
AutoLoad TwinTran™
Installation & Configuration Guide

ML and SL Versions

Part Number: 1910.10

TwinTran™ Installation & Configuration Guide

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Printed in the United States of America

Revised: 17 July 2007

Version Support

This document supports the following application versions:

Paymentech Host (PNH),	Version 1.60 (or later)
Paymentech Terminal (PNS),	Version 1.60 (or later)
TSYS - VITAL Processing Services (VS2)	Version 1.60 (or later)

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OVERVIEW

Introduction

About AutoLoad TwinTran

The *AutoLoad TwinTran* is a direct replacement for a DataTran that processes transactions via the Internet with automatic dial backup without merchant preprogramming requirements. The *AutoLoad TwinTran ML or SL* connects to the serial port of a POS system or ECR exactly as a DataTran. The *AutoLoad TwinTran ML* version is designed for multi-register LAN'd configurations; the *SL* version is designed for a single, standalone ECR/POS. Since an *AutoLoad TwinTran* understands DataTran commands, it is a plug'n'play alternative to DataTran ML or SL. And since the supported payment processors use the unique MAC address encoded into each *AutoLoad TwinTran* at the factory, it is not necessary to load merchant specific parameters into the *TwinTran*.

About Datacap

Datacap Systems, Inc. develops and markets electronic payment interfaces that enable cash register and business systems developers to add electronic payment acceptance to their systems.

Datacap has various solutions that interface to virtually any hardware or software platform and send transactions to all major payment processors via most common communications technologies including dial, wireless, and Internet.

What's Included with your AutoLoad TwinTran

The *AutoLoad TwinTran* system includes the following components in the shipping box:

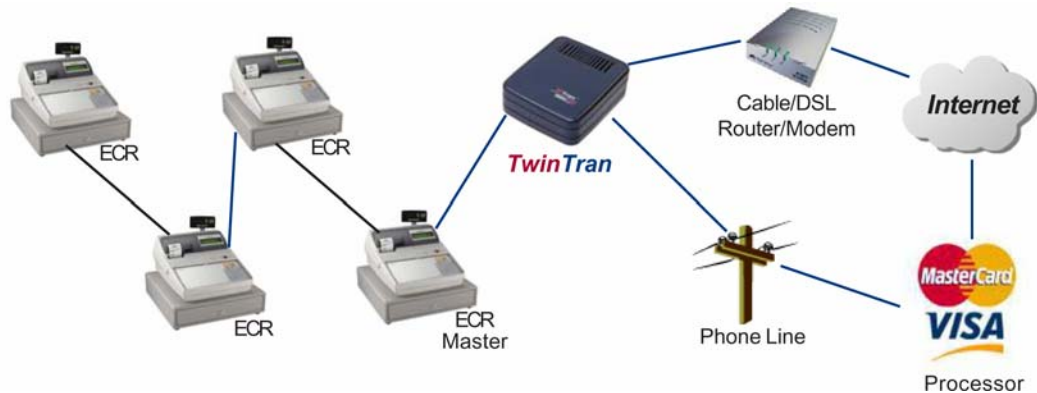
- ***TwinTran (P/N: 1910.10)*** – The *TwinTran* unit with memory and power, Ethernet, telephone and three serial connectors.
- ***TwinTran Application*** - The *AutoLoad TwinTran* ships from the factory with the software to support secure IP communications to a selected payment processing service. The software loaded at the factory also defines whether the *TwinTran* is an *SL* or *ML* model. There is a sticker applied on the bottom of the *TwinTran* with designation of the installed software.
- ***Power Transformer*** – for use with 110V AC power.
- ***AutoLoad TwinTran Installation Guide*** – This installation guide.
- ***Cables*** – Ethernet and Telephone cables and additional cables based on options described in following sections.

