Plex Systems

IMPLEMENTATION GUIDELINES FOR

ANSI X12 EDI CONVENTIONS

856 TRANSACTION SET

SHIP NOTICE / MANIFEST

Version 004010

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Introduction:

This document contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Segment:	**ST** **Transaction Set Header**	
Position:	010	
Loop:		
Level:	Heading	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the start of a transaction set and to assign a control number	
Syntax Notes:		
Semantic Notes:		
Comments:		
Example:	**ST*856*000001**	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	ST01	143	**Transaction Set Identifier Code**	M ID 3/3
			Code uniquely identifying a Transaction Set	
			856 Ship Notice/Manifest	
>>	ST02	329	**Transaction Set Control Number**	M AN 4/9
			Must contain a unique number assigned to each transaction set within a functional group. This number must match the value in SE02	

Segment: # BSN Beginning Segment for Ship Notice

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Syntax Notes:

Semantic Notes:

Comments:

Example: **BSN*00*123456*20070212*0837**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> BSN01	353	Transaction Set Purpose Code	M ID 2/2
		00 Original	
		01 Cancellation	
		05 Replace	

>>   **BSN02**   **396**   **Shipment Identification**   **M   AN 2/30**

A unique control number assigned by the original shipper to identify a specific shipment.

>>   **BSN03**   **373**   **Date**   **M   DT 8/8**

Date expressed as CCYYMMDD

Ship notice generation date.

>>   **BSN04**   **337**   **Time**   **M   TM 4/8**

Ship notice generation time.

Segment: **DTM** Date/Time Reference

Position: 040

Loop:

Level: Heading

Usage: Mandatory

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes:

Semantic Notes:

Comments:

Example: **DTM*011*20070304*1230*ES**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> DTM01	374	Date/Time Qualifier	M ID 3/3
	011	Shipped	
>> DTM02	373	Date	M DT 8/8
		Date expressed as CCYYMMDD	

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DTM03   **337**   **Time**   **C**   **TM 4/8**

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

DTM04   **623**   **O**

Time Code   **ID 2/2**

Segment:	**HL** **Hierarchical Level**
Position:	010
Loop:	HL Mandatory Repeat: 200000
Level:	Detail - Shipment
Usage:	Mandatory
Max Use:	1
Purpose:	To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:	
Semantic Notes:	
Comments:	
Example:	HL*1**S

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	HL01	628	**Hierarchical ID Number**	M AN 1/12

A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.

Use "1" for the shipment level HL segment. Increment by 1 for each subsequent HL segment within the transaction.

	HL02	734	**Hierarchical Parent ID Number**	O AN 1/12

Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Not Used for this occurrence of the HL segment

>>   **HL03**   **735**   **M ID 1/2**

Hierarchical Level Code

                                 S   Shipment

Segment: **MEA** Measurements

Position: 020

Loop: HL

Level: Detail – Shipment

Usage: Mandatory

Max Use: 2

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

Syntax Notes:

Semantic Notes:

Comments:

Example: **MEA*WT*G*1243*LB**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
MEA01	**737**	**Measurement Reference ID Code**	**O ID 2/2**
	WT	Weights	

>>   **MEA02**   **738**   **Measurement Qualifier**   **M   ID 1/3**

                          G   Gross Weight   (required)

                          N   Net Weight   (optional)

           MEA03   **739**   **Measurement Value**   **C   R 1/20**

                          The value of the measurement

           MEA04   **C001**   **Composite Unit of Measure**   **C**

                          LB   Pound

                          KG   Kilograms

Segment: **TD1** Carrier Details (Quantity and Weight)

Position: 030

Loop: HL

Level: Detail - Shipment

Usage: Mandatory

Max Use: 20

Purpose: To specify the transportation details relative to commodity, weight, and quantity

Syntax Notes:

Semantic Notes:

Comments:

Example: TD1*CTN90*5

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD101	103	Packaging Code	O AN 3/5
		Code identifying the type of packaging.	
TD102	80	Lading Quantity	C N0 1/7
		Number of units (pieces) of the lading commodity.	
		Number of packages of the type specified in TD101.	

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Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)

Position: 040

Loop: HL

Level: Detail - Shipment

Usage: Mandatory

Max Use: 1

Purpose: To specify the carrier and sequence of routing and provide transit time information

Syntax Notes:

Semantic Notes:

Comments:

Example: **TD5*B*2*CETR*M**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD501	**133**	**Routing Sequence Code**	**C ID 1/2**
	B	Origin/Delivery Carrier (Any Mode)	

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| **TD502** | **66** | **Identification Code Qualifier** | **C** | **ID 1/2** |

| | 2 | Standard Carrier Alpha Code (SCAC) | | |

| **TD503** | **67** | **Identification Code** | **C** | **AN 2/80** |

Code identifying a party or other code

Carrier SCAC Code

| **TD504** | **91** | **Transportation Method/Type Code** | **C** | **ID 1/2** |

Code specifying the method or type of transportation for the shipment.

