

**810 Invoice**

ELECTRONIC DATA INTERCHANGE (EDI) MAPPING  
X12 850 PURCHASE ORDER (004010)

Functional Group ID=**IN**

<b>Heading</b>								
Page No.	Pos. No.	Seg. No.	Name	Base Status	User Status	Max Use	Loop Repeat	Notes & Comments
4	010	ST	Transaction Set Header	M	M	1		
5	020	BIG	Beginning Segment for Invoice	M	M	1		
			<b>LOOP ID – N1</b>				<b>1</b>	
6	070	N1	Name - Ship To	O	M	1		
7	090	N3	Address Information	O	M	1		
8	100	N4	Geographic Location	O	M	1		
			<b>LOOP ID – N1</b>				<b>1</b>	
9	130	N1	Name - Ship From	O	M	1		
10	150	N3	Address Information	O	M	1		
11	160	N4	Geographic Location	O	M	1		

<b>Detail</b>								
Page No.	Pos. No.	Seg. No.	Name	Base Status	User Status	Max Use	Loop Repeat	Notes & Comments
			<b>LOOP ID – IT1</b>				<b>10000</b>	
12	010	IT1	Baseline Item Data (Invoice)	O	M	1		
14	040	TXI	Tax Information	O	M	1		
			<b>LOOP ID - PID</b>					
15	060	PID	Product/Item Description	O	M	1		

<b>Summary</b>									
<b>Page No.</b>	<b>Pos. No.</b>	<b>Seg. No.</b>	<b>Name</b>	<b>Base Status</b>	<b>User Status</b>	<b>Max Use</b>	<b>Loop Repeat</b>	<b>Notes &amp; Comments</b>	
16	180	SAC	Service, Promotion, Allowance or Charge Information	O	O	1			
17	190	TXI	Tax Information	O	O	1			
18	010	TDS	Total Monetary Value Summary	M	M	1			
19	070	CTT	Transaction Totals	O	M	1			
20	080	SE	Transaction Set Trailer	M	M	1			

Notes: The TXI segment following any SAC segments should contain tax information on the SAC segment rather than on the entire invoice (e.g. taxable freight, taxable handling). The TXI segment for the entire invoice is not necessary as we are collecting tax information on the line items and on the SAC segments.

**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  
**Comments:**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 810 Invoice	M ID 3/3	M
ST02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9	M

**Segment:** **BIG** Beginning Segment for Invoice  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates  
**Comments:** 1 BIG07 is used only to further define the type of invoice when needed.

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
BIG01	373	<b>Date</b> Date expressed as CCYYMMDD <u>Invoice Date</u>	M DT 8/8	M
BIG02	76	<b>Invoice Number</b> Identifying number assigned by issuer	M AN 1/22	M AN 1/10
BIG03	373	<b>Date</b> Expressed as CCYYMMDD <u>Purchase Order Date</u>	O DT 8/8	M
BIG04	324	<b>Purchase Order Number</b> Identifying number for Purchase Order assigned by the orderer/purchaser - Leave blank for orders originating from a source other than the ReactorNet system	O AN 1/22	O AN 1/15
BIG07	640	<b>Transaction Type Code</b> Code specifying the type of transaction CR (Credit Memo) DI (Debit Invoice)	O ID 2/2	M

**Segment:** **N1 Name - Ship To**  
**Position:** 070  
**Loop:** N1 Optional (Must Use)  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Comments:** **1** This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual ST ShipTo	M ID 2/3	M ID 2/2
N102	93	<b>Name</b> Free-form name Customer Name	X AN 1/60	M AN 1/30
N103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 91 Assigned by Seller or Seller's Agent	X ID 1/2	M ID 2/2
N104	67	<b>Identification Code</b> Code identifying a party or other code Ship To Account Number	X AN 2/80	M AN 3/10

**Segment:** **N3** Address Information  
**Position:** 090  
**Loop:** N1 Optional (Must Use)  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To specify the location of the named party  
**Comments:**  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
N301	166	<b>Address Information</b> Address Information	M AN 1/55	M AN 1/30
N302	166	<b>Address Information</b> Address Information	O AN 1/55	O AN 1/30

**Segment:** **N4 Geographic Location**  
**Position:** 100  
**Loop:** N1 Optional (Must Use)  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Comments:** **1** A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.  
**2** N402 is required only if city name (N401) is in the U.S. or Canada.  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
N401	19	<b>City Name</b> Free-form text for city name	O AN 2/30	M AN 2/20
N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2	M
N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15	M ID 5/9



**Segment:** **N1** Name –Ship From  
**Position:** 130  
**Loop:** N1 Optional (Must Use)  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Comments:** **1** This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing par  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual <u>Ship From Warehouse</u> SF Ship From	M ID 2/3	M ID 2/2
N102	93	<b>Name</b> Free-form Name <u>Warehouse Name</u>	X AN 1/60	M AN 1/20
N103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 91 Assigned by Seller or Seller's Agent	X ID 1/2	M ID 1/1
N104	67	<b>Identification Code</b> Code identifying a party or other code <u>Warehouse ID / Account Number</u>	X AN 2/80	M AN 2/13