How it works

The *AutoLoad TwinTran* is designed to allow ECR/POS systems that support the Datacap Serial Command Interface format commands (used by DataTrans) to process transactions via IP with dial backup to supported payment processors. The ECR/POS system is connected to an *AutoLoad TwinTran* via an RS232 interface. The *AutoLoad TwinTran* is also connected via the Ethernet connector to a persistent IP connection with DHCP server and DNS services available and to a regular telephone line.

When the *AutoLoad TwinTran* receives a transaction request from the ECR/POS system, it verifies that it has merchant account information loaded in its memory. If merchant account information is missing, the TwinTran will automatically contact Datacap's Payment Systems Configuration Server (PSCS) on the Internet using its MAC to retrieve merchant account information. Every *AutoLoad TwinTran* is manufactured with a unique MAC (Media Access Control) number to identify itself to the Datacap PSCS. If a merchant profile had been previously created on the PSCS associated with the MAC value, then the TwinTran automatically downloads it and processes the requested payment transaction.

A typical configuration for an *AutoLoad TwinTran with an ML application loaded* is as follows:



A typical configuration for an *AutoLoad TwinTran with an SL application loaded* is as follows:



INSTALLATION

Requirements

Communications Requirements

To successfully install and run an *AutoLoad TwinTran*, you should confirm that there are networking services available with the following characteristics:

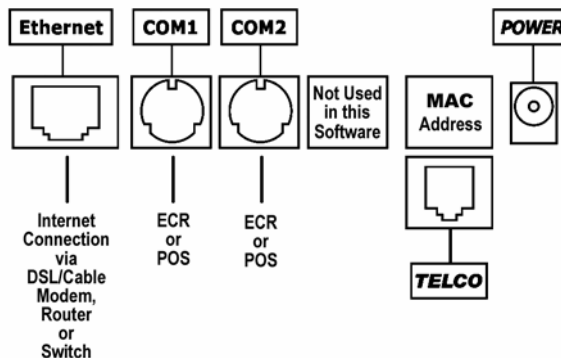
- An Ethernet connection supporting TCP/IP network connectivity
- A persistent Internet connection; cable, DSL, dedicated line, frame relay, etc. Dial access that holds an open line will also work due to low bandwidth requirements.
- Active DHCP server availability. The *AutoLoad TwinTran* obtains a dynamically assigned IP address from a DHCP server. The DHCP server should also provide the address of the gateway and the subnet mask.
- Access to Internet DNS (Domain Name Services).
- A regular phone line for dial backup operation.

Inexpensive routers which are widely available, such as Linksys, D-Link or Belkin, can provide the required DHCP and DNS services if properly configured.

Installation Procedure

Connecting the TwinTran with ML Application

Connect either COM1 or COM2 (or both) on the *AutoLoad TwinTran* to the appropriate serial port on the ECR/POS system with the appropriate cable.



Cables for connecting ECR/POS devices to the *AutoLoad TwinTran* are available from Datacap Systems Inc. The following cables are available:

Datacap Cable P/N	Required Adapter	Mfg	ECR Model
7871-00	7877.02	Sam4S Sharp Casio TEC Uniwell	1000, 2000 A410, A420, A520, A530, A570, A610, A770, UP600, UP700, UP3300, UP3301 QT2100, QT6000, ,QT7300, QT8000, TE2200, TE2400, TE3000, TE4500, TE8500 MA1535, MA1595 DX890, TX850, TX870, SX7000, SX8000
7871-01	7877.02	Sam4S	380, 390, 600, 650, 52XX, 7000
7871-10	7877.02	Sam4S	600, 1000, 2000, 7000
7871-10	7877.02	CRS	3000
7871-11	7877.02	CRS	4000

Note:

These ECR cables are identical to those used for the DataTran ML. In addition to the cables described above, an adapter (uDIN6M-uDIN8F - PN: 7877.02) must be used and is included and attached to the selected cable

Using an Ethernet cable, connect the *AutoLoad TwinTran* Ethernet port to the Modem/Router/Switch in your network that provides DHCP and DNS services as outlined in the previous section.

