

Learning Resources

EDI GUIDELINES

PURCHASE ORDER 850

FUNCTIONAL ACKNOWLEDGEMENT 997

VERSION 4010

LEARNING RESOURCES 850 GUIDELINES

Changes since last publication (Feb 2008):

- The Component Element Separator has been updated to show the value 3A :
- Since Learning Resources uses different shipping formats with their vendors, 850 PO examples are now included with this guideline as a reference. Each example is labeled to indicate the shipping format that is being used within the example.

LEARNING RESOURCES 850 GUIDELINES

GLOSSARY OF TERMS

Segment:	Consists of a segment identifier, one or more data element each preceded by an element separator, and ending with a terminator (X12.6).	
Seg. Use:	Denotes if the segment is mandatory or optional for Learning Resources.	
Reference Des.:	Identifies the segment and the data element sequence number.	
Data Element Number:	This is the number assigned to the data element. This number may be used for direct reference into the ANSI X12 Data Dictionary.	
Data Element Name:	This is the description assigned to the data element.	
Element Usage:	M - Mandatory	Learning Resources requires this element.
	O - Optional	This element can be used.
	C - Conditional	The data element can be used only if other elements are used within the segment.

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Envelope and Group

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
ISA	Interchange Control Header	M	1	
GS	Functional Group Header	M	1	

Header

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
ST	Transaction Set Header	M	1	
BEG	Beginning Segment (Purchase Order)	M	1	
REF	Reference Numbers	O	>1	
ITD	Terms of Sale/Deferred Terms of Sale	M	5	
DTM	Date/Time Reference	M	10	
	Loop ID –N9			1000
N9	Reference Identification	O	1	
MSG	Message Text	O	1000	
	Loop ID –N1			200
N1	Name	O	1	

Detail

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
	Loop ID – PO1			100000
PO1	Purchase Order Base Line Item Data	M	1	
PO4	Item Physical Details	O	>1	

Summary

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
CTT	Transaction Totals	M	1	
SE	Transaction Set Trailer	M	1	

Envelope and Group

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
GE	Functional Group Trailer	M	1	
IEA	Interchange Control Trailer	M	1	

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Segment: ISA - Interchange Control Header
Level: Envelope
Learning Resources Usage: Mandatory
Purpose: To start and identify a transmission for a partner.

Ref. Des.	Data Element	Name	Element Usage
ISA01	101	Authorization Information Qualifier 00 No authorization information present.	M
ISA02	102	Authorization Information This field will be blank.	M
ISA03	103	Security Information Qualifier 00 No security information present.	M
ISA04	104	Security Information This field will be blank.	M
ISA05	105	Interchange Sender Qualifier Partner's EDI ID Qualifier	M
ISA06	106	Interchange Sender ID Partner's EDI ID – test or Partner's EDI ID – production	M
ISA07	105	Interchange ID Qualifier 12 – Production ZZ - Test	M
ISA08	107	Interchange Receiver ID Learning Resources EDI IDs 8475738400– Production 8475738400T – Test	M
ISA09	108	Date The format is YYMMDD .	M

LEARNING RESOURCES 850 GUIDELINES

Segment: ISA - Interchange Control Header (Continued)

Level: Envelope

Learning Resources Usage: Mandatory

Purpose: To start and identify a transmission for a partner.

Ref. Des.	Data Element	Name	Element Usage
ISA10	109	Time The time that the interchange was created in partner's system. The format is HHMM (24 Hr.)	M
ISA11	110	Interchange Standards Identifier U U.S. EDI community of X12	M
ISA12	111	Interchange Version ID 00401 Version 4010	M
ISA13	112	Interchange Control Number This unique value is sequentially assigned by the partner beginning with the number "1". The value entered in this field will match the value in the Interchange Control Number field on the Interchange Control Trailer (IEA02).	M
ISA14	113	Acknowledgment Requested 0 No acknowledgment requested.	M
ISA15	114	Test Indicator P Production Data	M
ISA16	115	Subelement Separator > The value identified for retail use.	M

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Segment: GS - Functional Group Header
Level: Group
Learning Resources Usage: Mandatory
Purpose: Indicates the beginning of a functional group and provides control information.

