



Item Tracking

Quick Guide

LS Retail NAV 6.1

Author : STK/HK
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1 Introduction

1.1 The Purpose of this document

The purpose of this document is to give a quick overview of Item Tracking. It is intended for partners and system administrators as well as sales and marketing purposes.

1.2 Functional Overview

Item Tracking functionality enables item tracking in LS Retail NAV. It enables the purchase, sale and transfer of tracking specific item and the document can travel to different locations using an InStore document. This functionality enables item tracking using InStore documents and enables Item tracking through ICT Mirrors. At POS, tracking specific item can be sold with lot/serial details and expiration date and this sale can be replicated to store.

While making sale at POS, if barcode with lot/serial will be scanned or entered, system will pick the lot/serial associated with that barcode. On selection of item, inventory lookup form will be opened showing all the available lot-/serial numbers for that particular item. If lot/serial is available but already expired and item is having strict expiration, then system wouldn't allow sale of that item.

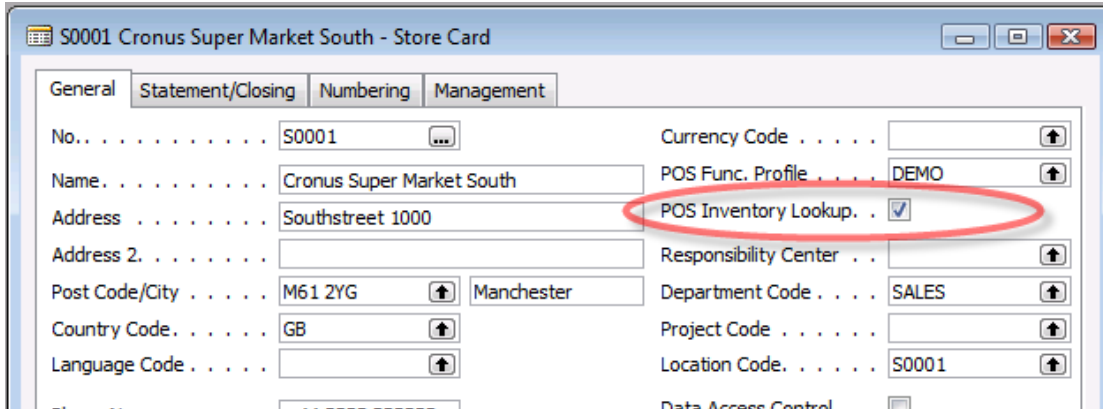
This module is an extension of standard Dynamics NAV Item Tracking and the aim is to provide the standard behavior to all parts of LS Retail NAV. The main focus is on InStore Management and also to upgrade how the POS handles serial no. and add the lot no. functionality. Most of the setup needed is part of standard Dynamics NAV setup with the two following exceptions: Firstly defining and setting up the inventory lookup which is used to support serial and lot no. availability and validation on the POS and secondly defining of serial-/lot no. embedded barcodes.

