User Manual

For EPOS 4 Excel v1.1

Version: 26/1/2012

Contents

License Agreement

The GNU Lesser General Public License version 3 which covers EPOS 4 Excel can be found in Appendix B

1. Introduction

What is EPOS 4 Excel?

EPOS 4 Excel (E4E) is a Microsoft Excel macro enabled workbook which provides a basic electronic point of sale (EPOS) system. E4E is programmed in Excel VBA and uses Excel worksheets as the basis of its user interface. It incorporates the ability to make sales, print receipts (on a receipt printer or a normal printer), keep track of stock, store customer orders for later processing and it can even cope with sales promotions (monetary discounts, % discounts, buy X get Y free, buy X for £ Y). E4E was not designed to be a complete EPOS system with all the complex functions you would ever need. It was originally written to be used in conjunction with an internet based computerised accounting / stock management / sales system. In this case E4E enables sales to be made off-line when an internet connection is not available. The sales data is stored in a customisable .CSV (comma separated values) format which can be then uploaded to your separate computerised accounting / stock management system at a later convenient moment.

Does it work? E4E has been tested extensively by an internet book seller that also sets up temporary bookstalls. They have used it in environments with single tills and multiple tills networked together.

System Requirements

Essential:
Microsoft Excel 2007 or later installed on every computer you wish to use E4E on

Optional:
USB barcode reader
USB receipt printer (NOTE: E4E has only been tested with the Star TSP113 receipt printer) OR an ordinary printer
A computer network to enable the connecting of multiple tills together (See Appendix A for a simple example of how to do this)
A separate way of processing credit / debit card payments

2. Opening EPOS 4 Excel and Enabling Macros in Excel

Opening the EPOS 4 Excel worksheet

1. Download the E4E worksheet (epos4excel_v1.0.xlsm) from the website (epos4excel.weebly.com) and save to a location on your computer.
2. Open the worksheet just by double clicking on it. This will automatically open Excel and load the worksheet
3. Alternatively, open Excel and use the menu File - Open to select and open the worksheet file.

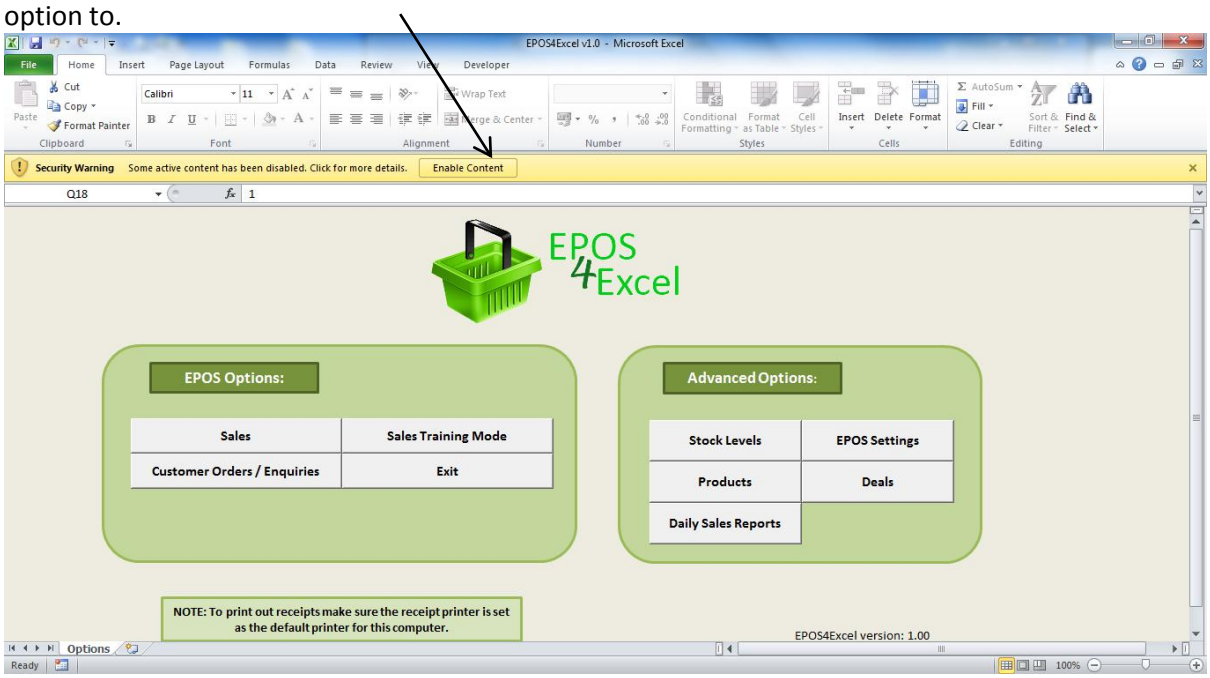
NOTE: you need Excel 2007 or later already installed on the machine to be able to use E4E

INTERNET EXPLORER USERS: Internet Explorer sometimes downloads an Excel file and changes the file extension to .zip and you won't be able to open the file in Excel. If this happens to then you will need to manually rename the file from epos4excel_v1.0.zip to epos4excel_v1.0.xlsm

(see http://www.mediacollege.com/microsoft/windows/extension-change.html for more details about changing the file extension)

Enabling macros in Excel

To use E4E macros must be enabled in Excel. When you first open the E4E you may see a security warning that the file indicates that macros which have been disabled OR that some active content has been disabled. Enable macros or the active content for the E4E workbook if you are given the option to.



Alternatively you can enable macros manually for all Excel workbooks (not just the E4E workbook) in the follow ways:

Excel 2010

First click the Excel File Menu and select Options from the left sidebar. In options, select the Trust Center from the left sidebar and click the Trust Center Settings button on the main window.
Now in Trust Center Settings dialog window, select Macro Settings from the left sidebar, choose the Enable All Macros option and hit OK.

Excel 2007

Click the Microsoft Office Button , and then click Excel Options.
Click Trust Center, click Trust Center Settings, and then click Macro Settings. Click the options that you want ie. Enable all macros (not recommended, potentially dangerous code can run).
Clicking this option to allow all macros to run.

WARNING: After you have finished using E4E it is important that if you manually enabled macros you disable them again. Follow the instructions above and choose 'Disable all macros with notification'. Leaving macros enabled can leave your computer with a security vulnerability. No liability will be accepted for any loss or damage caused by you leaving Excel macros enabled on your computer. You have been warned!!

3. Customising EPOS 4 Excel for your company

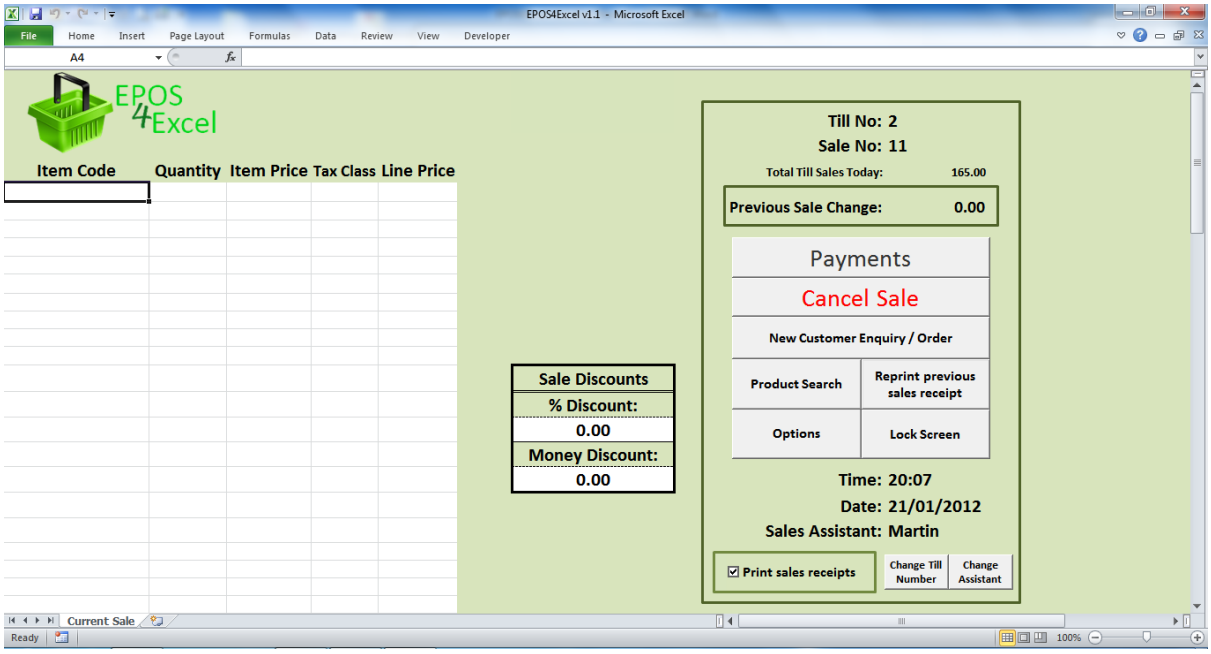
It is possible to customise E4E for your company in the following ways:

1. The logo on the sales screen
2. The logo and company details on the receipt.
3. The currency and payment types
4. The layout of the sales data storage file
5. The background colours (Advanced users only)

NOTE: These customisation changes only affect the specific instance of the E4E workbook they are made on. If you are running E4E on multiple computers over a network it is therefore a good idea to make any customisation changes to the E4E workbook before you place copies of it on all your tills. Otherwise you will need to make the customisations on all tills individually.

WARNING: The more you customise about the E4E worksheet (eg. colours, logos etc.) the more you will have to re-customise if you download a newer version of the worksheet with bug fixes or new features. Therefore it is advisable to keep your customisations a minimum!

Customising the logo on the sales screen



1. On the sales screen click the Excel 'review' menu (top of screen) and select 'unprotect sheet'
2. Click once on the 'EPOS 4 Excel' logo and press the 'delete' key on your keyboard to delete the logo.
3. Click on the Excel 'Insert' menu and select 'picture'. Choose the file containing your company logo picture and insert it. Move and adjust the size of the new logo as appropriate.
4. Click on the Excel review menu and select 'protect sheet'. Click 'ok' in the pop up box WITHOUT changing any of the other settings in the pop up box.
5. The logo has now been changed.

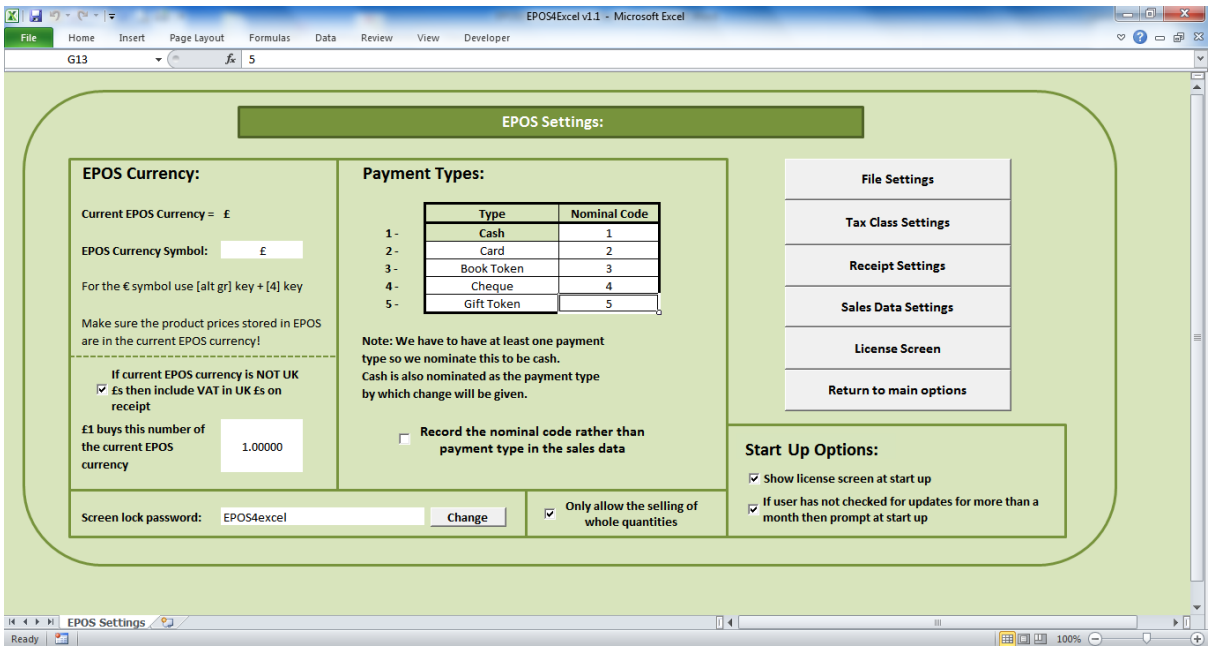
Customising the company logo and company details on the receipts

E4E enables you to print either a 'narrow receipt' using a specialist USB receipt printer or a 'wide receipt' using an ordinary USB A4 printer. You choose which will be printed using the receipt settings screen which is accessible from the EPOS settings screen.

You will need to customise the narrow receipt template and wide receipt template for your company by editing the company logo and company details. These can be found via the receipt settings screen. See editing the receipt settings section of this manual for more details about how to do this.

Customising payment types and currency

E4E allows payment for products to be made in up to five different ways. To change the available payment types in E4E go to the EPOS settings screen.



Payment type 1 will always be fixed as cash, but you can chose payment types 2-5 to be anything you want. Change the names for your payment types by clicking in the relevant boxes. If you want less than five payments simply leave any of the boxes blank.

If you are using E4E in conjunction with a computerised accounting package you can enter the nominal code corresponding to the payment type. There is then the option, by ticking the checkbox, to record the nominal code rather than the description of the payment type in the sales data.

To change the currency symbol to the one relevant for your country enter your currency symbol in the EPOS currency symbol box. This currency symbol will be used on the receipts etc. You must make sure the item prices stored in the product list are in this currency.

Customising the sales data file settings

See the sales data settings section of this user manual if you wish to customise the layout of the sales data file.

Advanced Users: Cell protection and changing the E4E screen background colours

Background colours: Unprotecting the Excel worksheet that corresponds to a specific E4E screen also allows you to:

1. Change the background colours on E4E screens by changing the cell fill / background colour.
2. Change the colours of any 'shapes' which make up part of the user interface of E4E

All user editable cells on E4E screens have a white background to indicate that these cells are editable. Do not the change the cell fill / background colour of white cells to keep this continuity in E4E, however feel free to change all other cell fill / background colours as appropriate eg. to your company colours OR a colour scheme that complements your company logo on the sales screen.

Note: On the 'current sale' worksheet column F stores the deal code related to a product in the sale. This is hidden from the user by setting the font colour to be the same as cell background colour. If you change the cell background colour on the 'current sale' worksheet then also set the font colour of column F to be the same colour as the cell background colour, this will keep the deal code information hidden from the user.

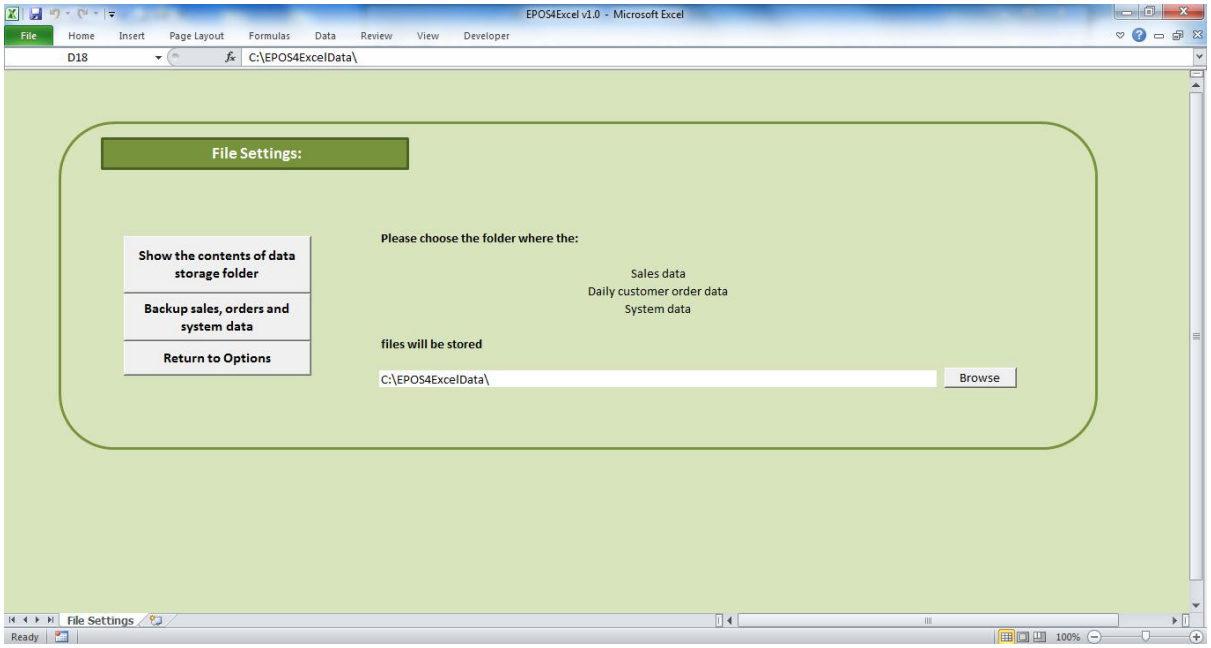
Cell protection: All worksheet cells in E4E are set to be protected from editing / locked unless they have a white background. Cells with a white background are editable and have no protection.

4. Setting up EPOS 4 Excel for use

There are various steps you need to complete to set up E4E before it can be used for making sales. Some of these steps are essential and some are optional as indicated below.