**Segment:** **N3** Address Information  
**Position:** 150  
**Loop:** N1 Optional (Must Use)  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To specify the location of the named party  
**Comments:**  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
N301	166	<b>Address Information</b> Address Information	M AN 1/55	M AN 1/30
N302	166	<b>Address Information</b> Address Information	O AN 1/55	O AN 1/30

**Segment:** **N4 Geographic Location**  
**Position:** 160  
**Loop:** N1 Optional (Must Use)  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Comments:** 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.  
 2 N402 is required only if city name (N401) is in the U.S. or Canada.  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
N401	19	<b>City Name</b> Free-form text for city name	O AN 2/30	M AN 2/20
N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2	M
N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15	M ID 5/9

**Segment:** **IT1** **Baseline Item Data (Invoice)**  
**Position:** 010  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To specify the basic and most frequently used line item data for the invoice and related transactions  
**Comments:** 1 Element 235/234 combinations should be interpreted to include products and/or services.  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
IT 101	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set. NT Not Taxable TX Taxable	O AN 1/20	O AN 2/2
IT 102	358	<b>Quantity Invoiced</b> Number of units invoiced (supplier units) <u>Quantity Invoiced</u>	X R 1/10	M R 1/8
IT 103	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Price Basis Code: CA - Case EA - Each LB – Pound	X ID 2/2	M
IT 104	212	<b>Unit Price</b>	X R 1/17	M R 1/8

		Price per unit of product, service, commodity, etc.		
IT 106	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) VN – Vendor’s (Seller’s) Item Number	X ID 2/2	M
IT 107	234	<b>Product/Service ID</b> Identifying number for a product or service Supplier Item Number	X AN 1/48	M AN 7/7

**Segment:** **TXI1** **Baseline Item Data (Invoice)**  
**Position:** 040  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify tax information  
**Comments:**  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
TXI01	963	<b>Tax Type Code</b> Code specifying the type of tax: LS – State and Local Sales Tax	M ID 2/2	M
TXI02	782	<b>Monetary Amount</b> Monetary Amount Sales Tax Amount	X R 1/18	M R 1/7
TXI03	954	<b>Percent</b> Sales Tax Rate Sales Tax Rate	X R 1/10	M R 1/10

**Segment:** **PID** Product/Item Description  
**Position:** 060  
**Loop:** PID Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To describe a product or process in coded or free-form format  
**Comments:**  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
PID01	349	<b>Item Description Type</b> Code indicating the format of a description F – Free-form	M ID 1/1	M
PID05	352	<b>Description</b> A free-form description to clarify the related data elements and their content Item Description	X AN 1/80	M AN 1/30

**Segment:** **SAC** Service, Promotion, Allowance, or Charge Information  
**Position:** 180  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 100  
**Purpose:** To specify freight, handling charges, etc.  
**Comments:**  
**Usage Notes:** This segment may be used or omitted

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
SAC01	248	<b>Allowance or Charge Indicator</b> Code indicating contents of the segment	M ID 1/1	M ID 1/1
SAC02	1300	<b>Service, Promotion, Allowance or Charge Code</b> Code indicating type of allowance or charge	C ID 4/4	M ID 4/4
SAC05	610	<b>Amount</b> Monetary Amount	O R 1/15	M R 1/15



**Segment:** **TXI1** Tax Information  
**Position:** 190  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify tax information on preceding SAC segments  
**Comments:**  
**Usage Notes:** This segment may be used or omitted

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
TXI01	963	<b>Tax Type Code</b> Code specifying the type of tax: LS – State and Local Sales Tax	M ID 2/2	M
TXI02	782	<b>Monetary Amount</b> Monetary Amount Sales Tax Amount	X R 1/18	M R 1/7
TXI03	954	<b>Percent</b> Sales Tax Rate Sales Tax Rate	X R 1/10	M R 1/10

**Segment:** **TDS** Total Monetary Value Summary  
**Position:** 010  
**Loop:**  
**Level:** Summary  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify the total invoice discounts and amounts  
**Comments:** 1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01  
**Usage Notes:**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
TDS01	610	<b>Amount</b> Monetary Amount Total Invoice Amount	M N2 1/15	M N2 1/13

**Segment:** **CTT** Transaction Totals  
**Position:** 070  
**Loop:**  
**Level:** Summary  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
CTT01	354	<b>Number of Line Items</b> Total number of line items in the transaction set Line Item Total	M N0 1/6	M
CTT02	347	<b>Hash Total</b> Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field. Total Quantity	O R 1/10	M

**Segment:** **SE** Transaction Set Trailer  
**Position:** 080  
**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)  
**Comments:** **1** SE is the last segment of each transaction set  
**Usage Notes:** **The transaction cannot process without this segment**

**Data Element Summary**

Ref Des.	Data Element	Name	Base Attributes	User Attributes
SE01	96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	M NO 1/10	M
SE02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9	M