2 Setup Item Tracking

2.1 Setup Inventory Lookup

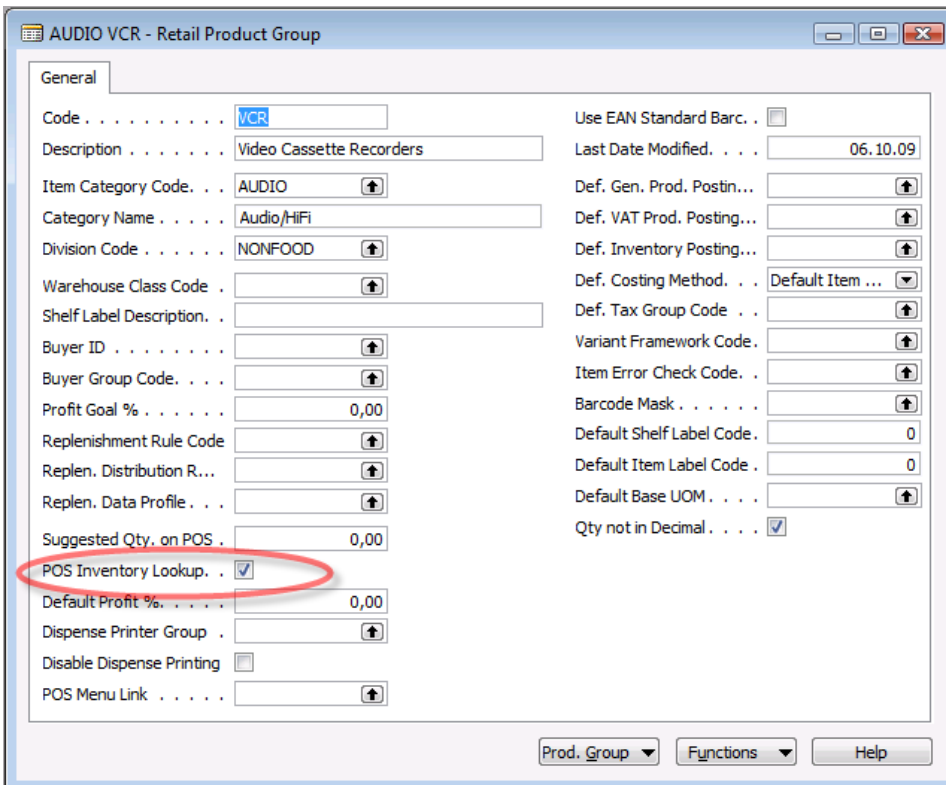
For the serial and lot no. lookup and validation to work on the POS you must define inventory lookup for item with serial or lot no. item tracking. In this case both for the product groups and the stores involved.

First set the store to use inventory lookup. Open the **Store Card** (click on **LS Retail – BackOffice, Setup, Store Card**). In this form place a check mark in the **POS Inventory Lookup** field.



The screenshot shows the 'Store Card' form for 'S0001 Cronus Super Market South'. The 'General' tab is active. The 'POS Inventory Lookup' checkbox is checked and circled in red. Other fields include: No. S0001, Name: Cronus Super Market South, Address: Southstreet 1000, Post Code/City: M61 2YG Manchester, Country Code: GB, Currency Code, POS Func. Profile: DEMO, Responsibility Center, Department Code: SALES, Project Code, Location Code: S0001, and Data Access Control.

Next set the product group to use inventory lookup. Open the Retail Product Group VCR: (Click on **LS Retail – BackOffice, Setup, Item, Groups, Product Groups**), find the product group VCR and from menu button Product Group click Card (**Shift + F5**). In this form place a check mark in the **POS Inventory Lookup** field.



The screenshot shows the 'Retail Product Group' form for 'AUDIO VCR'. The 'General' tab is active. The 'POS Inventory Lookup' checkbox is checked and circled in red. Other fields include: Code: VCR, Description: Video Cassette Recorders, Item Category Code: AUDIO, Category Name: Audio/HIFI, Division Code: NONFOOD, Warehouse Class Code, Shelf Label Description, Buyer ID, Buyer Group Code, Profit Goal %: 0,00, Replenishment Rule Code, Replen. Distribution R..., Replen. Data Profile, Suggested Qty. on POS: 0,00, Default Profit %: 0,00, Dispense Printer Group, Disable Dispense Printing, POS Menu Link, Use EAN Standard Barc., Last Date Modified: 06.10.09, Def. Gen. Prod. Postin..., Def. VAT Prod. Posting..., Def. Inventory Posting..., Def. Costing Method: Default Item..., Def. Tax Group Code, Variant Framework Code, Item Error Check Code, Barcode Mask, Default Shelf Label Code: 0, Default Item Label Code: 0, Default Base UOM, Qty not in Decimal: checked.

Note that item inventory lookup can also be set on item category level.