EPOS 4 Excel data file settings (Essential)

You need to choose the folder where the EPOS 4 Excel sales data, customer order data and the system data files will be stored. To choose / change the locations of the files:



1. On the file settings screen (found via the EPOS settings screen) click the 'browse' button next to the folder name and change the storage folder location as appropriate.
2. If you are connect multiple tills together over a network then the storage folder location will need to point to the same folder location on each individual instance of E4E that is running ie. on every till.

Creating a product list (Essential)

There are two ways to create a product list. Firstly, by manually adding products one by one. For more details of how to do this see the 'Add / alter product details' section of this manual. Secondly, the quickest way to create a product list is to create an excel workbook (.XLS or .XLSX) to import into E4E. The Excel workbook should have the following columns:

Column A:	SKU / Item Code / Item Barcode
Column B:	Item Description
Column C:	Gross Price (including VAT)
Column D:	Item Tax Class
Column E:	Deal code

The item data in ALL columns are essential except for the deal code column which you may leave blank. After you have created this workbook you can then import the product details into E4E. See the 'Importing Products' section of this manual for more details.

NOTES: Column headings should be placed in row 1 of the worksheet. If you place item details in row 1 this item's details will not be imported.

The SKU / Item Code should be a number if you are using a barcode scanner. If you decide to enter item codes manually you can use mixture of numbers and letters for your item codes.

The Gross price should be the price per individual item (eg. price per book) or unit price (eg. price per kilogram, which would allow you to sell loose items in varying proportions of a kilogram). On the EPOS setting screen you can choose to only allow the selling of whole number quantities of products (ie. you would then not be able to sell varying quantities of loose items)

The item tax class is a code which represents the items % VAT rate eg. T20 representing a 20% VAT rate. These codes and the corresponding % VAT rates will need to the stored E4E's tax settings. See the 'Editing Tax Settings' section of this manual for more details.

The deal code is a code which indicates the product is linked to a deal. For more details see the 'deals' section of this manual.

E4E has been successfully tested with over 8,000 products on the product list. Theoretically E4E could hold over 1 million products but it may run too slowly!!

Create an initial stock levels file (Optional)

If you wish to have an accurate measure of stock levels, then before using E4E to make sales you will need to generate an Excel workbook (.XLS or .XLSX) containing a list of the levels of stock for each item. Create the file list with the following columns (no column headings):

Column A: SKU/ item code
Column B: the initial stock levels for each item.

NOTE: The initial stock levels can be whole numbers or decimal numbers eg. if you sell items in price per kilogram the initial stock levels would be the number of kilograms you have. The item price on the product list would then be the price per kilogram.

This initial stock levels file should then be imported into E4E using the import multiple deliveries button on the stock levels screen (see later in this manual for further details). First clear the stock levels and then import the initial stock levels file. This will set the initial stock levels in E4E.

NOTE: If you do not import an initial stock levels file E4E will still record the numbers of each item sold but you will not have an accurate record of what you have in stock.

Setting up a printer and printing receipts (Optional)

To print receipts you will need the following:

- Separate USB receipt printers or an ordinary printer plugged in to every till
- The printer **must** be set as the default printer on the computer

When making sales receipts will be generated and printed if the 'print sales receipts' checkbox is ticked on the sales screen. If you do not wish to generate receipts make sure you untick this checkbox **every time** you start up E4E (the default setting on E4E on loading the worksheet is to print receipts).

NOTE: If you do not have a printer connected to the computer and you leave the print receipts checkbox ticked then receipts will be generated and stored in your computer's printer queue. The next time you attach a printer to the computer these stored receipts will then be printed out. It is therefore advisable that the checkbox is unticked if you do not have a printer attached to the computer or if the printer stops working.

You can print a test receipt to check the receipt printer is working by clicking on the 'print test receipt' button on the receipt settings or receipt templates screens (accessible via the EPOS settings screen).

If the receipts don't print, check that:

- The 'Print sales receipts' check box is ticked on the sales screen
- The relevant printer drivers are correctly installed
- The printer is set as the default printer
- The printer is connected to the computer correctly
- The printer is switched on and plugged into the mains electricity
- The printer has paper in it

If this does not solve the printing problem try the following:

Unplug the printer from the USB port. Go to the Windows start menu. Go to the control panel and open 'Devices and Printers'. Delete any printers with the name of your printer (there may be more than one). Now plug in the printer into the USB port. The computer should now recognise / install the receipt printer. Try printing out receipts again.

If paper runs out in the middle of printing a receipt you can always re-print the last sales receipt, after loading new paper, by clicking the 'reprint previous sales receipt' button on the sales screen. This option is only available if the 'print sales receipts' checkbox is ticked on the sales screen. The last receipt generated will be held in memory and you can reprint it even if you leave the sales screen and return later.

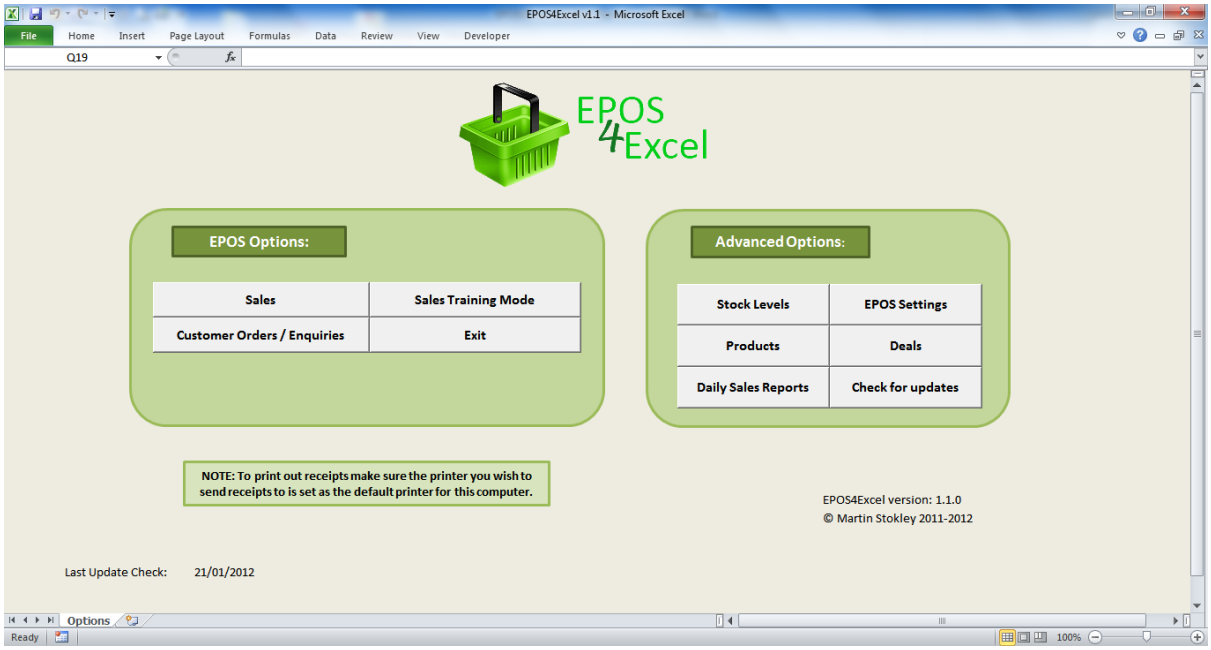
NOTE: E4E has been run successfully using the Star TSP113 receipt printer and the column width of the receipt template on the narrow receipt template screen has been set for this receipt printer. You may need to adjust the column width of the receipt template for E4E to work successfully with another receipt printer. Experimentation for your particular set up may be necessary!! See the editing receipt settings section of this manual for more details.

5. Making sales with EPOS 4 Excel

Important: Whenever manually entering numbers (eg. changing an item price, entering a payment amount, manually entering an item code) on an Excel worksheet always make sure you press the 'Enter / Return' key on the keyboard to make the system update properly.

Starting out

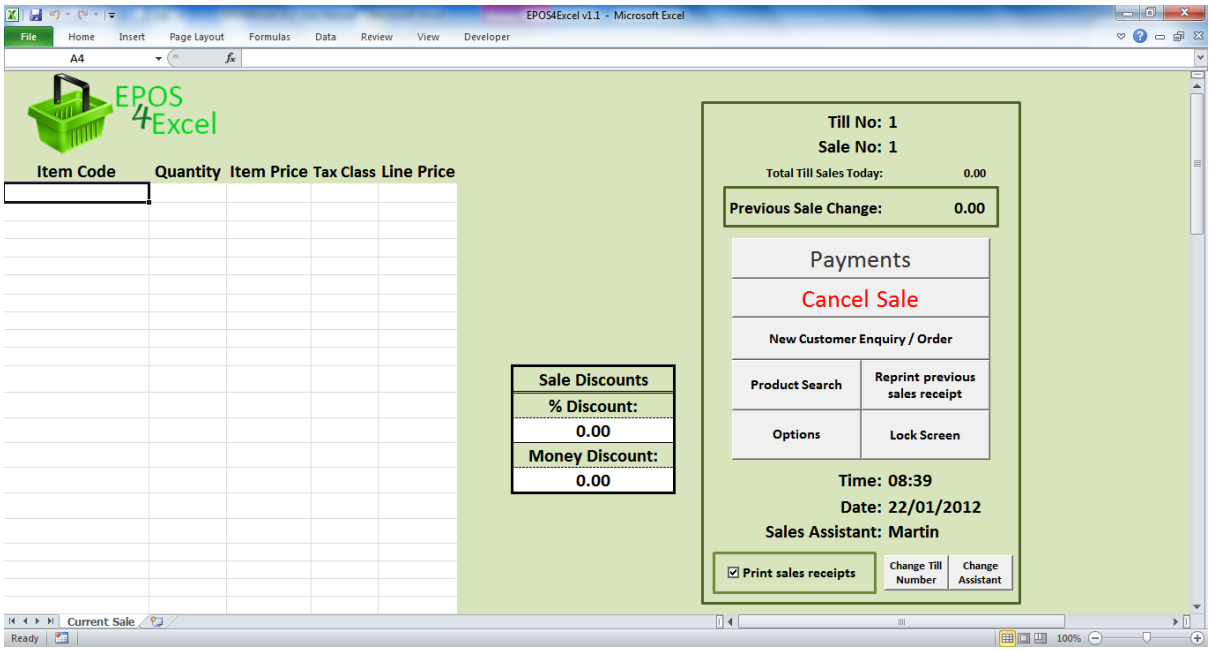
1. Open EPOS 4 Excel
2. Make sure that Macro's are enabled in Excel (See the section 'Enabling Macros in Excel') and you have added some products
3. Click on the 'Sales' button
4. You will be asked for the sales assistant first name. This will be printed on the receipt ('You were served by: XXXXXXX') and stored in the sales data so the sales assistant making the sale can be identified at a later date if necessary.
5. If no sales have been made today using 10EPOS you will be ask to enter a till number. If different people are selling in two different places on the same day you need to make sure that they use different till numbers. **NOTE:** If you make sales, then enter sales training mode and then return to make sales you will be asked for your till number again. (The sales training mode automatically sets the till number to 1.)



Adding Products to the Sale

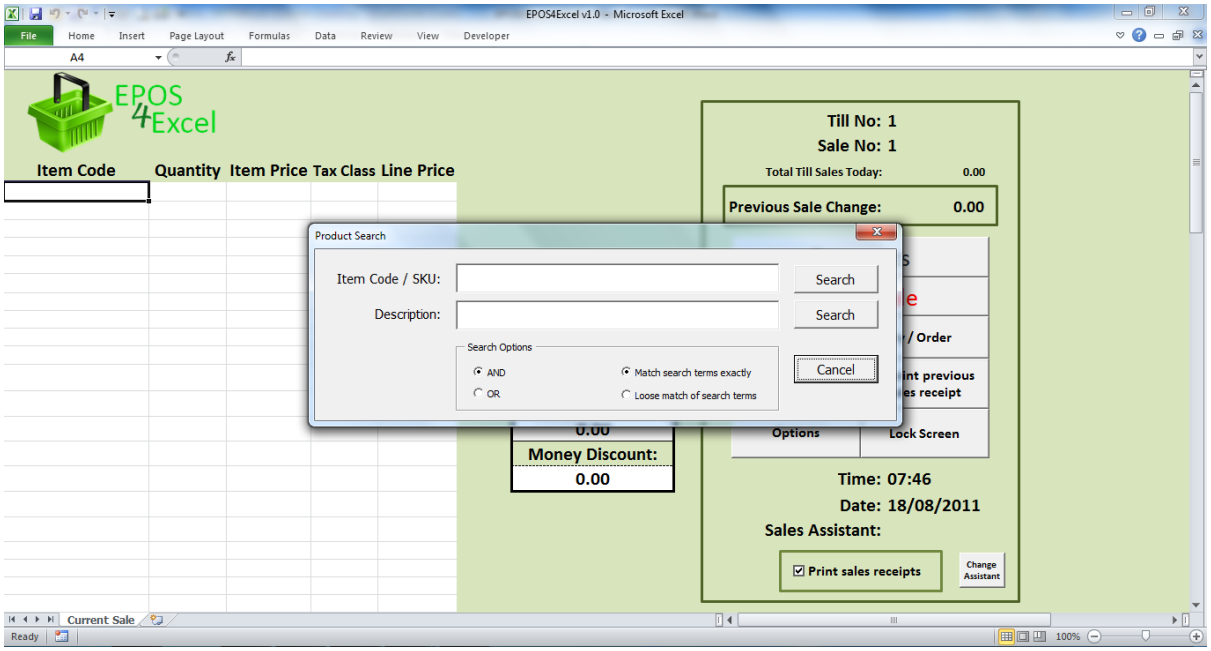
1. Scan or manually enter the barcode of the first product into the first free cell in the 'Item Code' column. The price will automatically be looked up. (Make sure you press the ENTER key if you manually enter the barcode).
2. Alter the quantity in the 'quantity' column if there are more than one of the same product. (NOTE: If you are selling loose items by weight, for example, you would enter the weight here eg. how many kilograms the customer wants to buy and your item price would then be the price per kilogram)
3. Check the 'item price' column against the price on the product. If it is different, click in the cell for the item price and type in the correct price.
4. Repeat this for each product by scanning / entering the barcode in the next free cell in the 'Item Code' column. (You cannot add more than 97 product rows in a single sale)

NOTE: LINE PRICE = QUANTITY x ITEM PRICE (You will not be able to change the line price amount)



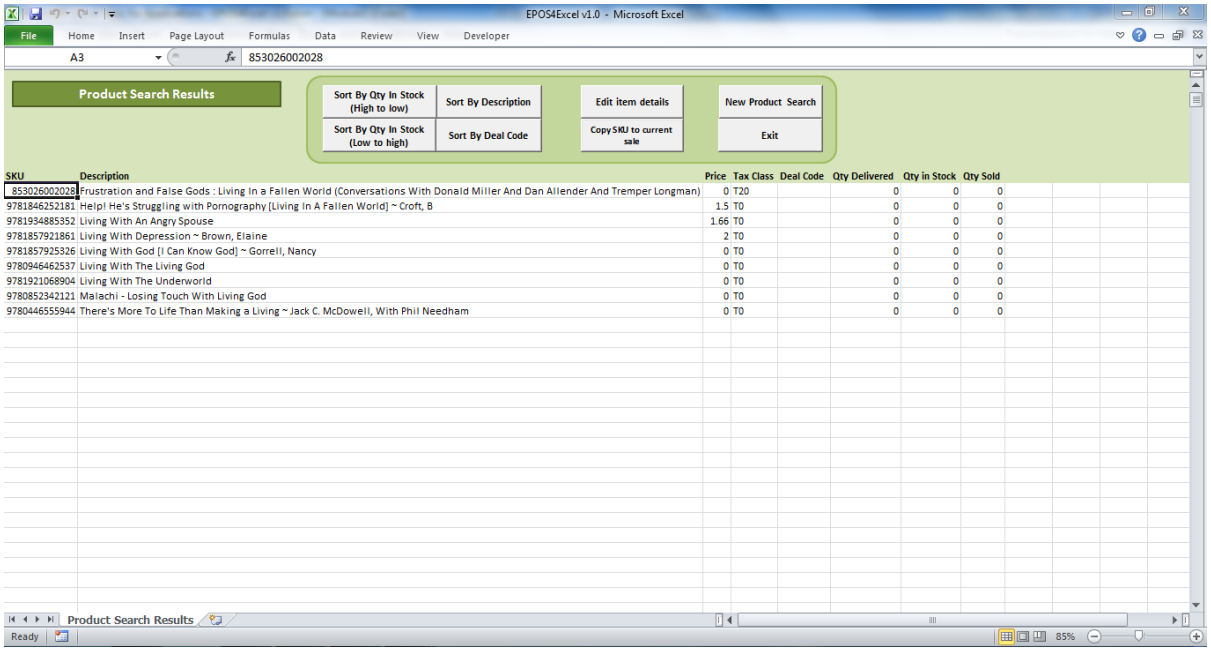
Manually looking up a product's code

If you find a product without an item code you can always look up the item's code manually. On the sales screen click the product search button. Enter your search terms in the description box and click search. For more details on searching and the search options see the products section of this manual.



You will then be shown the product search results screen with a list of products related to your search terms. Click on the item code / SKU for the product you wish to add to the sale. Click the copy SKU to current sale button and you will be returned to the sales screen with the item's code having been added to the sale list.

If the product is not found, you can always click the new product search button to try searching again.



Adding Monetary and % Discounts to the Sale

1. You can enter a global discount percentage in the '% Discount' box (You do not need to enter a % sign).
2. You can enter a monetary discount off the total sale price in the 'Monetary discount' box (You do not need to enter a £ sign).

NOTE: The order in which the discounts are applied to the sale are: Any deals (see the deals section of this manual for more details) and then 'Monetary discount' followed by the '% Discount'. Adding the monetary discount before the % discount works in the retailers favour.