Note:

TwinTran must be connected to a network with an active DHCP server so that it can acquire a non conflicting IP address. This is the principal cause for failure of AutoLoad TwinTran to operate, so it should be verified as the first step in troubleshooting.

Connect the RJ phone cord to the *TwinTran* and to the telephone jack.

Connect the power to the *TwinTran* and verify that the red and green LEDs on the front of the *TwinTran* are illuminated within twenty seconds. If these LEDs do not light within that time, verify the network cable and status, disconnect the power and reconnect the power.

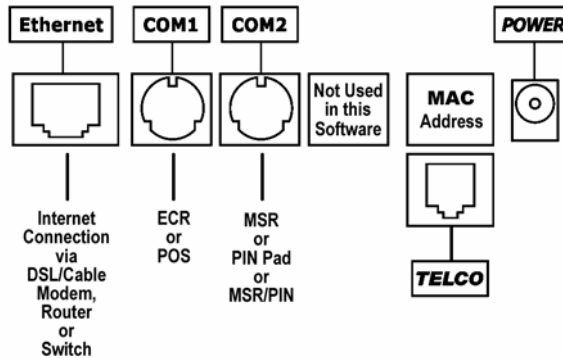
Note:

The red and green LEDs on the top front edge of the *TwinTran* must both be illuminated indicating that it's NIC (Network Interface Controller) is properly initialized. Although both LEDs are required for proper operation, they do not necessarily guarantee that your router/switch/modem have provided a legitimate IP address to *TwinTran*. See Activation and Testing to verify operation.

Connecting the TwinTran with SL Application

Connect COM1 on the *AutoLoad TwinTran* to the appropriate serial port on the ECR/POS system with the appropriate cable.

Connect COM2 on the *AutoLoad TwinTran* to one of the following optional devices: VeriFone 1000SE PIN pad, VeriFone SC5000 PIN pad with MSR or an IDT or Datacap MSR (see the cable chart below).



Cables for connecting ECR/POS devices to the *AutoLoad TwinTran* are available from Datacap Systems Inc. The following cables are available:

Datacap Cable P/N	Required Adapter	Mfg	ECR Model
7871-00	7877.02	Sam4S Sharp Casio TEC Uniwell	1000, 2000 A410, A420, A520, A530, A570, A610, A770, UP600, UP700, UP3300, UP3301 QT2100, QT6000, ,QT7300, QT8000, TE2200, TE2400, TE3000, TE4500, TE8500 MA1535, MA1595 DX890, TX850, TX870, SX7000, SX8000
7871-01	7877.02	Sam4S	380, 390, 600, 650, 52XX, 7000
7871-10	7877.02	Sam4S	600, 1000, 2000, 7000
7871-10	7877.02	CRS	3000
7871-11	7877.02	CRS	4000

Note:

These ECR cables are identical to those used for the DataTran SL. In addition to the cables described above, an adapter (uDIN6M-uDIN8F - PN: 7877.02) must be used and is included and attached to the selected cable

Cables for connecting peripheral devices to the *AutoLoad TwinTran* are available from Datacap Systems Inc. The following cables are available:

Peripheral P/N	Cable P/N	Required Adapter	Peripheral Device
7020.02	1332.10	7877.01	VFI 1000SE Pin Pad
7020.30	1332.10	7877.01	VFI SC5000 Pin Pad with MSR
7441.01	-	7877.00	Datacap MSR (RS232)
OEM	-	7877.00	IDT MSR (RS232)

Note:

These peripheral cables are identical to those used for the DataTran SL. In addition to the cables described above, an adapter must be used and is included and attached to the selected cable.

Using an Ethernet cable, connect the *AutoLoad TwinTran* Ethernet port to the Modem/Router/Switch in your network that provides DHCP and DNS services as outlined in the previous section.

Note:

TwinTran must be connected to a network with an active DHCP server so that it can acquire a non conflicting IP address. This is the principal cause for failure of AutoLoad TwinTran to operate, so it should be verified as the first step in troubleshooting.

Connect the RJ phone cord to the TwinTran and to the telephone jack.