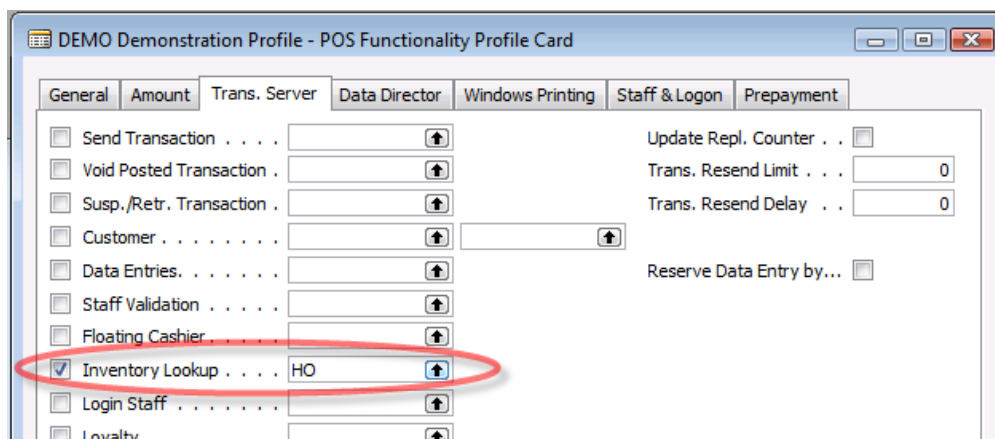
2.2 Update the Inventory Lookup table

In order for the inventory lookup to work, the inventory lookup table must be updated on a regular basis. This is done by running the codeunit **POS Transaction Server Utility (99008909)** which is normally done by a Scheduler Job. This can also be run manually both from the store card and the product group card.

Note that this table is also updated when posting positive stock (purchase, positive adjustment, return sale and so on) for serial and lot item tracking items with active POS inventory lookup setup. So in general, if the inventory lookup is only used for item tracking, the codeunit only needs to be run once to get start values and after the normal posting of items should update the table.

2.3 Setup with Transaction Server

Inventory lookup for item tracking items can be supported through the Transaction Server. To set this up go to POS Functionality Profile Card (click on **LS Retail – POS, Profiles, Functionality Profile**). On the Trans. Server tab place a check mark in the **Inventory Lookup** field and enter the correct distribution Location.



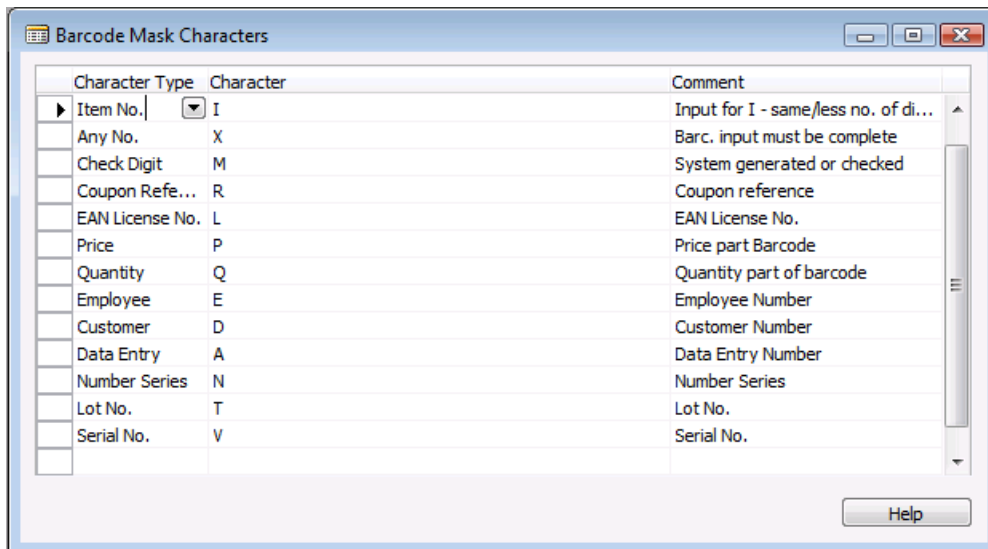
2.4 Setup Item Tracking

For information on how to set up item tracking codes and item tracking in general refer to the standard Dynamics NAV documentation.