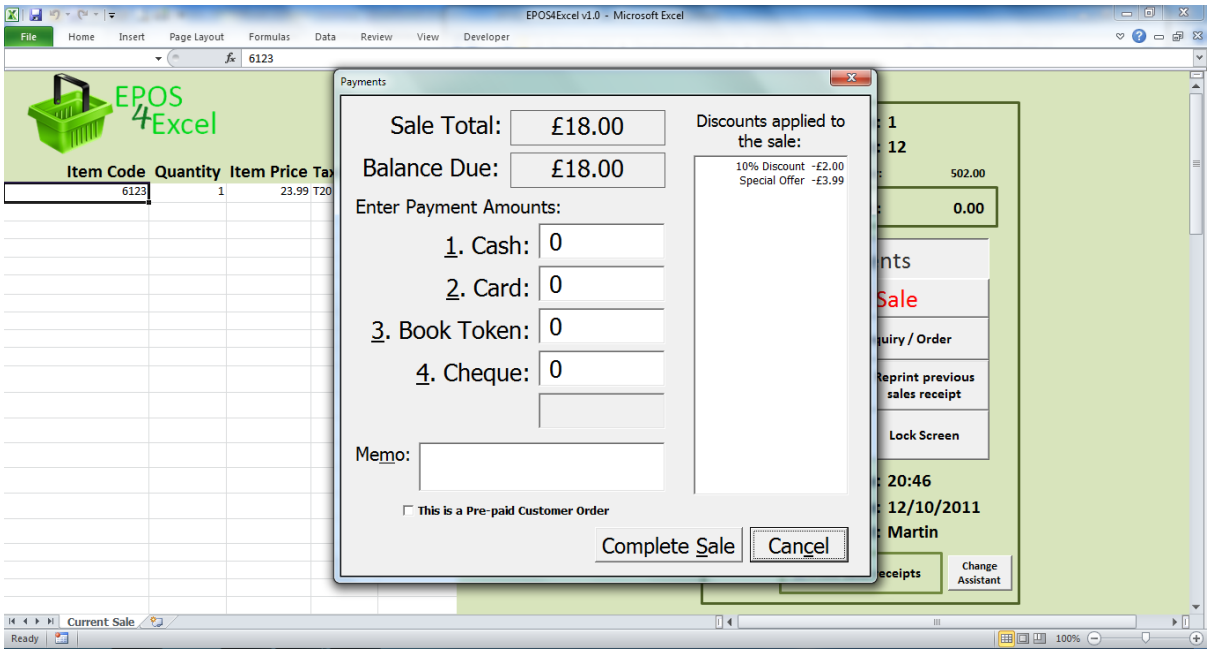
Deleting an Item from the Sale

1. In the 'Quantity' box for the item you wish to delete enter the number '0'.
2. The item will be deleted from the product list and a box will pop up confirming the item has been deleted.

Cancelling a sale

1. Click the 'cancel sale' button.
2. A box will pop up asking if you 'really want to CANCEL the sale?' Click 'Yes'.
3. Any products already entered will be cleared ready for a new sale.

Taking payment



1. Click the payments button on the sales screen.
2. The payments window will pop up displaying the sale total, balance still due and what discounts have been applied to the sale.
3. Enter the relevant payment amounts in the boxes relevant to the payment types the customer is paying with. If you click in a payment amount box that has an amount zero in it, E4E will automatically put the balance due in the payment amount box. NOTE: if you set up E4E to have less than five payment types then one or more boxes on the take payment window will be disabled.
4. In the memo box you can record any necessary relevant information to the sale eg. 'damaged stock 20% discount given'
5. If this is a pre-paid customer order then tick the pre-paid customer order box. After you have completed the sale you will then be asked for the customer details. The order details will then be stored in E4E's customer orders. NOTE: E4E will automatically add to the memo box when saving the sales data a notification that this is pre-paid customer order.
6. Any change necessary will be displayed as a negative balance due. NOTE: E4E always assumes change will be given as cash.
7. Click complete sale to finalise the sale OR click cancel to go back to the sales screen and add more products / cancel the sale completely.
8. After you have completed a sale the change that was due from that sale will be shown in the 'Previous Sale Change' box.

Keyboard shortcut's when taking payment

ALT + 1	Enter payment method 1
ALT + 2	Enter payment method 2
ALT + 3	Enter payment method 3
ALT + 4	Enter payment method 4
ALT + 5	Enter payment method 5
ALT + m	Enter a memo
ALT + s	Complete Sale
ALT + c	Cancel

Changing the sales assistant name

If you change sales assistant in the midst of using E4E to make sales you can change the sales assistant name by clicking the change assistant button on sales screen. You will be asked for a new sales assistant first name.

Locking the sales screen

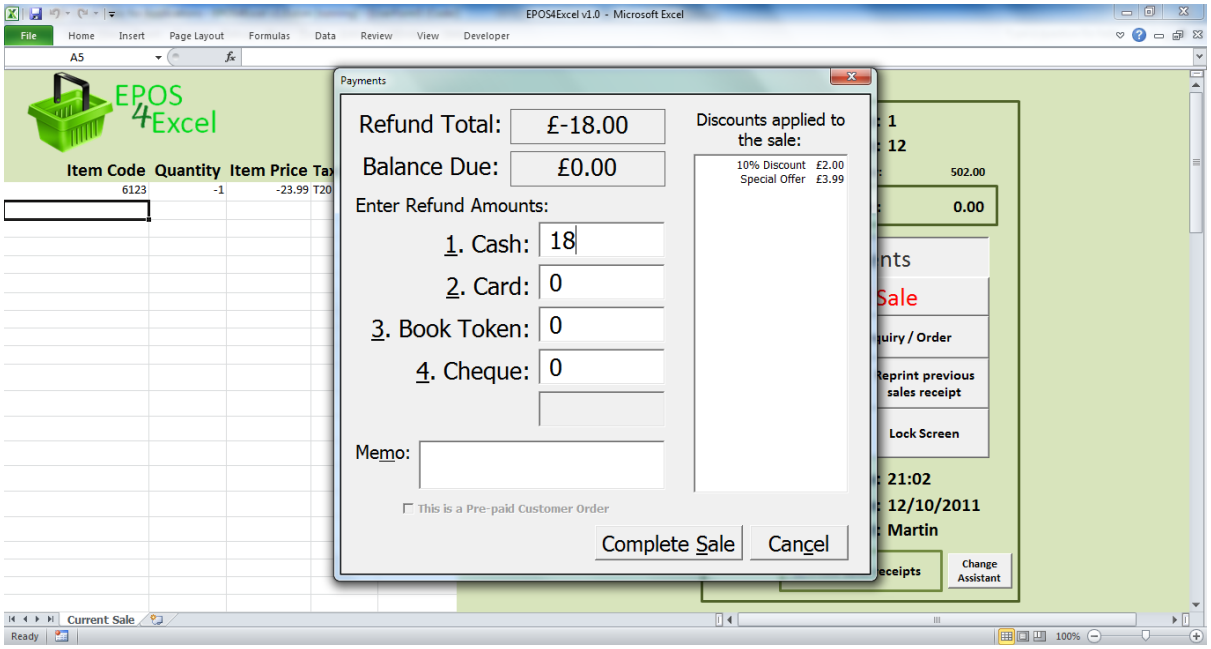
If you need to leave the till unattended for any reason you can lock the till by clicking the lock screen button on the sales screen. You will then be asked for a password to unlock the screen. You can choose your password on the EPOS settings screen. If you forget the password you can always enter 'EPOS4excel' when asked for a password and this will override any user chosen password unlocking the screen.

NOTE: Passwords are case sensitive!

Refunding Items

In E4E you cannot refund items at the same time as selling other items (ie. an exchange). If a customer wants to return items and buy different items at the same time, first complete the refund of the items and then sell the other items separately.

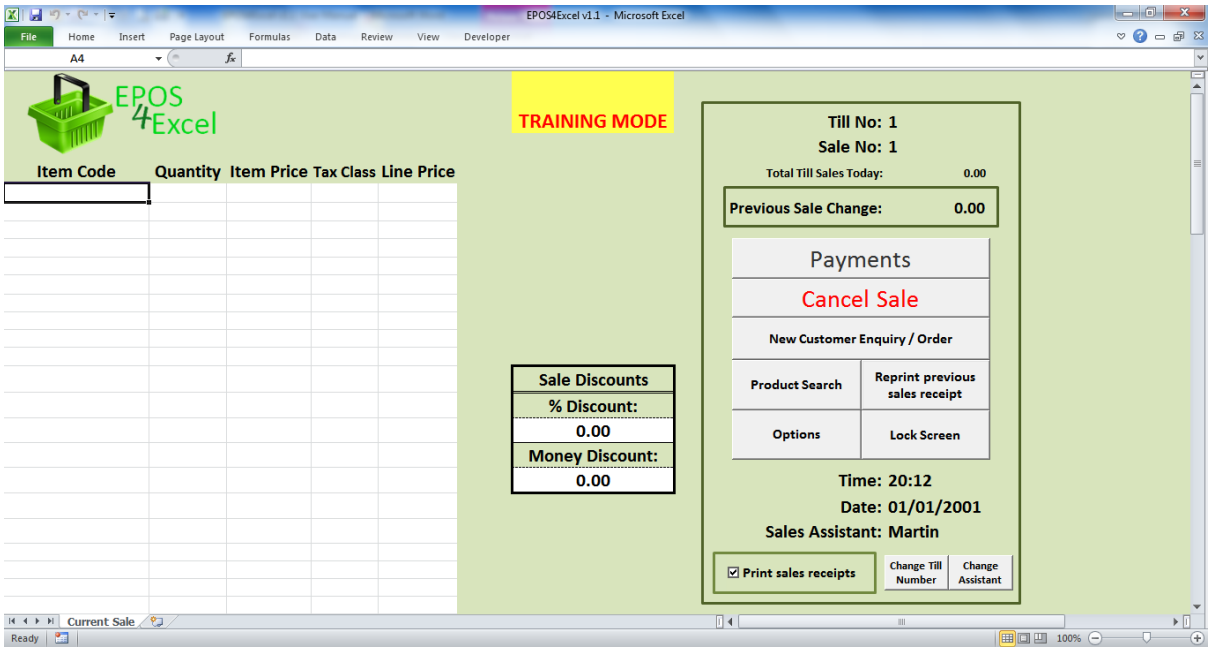
1. Scan the barcode of the first product to be refunded into the first free cell in the 'Item Code' column. The price and will automatically be looked up.
2. Change the quantity to -1
3. Check the item price is right, if not change the item price.
4. Repeat for any other items to be refunded.
5. Add the correct amount '% Discount' that was on the original sale. Add any necessary amount for 'monetary discount' (this must be entered as a positive amount).
6. Click the payments button. Enter the amount of refund next to the relevant payment type.
7. You can use the memo box for recording any details necessary regarding the refund eg. 'Money back guarantee' / 'misprinted book' or the receipt number of the original sale etc.
8. Click the complete sale button to complete the refund.



Sales training mode

E4E has a built in sales training mode. On the main options screen click the sales training mode button to enter the training mode. When you are in sales training mode you can learn how to use the sales screen functions with no sales data, customer order data, product details or stock level changes being saved. This enables new staff to get used to the sales functions without anything they do affecting any of your data.

Training mode is displayed clearly at the top of the sales screen to show you are in the sales training mode. You will exit the sales training mode when you click the options button on the sales screen.



Returning to the EPOS 4 Excel options screen

On the sales screen click the 'options' button.

Frequently Asked Questions:

How do I find out the cost of the sale so far in the middle of entering items to be sold?

Click on the take payment button and then the payments box will pop up and tell you the cost of the items in the sale so far. To return to the sale and add more items click the cancel button.

What if the customer decides they no longer want an item I've already scanned?

Change the item quantity to the number '0' and it will be deleted from the sale.

I've accidently left a blank row in the list of products for the sale, what do I do?

Do not worry, you **do not** need to cancel the sale and start again. Carry on as normal and when you come to complete the sale E4E will automatically remove any blank rows.

Can I sell an item which is not on the product list?

If the details of the item you wish to sell are not currently held on the product list then when you add the item's SKU / item code to the sale you will be requested to enter the item details to add it to the product list. Choose cancel if you do not wish to sell the item, otherwise enter the requested item details.

I want to close the till down for a couple of hours. Do I need to leave EPOS 4 Excel running?

You can simply choose to lock the sales screen and enter the password to unlock it when you return. However you do not need to leave E4E running! Exit the sales screen by clicking on the options button. Click the Exit button on the options screen and the till number will be saved. Close down the computer. Come back later and open E4E. Go to the sales screen. It will recognise that E4E has already been used for sales, so it won't prompt you for a till number but it will ask you for the sales assistant name. You can continue making sales where you left off.

The computer has crashed and I haven't saved the file. Have I lost all the data of the sales I have made?

No! Every time you complete a sale button the E4E file containing the sales data is automatically saved. The most you will have lost is the data you were entering for the current sale.

Can I enter a % discount for an individual item only?

You can only enter a global % discount or global £ discount. To enter a discount for an individual item, manually change the 'item price' as appropriate.

How do I deal with an item that is to be given away free?

It is important that any free items are still scanned in as a sale so that stock levels are kept accurate to what is actually in stock. There are two different possible situations when giving away free items:

1. In the midst of paid items there is a free item. In this case still enter the free product's item code in as normal. Change the item price to zero. Continue and complete the sale as normal.
2. All items in the sale are free. In this case enter the item codes of all the free products as normal and change all the item prices to zero. Click the payments button. You can click on the complete sale button without entering any payment amounts.

NOTE: If an item in the sale has a zero price then when you click payments you will be warned of the existence of a zero priced item in the sale and asked if you are sure you want to go ahead with taking payment. If you wish to change the price of the zero priced item, click cancel and alter the price before clicking take payment again.

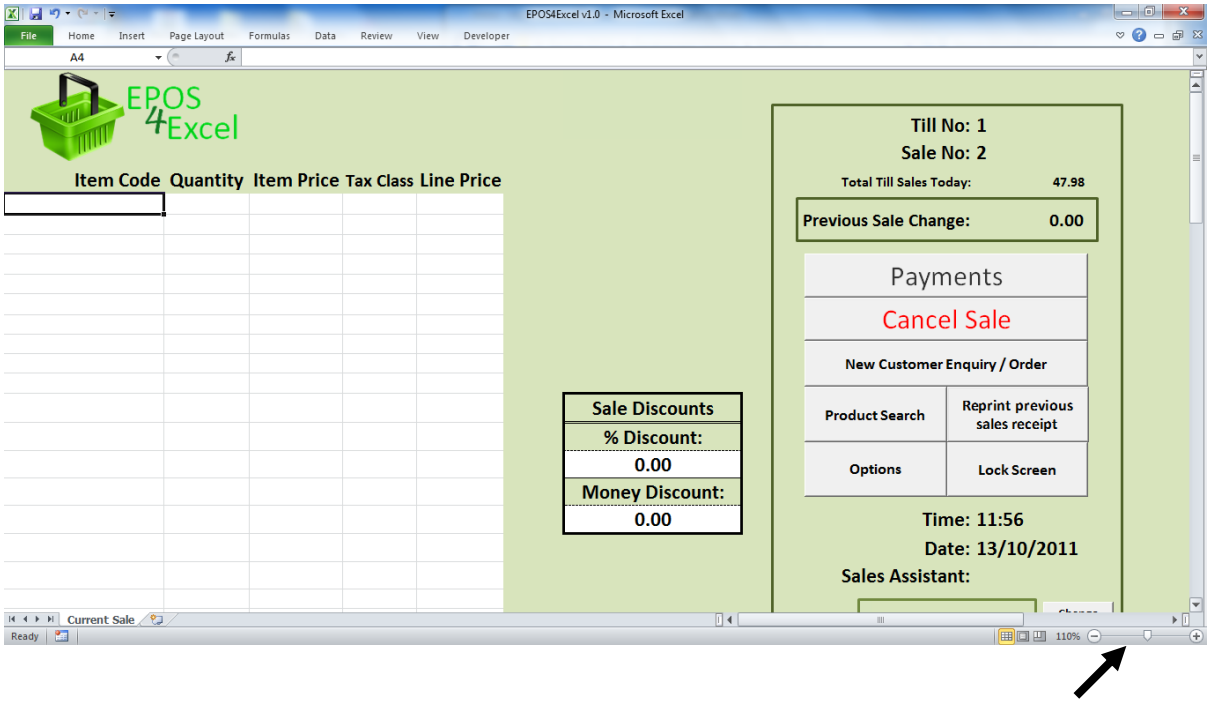
The printer ran out of paper or jammed in the middle of printing a receipt. How do I reprint the last receipt?

On the sales screen simply click the reprint previous sales receipt button. This button will only be enabled if you have the print sales receipts box ticked.

Something disastrous seems to have happened and I cannot continue to use this copy of E4E for making sales. What do I do?

You can open a new copy of the E4E worksheet. Make sure the data file settings in the new E4E file are set up the same as the E4E file you can no longer use. Click the sales button and make sure you enter the same till number as before. E4E should then automatically pick up the last sale number and total amount sold on the till today from the sales data file. You can begin to make sales again.