Ref. Des.	Data Element	Name	Element Usage
GS01	479	Functional ID PO Purchase Order	M
GS02	142	Application Sender's Code This is the same code as used in the (ISA06).	M
GS03	124	Application Receiver's Code For Learning Resources, the number is the same as the code used in the (ISA08).	M
GS04	373	Data Interchange Date The format is CCYYMMDD .	M
GS05	337	Data Interchange Time The time that the interchange was created in the partner's system. The format is HHMM (24 Hr.)	M
GS06	28	Data Interchange Control Number This unique value is sequentially assigned by the partner starting with the number "1". The value entered in this field will match the one in the Functional Group Trailer (GE02).	M
GS07	455	Responsible Agency Code X Accredited standards committee X12.	M
GS08	480	Version 004010	M

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Segment: ST - Transaction Set Header
Level: Header
Learning Resources Usage: Mandatory
Purpose: To indicate the start of a transaction set and to assign a control number.

Ref. Des.	Data Element	Name	Element Usage
ST01	143	Transaction Set Identifier Code This is the code that identifies the transaction as a purchase order. 850 – Purchase Order	M
ST02	329	Transaction Set Control Number This unique value is sequentially assigned by the partner starting with the number “1”. The value entered in this field will match the one in the Transaction Set Trailer Record (SE02).	M

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Segment: BEG - Beginning Segment for Purchase Order
Level: Header
Learning Resources Usage: Mandatory
Purpose: To indicate the beginning of the purchase order transaction set.

Ref. Des.	Data Element	Name	Element Usage
BEG01	353	Transaction Set Purpose Code 00 Original order	M
BEG02	92	Purchase Order Type Code SA Stand-alone Order	M
BEG03	324	Purchase Order Number This field contains Partner's P.O. number.	M
BEG05	373	Purchase Order Date The format is CCYYMMDD.	M

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- Each character of the purchase order number is valid even if it is a zero.

LEARNING RESOURCES 850 GUIDELINES

Segment: REF - Reference Numbers
Level: Header
Learning Resources Usage: Optional
Purpose: To transmit Partner's merchandise vendor number.

Ref. Des.	Data Element	Name	Element Usage
REF01	128	Reference Number Qualifier IA Internal Vendor Number	O
REF02	127	Reference Number This is the vendor number assigned by Learning Resources' to the partner.	O

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- The data within the REF segment can be transmitted upon request from the trading partner.

LEARNING RESOURCES 850 GUIDELINES

Segment: ITD - Terms of Sale
Level: Header
Learning Resources Usage: Mandatory
Purpose: To identify the terms of sale. Terms will be sent on all transmissions.

Ref. Des.	Data Element	Name	Element Usage
			M
ITD01	336	Terms Type Code 01 Basic	
			M
ITD02	333	Terms Basis Date Code 03 Invoice Date	
			O
ITD03	338	Terms Discount Percent The discount percent available to Learning Resources if an invoice is paid on or before the terms discount due date.	
			C
ITD04	370	Terms Discount Due Date The date the payment is due if the discount is to be earned. Format is CCYYMMDD.	
			C
ITD05	351	Terms Discount Days Due Number of days in discount period by which payment is due if discount is earned.	
			O
ITD06	446	Terms Net Due Date Date when total invoice amount becomes due. Format is CCYYMMDD	
			O
ITD07	386	Terms Net Days Number of days until total invoice amount is due.	
			O
ITD08	362	Terms Discount Amount Total amount of terms discount	
			O
ITD12	352	Description A free-form description to clarify the related data elements and their content .	
			O

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Segment: DTM - Date/Time References
Level: Header
Learning Resources Usage: Mandatory
Purpose: To specify ship dates.