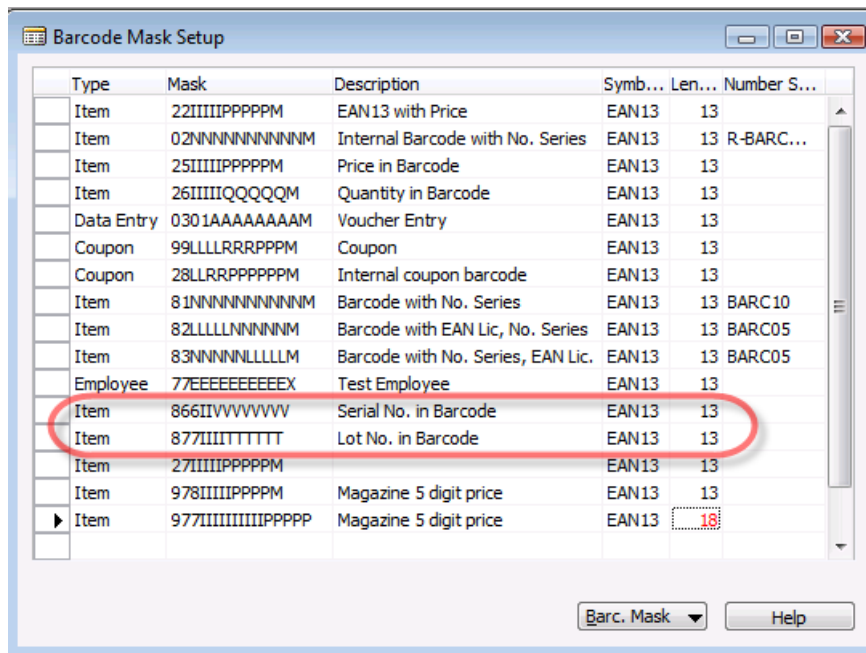
2.5 Setup Barcodes

To define serial-/lot no. embedded barcode, create a barcode mask with serial or lot barcode segments to match the length of the no. series used to assign serial or lot no.

First (if not already existing) define the barcode mask character to use for serial and lot no. Go to Barcode Mask Characters Click on **LS Retail – BackOffice, Setup, Item, Barcodes, Barcodes Mask Characters** to open the relevant form. In form, define character for serial and lot no. In this case the characters **T** and **V**.



Next define the barcode mask to match the serial or lot no. to use. To open the Barcode Mask Setup click on **LS Retail – BackOffice, Setup, Item, Barcodes, Barcodes Mask Setup**.



2.6 Set the POS to Show Serial-/ Lot No.

You can set the POS to display serial-/lot no. on the POS journal lines. Go to Interface Profile Card (**LS Retail – POS, Profiles, Interface Profile**). On the Journal tab place a check mark in the **View Lot Number** and **View Serial Number** fields.

PPOS - Interface Profile Card

General Journal Main Menu Add. Menus Number Pad Bitmaps Input Inform. Total Other Startup/Login Pop-up

Journal Width	<input type="text" value="13940"/>	View Number	<input type="checkbox"/>
Journal Height.	<input type="text" value="6717"/>	View Description.	<input type="checkbox"/>
Journal XPos	<input type="text" value="32"/>	View Quantity	<input checked="" type="checkbox"/>
Journal YPos	<input type="text" value="3268"/>	View Price.	<input checked="" type="checkbox"/>
Small Font and Lines . . .	<input type="checkbox"/>	View Disc. %	<input type="checkbox"/>
Journal Scroll Bar	<input checked="" type="checkbox"/>	View Amount	<input checked="" type="checkbox"/>
Journal Scroll Page Size .	<input type="text" value="0"/>	View Guest	<input type="checkbox"/>
Qty and Price in Descr. .	<input type="checkbox"/>	View Menu Type.	<input type="checkbox"/>
		View Lot Number	<input checked="" type="checkbox"/>
		View Serial Number . . .	<input checked="" type="checkbox"/>
		View Prom./Discount G...	<input checked="" type="checkbox"/>
		View Staff.	<input type="checkbox"/>
		View Prepayment	<input type="checkbox"/>
		View Pos Info	<input type="checkbox"/>