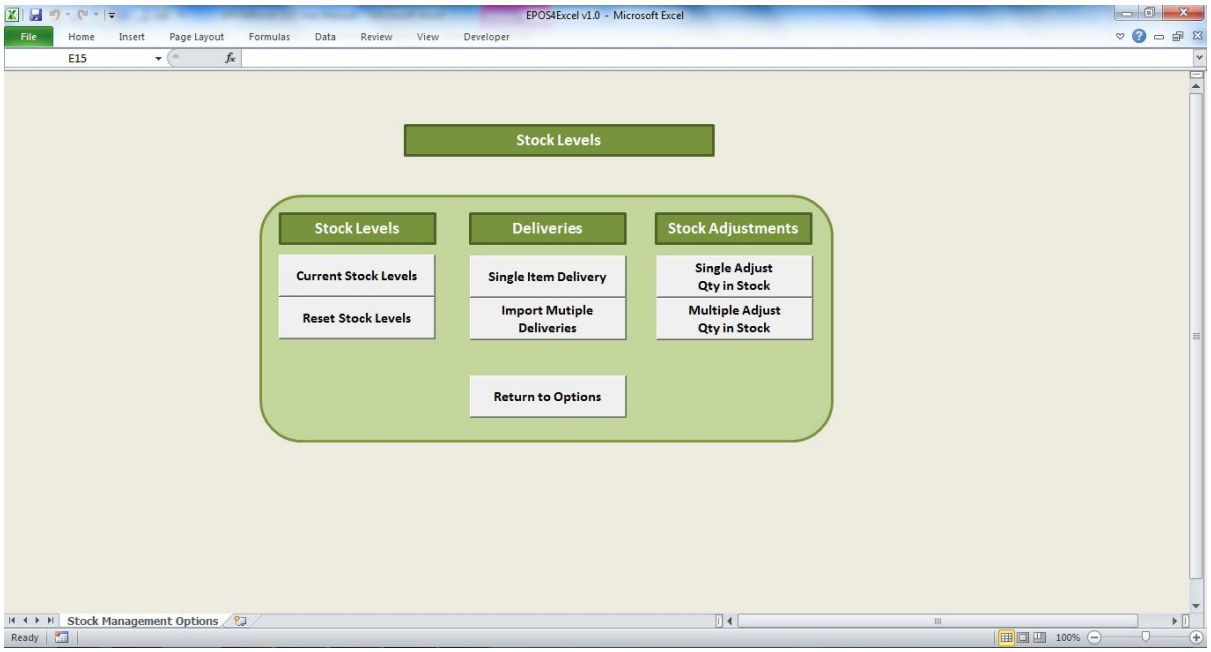
On the sales screen the box containing the information / buttons (right hand side) is too big to fit on the screen.



For some computers with a smaller resolution on the monitor this may be a problem. The way around it is to adjust the 'zoom' of the Excel window to less than 100% using the slider or + / - buttons at the bottom of the window.

5. Stock Management Functions

E4E includes basic stock management features, which means you can track stock levels of items. For accurate stock levels you must import your initial stock levels into E4E before you start selling. See the section of this manual on setting up EPOS 4 Excel for use for further details about importing initial stock levels. To access the stock management functions click the stock levels button on the main options screen.



Showing the current stock levels of all products

Click the current stock levels button on the stock levels screen. E4E will show a screen containing a list of all products and their stock levels.

You can chose to sort the list by quantity in stock (high to low OR low to high) and by description (A to Z).

You can also choose to export the current stock levels data as laid out on the screen to an excel workbook.

Resetting the stock levels

You can set the stock levels for all products back to zero by clicking the reset stock levels button on the stock levels screen. This sets quantity delivered, quantity sold and quantity in hand for all products to zero.

Warning: You will not be able to retrieve this information if you reset the stock level to zero

Adding a new delivery of a single product

You can record a new delivery of a single product by clicking the single item delivery button on the stock levels screen.

1. Enter the item code that you wish to record a new delivery for.
2. Enter how many or how much (eg. how many kilograms) of that item has been delivered.
3. The stock levels will now be updated to take into account the delivery.

Importing multiple deliveries in one go

If you have many items delivered at the same you do not have manually enter the delivery details of each single item. Create an Excel workbook (.XLS or .XLSX) with the following columns (no column headings):

Column A: SKU/ item code
Column B: quantity of the item delivered

Click the import multiple deliveries button on the stock levels screen and choose the file you have created with the delivery details. E4E will now import these multiple deliveries and update the stock levels accordingly.

You can use the import multiple deliveries process for setting up the initial stock levels of a shop:

1. Make sure all products in the shop have been added to product list
2. Reset the stock levels to zero
3. Create an Excel workbook containing the item code and initial stock level for that item in the shop (as above).
4. Then using this workbook 'deliver' all the items in your shop as above. Your initial stock levels for your shop will have been set up.

NOTE: You can only deliver products that already exist on the product list. If you are delivering a new product first you must add the product to product list before adding a delivery. See the alter / add a new product section of this manual for more details on adding new products.

NOTE: If you make a mistake with the quantity you can always add a delivery for the same item with a negative quantity to cancel out the number you previously said was delivered.

Adjusting the quantity in stock for a single item

Sometimes it may be necessary to adjust the quantity in stock of an item to keep the stock levels accurate eg. if items get stolen etc. You can do this by clicking the single adjust qty in stock button on the stock levels screen. Enter the item's code whose stock level you wish to adjust. Enter the new stock level for this item ie. how many of the item are or how much of the item is (eg. how many kilograms) currently held in stock. This will become the new stock level for this item.

Adjusting the quantity in stock for multiple items

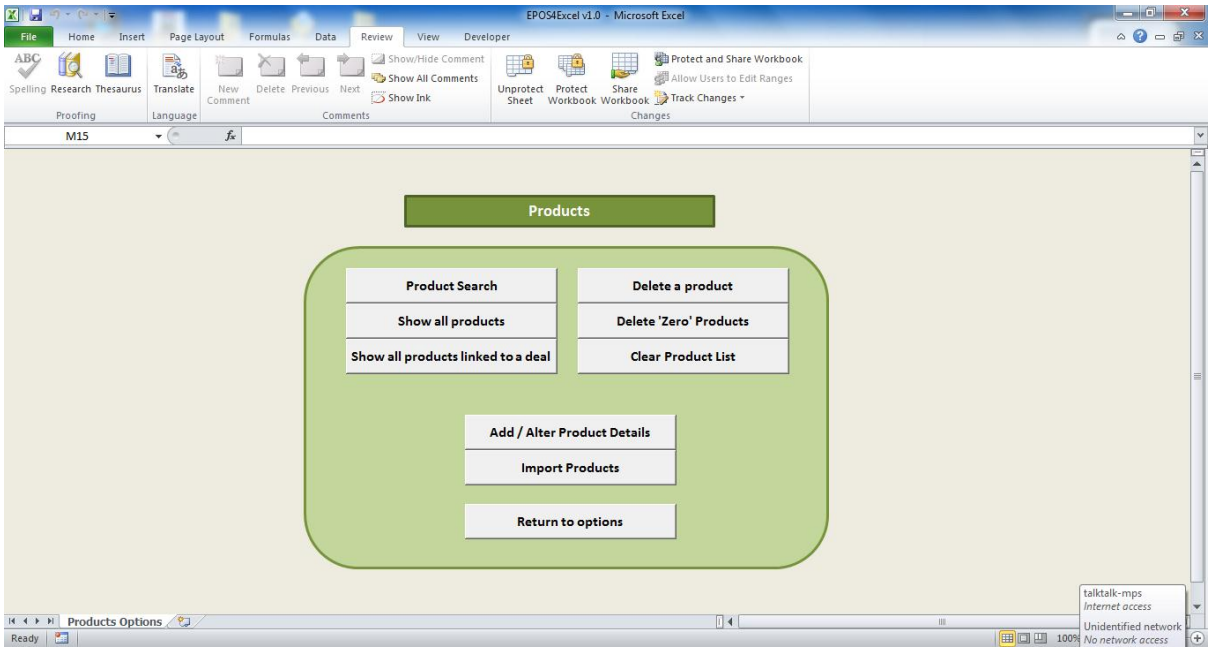
You can adjust the quantity in stock of multiple items by creating an Excel workbook (.XLS or .XLSX) with the following columns (no column headings):

Column A: SKU/ item code
Column B: the new stock level for this item ie. how many of the item are or how much of the item is (eg. how many kilograms) currently held in stock

Click the multiple adjust qty in stock button on the stock levels screen and choose the file you have created. E4E will now update the quantity in stock levels accordingly.

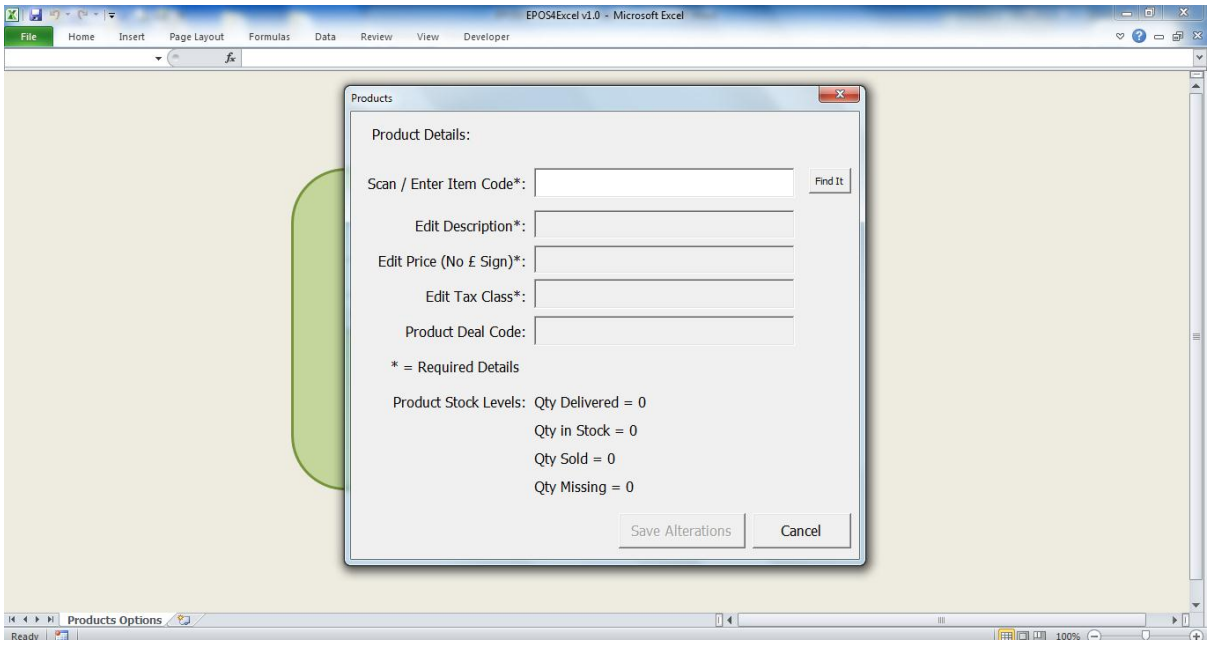
Using this process you can do a stock take for your shop and update the stock levels for all items in your shop thereby keeping them accurate.

6. Products



There are two ways to create a product list either manually adding products one by one or by importing products.

Adding or altering product details



1. Click the alter / add product details button on the products screen
2. In the pop up box enter the item code of item whose details you wish to add / alter and then press enter or click on the find it button
3. If the item is found on the E4E product list then the item details will be show for you to edit.
4. If the item is not found on the E4E product list you will told this is a new item. You then must enter a description, tax class and item price. Deal code is optional.
5. Click save to save your edits or cancel to discard them.

NOTE: If the item is already on the product list then the alter / add product pop up box will also show you the stock levels for the item. Here Qty Missing = Qty Delivered – Qty in Stock – Qty Sold

NOTE: If the item is already on the product list, altering the item code and saving alterations will create a new product with the same product details as the details of original product but different item code / sku. The original item will be kept on the product list and a new item with the changed item code will be added to the product list. To remove the original product you will have to delete this single manually (see below).

NOTE: It may be necessary during a sales session to alter the price of a product eg. if the price of the product needs to be reduced / increased due to mispricing etc. This can be done during a sale by simply altering the item price every time the product is scanned on the sales. However you can also make the price change more permanent by altering the price list using the above method.

NOTE: If you wish to edit the details of a product whose item code you don't know then see the searching for products section below for details about how to find a product by item description.

Importing products

The quickest way to create a product list in E4E is to create an excel workbook (.XLS or .XLSX) to import. The Excel workbook should have the following columns:

Column A:	SKU / Item Code / Item Barcode
Column B:	Item Description
Column C:	Gross Price (including VAT)
Column D:	Item Tax Class
Column E:	Deal code (Optional)

The item data in ALL columns are essential except for the deal code column which you may leave blank.

Column headings should be placed in row 1 of the worksheet. If you place item details in row 1 this item's details will not be imported.

The SKU / Item Code should be a number if you are using a barcode scanner. If you decide to enter item codes manually on the sales screen you can use mixture of numbers and letters for your item codes.

The Gross price should be the price per individual item (eg. price per book) or unit price (eg. price per kilogram, which would allow you to sell loose items in varying proportions of a kilogram). On the EPOS settings screen you can choose whether to only allow the selling of whole quantities of products (ie. you would then not be able to sell varying quantities of loose items)

The item tax class is a code which represents the items % VAT rate eg. T20 representing a 20% VAT rate. These codes and the corresponding % VAT rates will need to the stored E4E's tax settings. See the Tax Settings section of this manual for more details.

The deal code is a code which indicates the product is linked to a deal. For more details see the deals section of this manual.

You can then import the product details into E4E by clicking the import products button on the products screen. Choose the Excel workbook that contains the product data you wish to import. During the import the progress will be shown at the bottom of the products screen.

During a products import if the imported item code is already found on the product list then E4E will use the imported details to update the item description, item tax class, item price and deal code of the already stored item. (If there is no deal code for an item any existing deal code for that product will be kept.) New products will be added to the already existing items on the product list.

E4E has been successfully tested with over 8,000 products on the product list. Theoretically E4E could hold over 1 million products but this would probably run too slowly!!

Deleting a product from the product list

To delete a product from the product on the products screen click the delete a product button. Enter the item code / sku of the product you wish to delete. The product will be deleted from the product list.

Warning: If you delete a product then the product data and stock levels will be wiped and you will not be able to retrieve this data.

Clearing the product list

Sometimes it may be necessary to clear the product list and start again with a blank one eg. If you take temporary shops to conferences you may take different products to different conferences and so at the start of each conference it would be good to start off with a blank product list.

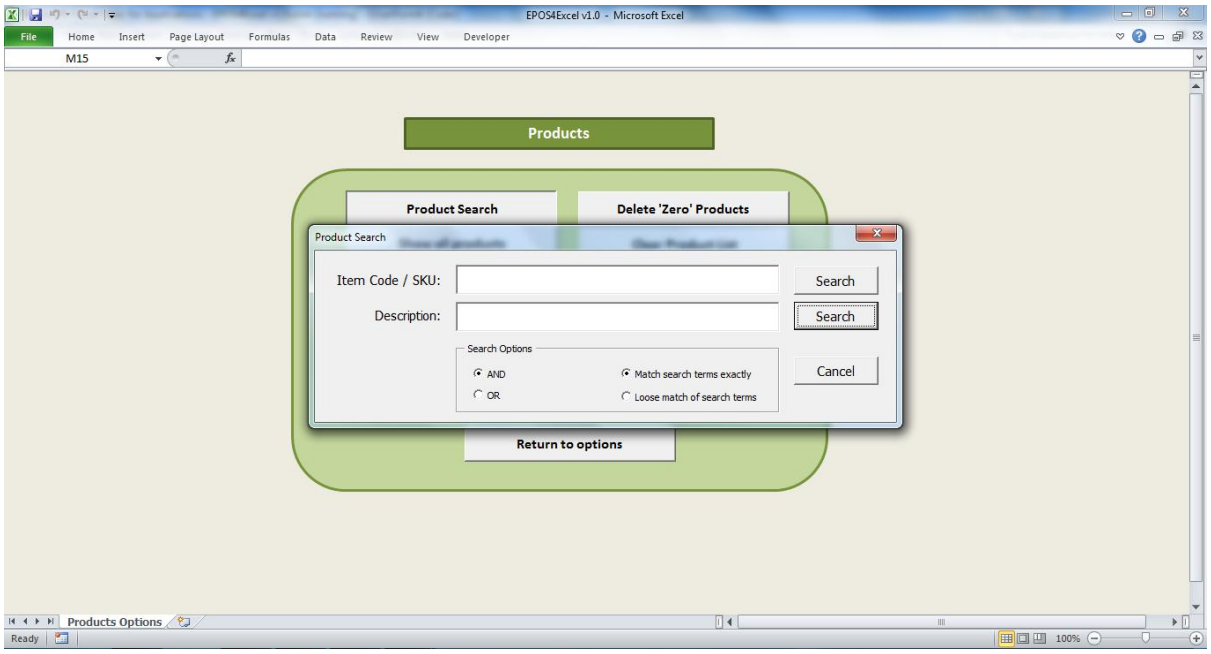
To clear the product list click the clear product list on the products screen. You will be asked if you are sure if you want to do this before the product list is cleared.

Warning: If you clear the product list then the product data and stock levels will be wiped and you will not be able to retrieve this data.

Deleting unused products from the product list

On the products screen clicking the delete zero products button allows you to delete all products from the product list that have zero qty delivered, zero qty in stock and zero qty sold ie. products that have not been used.