ANSI X –12 Data Element Dictionary

Segment: **TD3** Carrier Details (Equipment)

Position: 050

Loop: HL

Level: Detail - Shipment

Usage: Mandatory

Max Use: 12

Purpose: To specify transportation details relating to the equipment used by the carrier

Syntax Notes:

Semantic Notes:

Comments: This Segment is Mandatory when the pick-up and delivery equipment number is the same. This maximum use of the TD3 segment is one. This TD3 is used to identify the serial number of the trailer or railcar.

Example: TD3*TL* *438573

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD301	**40**	**Equipment Description Code**	**M ID 2/2**

Code identifying type of equipment used for shipment.

TD302   **206**   **Equipment Initial**   O   AN 1/4

Prefix or alphabetic part of an equipment unit's identifying number

TD303   **207**   **Equipment Number**   M   AN 1/10

Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)

Segment: **REF** Reference Identification

Position: 060

Loop: HL

Level: Detail - Shipment

Usage: Mandatory

Max Use: 3

Purpose: To specify identifying information

Syntax Notes:

Semantic Notes:

Comments:

Example: **REF*BM*12345**

REF*PK*67890

REF*CN*98765431

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	**Reference Identification Qualifier**	M ID 2/3
		AW Air Waybill Number	
		BM Bill of Lading Number	

CN	Carrier's Reference Number	
FR	Freight Bill Number	
MB	Master Bill of Lading	
PK	Packing List Number	
SI	Shipper's Identifying Number of Shipment	

REF02   127   Reference Identification   C   AN 1/30

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Segment: # FOB F.O.B. Related Instructions

Position: 070

Loop: HL

Level: Detail – Shipment

Usage: Optional

Max Use: 1

Purpose: To specify transportation instructions relating to shipment

Syntax Notes:

Semantic Notes:

Comments:

Example: **FOB*CC**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> **FOB01**	**146**	**Shipment Method of Payment**	**M ID 2/2**
	CC	Collect	
	PP	Prepaid	

Segment: **CUR** Currency

Position: 310

Loop: HL

Level: Detail - Shipment

Usage: Optional

Max Use: 1

Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Syntax Notes:

Semantic Notes:

Comments:

Example: **CUR*SE*USD**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
>>	CUR01	98	Entity Identifier Code	C ID 2/3
			SE Selling Party	
>>	CUR02	100	Currency Code	C ID 3/3
			Code (Standard SO) for country in whose currency the charges are specified	

Segment:	**N1** Name	
Position:	010	
Loop:	N1	Repeat: 200
Level:	Detail – Shipment	
Usage:	Mandatory	
Max Use:	**2**	
Purpose:	To identify a party by type of organization, name, and code	
Syntax Notes:		
Semantic Notes:		
Comments:		
Example:	**N1*ST*ACME MFG*01*987456321**	
	N1*SF**92*48977	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	**N101**	**98**	**Entity Identifier Code**	**M ID 2/3**
		ST	Ship To	
		SU	Supplier/Manufacturer	
		SF	Ship From	

| | **N102** | **93** | **Name** | **O** | **AN 1/60** |

Free-form name

| >> | **N103** | **66** | **Identification Code Qualifier** | **M** | **ID 1/2** |

| | 01 | | D-U-N-S Number, Dun & Bradstreet |
| | 92 | | Mutually Defined |

| >> | **N104** | **67** | **Identification Code** | **M** | **AN 2/80** |

Code identifying a party or other code

Segment: **HL** Hierarchical Level

Position   010

Segment:	**HL** Hierarchical Level
Position:	010
Loop:	HL Repeat: 200000
Level:	Detail - Tare
Usage:	Optional
Max Use:	1
Purpose:	To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:	
Semantic Notes:	
Comments:	**This segment is optional, but must be used if master units are being reported.**
Example:	**HL*2*1*T**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> HL01	628	**Hierarchical ID Number**	M AN 1/12

A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.

Use "1" for the shipment level HL segment. Increment by 1 for each subsequent HL segment within the transaction.