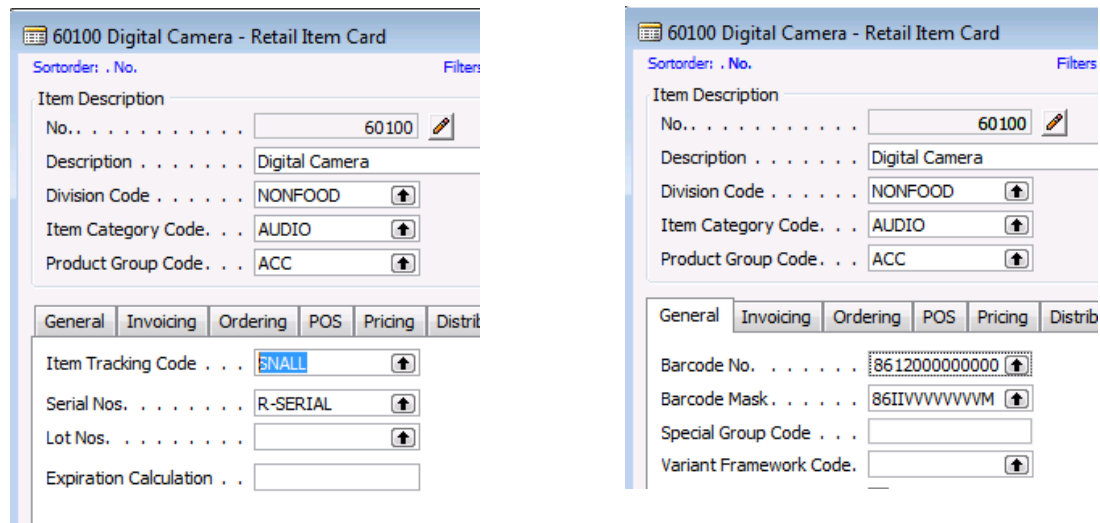
3 Using Item Tracking

The general purpose of the item tracking is to be able to track item from purchase to sale or from the time it arrives through the back door until leave through the front door.

In this case we will set up an item with item tracking and follow it from purchase to sale.

3.1 Item Tracking for a Item

Open the Retail Item Card by clicking on **LS Retail – BackOffice, Retail Item Card**. Either create new item or find item 60100. On the Tracking tab select the correct Item Tracking Code and set the corresponding Serial or Lot no. series.



The image shows two screenshots of the '60100 Digital Camera - Retail Item Card' form. The left screenshot shows the 'Tracking' tab with the following fields: Item Tracking Code (SNALL), Serial Nos. (R-SERIAL), Lot Nos., and Expiration Calculation. The right screenshot shows the 'General' tab with the following fields: Barcode No. (861200000000), Barcode Mask (86IIVVVVVVWM), Special Group Code, and Variant Framework Code.

If used, define a barcode mask and barcode matching the mask on the general tab. Note the barcode has the correct prefix and unique identifier for the item and is the stored filled with zeros.

3.2 Purchase

Purchase can be posted either directly through the Retail Purchase Order form or through a Retail Receiving document. The document is normally created as retail order but the receiving and posting batch can be either done directly or by the receiving document.

3.2.1 Retail Purchase Order

Go to Retail Purchase Order by clicking on **LS Retail - InStore Mgmt, Purchasing, Retail Purchase Order**. Create a normal purchase order and enter item line for item 60100 and quantity as 10.

Before the order can be posted, item tracking information must be entered for the item tracking item. This can be done by entering manual no. or by assigning no. from assigned no. series. Go to Menu Button Lines and select **Item Tracking Lines**. From the Function menu button select **Assign Serial No.** and assign all 10 numbers.

Close the form and you are back in the order. Now the order is ready to post.

3.2.2 Retail Receiving

Create the purchase order in the same way as before but do not assign any serial no. Now go to Retail Receiving through **LS Retail - InStore Mgmt, Receiving, Retail Receiving**. Create a receiving document and assign the purchase order to it. Confirm the receiving; enter the quantity 8 to receive and the hit function Assign Serial No. to get.

Confirm the document again and post.

Note that a similar process is valid for Retail Purchase Return Order, except the return orders work with an already existing inventory.

3.3 Transfer

To transfer item tracking items between stores, you use InStore Management. First create transfer order in the sending store. Go to transfer order To Be Picked (**LS Retail – InStoreMgmt, Transfer, To Be Picked**). Create transfer order and enter an item line for item 60100 and quantity as 4.

Before the order can be posted, item tracking information must be entered for item tracking item. Go to the menu button **Lines** and select Item Tracking Lines/Shipment. Use the **Serial No.** assist button to select available serial no.

Close the form and you are back in the order. Now the order is ready to post.

Now a user at the receiving store can receive the transfer order. Go to transfer order To Be Received through **LS Retail - InStore Mgmt, Transfer, To Be Received**. Change the quantity to receive if needed, in this case change the actual Quantity to 3.