Searching for products



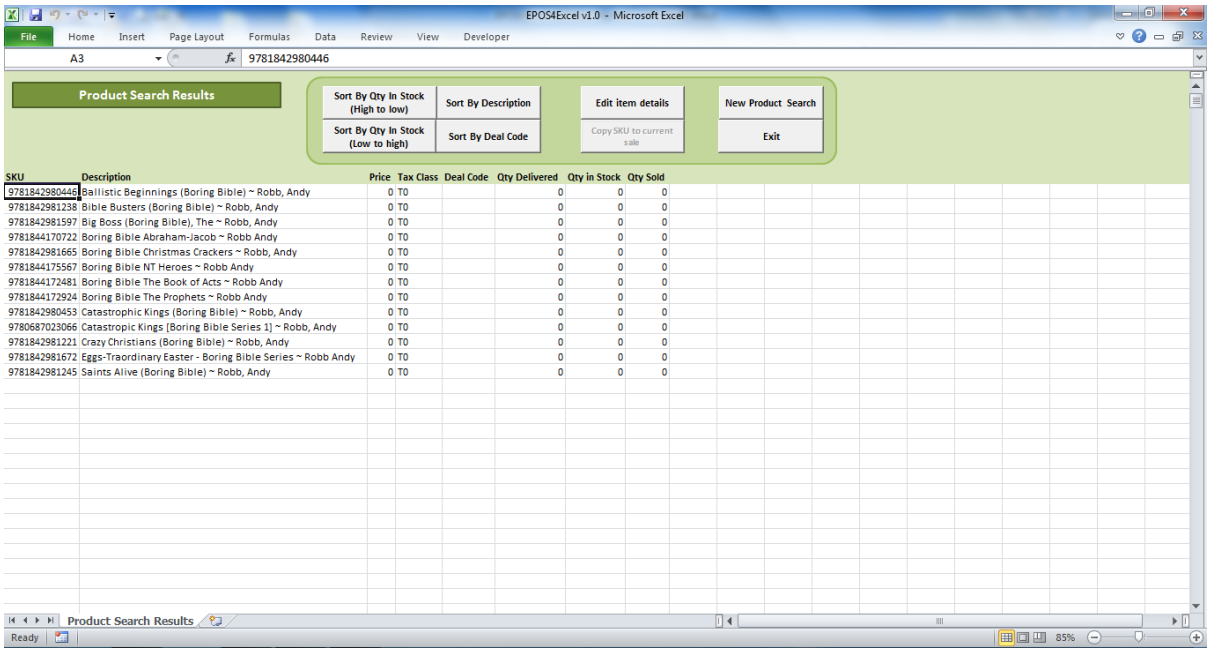
To search for products click the product search button on the products screen. You can either search by item code or by item description. Enter your search terms in the appropriate box and click the search button.

The search options are as follows:

Item Code / SKU search options	**Exact Match** = searches for the item code which exactly matches the search term eg. Searching for 1234 will find the single item with a code of 1234 but it would not find an item with a code of 61234. **Loose match** = searches for those item codes which include the search term but not necessarily exactly eg. Searching item code for 1234 will find the single item with a code of 1234 and it will also find an item with a code of 61234. Why might the loose match be useful? If you can only partially read the barcode of a product because it has been damaged, then you can search for the partial section of the barcode which you can read to find the product details. Another possible use could be: If the item codes of all products from a single supplier begin with, say, the same 7 digits (eg. 9781365) then a loose match search for these 7 digits will find all items from that single supplier. **NOTE: The AND / OR search option is not available when searching for item codes.**

Description search options	**AND / OR** = when searching in item descriptions you can choose to find all results that contain eg. 'test' AND 'bed' or all results that contain 'test' OR 'bed'. NOTE: Descriptions are always searched based on a loose match. In other words, searching for those descriptions which include ALL the search terms but not necessarily exactly eg. searching description for 'test bed' will find item descriptions with the words 'test' AND / OR 'bed', however it will also find item descriptions containing the words like 'testing' and 'bedroom'.

After clicking search a list of the products relating to your search terms will be shown.



You can choose to sort the results list by quantity in stock, description or by deal code.
You can also edit an item's details by clicking on the item code / SKU of the item whose details you wish to edit. Then click on the edit item details button. A window will pop up with the item details for you to edit. If you cannot see the product you were looking for you can always search again by clicking the new product search button.

Showing all products

If you click on the show all products button on the products screen you will be shown a list of all products stored in E4E.

Showing all products linked to a deal

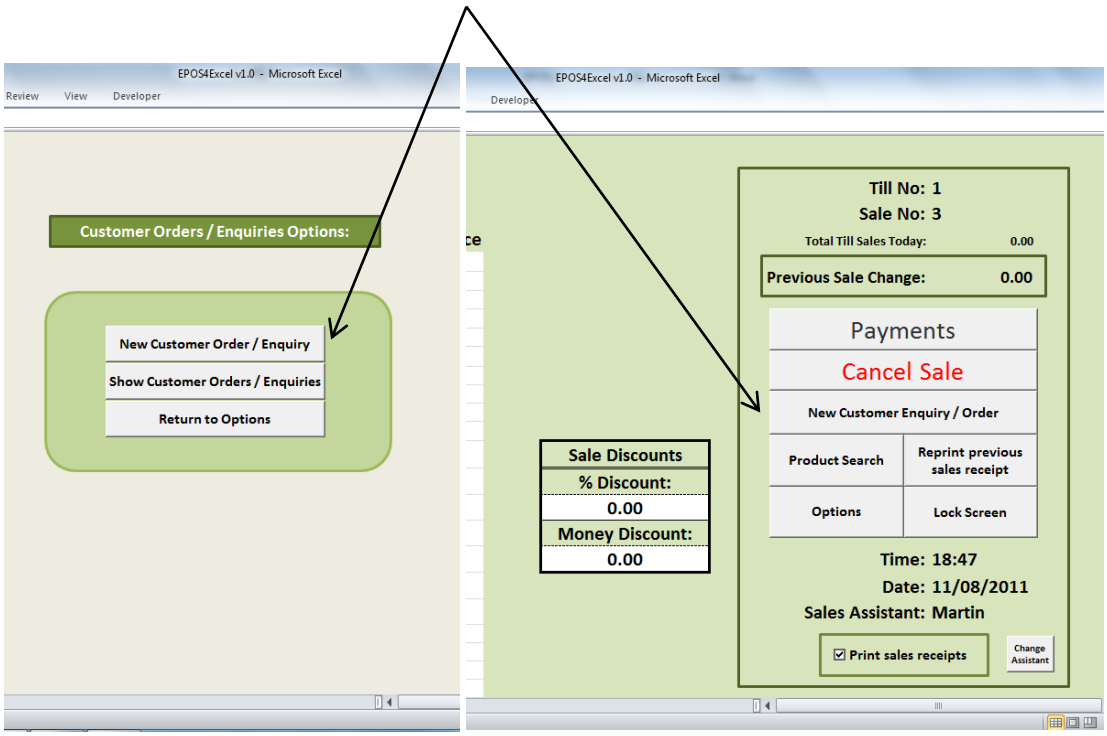
If you click on the show all products linked to a deal button on the products screen you will be show a list of all products linked to a deal.

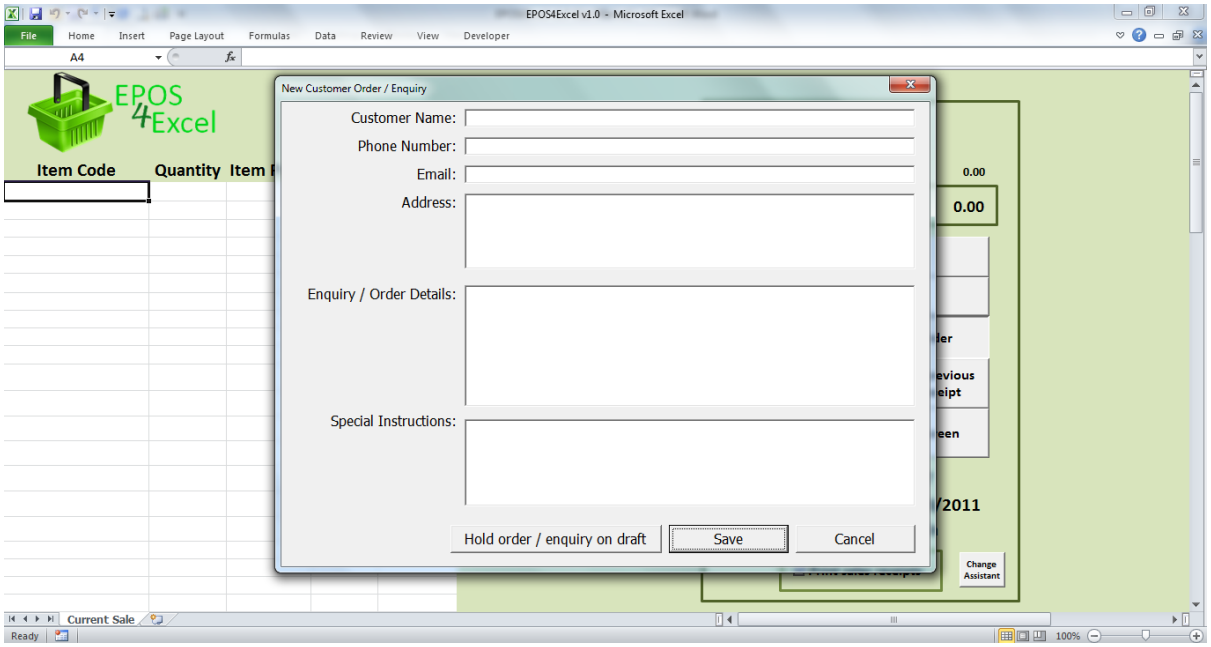
7. Customer orders and enquiries

E4E includes the ability to store customer orders / enquiries which can then be processed later. The file containing the orders is found in the E4E data storage folder (see the section on setting up E4E and Appendix D in this user manual for more details). If you are working remotely, then at the end of the day this customer orders file could be emailed to your companies head office for processing.

Entering details of a customer order / enquiry

1. To enter details of new customer order / enquiry click on the new customer order / enquiry button which can be found on either the sales screen or the customer orders / enquiries options screen.
2. A box will pop up asking for details about the order / enquiry. Enter as much information as is possible.
3. To save the details of the enquiry click the save button.
4. You can also click the Hold order / enquiry on draft button to keep the enquiry details without saving it. Clicking this button will close the pop up box but still keep the order / enquiry details in the pop up box. The next time you click the new customer order / enquiry button the pop up box will appear containing the details you have placed on draft. You can then continue editing it before saving. **NOTE:** Until you press the save button the order / enquiry details will not be saved to the order / enquiry notebook.
5. Alternatively you can click the cancel button to exit without saving and the order details will be cleared from the pop up box.

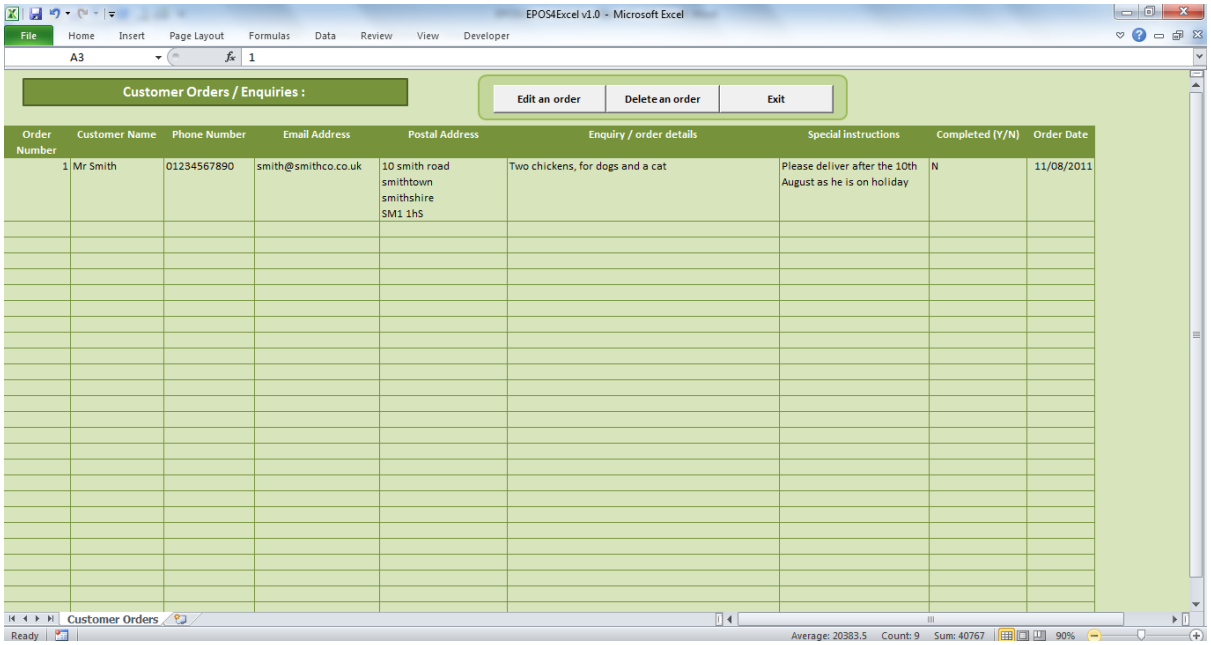




Viewing or editing customer orders / enquiries

On the customer orders / enquiries options screen click the show customer orders / enquiries button. This will show all customer orders that have been made for the current day. If you are running E4E on a network it will show you and enable you edit all customer orders made on every till for the current day.

E4E starts a new customer order file each day and you will only be able to view the customer orders from the current day. To access the customer orders from previous days open the E4E data storage folder and open the relevant file: ordersDDMMYYYY.xlsx, where DD = Day, MM = Month, YYYY = Year.



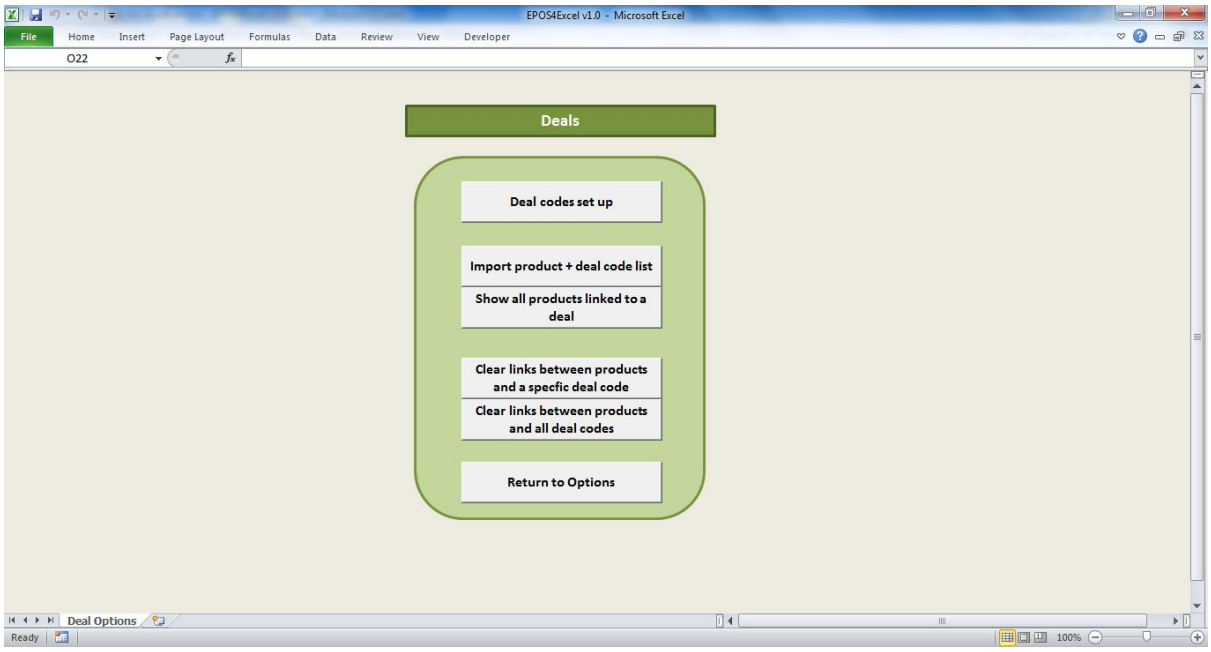
Deleting a customer order

1. On the View / Edit customer order screen make a note of the order number that you wish to delete.
2. Click the delete an order button.
3. Enter the number of the order you wish to delete.
4. The customer order will now be deleted.

Editing a customer order

1. On the View / Edit customer order screen make a note of the order number that you wish to edit.
2. Click the edit an order button and enter the number of the order you wish to edit
3. Make any necessary changes and click save.
4. The order is now edited

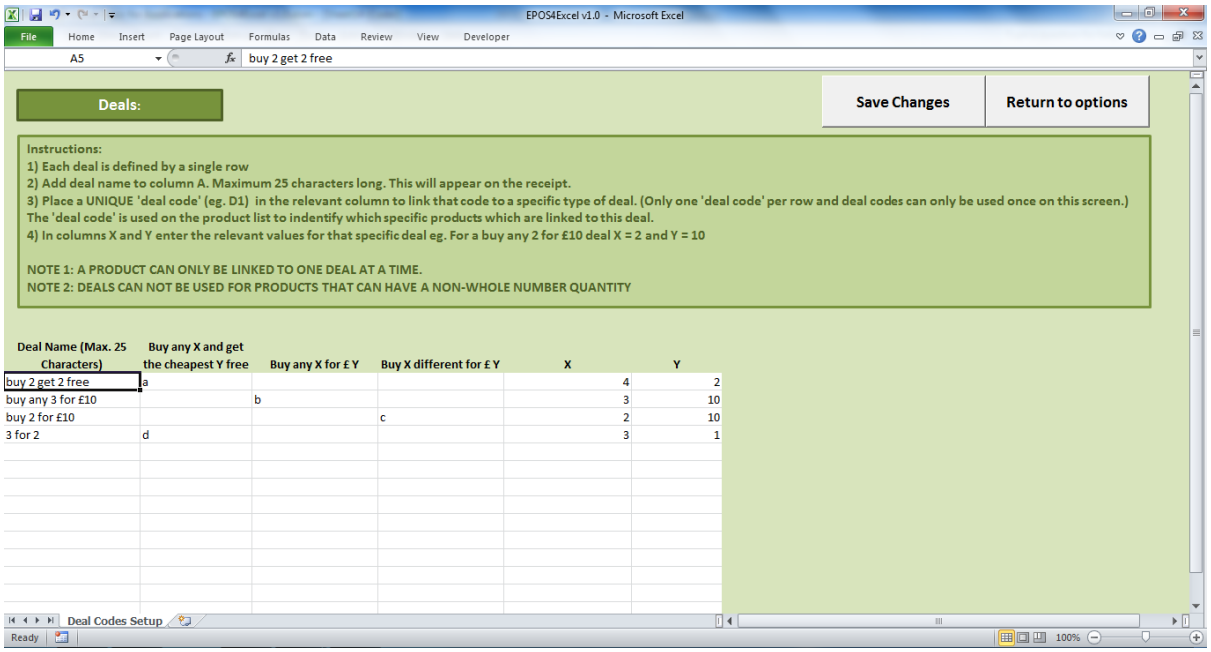
8. Deals



In addition to adding % and monetary discounts on the sales screen, E4E also allows you to set up various sales promotions which are automatically added when the relevant products are in the sale. Sales promotions in E4E are known as deals.