Connect the power to the *TwinTran* and verify that the red and green LEDs on the front of the *TwinTran* are illuminated within twenty seconds. If these LEDs do not light within that time, verify the network cable and status, disconnect the power and reconnect the power.

Note:

The red and green LEDs on the top front edge of the *TwinTran* must both be illuminated indicating that it's NIC (Network Interface Controller) is properly initialized. Although both LEDs are required for proper operation, they do not necessarily guarantee that your router/switch/modem have provided a legitimate IP address to TwinTran. See Activation and Testing to verify operation.

IP Networking Considerations

The *AutoLoad TwinTran* sends IP traffic to the payment processor using preprogrammed URLs rather than IP addresses. Therefore, AutoLoad TwinTran requires uninterrupted access to DNS services to resolve the IP addresses for these URLs for every transaction.

Troubleshooting Resources for Networking Problems

Installation of the *AutoLoad TwinTran* is usually a plug'n'play operation. When problems occur, the most frequent cause is some aspect of the LAN network configuration. Datacap has created a tool called the Datacap Setup Software (DSS) to assist in discovering and rectifying network problems with an *AutoLoad TwinTran*. The DSS utility is free and you can download the DSS from Datacap's website (www.datacapystems.com) – go to Support, then DataTran and locate the DSS download link.

Datacap also has another free test utility which can help an installer determine if a firewall or other LAN configuration is allowing access to any of the supported payment processors that AutoLoad TwinTran can support. The utility is called Gateway Tester and is a free utility that you can download from Datacap's server at www.datacapeway.com.

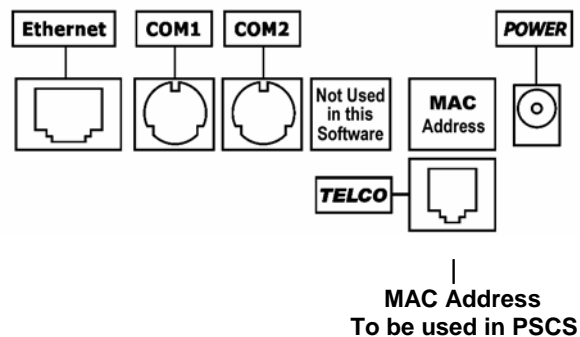
ACTIVATION & TESTING

Activation

Although the *AutoLoad TwinTran* is delivered with the selected payment processor software installed, it does not contain any merchant specific account information. The *AutoLoad TwinTran* automatically downloads merchant account information as needed from Datacap's Payment System Configuration Server (PSCS) which is available 24/7 on the Internet.

A merchant profile can be created on the Datacap's PSCS using a web browser. This profile contains all the necessary information for the *AutoLoad TwinTran* to process transaction for a particular merchant. The profile is associated with the MAC (Media Access Control) number which is manufactured into the *AutoLoad TwinTran* hardware. The *AutoLoad TwinTran* uses the MAC value to lookup and retrieves the specific merchant account information from Datacap's PSCS.

The MAC value for the *AutoLoad TwinTran* is located on a small label next to the power connector.



A dealer, ISO, bank or Datacap can use the PSCS system to create and associate profiles with MAC numbers. This process must be completed on PSCS before you can process transactions on an *AutoLoad TwinTran*.

You may apply for a PSCS account at the following URL: www.datacapepay.com

It is recommended that you perform a sale and refund of \$1.00 for each card type the merchant is entitled to accept. Then contact the processor to verify that the transactions were properly processed.

Testing

Important! - Before You Start Live Processing

You should arrange with the processor for testing *AutoLoad TwinTran* and all other related components before going live.

It is the sole responsibility of the merchant account holder to verify that the merchant information loaded into the TwinTran by PSCS is correct.

You should only process actual payments after verification that all test transactions have been successfully deposited.

Datacap Systems shall not be liable for any errors or for incidental or consequential damages in connection with the use of the software or other programmed information, including customer supplied or Datacap supplied information.