Ref. Des.	Data Element	Name	Element Usage
DTM01	374	Date/Time Qualifier 037 Ship Not Before This is the earliest date that shipping may occur. 001 Cancel After This is the last date shipping may occur.	M
DTM02	373	Date Format is CCYYMMDD	M

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Segment: N9 – Reference Identification
Level: Header
Loop: N9
Learning Resources Usage: Optional
Purpose: To identify the information sent in the MSG segment.

Ref. Des.	Data Element	Name	Element Usage
N901	128	Reference Identification Qualifier ZZ Mutually Defined	O
N902	127	Reference Identification 850 purchase order comments	C

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- Learning Resources may receive this segment upon request of the trading partner.

LEARNING RESOURCES 850 GUIDELINES

Segment: MSG – Message Text
Level: Header
Loop: N9
Learning Resources Usage: Optional
Purpose: To convey free-form purchase order text.

Ref. Des.	Data Element	Name	Element Usage
MSG01	933	Free-Form Message Text Free-form message .text	M

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- The free-form text is not edited for accuracy by the EDI system.
- Comments may provide shipping instructions or ad date information.

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Segment: N1 - Name
Level: Header
Learning Resources Usage: Optional
Purpose: To identify the ship and bill to locations for the purchase order.

Ref. Des.	Data Element	Name	Element Usage
N101	98	Entity Identifier Code BT Bill To ST Ship To	M
N103	66	Identification Code Qualifier 92 Assigned by Learning Resources	C
N104	67	Identification Code The number transmitted will indicate either a store or distribution center location.	C

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- There are two possibilities in the use or non-use of the N1 segment for Learning Resources orders:
 1. The “BT” code will be used in the N101 element to designate the destination for the purpose of invoicing. The code can identify a distribution center or a specific store.
 2. The “ST” code will be used in the N101 element to designate the shipment destination. It is assumed for a location identified in this segment, that both the partner and Learning Resources maintain accurate address information. No address information will be sent in the transmission.

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Segment: PO1 - Purchase Order Baseline Item Data
Level: Detail
Learning Resources Usage: Mandatory
Purpose: To specify purchase order line item data.

Ref. Des.	Data Element	Name	Element Usage
PO101	350	Purchase Order Line Item Number Identifies a specific line on a Learning Resources order.	O
PO102	330	Quantity Ordered	M
PO103	355	Unit of Measurement Code EA Each	M
PO104	212	Unit Price Cost will be sent for each item ordered.	C
PO106	235	Product/Service ID Qualifier CB Buyer's Catalog Number VP Vendor's Part ID UP UPC-A (1-5-5-1)	C
PO107	234	Product ID Identifying number for a product. CB (8 digit) number. VP Vendor's Part ID UP (12 digit) number.	C
PO108 thru PO111	(235) (234)	Product ID Qualifier Product ID	O C

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- Both the "CB" and "UP" qualifiers will be sent on all orders.
- If more than one Product ID Qualifier is used, they will be sent in the following order: CB, UP.

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Segment: PO4 - Item Physical Details

Level: Detail

Learning Resources Usage: Optional

Purpose: To specify the physical qualities and packaging relating to an item.

Ref. Des.	Data Element	Name	Element Usage
PO401	356	Pack The number of inner containers per outer container, or number of eaches if there are no inner containers.	O
PO414	810	Inner Pack The number of eaches per inner container.	O

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LEARNING RESOURCES SEGMENT USAGE COMMENTS

- The **PO401** element will be sent alone when there are no smaller containers within the case.
- The **PO401** and the **PO414** will be sent when the **PO414** (Inner Pack), represents the number of eaches in each inner container when the **PO401** is the number of inner containers within the case.
- The unit of measure is assumed to be 'Each' in all situations.

Segment: CTT - Transaction Totals
Level: Summary
Learning Resources Usage: Mandatory
Purpose: To provide total line items to validate transaction completeness and correctness.

Ref. Des.	Data Element	Name	Element Usage
CTT01	354	Number of Line Items Total number of line items (PO1 segments) present in the transaction set.	M

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Segment: SE - Transaction Set Trailer
Level: Summary
Learning Resources Usage: Mandatory
Purpose: To indicate the end of the transaction set and to provide the count of the segments transmitted within the transaction set.