Setting up deals

To set up deals click on the deal codes set up button on the deals screen and you will be presented with the following screen.



E4E allows the defining of three different types of deal:

- Buy any X products from a selection and get the cheapest Y free
- Buy any X products from a selection and get them for £Y
- Buy X different products from a selection and get them for £Y

The way you define the selection of products the deal applies is by using an alpha-numeric deal code (eg. a, a1, sd3 etc.)

1. In the first column of the first free row enter a deal name (maximum 25 characters, if you type more than 25 characters E4E will reduce it to 25 characters). This deal name will appear on the receipt when the deal is used.
2. In the relevant column enter a deal code to link it to a specific deal type eg. enter 'a1' in the 'Buy any X and get the cheapest Y free' to link the deal code 'a1' to this deal type.
3. In columns X and Y enter the numeric values for the specific deal eg. for 'buy any 3 and get the cheapest 1 free' enter 3 in column X and 1 in column Y.

The deal code is now set up and you now just need to link the products you want to the deal to apply to to the deal code (see below). To save the changes you have made click the save changes button. Your changes will not be kept if you do not save the changes.

Important things to note about deals are:

- Only one deal code can be entered per row on the deal codes set up screen.
- A product can only be linked to one deal code at a time.
- Deals cannot be used with products which can be sold in non-whole number quantities
- If you are using E4E on a network, then setting up the deals on one till will set up the deals and deal codes on all tills if you save the changes.

NOTE: The order in which the discounts are applied to the sale is as follows:

1. Any deals
2. Then any 'Monetary discount'
3. Then any '% Discount'.

Adding the monetary discount before the % discount works in the retailers favour.

Examples of how common deals can be set up are:

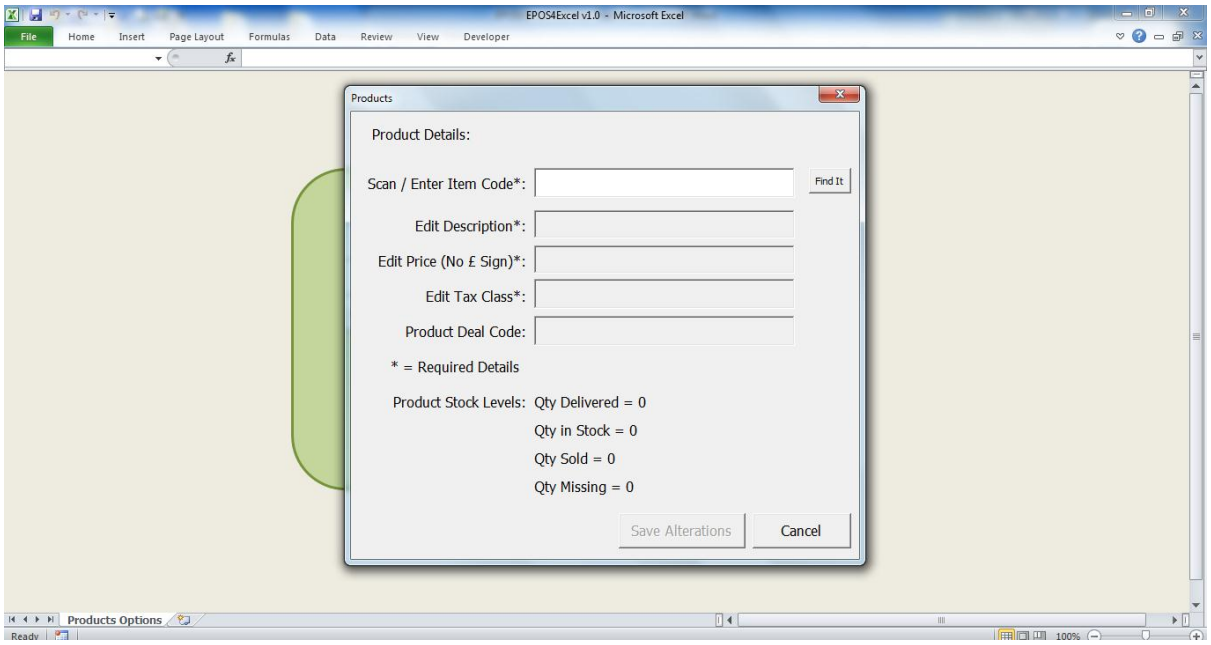
Deal	Deal column to use	Values for X and Y	Notes:
Buy one from a selection of products and get one free	Buy any X and get the cheapest Y free	X = 1 Y = 1	Link the deal code to each of the products in the deal
Buy one and get one of the same product free	Buy any X and get the cheapest Y free	X = 1 Y = 1	Only link the deal code to one product
3 for 2 on a selection of products	Buy any X and get the cheapest Y free	X = 3 Y = 1	Link the deal code to each of the products in the deal. Cheapest item is given free
3 for 2 on the same product	Buy any X and get the cheapest Y free	X = 3 Y =2	Only link the deal code to one product
Buy 2 of the same product for £10	Buy any X for £Y	X = 2 Y = 10	Only link the deal code to one product
Buy any 3 from a selection of products for £15.99	Buy any X for £Y	X = 3 Y = 15.99	Link the deal code to each of the products in the deal.
Buy 3 different products from a selection for £20	Buy X different for £Y	X = 3 Y = 20	Link the deal code to each of the products in the deal.
Buy product 1 AND product 2 for £10.99	Buy X different for £Y	X = 2 Y = 10.99	Only link the deal code to products 1 and 2

Linking a product to a deal code

After setting up the deal codes you now have to link these deal codes to the products in the individual deals. You can link individual deal codes to as many products as you like, for example:

Imagine you had a selection of 10 products and you wanted the customer to be able to buy any 2 for £10. You would link a 'buy any 2 for £10' deal code to all 10 products. Then when the customer buys any two out of the ten items linked to the deal code the deal will be applied to the sale.
OR imagine all products from one supplier were on a buy 2 for £10 you could link a buy 2 for £10 deal code to all products from that one supplier.

There are two ways to link products to deal codes, firstly individually:



1. On the products screen click the add / alter product button.
2. Search for the product you wish to link to a deal code by entering the item code / SKU and clicking the find button
3. In the product deal code box enter the deal code of the deal that you wish to link the product to.
4. Click the save alterations button. The product is now linked to this deal code.
5. Repeat the process for any other product linked to this deal code.
6. You deal is now set up completely and when adequate numbers of the products linked to the deal code are sold the deal will be added to the sale.

You can also link many products to deal codes in one go. After setting up your deal codes you can produce an Excel workbook file containing:

Column A: Item code / SKU
Column B: The deal code you wish to link the item code in column A to

(NO column headings or blank rows!)

On the deals screen click the import product + deal code list. Choose the Excel workbook you have just created. E4E will then link the chosen products to the respective deal codes.

Showing all products linked to a deal

Clicking the show all products linked to a deal button on the deals screen will bring a list up the list of all products which have been linked to a deal code, including their stock amounts.

Removing a link between a single product and a deal code

1. On the products screen click the add / alter product button.
2. Search for the product you wish to link to a deal code by entering the item code / SKU and clicking the find button
3. Delete the contents of the product deal code box.
4. Click the save alterations button. The link between the product the deal code is now cleared.

Removing links between all products and a specific deal code

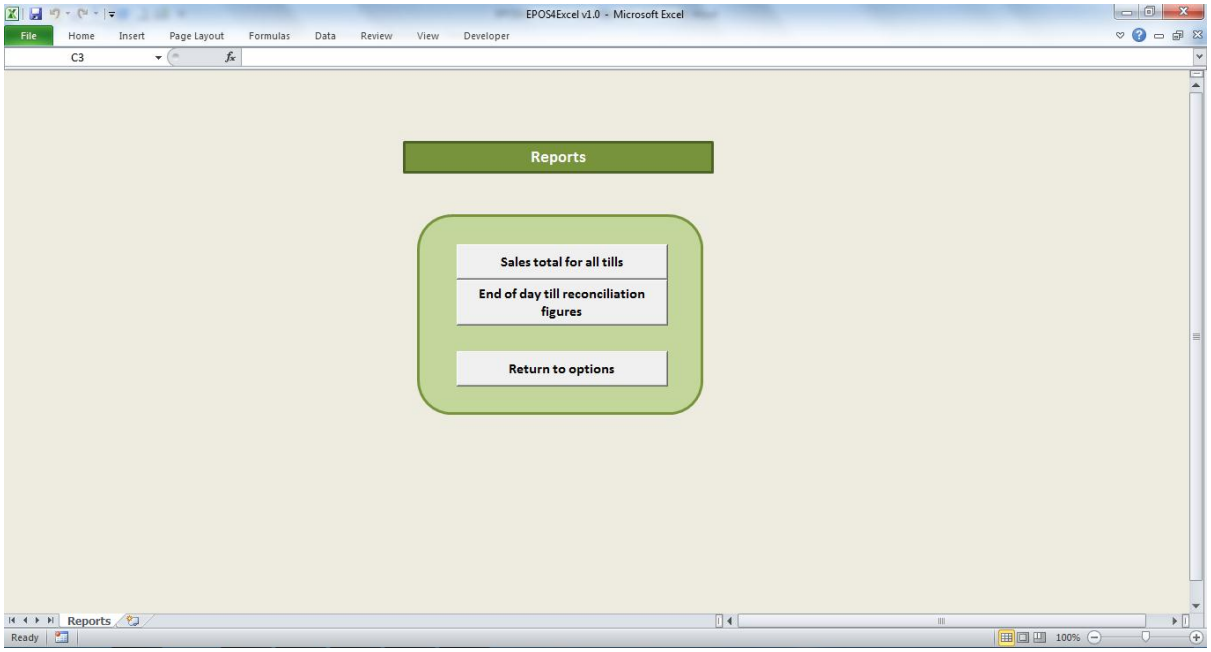
On the deals screen click the clear links between products and a specific deal code button. You will be asked to enter the deal code and then all links between it and all products will be cleared.
Warning: This information will be unrecoverable!!

Removing all links between products and deal codes

Clicking the clear all links between products and ALL deal codes button on the deals screen will remove all links between all products stored in E4E and deal codes.
Warning: This information will be unrecoverable!!

9. Daily sales reports

E4E currently only offers two basic daily sales reports as the assumption is that you will use E4E in conjunction with a computerised accounting system. If you are working on a network the sales figures for all tills can be accessed from one till.



End of day till reconciliation figures

1. When you have finished selling for the day. On the daily sales report click the end of day till reconciliation button.
2. You will be asked which till number you wish to show the till reconciliation figures for. If you are not using E4E on a network you can click cancel to show the current tills figures.
3. A window will now pop up displaying the number of items sold and total amounts of each payment type have been taken for the current day on the chosen till.
4. To print out the reconciliation totals for the selected till in receipt format click the print totals button.

Note: You can access this 'End of day till reconciliation' screen in the way detailed above at any point during the sales period of the day. If you do it will just give you a running total of what you have taken on that till until the moment when you view it.

Sales total for all tills

On the daily sales reports screen you can click on the sales total for all tills. This will show the running total for what has been taken on all tills if you are running E4E on a network. If you are not running E4E on a network it will just display the total for the current till.

10. Tax settings

The tax settings in E4E should be edited so that every tax class that appears on your price list also appears in the tax class settings.

WARNING: Changing the % VAT settings in the middle of a sales session could cause problems with the sales data as the same product could be sold at different % VAT rates.

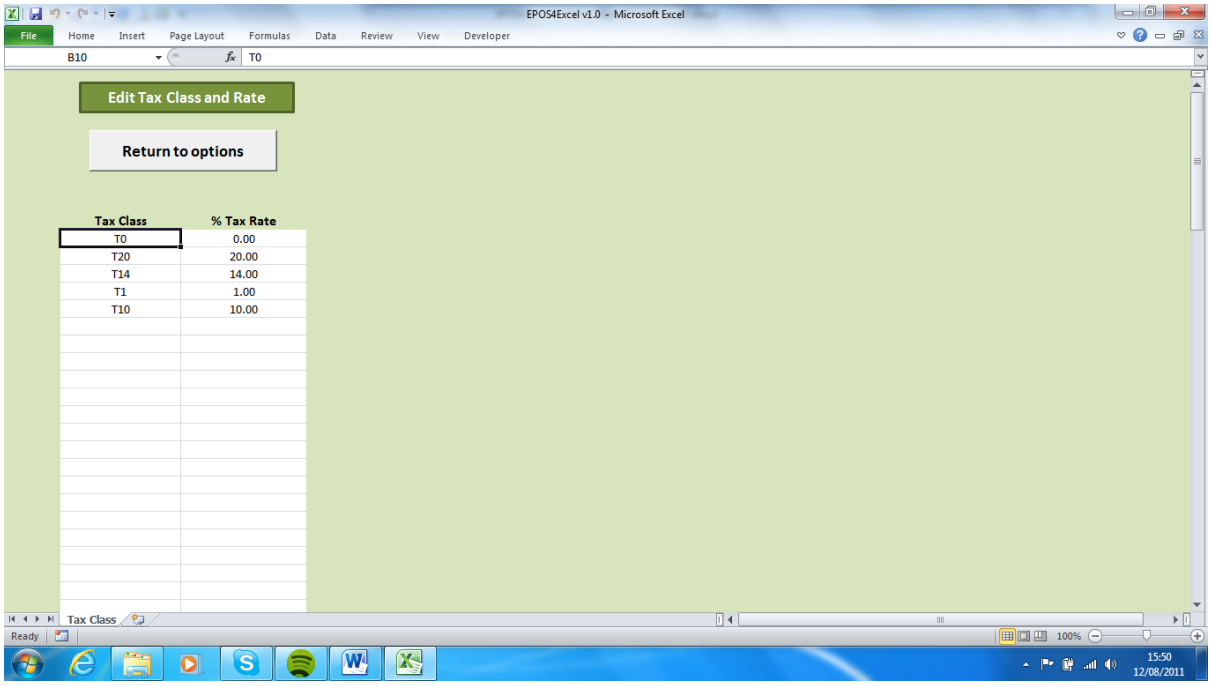
To edit the tax settings, on the EPOS settings screen click the tax settings button.

1. In the first column edit the Tax Class codes
2. In the second column edit % VAT rates linked the tax class codes
3. Click the 'Return to options' button.

The tax class code in the first column can be any combination of characters. This code is used to link products to a specific % VAT rate.

The % vat rate in the second column must be a percentage to a maximum of two decimal places.

If you are using E4E with multiple tills connected over a network then altering the tax class settings on one till will update all tills.

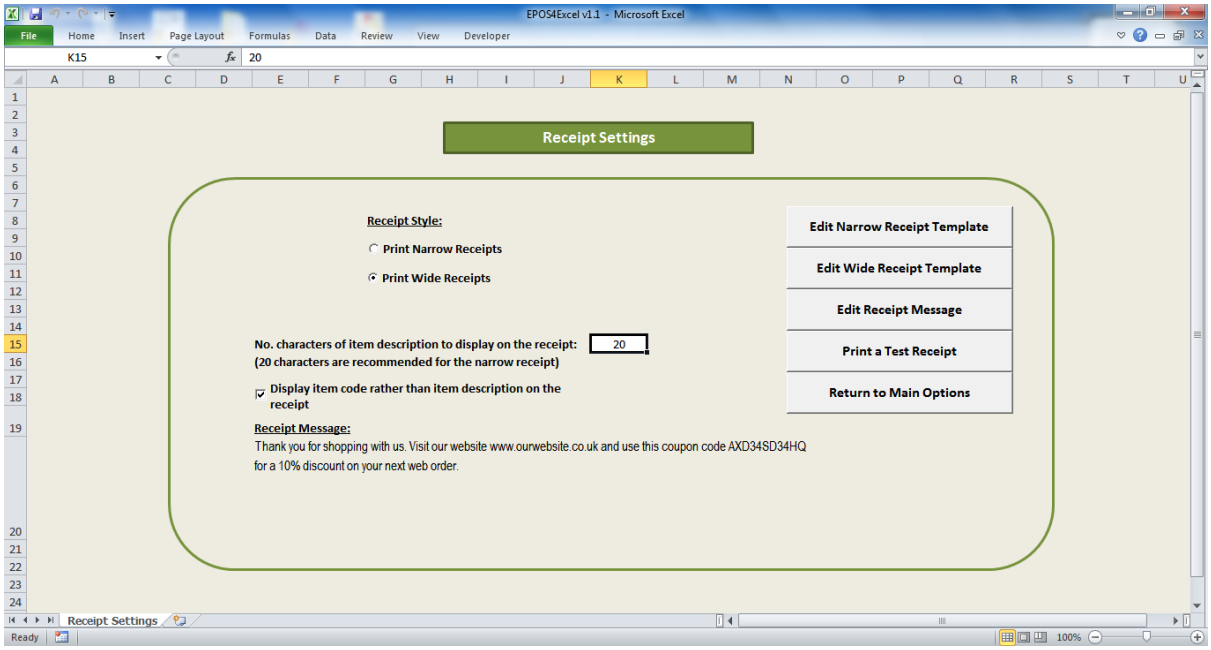


11. Editing the receipt settings

E4E offers you the option to print two types of receipt, either a 'narrow receipt' using a specialist USB receipt printer or a 'wide receipt' using an ordinary USB A4 printer. In this section we describe how to alter the layout and settings for both narrow receipts and wide receipts.