H01304 - Retail Transfer To Be Received

General | Transfer-from | Transfer-to | Foreign Trade

No. H01304 Posting Date 25.11.09

Store-from S0001 Department Code SALES

Transfer-from Code S0001 Project Code

Store-to S0004 Status Released

Transfer-to Code S0004 Buyer ID STEFAN

In-Transit Code OWN LOG. Created By Source Code

InStore Reference No. HOIS00000066 Buyer Group Code

Pre Receive Referenc...

Item No.	Description	Quantity	Unit of M...	Actual Qty. t...	Qty. Difference	Shipmen
60100	Digital Camera	4	PCS	3	-1	25.11.

Order | Line | Functions | Posting | Print... | Help

Before the order can be posted, item tracking information needs to be updated for item tracking item. Go to menu button Lines and select Item Tracking Lines/Receipt. Adjust the quantity to handle according to the receiving quantity. In this case we are missing serial no. 54263403.

60100 Digital Camera - Item Tracking Lines

Source Item Trac... Undefined

Transfer ...

Quantity 4 4

Qty. to Handle 3 3

Item Tracking Code SMALL SN specific tracking

A. Serial No.	A. Lot No.	Quantity...	Qty. to ...
54263401		1	1
54263402		1	1
54263403		1	0
54263404		1	1

Line | Functions | Help

Close the form and you are back in the order. Now the order is ready to post.

Note that picking/receiving document can be used to process transfer orders in a similar way as for purchase orders.

3.4 Sell on Sales Order

To sell item tracking items go to Retail Sales Order by clicking on **LS Retail - InStore Mgmt, Sales, Retail Sales Order**. Create a normal sales order and enter an item line for item 60100 and quantity as 3.

The screenshot shows a software window titled "H01284 The Cannon Group PLC - Retail Sales Order". It has several tabs: General, Invoicing, Sourcing, Shipping, Payment, Instructions, Communication, and Retail. The "General" tab is active. Fields include: No. (H01284), Posting Date (25.11.09), Sell-to Customer No. (10000), Order Date (25.11.09), Sell-to Contact No. (CT000001), Document Date (25.11.09), Sell-to Customer Name (The Cannon Group PLC), Requested Delivery Date, Sell-to Address (192 Market Square), Promised Delivery Date, Sell-to Address 2, Estimated Delivery Date, Sell-to Post Code/City (B27 4KT, Birmingham), External Document No., Sell-to Contact (Mr. Andy Teal), Salesperson Code (PS), No. of Archived Versions (0), Campaign No., Store No. (S0001), Responsibility Center (BIRMINGHAM), Location Code (S0001), Retail Special Order (checkbox), Sales Type, and Status (Open). Below the fields is a table with columns: T., Barcode, No., Variant C..., Description, Location ..., Unit of M..., Quantity, Unit. The table contains one row: Item 60100, Digital Camera, S0001, PCS, 3. At the bottom are buttons: Order, Line, Functions, Posting, Print..., Help.

Before the order can be posted, item tracking information has to be entered for item tracking item. Go to the menu button Line and select Item Tracking Lines. Use the Serial No. assist button to select available serial no.

The screenshot shows a software window titled "60100 Digital Camera - Item Tracking Lines". It has fields for Source, Item Trac..., and Undefined. Below these are fields for Sales Line: Quantity (3), Qty. to Handle (3), Qty. to Invoice (3). There is also an Item Tracking Code field with "SNALL" and "SN specific tracking". Below is a table with columns: A. Serial No., A. Lot No., Quantity..., Qty. to ..., Qty. to I... The table contains three rows: 54263143, 54263144, 54263145. At the bottom are buttons: Line, Functions, Help.

Close the form and you are back in the order. Now the order is ready to post.

3.5 Sell on POS

When selling item tracking items on the POS the user can either enter (scan) an embedded barcode or enter an item number. When using embedded barcode the process of selecting item and entering serial-/Lot no is one step, but when entering the item the user has to provide serial-/Lot no. either by doing lookup or by entering a known number.

Start the POS; click on **LS Retail – POS, POS Client**. Log on as normal user and enter item 60100.

