a clear and efficient means to examine the receiver's health & status, change receiver parameters, download data files, and upload firmware. There is also a command-line interface for hands-off automation.

DIRECT RECEIVER CONTROL

Micro-Manager software can download data, and any receiver parameter can be set. Simply connect to the GPS receiver and start the μ -Manager software on a PC.



NEW FEATURES IN VERSION 2.2

Micro-Manager 2.2 allows the user to easily configure the IP properties of the iCGRS, the World's first Internet-enabled GPS receiver. Version 2.2 Pro allows you to directly connect to the IP address of an iCGRS and completely control, monitor and download data from the receiver. Icons are now available in addition to the pull-down menus, making it easier to use the Micro-Manager GUI. TRUMP automates and manages the process of converting Thales U-Files to Ashtech-formatted raw GPS observation files and to Receiver INdependent EXchange (RINEX) files. TRUMP was designed to run in conjunction with the iCGRS receivers, which use File Transfer Protocol (FTP) to push U-Files to a computer/network on which TRUMP resides. TRUMP continuously runs on the FTP push target computer (or network) searching for the arrival of recently pushed U-Files. Upon finding a U-File, TRUMP converts those files to Ashtech raw GPS observation files. TRUMP can also convert those Ashtech raw GPS observation files to RINEX files. TRUMP can also execute a set of user-defined post-convert commands for each U-file converted in this process.

MICRO-MANAGER AND MICRO-MANAGER PRO

REMOTE RECEIVER CONTROL

Micro-Manager Pro allows all the direct receiver controls of Micro-Manager and allows those same receiver controls through a radio or phone modem to any site having phone or radio access. You can support multiple remote sites with a single copy of Micro-Manager Pro. Each site in the RINEX parameters look-up table can be independently configured by the user so that site-specific information is written into the RINEX header for each site's data.

SESSION PROGRAMMING FEATURE

The μ Z family of GPS receivers implements a session programming feature for selecting and controlling periods of data collection. Micro-Manager supports programming 96-Sessions per day so that 15-minute files can be created. Micro-Manager also supports the RINEX v 2.2 file naming convention that includes the hour and minute that the files were created so that these 15-minute files are uniquely named. Micro-Manager Pro will automatically convert Thales D-Files containing Met sensor data to RINEX Meteorological data files. μ -Manager provides an easy to understand GUI interface to this receiver feature. These combine to provide a powerful file management tool that can be used to ensure coincident data collection over multiple GPS receivers using a single copy of μ -Manager.

DATA DOWNLOAD AND CONVERSION

Micro-Manager has a Window allowing you to view all the data files on the receiver. From this Window you can select files to download and then delete from the receiver. RINEX file conversion is initiated after downloading with a simple checkbox. A Post-Download Command fea-

ture for Micro-Manager Pro allows you to call other programs after a file is downloaded. Now you can automatically create directory structures, move data to other locations on your network, or send data to an FTP host using the bundled FTP utility XYZs_FTP.

RELIABLE FIRMWARE UPLOADS

Micro-Manager file transfers are based upon the ZMODEM protocol, and as such you can expect to have new firmware reliably transferred to the GPS receiver. In addition, a new multi-tiered protection mechanism has been introduced to verify uploaded firmware before it replaces existing firmware.

TERMINAL WINDOW FEATURE

Micro-Manager provides a powerful Terminal Window capability that permits full access to commands that may not be available within the GUI. This permits the μ Z receiver to be fully commanded from the Terminal Window. The command templates feature makes Terminal Window commands easy to remember and create. The Terminal Window Script-file feature can launch a set of receiver commands (including delaying the time of the commands).

WORKS WITH GEODETIC BASE STATION SOFTWARE - GBSS

Micro-Manager Pro can be automatically called by GBSS to control and download remote Thales μ Z receivers. This GBSS/ μ -Manager duo combines sophisticated real-time data logging with automated downloads of remotely located (or directly connected) GPS receivers.

TECHNICAL SPECIFICATIONS

Micro-Manager Features

- Direct receiver connection
- 32-bit multitasking and multithreaded architecture running on Windows 95/98/NT/2000
- Windows Graphical User Interface
- Choice of GUI (manual) or command line (automatic) interface
- Ring file data control
- Receiver data file management
- Session programming (up to 96)
- Receiver script file uploading feature
- Powerful terminal window capability
- User-configurable alerts for μ Z CGRS receivers
- Reliable firmware uploads
- Z-modem protocol for data transfer

- File translations to Thales or RINEX formats
- RTCM base station configuration control and status
- Built-in user safeguards
- User-configurable real-time informational screens
 - Current Receiver Parameters
 - Session Programming
 - Receiver Files and Memory Usage
 - Satellite Visibility
 - RTCM Status & Control
 - Diagnostic Messages
 - Receiver Tracking Status
 - Receiver information
 - Geodetic position & time

Micro-Manager Pro Features

Includes all above features, plus:

- Remote (modem or IP) or direct receiver connection
- Full control over dialing parameters and hardware handshaking for modems
- Dialing directory facilities

- Modem settings
- Post-Download Commands
- Automatically convert to RINEX v 2.2 long file names or classic RINEX v 2.1
- RINEX site look-up table
- XYZs_FTP FTP utility program to automatically push files to FTP host

Suggested PC Requirements

Computer Hardware

- Pentium or higher
- 64 MB RAM
- 4 GB hard drive

Computer Operating System

- Windows NT, 2000, 2003 or XP preferred
- Windows 95 or 98 acceptable

Ordering Information

Product	Part Number
Micro-Manager	110918
Micro-Manager Pro	110919

Thales

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