Accessing the Receipt Settings

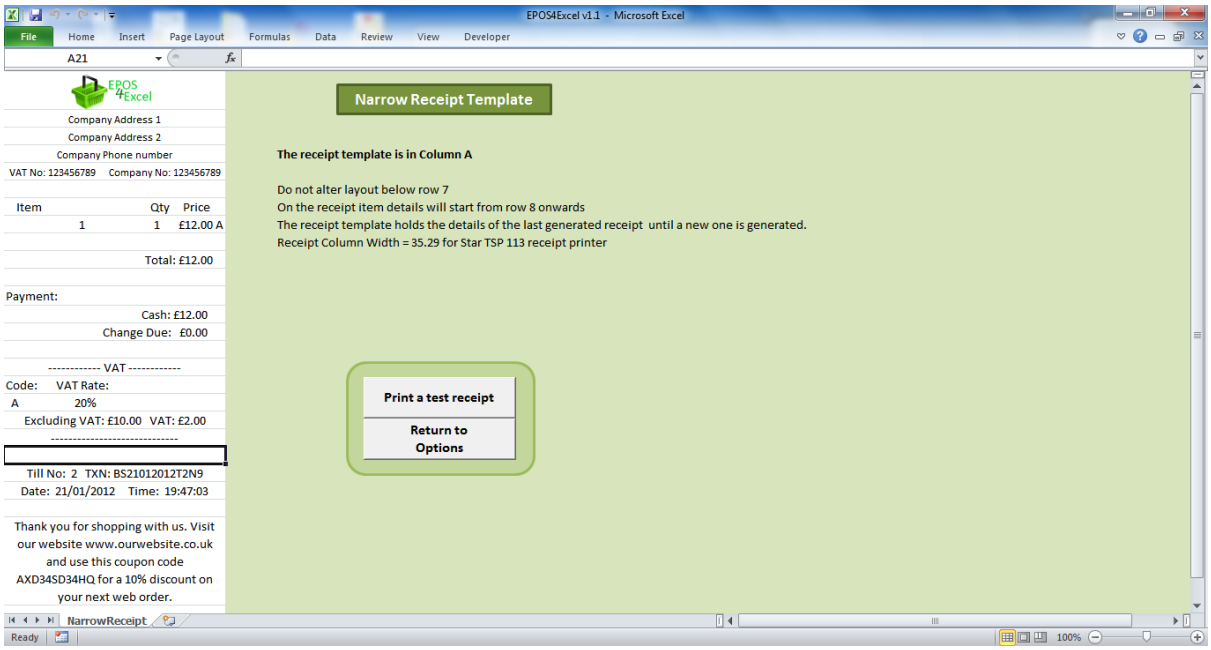
On the EPOS setting screen click on the receipt settings button which will bring up the following screen:



On the receipt settings screen you can choose whether E4E will print narrow or wide receipts.

Setting up narrow receipts for use

Customising the company logo and company details on the narrow receipt template



1. On the edit narrow receipt template screen click the Excel 'review' menu (top of screen) and select 'unprotect sheet'
2. Click once on the 'EPOS 4 Excel' logo at the top of the receipt template and press the 'delete' key on your keyboard to delete the logo.
3. Click on the Excel 'Insert' menu and select 'picture'. Choose the file containing your company logo picture and insert it into the empty space which is now at the top of the receipt template. Move and adjust the size of the new logo to make it fit as appropriate.
4. As appropriate edit the lines of the receipt template containing the company address, company phone number, VAT number and company number. Do not alter the receipt template below row 7 as this part of the receipt will hold the sale details.
5. Click on the Excel review menu and select 'protect sheet'. Click 'ok' in the pop up box WITHOUT changing any of the other settings in the pop up box.
6. The logo and company details on the receipt have now been changed. You can print a test receipt to see how your new logo and company information looks on the narrow receipt by clicking the print test receipt button on the narrow receipt template screen.

NOTE: Changes to the narrow receipt template only affect the specific till they are made on. If you are running E4E on multiple tills over a network it is therefore a good idea to make the customisation changes to the receipt template before you place copies of the E4E workbook on all your tills.

Altering the width of the narrow receipt

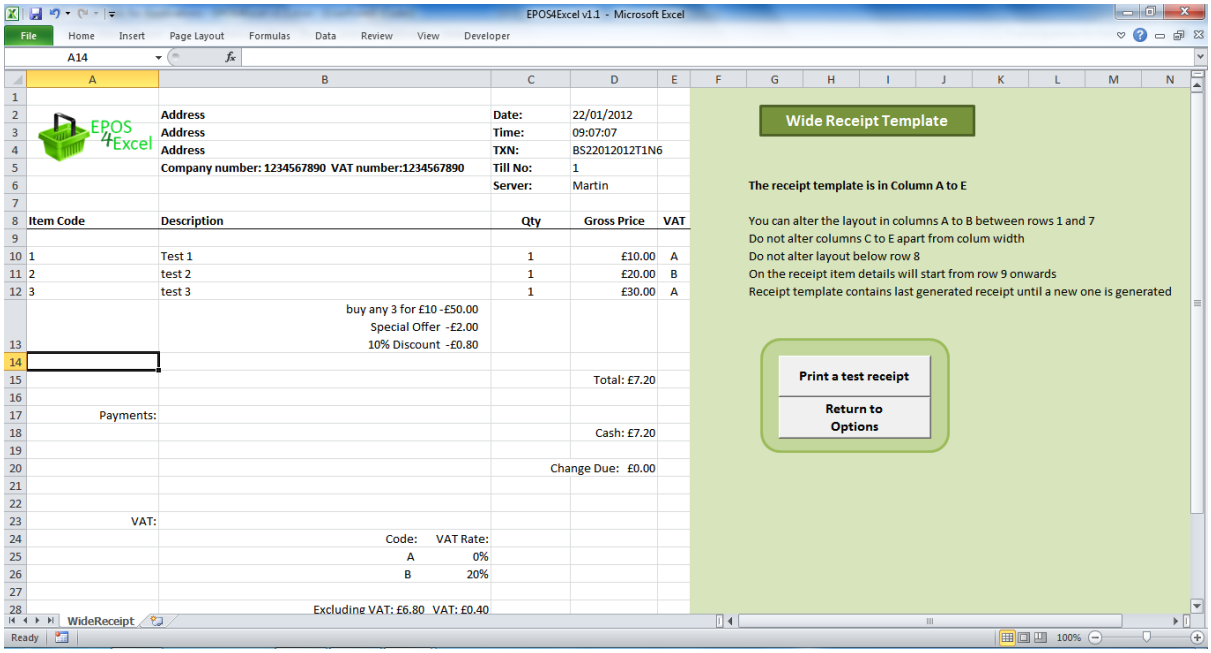
E4E has been tested to work on the Star TSP113 receipt printer. It may be necessary to alter the receipt width for different receipt printers. It is advisable to only change the narrow receipt width if this is absolutely necessary.

1. On the edit narrow receipt template screen click the Excel 'review' menu (top of screen) and select 'unprotect sheet'.
2. Drag the width of column A to make it larger or smaller.
3. Click on the Excel review menu and select 'protect sheet'. Click 'ok' in the pop up box WITHOUT changing any of the other settings in the pop up box.
4. Print a test receipt to see how it looks

NOTE: Changing the narrow receipt width only affects the specific till this is done on. If you are running E4E on multiple tills over a network it is therefore a good idea to make the customisation changes to the receipt template on one copy of E4E and then place copies of this E4E workbook on all your tills.

Setting up wide receipts for use

Customising the company logo and company details on the wide receipt template



1. On the edit wide receipt template screen click the Excel 'review' menu (top of screen) and select 'unprotect sheet'
2. Click once on the 'EPOS 4 Excel' logo at the top of the receipt template and press the 'delete' key on your keyboard to delete the logo.
3. Click on the Excel 'Insert' menu and select 'picture'. Choose the file containing your company logo picture and insert it into the empty space which is now at the top of the receipt template. Move and adjust the size of the new logo to make it fit as appropriate.
4. As appropriate edit the columns A and B of the wide receipt template which contain the company address, company phone number, VAT number and company number. Do not alter the receipt template below row 7 as this part of the receipt will hold the sale details.
5. Click on the Excel review menu and select 'protect sheet'. Click 'ok' in the pop up box WITHOUT changing any of the other settings in the pop up box.
6. The logo and company details on the receipt have now been changed. You can print a test receipt to see how your new logo and company information looks on the wide receipt by clicking the print test receipt button on the wide receipt template screen.

NOTE: Changes to the wide receipt template only affect the specific till they are made on. If you are running E4E on multiple tills over a network it is therefore a good idea to make the customisation changes to the receipt template before you place copies of the E4E workbook on all your tills.

Receipt layout settings which apply to both narrow and wide receipts

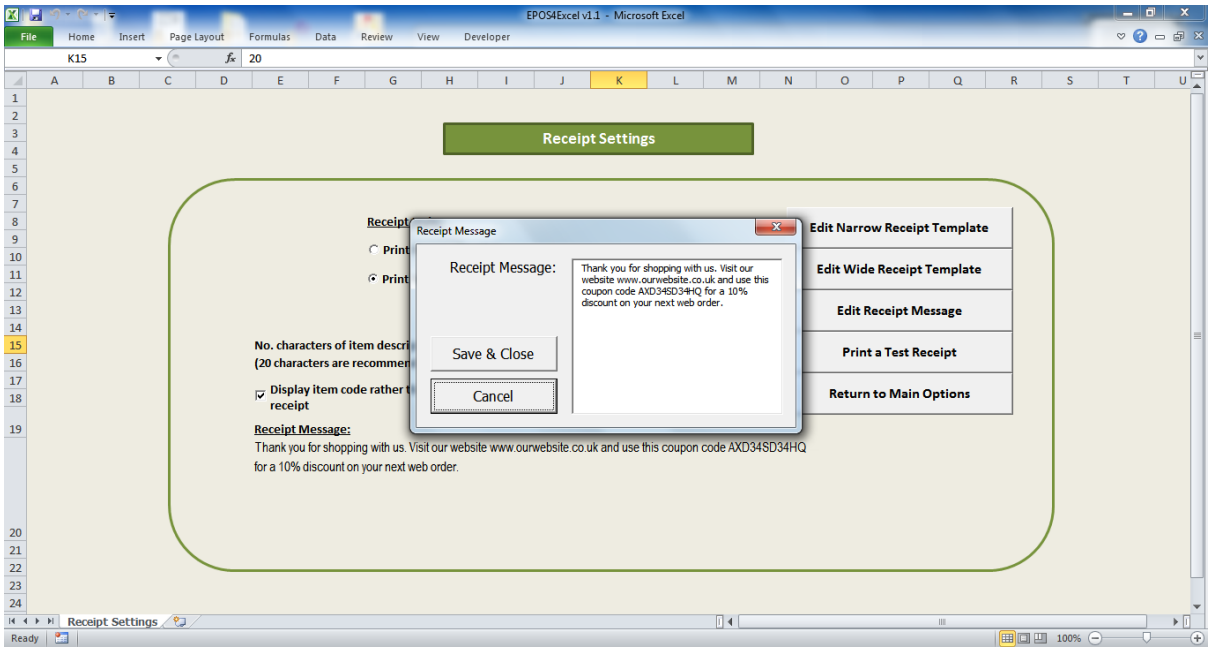
Changing how many characters of the item description are to appear on the receipt

On the receipt settings screen enter in the appropriate box the number of the characters of the item description you wish to display on the receipt. NOTE: This needs to be a whole number! We recommend about 20 characters if you are printing narrow receipts and if you want to print the whole description on a wide receipt we suggest using a large number such as 9999.

Displaying the item code / SKU rather than the item description on the receipt

You can choose to display only the item code rather than the item description on the receipt by ticking the checkbox on the receipt settings screen.

Editing the message at the end of receipt

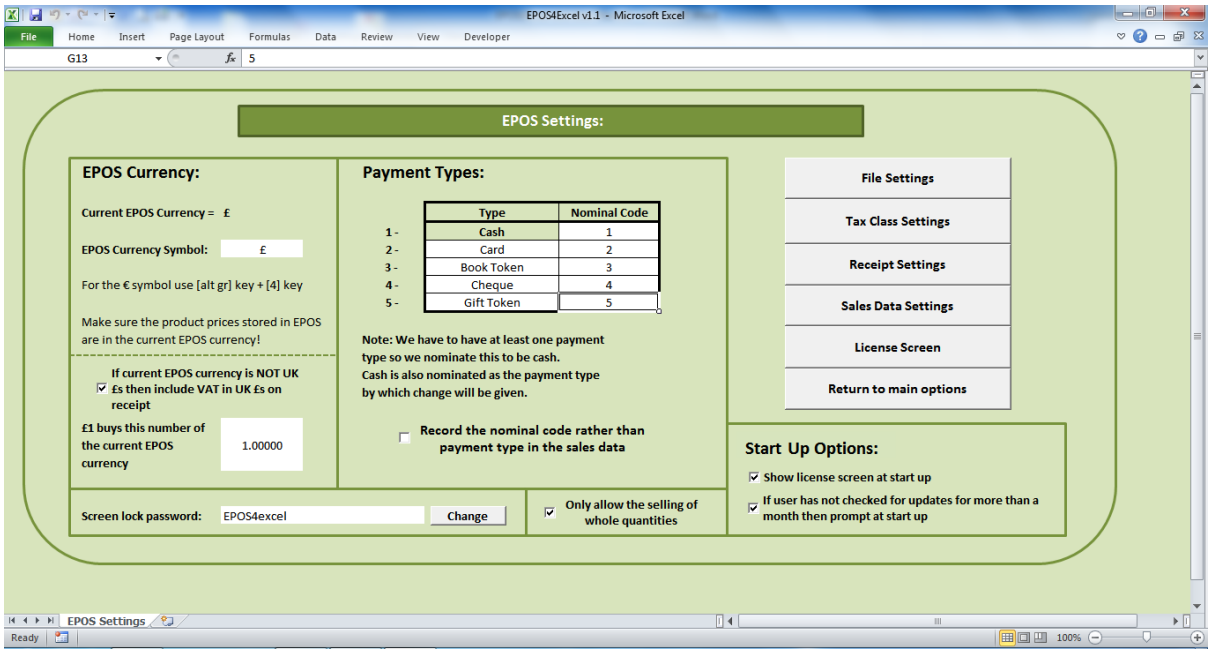


1. To change the receipt message on the receipt settings screen click the edit receipt message button.
2. A window will pop up and allow you edit the message. The text will automatically wrap onto a new line on the receipt if necessary. You may have to play about with adding extra spaces to get the layout on the receipt you want. Click the save & close button to save any changes or the cancel button to discard any changes you have made.
3. Click the print test receipt button to print out a sample receipt containing the new message.
4. The receipt message should now be changed from the next sale onwards.

NOTE: If you are running E4E on multiple tills over a network then altering the receipt message on one till will alter it on all tills.

Printing VAT in UK pounds on the receipt when using a different currency

E4E enables you print both a sale's VAT in UK pounds (£) and in the current E4E currency on the receipt. You can enable this option on the EPOS settings screen by ticking the checkbox and entering the appropriate exchange rate.



Printing a test receipt

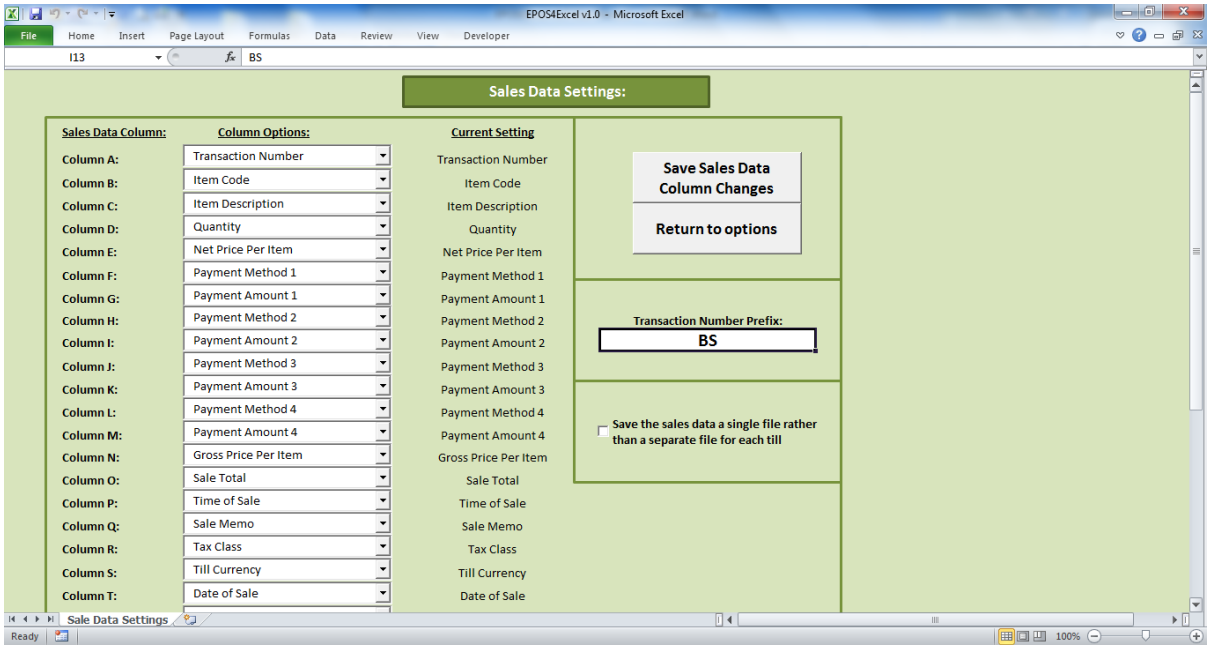
On the receipt settings screen clicking the print test receipt button will print either a narrow receipt or wide receipt dependent on the current user selection for receipts. This enables you to check your printer is working without having to make a sale OR to check you are happy with any changes to receipt layout that you have made.