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| | HL02 | 734 | **Hierarchical Parent ID Number** | O | AN 1/12 |
| | | | | | |

Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Hierarchical ID number of the parent HL segment.

| >> | HL03 | 735 | **Hierarchical Level Code** | M | ID 1/2 |

| | | | | | |
| | | T | Tare | | |

Segment: **CLD** Container Load Details

Position:	020
Loop:	HL
Level:	Detail - Tare
Usage:	Optional
Max Use:	1
Purpose:	To provide tare level packaging information
Syntax Notes:	
Semantic Notes:	
Comments:	**This segment is optional, but must be used if pallet detail is required.**
Example:	**CLD*1*1*PLT90**

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	CLD01	622	Number of Loads	M N0 1/5
>>	CLD02	382	Number of Units Shipped	M R 1/10
>>	CLD03	103	Packaging Code	O AN 5/5

Segment: **REF** Reference Identification

Position: 150

Loop: HL

Level: Detail - Tare

Usage: Optional

Max Use: 200

Purpose: To specify identifying information

Syntax Notes:

Semantic Notes:

Comments: **This segment is optional, but must be used if container detail is required.**

Example: **REF*LS*123456789**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	Reference Identification Qualifier	M ID 1/3
		HC Heat Code	
		LS Bar-coded Serial Number – Master Unit	
REF02	127	Reference Identification	C AN 1/10

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier.   Heat code will allow AN 1/30, but Master Unit Serial is AN 1/10.

Segment: **HL** Hierarchical Level

Position   010

Segment:	**HL** Hierarchical Level	
Position:	010	
Loop:	HL	Repeat: 200000
Level:	Detail - Item	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To identify dependencies among and the content of hierarchically related groups of data segments	
Syntax Notes:		
Semantic Notes:		
Comments:		
Example:	**HL*2*1*I**	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	HL01	628	Hierarchical ID Number	M AN 1/12

A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.

Use "1" for the shipment level HL segment. Increment by 1 for each subsequent HL segment within the transaction.

| | HL02 | 734 | **Hierarchical Parent ID Number** | **O** | **AN 1/12** |

Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Hierarchical ID number of the parent HL segment.

| **>>** | HL03 | 735 | **Hierarchical Level Code** | **M** | **ID 1/2** |

| | | | I | Item |

Segment: $\quad$ **LIN** Item Identification

Position: $\quad$ 020

Loop: $\quad$ HL

Level: $\quad$ Detail - Item

Usage: $\quad$ Mandatory

Max Use: $\quad$ 1

Purpose: $\quad$ To specify basic item identification data

Syntax Notes:

Semantic Notes:

Comments

Example: $\quad$ **LIN**BP*123456*PO*1234563**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
LIN01	350	Assigned Identification	N	AN 1/20
>> $\quad$ LIN02	235	Product/Service ID Qualifier	M	ID 2/2
		BP $\qquad$ Buyer's Part Number		
>> $\quad$ LIN03	234	Product/Service ID	M	AN 1/48

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Identifying number for a product or service

| **LIN04** | **235** | **Product/Service ID Qualifier** | | **X** | **ID 2/2** |

EC   Engineering Change

| **LIN05** | **234** | **Product/Service ID** | | **X** | **AN 1/48** |

Identifying number for a product or service

| **LIN06** | **235** | **Product/Service ID Qualifier** | | **X** | **ID 2/2** |

PO   Purchase Order

| **LIN07** | **234** | **Product/Service ID** | | **X** | **AN1/48** |

Segment:	**SN1** Item Detail (Shipment)	
Position:	030	
Loop:	HL	
Level:	Detail - Item	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To specify line-item detail relative to shipment	
Syntax Notes:		
Semantic Notes:		
Comments:		
Example:	**SN1**40000*PC*165000**	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
	SN101	**350**	**Assigned Identification**	**O AN 1/20**
>>	**SN102**	**382**	**Number of Units Shipped**	**M R 1/10**
			Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	

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>>   **SN103**   **355**   **Unit or Basis for Measurement Code**   **M   ID 2/2**

Code specifying the units in which a value is being expressed, or manner in which measurement has been taken. Any valid X12 code for this element is acceptable.