Ref. Des.	Data Element	Name	Element Usage
SE01	96	Number of Included Segments The total number of segments included in a transaction set including the ST and SE segments.	M
SE02	329	Transaction Set Control Number The identifying transaction set control number. This must be the same number as in the ST02.	M

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Segment: GE - Functional Control Trailer
Level: Group
Learning Resources Usage: Mandatory
Purpose: Indicates the end of a functional group and provides control information.

Ref. Des.	Data Element	Name	Element Usage
GE01	97	Number of Included Transaction Sets This field represents the number of transaction sets (ST/SE) included in the functional group (GS/GE).	M
GE02	28	Data Interchange Control Number This must be the same number that was entered in the (GS06) field for the group.	M

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Segment: IEA - Interchange Control Trailer
Level: Envelope
Learning Resources Usage: Mandatory
Purpose: To define the end of an interchange for a partner and to provide control information.

Ref. Des.	Data Element	Name	Element Usage
IEA01	116	Number of Included Groups This field represents the number of GS segments within the transmission.	M
IEA02	112	Interchange Control Number The number in this field must match the one in the ISA segment (ISA13).	M

LEARNING RESOURCES 850 GUIDELINES

FUNCTIONAL ACKNOWLEDGMENT TRANSACTION SET (997)

Envelope and Group

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
ISA	Interchange Control Header	M	1	
GS	Functional Group Header	M	1	

Header

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
ST	Transaction Set Header	M	1	
AK1	Functional Group Response Header	M	1	
AK9	Functional Group Response Trailer	M	1	
SE	Transaction Set Trailer	M	1	

Envelope and Group

Segment	Segment Name	Seg. Use	Max Use	Loop Repeat
GE	Functional Group Trailer	M	1	
IEA	Interchange Control Trailer	M	1	

LEARNING RESOURCES TRANSACTION USAGE COMMENTS

- Learning Resources requires a functional acknowledgment from all trading partners within two business days from the date Learning Resources transmits the data. Learning Resources verifies the receipt of all out-bound transactions. For in-bound transactions, Learning Resources sends a 997 upon receipt; and expects the trading partner to report missing 997s within a week of transmission.
- Learning Resources considers acknowledgment complete when the trading partner sends the AK1 and AK9 segments.

LEARNING RESOURCES 850 GUIDELINES

FUNCTIONAL ACKNOWLEDGMENT

Segment: ST - Transaction Set Header
Level: Header
Learning Resources Usage: Mandatory
Purpose: To indicate the start of a transaction set and to assign a control number.

Ref. Des.	Data Element	Name	Element Usage
ST01	143	Transaction Set Identifier Code 997 This is the code that identifies the transaction as a functional acknowledgment.	M
ST02	329	Transaction Set Control Number This value is sequentially assigned by Learning Resources starting with the number "1" for each trading partner. The value entered in this field will match the one in the Transaction Set Trailer Record (SE02).	M

LEARNING RESOURCES 850 GUIDELINES

FUNCTIONAL ACKNOWLEDGMENT

Segment: AK1 - Functional Group Response Header
Level: Header
Learning Resources Usage: Mandatory
Purpose: To start an acknowledgment of a functional group.

Ref Des.	Data Element	Name	Element Usage
AK101	479	Functional Identifier Code This is the functional group ID for the group that is being acknowledged. PO Purchase Order (850)	M
AK102	28	Group Control Number This is the control number assigned by Learning Resources in the original transmission in the GS06.	M

LEARNING RESOURCES SEGMENT USAGE COMMENTS

- The function group code depends upon the group ID that was sent on the transaction from Learning Resources.
- For example, if a purchase order were being acknowledged, the value would be "PO" which was sent in the GS01 for the original transmission.