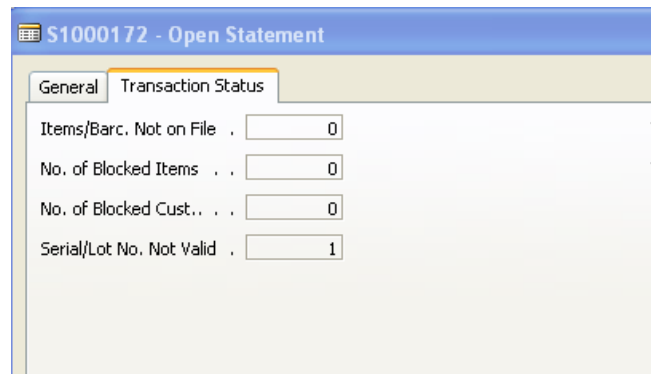
Press the command **Lookup** to get list of available serial no.

Select number 54263027 and press **OK**.

To sell another item/serial number, enter embedded barcode with the serial no. 54263120. The prefix for the barcode is 86; the item par is 12 and then comes the serial no. and the check digit (8612542631200).

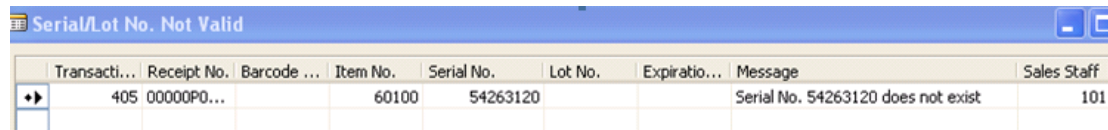
To finish the sale press Total and pay with cash.

Some errors regarding item tracking can occur when working with statements. To solve these errors a user might have to change or modify serial or lot information entered at the POS. The number of item tracking errors is shown in the Open Statements form under the transaction Status tab after calculation.



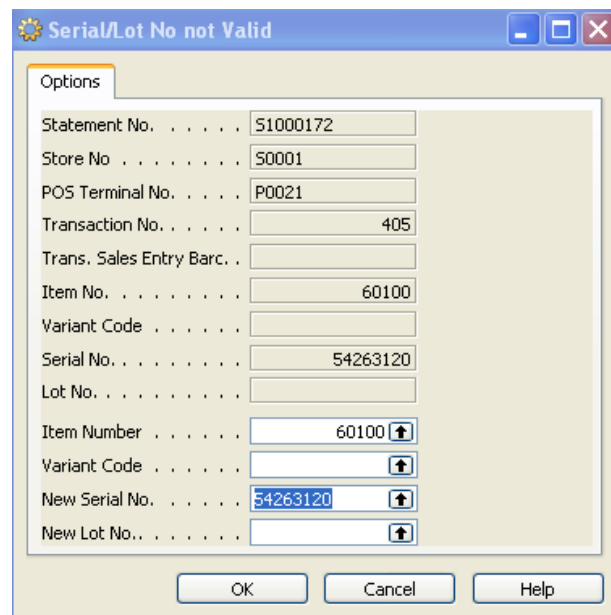
Field	Value
Items/Barc. Not on File	0
No. of Blocked Items	0
No. of Blocked Cust.	0
Serial/Lot No. Not Valid	1

To fix, either drill down on the field or press the menu button Statement/Serial/Lot No. Not Valid to get a list.



Transacti...	Receipt No.	Barcode ...	Item No.	Serial No.	Lot No.	Expiratio...	Message	Sales Staff
405	00000P0...		60100	54263120			Serial No. 54263120 does not exist	101

Press the menu button Function/Correct Serial/Lot No. to get a form to fix the error.