Examples:

EA   Each

PC   Piece

LB   Pounds

SN104   **646**   **Quantity Shipped to Date**   **O   R 1/15**

Number of units shipped to date

Segment:	**PRF** Purchase Order Reference
Position:	050
Loop:	HL
Level:	Detail - Item
Usage:	Mandatory
Max Use:	1
Purpose:	To provide reference to a specific purchase order
Syntax Notes:	
Semantic Notes:	
Comments:	
Example:	**PRF*WFC1000**

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	PRF01	324	**Purchase Order Number**	M AN 1/22
			Identifying number for Purchase Order assigned by the buyer/purchaser	
	PRF02	328	**Release Number**	O AN 1/30
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	
	PRF03	350	**Assigned Identification**	O AN 1/11
			Line item number from the purchase order	

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Segment:	**CLD** Container Load Details
Position:	170
Loop:	HL
Level:	Detail - Item
Usage:	Optional
Max Use:	1
Purpose:	To provide container packaging information
Syntax Notes:	
Semantic Notes:	
Comments:	**This segment is optional, but must be used if container detail is required.**
Example:	**CLD*1*40*CNT71**

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	**CLD01**	**622**	**Number of Loads**	M N0 1/5
>>	**CLD02**	**382**	**Number of Units Shipped**	M R 1/10
>>	**CLD03**	**103**	**Packaging Code**	M AN 5/5

Segment: **REF** Reference Identification

Position: 150

Loop: HL

Level: Detail - Item

Usage: Optional

Max Use: 200

Purpose: To specify identifying information

Syntax Notes:

Semantic Notes:

Comments: **This segment is optional, but must be used if container detail is required.**

Example: **REF*LS*123456789**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	**Reference Identification Qualifier**	**M ID 1/3**

LS – Serial is Mandatory.   LT - Lot and HC – Heat Code are both Optional

		LS	Bar-coded Serial Number
		LT	Lot Number
		HC	Heat Code
REF02	127	**Reference Identification**	**C AN 1/25**

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier. Lot Number must be AN 1/15, but Bar-coded Serial Number is AN 1/25

Segment: **CTT** **Transaction Totals**

Position: 010

Loop:

Level: Summary

Usage: Mandatory

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set

Syntax Notes:

Semantic Notes:

Comments:

Example: **CTT*2**

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> CTT01	354	**Number of Line Items**	M N0 1/6
		Total number of line items in the transaction set	

Total Number of HL segments

Segment:	**SE** **Transaction Set Trailer**
Position:	020
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:	
Semantic Notes:	
Comments:	
Example:	SE*55*000001

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	SE01	96	**Number of Included Segments**	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
>>	SE02	329	**Transaction Set Control Number**	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set. This must match the value in ST02.	

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This must match the value in ST02.

SAMPLE 1 – Item Level Only ASN

ISA*00*   *00*   *01*SENDERID   *01*RECEIVERID
*120130*1729*U*00401*000000091*0*T*<~

GS*SH*SENDERID*RECEIVERID*120130*1729*91*X*004010~

ST*856*0091~

BSN*00*SHIPPERID*20120130*1729~

DTM*011*20120130*1512~

HL*1**S~

MEA*PD*G*100*LB~

TD1*CTN90*1~

TD5*B*2*SCAC*M~

TD3*TL**123456~

REF*BM*BOL~

REF*PK*SHIPPER~

FOB*CC~

N1*ST**01*SHIPTOCODE~

N1*SF**01*SHIPFROMCODE~

HL*2*1*I~

LIN**BP*71800S84*PO*TESTPO*EC*A~

SN1**100*EA*177~

PRF*TESTPO~

CLD*1*100*CTN90~

REF*LS*S010866~

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CTT*1~

SE*21*0091~

GE*1*91~

IEA*1*000000091~

SAMPLE 2 – Master Units: Tare Level ASN

ST*856*0001~

BSN*00*SHIPPERID*20120604*1739~

DTM*011*20120604*1740~

DTM*017*20120607*1740~

HL*1**S~

MEA*PD*G*336*LB~

MEA*PD*N*304*LB~

TD1*PLT90*2~

TD5*B*2*SCAC*M~

TD3*TL**56565~

REF*BM*BOL~

REF*PK*SHIPPERID~

N1*ST**01*SHIPTOCODE~

N1*SF**01*SHIPFROMCODE~

HL*2*1*T~

CLD*1*1*PLT90~

REF*LS*M0577994~

HL*3*2*I~

LIN**BP*99999*EC*4~

SN1**4000*EA*104000~

PRF*987665~

CLD*4*1000*CTN25~

REF*LS*01JS775089~

REF*LS*01JS775090~

REF*LS*01JS775091~

REF*LS*01JS775092~

HL*4*1*T~

CLD*1*1*PLT90~

REF*LS*M0577995~

HL*5*4*I~

LIN**BP*99999*EC*4~

SN1**2000*EA*5975~

PRF*987665~

CLD*2*1000***EA~

REF*LS*S0001467~

REF*LS*S0001795~

HL*6*4*I~

LIN**BP*45678*EC*B~

SN1**500*EA*3600~

PRF*987665~

CLD*2*250*CTN25*~

REF*LS*S0001656~

REF*LS*S0001657~

CTT*6~

SE*44*07~