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FUNCTIONAL ACKNOWLEDGMENT

Segment: AK9 - Functional Group Response Trailer
Level: Header
Learning Resources Usage: Mandatory
Purpose: To acknowledge the acceptance or rejection of a functional group and to report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group.

Ref. Des.	Data Element	Name	Element Usage
AK901	715	Functional Group Acknowledge Code A Accepted E Accepted but errors were noted. P Partially accepted. At least one transaction set was rejected. R Rejected	M
AK902	97	Number of Transaction Sets Included This field will contain the count of the total number of transaction sets included.	M
AK903	123	Number of Received Transaction Sets This field will contain the count of the total number of transaction sets received.	M
AK904	2	Number of Accepted Transaction Sets This field will contain the total number of transaction sets that were accepted.	M

LEARNING RESOURCES 850 GUIDELINES

FUNCTIONAL ACKNOWLEDGMENT

Segment: SE - Transaction Set Trailer
Level: Header
Learning Resources Usage: Mandatory
Purpose: To indicate the end of the transaction set and to provide the count of the segments transmitted within the transaction set.

Ref. Des.	Data Element	Name	VICS Element Usage
SE01	96	Number of Included Segments The total number of segments included in a transaction set including the ST and SE segments.	M
SE02	329	Transaction Set Control Number The identifying transaction set control number. This must be the same number as in the ST02.	M

LEARNING RESOURCES 850 GUIDELINES

Example of 850 (4010) Direct to Store Delivery):

ISA*00* *00* *qual*partner's ID *12*8475738400 *080206
*0029*U*00401*000001006*0*P*:.
GS*PO*partner's ID*8475738400*20080206*0029*1006*X*004010.
ST*850*000001228.
BEG*00*SA *Partner'sPO Number**20080205.
ITD*01*3*****45.
DTM*037*20080206.
DTM*001*20080213.
N1*BT**92*0999.
N1*ST**92*0997.
PO1*1*16*EA*24.48**UP*010086640021.
PO4*4*****4.
PO1*2*8*EA*24.48**UP*010086610000.
PO4*2*****4.
PO1*3*44*EA*15.3**UP*010086630046.
PO4*11*****4.
PO1*4*12*EA*39.78**UP*010086630213.
PO4*3*****4.
PO1*5*20*EA*15.3**UP*010086630022.
PO4*5*****4.
PO1*6*8*EA*39.78**UP*010086630169.
PO4*2*****4.
PO1*7*8*EA*39.78**UP*010086610123.
PO4*2*****4.
PO1*8*4*EA*39.78**UP*010086640205.
PO4*2*****4.
PO1*9*20*EA*15.3**UP*010086630060.
PO4*5*****4.
CTT*9.
SE*27*000001228.
GE*1*1006.
IEA*1*000001006.

LEARNING RESOURCES 850 GUIDELINES

Example of 850 (4010) DC delivery:

ISA*00* *00* *qual*partner ID *12*8475738400 *080901
*0028*U*00401*000000252*0*P*>.
GS*PO*partner ID*8475738400*20080901*0028*252*X*004010.
ST*850*000000494.
BEG*00*SA*PO number**20080824.
ITD*01*3*****30.
DTM*037*20081008.
DTM*001*20081012.
N1*BT**92*0999.
N1*ST**92*0999.
PO1*1*630*EA*8.99**UP*747935011076.
PO4*3.
PO1*2*630*EA*8.99**UP*747935011083.
PO4*3.
PO1*3*630*EA*8.99**UP*747935011137.
PO4*3.
CTT*3.
SE*15*000000494.
GE*1*252.
IEA*1*000000252.

LEARNING RESOURCES 850 GUIDELINES

Example of 997 Functional Acknowledgement (inbound to Learning Resources from trading partner)

ISA*00* *00* *qual*partner ID *12*8475738400
*081027*0111*U*00401*000002075*0*P*>~
GS*FA*partner ID*6136010000*20081027*0111*2075*X*004010~
ST*997*0001~
AK1*PO*407~
AK9*A*3*3*3~
SE*4*0001~
GE*1*2075~
IEA*00001*000002075~