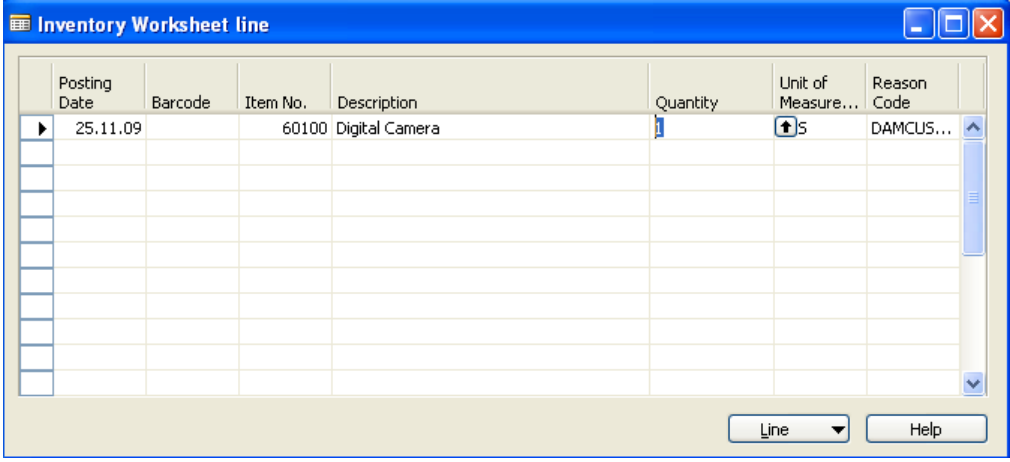
Statement No.	S1000172
Store No.	50001
POS Terminal No.	P0021
Transaction No.	405
Trans. Sales Entry Barc.	
Item No.	60100
Variant Code	
Serial No.	54263120
Lot No.	
Item Number	60100
Variant Code	
New Serial No.	54263120
New Lot No.	

In this case select available (correct) serial no. and hit ok.

Now the statement can hopefully be posted without errors.

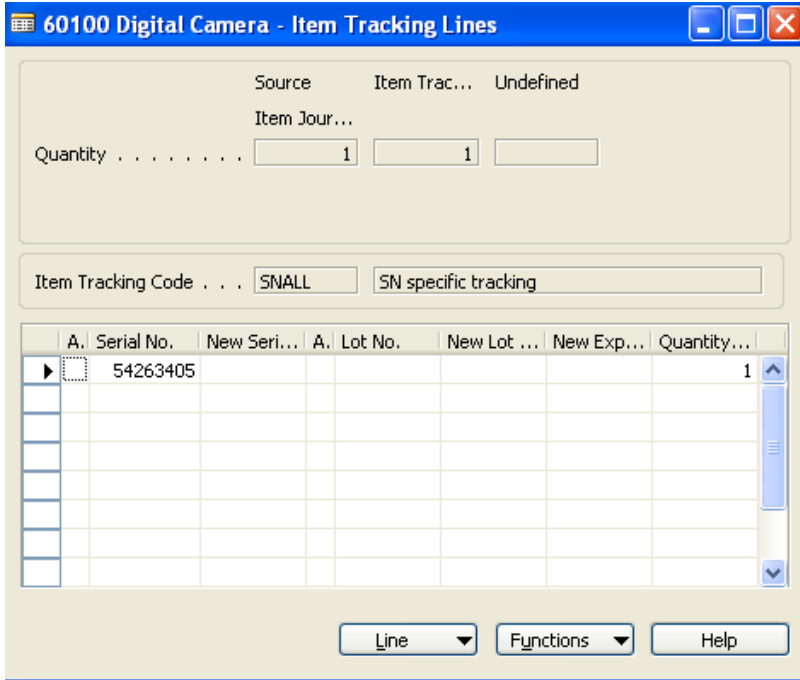
3.6 Use with Worksheets

When working with item tracking items in InStore Mgmt, item tracking information must be entered before a worksheet line can be posted. In general the same applies to all stock adjusting worksheets. Go to Stock Negative Adjustment, **LS Retail – InStore Mgmt, Worksheets, Stock Negative Adjust**. Select the mask **Damaged by Customer** and press **F5**; enter item 60100 and quantity 1.



Posting Date	Barcode	Item No.	Description	Quantity	Unit of Measure...	Reason Code
25.11.09		60100	Digital Camera	1	S	DAMCUS...

Before closing the form go to menu button **Line** and select **Item Tracking Lines**. Use the Serial No. assist button to select the serial no. to adjust.



Source Item Trac... Undefined

Item Jour...

Quantity 1 1 1

Item Tracking Code . . . SNALL SN specific tracking

A. Serial No.	New Seri...	A. Lot No.	New Lot ...	New Exp...	Quantity...
54263405					1

Close the form and the worksheet line form. Hit **F9** to confirm the mask and then **F11** to post.