12. The sales data, customer order data and system data

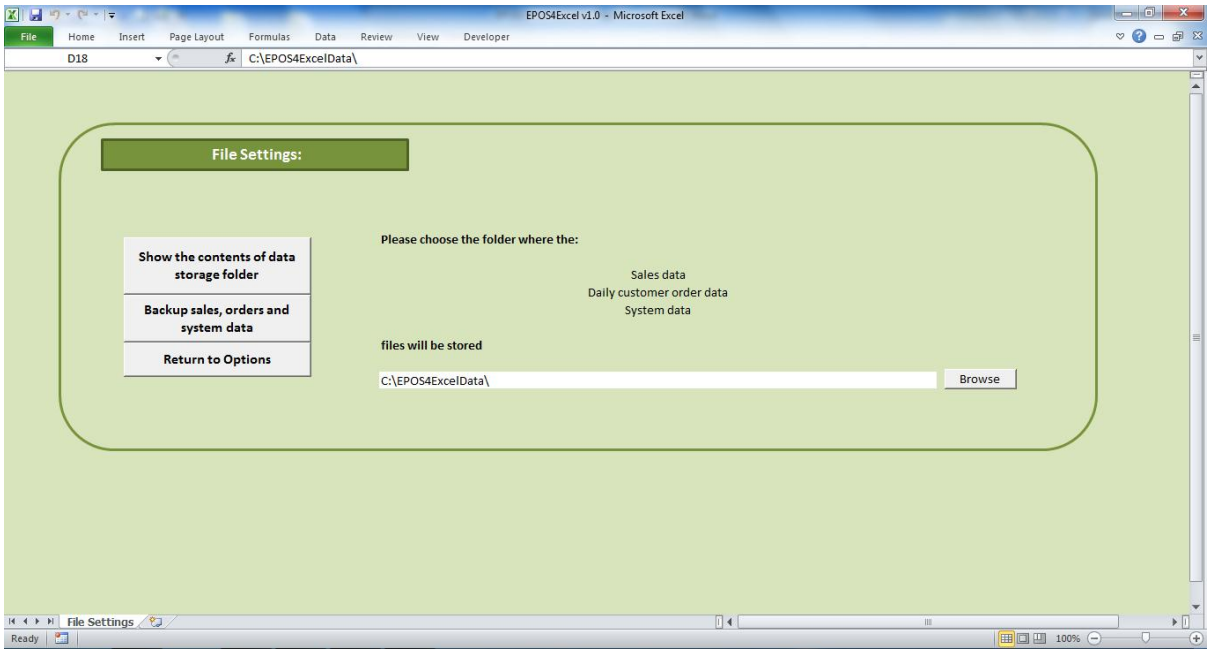
A single sales data file or one for each till?

If you are using E4E on multiple tills over a network you can choose to store the sales data in individual files for each till or in one file for all tills. To choose this, on EPOS settings screen click the sales data settings button. Then tick / untick the save sales data in a single file rather than a separate file for each till checkbox as appropriate.

This setting will need to be set up to be the same on each individual instance of E4E running on your network.



Accessing the orders and sales data



The sales data and orders data will be found in the data storage folder for E4E. To find this on the EPOS settings screen click the file settings button. You will find the storage folder details on this screen. Either navigate to this folder manually to access the files or click on the show contents of storage folder button to open a window showing the files in the storage folder.

E4E data files are named as follows:

If you choose a sales data file for each till:

sales*DDMMYYYY*T*X*.CSV	where DDMMYYYY is the date when the sales were made and X is the Till number upon which the sales were made. This is a comma separated values file.

If you choose a single sales data file for all tills:

sales*DDMMYYYY*.CSV	where DDMMYYYY is the date when the sales were made. This is a comma separated values file.

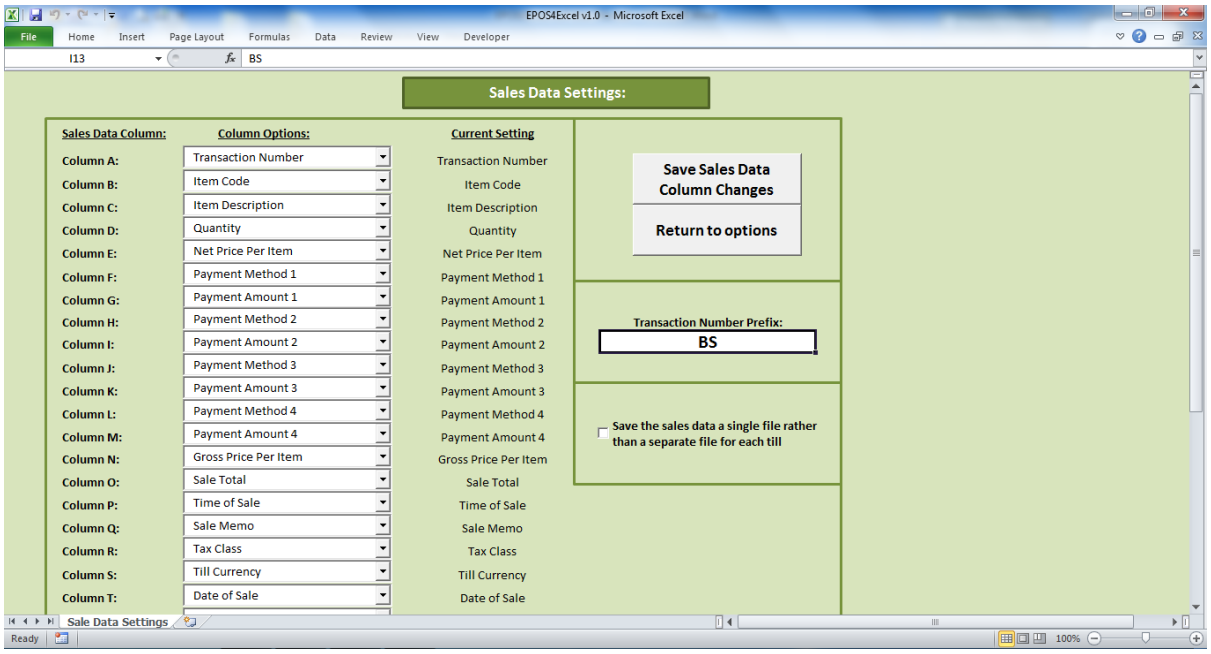
The customer orders data file:

orders*DDMMYYYY*.XLSX	where DDMMYYYY is the date when the customer orders / enquiries were made. This is an Excel workbook file.

Every day E4E will automatically start new sales data / customer orders data files and name them in the above format.

NOTE: It is advisable when processing the sales data files that you only work on a copy. Copying the file means you don't destroy the original sales data during processing and therefore the original sales data can always be accessed again.

Customising the layout of the sales data



On the sales data settings screen (available through the EPOS settings screen) it is possible to customise the layout of the sales data in the .CSV file that E4E generates. You can choose which piece of data will appear in which column of the sales data file by choosing the column options from the drop down lists and then clicking the save sales data column changes button to complete your changes. This is useful if you will be importing the sales data to an accounting software package. You can layout the sales data in a format identical or near identical to the format you need for importing.

NOTE: Changing the column settings will have to be done separately for each till running on a network unless you customise the E4E workbook and then place a new copy of it on each till.

The options for what the sales data columns can contain are as follows:

Warning: If you do not choose to include a specific option in the sales data then that specific data regarding the sale will not be kept. It is advisable to make sure the sales data records all possible information regarding the sale even if you think you will not need it just in case you do need it in the future. Information regarding the sale not saved in the sales data will be lost irretrievably.

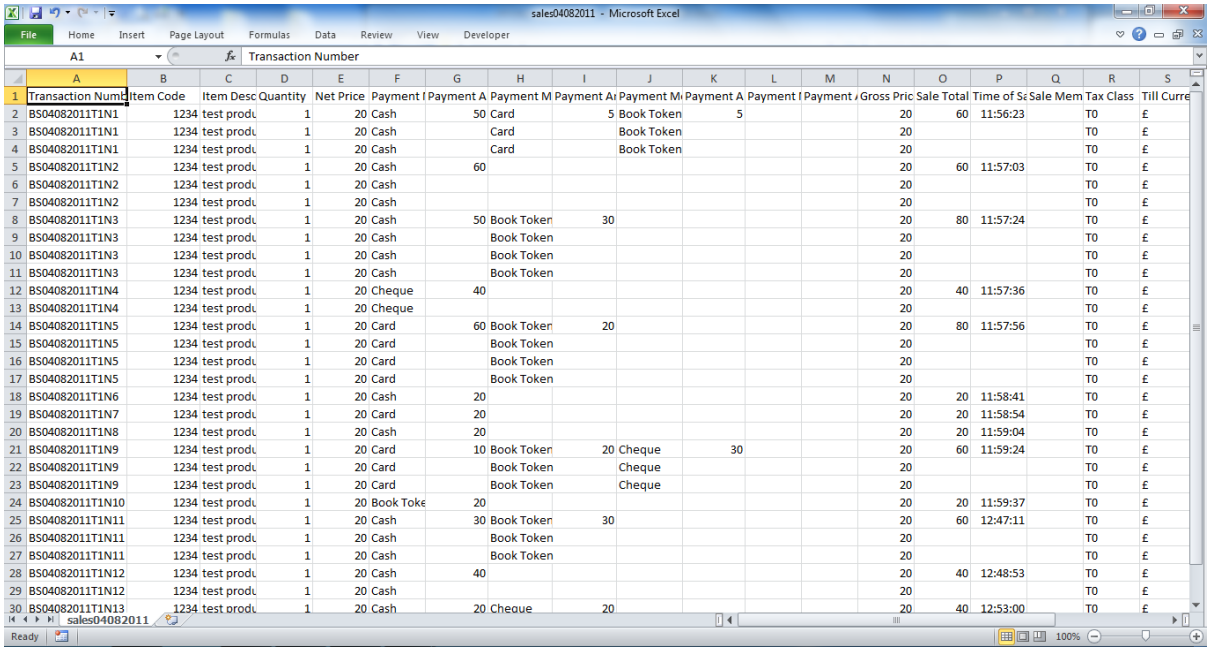
Column Option	Description
Transaction Number	Each individual sale is allocated a **unique** transaction number in the following format: BS13082011T1N12 Transaction Number can be interpreted as follows: The first section: The transaction number prefix chosen on the sales data settings screen The next eight numbers: DDMMYYYY = the date that the sale was made on The next letter and numbers: T = Till and the number following it will be till number The last letter and numbers: N and numbers following it signify the number of the sale on that till for that day
Item Code	The SKU / Item code of a product in the sale
Item Description	The description of the product identified by the item code in this row of the sales data
Quantity	How many of the item (identified by the item code in this row of the sales data) was sold
Net Item Price After Discounts	The price (excluding VAT) of the item identified in this row of the sales data AFTER any discounts have been applied. **See also the 'KNOWN ISSUE' box below.**
Sale Total VAT	The total amount of VAT on the whole sale. NOTE: This will only appear on the first row of the sale in the sales data
Payment Method 1 Payment Method 2 Payment Method 3 Payment Method 4 Payment Method 5	The different payment types the customer used to pay for the sale eg. 'cash', 'card' etc. Payment Method 1 will be the first payment type the customer used, Payment Method 2 will be the second payment type the customer used. If a customer uses less than five payment types then unused payment methods will be left blank in the sales data. NOTE: If you choose to record the nominal code and not the payment type in the sales data on the EPOS settings screen, then this column will contain the nominal code identifying the payment method and not words describing the payment type
Payment Amount 1 Payment Amount 2 Payment Amount 3 Payment Amount 4 Payment Amount 5	The different payment amounts the customer used to pay for the sale ie. Payment Amount 1 will be the amount the customer paid using Payment Method 1 and so on. For any unused payment methods the payment amount will be left blank in the sales data. NOTE: Payment amounts will only appear on the first row of the sale in the sales data
Gross Item Price After Discounts	The price (including VAT) of the item identified by the item code in this row of the sales data AFTER any discounts have been applied
Gross Item Price Before Discounts	The price (including VAT) of the item identified by the item code in this row of the sales data BEFORE any discounts have been applied

Sale Total	The total price of the whole sale (including VAT). NOTE: This will only appear on the first row of the sale in the sales data
Time of Sale	The time of the sale NOTE: This will only appear on the first row of the sale in the sales data
Sale Memo	Contains any memo the user entered during the payments process. In addition the sale memo will also contain details of any discounts applied to the sale and a notification if the sale is a prepaid customer order. NOTE: The sale memo will only appear on the first row of the sale in the sales data. **See also the 'KNOWN ISSUE' box below.**
Tax Class	The tax class of the **item** (NOT of the whole sale!) identified by the item code in this row of the sales data
Till Currency	The currency symbol and therefore currency that E4E is currently working in.
Date of Sale	The date of the sale
Till Number	The number of the till that made the sale
Sale Number	The number of the sale on the till that made the sale NOTE: Sale number will begin again 1 for every new day of sales
Sales Assistant Name	The first name of the sales assistant who was using the till if this was entered on the sales screen
Empty	A blank column

NOTE: Each separate sale in the sales data can be identified by the different transaction numbers. All the products from one specific sale will have the same transaction number and are recorded on consecutive rows. The payment amounts, sale total, memo, sale total VAT and time of sale will only appear in the row containing the first product in the sale. The rest of the sales data options will appear on every row of the sale.

NOTE: Columns AA (Till Number) and AB (Sales Assistant Name) in the sales data are fixed and you cannot change them. Column AA (Till Number) is used by E4E for calculating the daily sales reports from the stored daily sales data.

Example Sales data:



Transaction Numb	Item Code	Item Desc	Quantity	Net Price	Payment I	Payment A	Payment M	Payment Ar	Payment M	Payment A	Payment I	Payment	Gross Pric	Sale Total	Time of Sa	Sale Mem	Tax Class	Till Curre
BS04082011T1N1	1234	test produ	1	20	Cash	50	Card	5	Book Token	5			20	60	11:56:23		T0	£
BS04082011T1N1	1234	test produ	1	20	Cash		Card		Book Token				20				T0	£
BS04082011T1N1	1234	test produ	1	20	Cash		Card		Book Token				20				T0	£
BS04082011T1N2	1234	test produ	1	20	Cash	60							20	60	11:57:03		T0	£
BS04082011T1N2	1234	test produ	1	20	Cash								20				T0	£
BS04082011T1N2	1234	test produ	1	20	Cash								20				T0	£
BS04082011T1N3	1234	test produ	1	20	Cash	50	Book Toker	30					20	80	11:57:24		T0	£
BS04082011T1N3	1234	test produ	1	20	Cash		Book Token						20				T0	£
BS04082011T1N3	1234	test produ	1	20	Cash		Book Token						20				T0	£
BS04082011T1N3	1234	test produ	1	20	Cash		Book Token						20				T0	£
BS04082011T1N4	1234	test produ	1	20	Cheque	40							20	40	11:57:36		T0	£
BS04082011T1N4	1234	test produ	1	20	Cheque								20				T0	£
BS04082011T1N5	1234	test produ	1	20	Card	60	Book Toker	20					20	80	11:57:56		T0	£
BS04082011T1N5	1234	test produ	1	20	Card		Book Token						20				T0	£
BS04082011T1N5	1234	test produ	1	20	Card		Book Token						20				T0	£
BS04082011T1N5	1234	test produ	1	20	Card		Book Token						20				T0	£
BS04082011T1N6	1234	test produ	1	20	Cash	20							20	20	11:58:41		T0	£
BS04082011T1N7	1234	test produ	1	20	Card	20							20	20	11:58:54		T0	£
BS04082011T1N8	1234	test produ	1	20	Cash	20							20	20	11:59:04		T0	£
BS04082011T1N9	1234	test produ	1	20	Card	10	Book Toker	20	Cheque	30			20	60	11:59:24		T0	£
BS04082011T1N9	1234	test produ	1	20	Card		Book Token		Cheque				20				T0	£
BS04082011T1N9	1234	test produ	1	20	Card		Book Token		Cheque				20				T0	£
BS04082011T1N10	1234	test produ	1	20	Book Toke	20							20	20	11:59:37		T0	£
BS04082011T1N11	1234	test produ	1	20	Cash	30	Book Toker	30					20	60	12:47:11		T0	£
BS04082011T1N11	1234	test produ	1	20	Cash		Book Token						20				T0	£
BS04082011T1N11	1234	test produ	1	20	Cash		Book Token						20				T0	£
BS04082011T1N12	1234	test produ	1	20	Cash	40							20	40	12:48:53		T0	£
BS04082011T1N12	1234	test produ	1	20	Cash								20				T0	£
BS04082011T1N13	1234	test produ	1	20	Cash	20	Cheque	20					20	40	12:53:00		T0	£

KNOWN ISSUE: The gross item price (including VAT) in E4E is held in the products list. E4E calculates the net item price (excluding VAT) from the gross item price using the VAT fraction method (See appendix C). This can introduce an unavoidable rounding error when calculating the net item prices. Therefore sometimes adding up the net prices for a sale in the sales data and then adding the total sale VAT does not quite equal the actual sale total. If you are working in conjunction with a computerised accounting package it is best to upload gross item prices and allow it to calculate the VAT appropriately. If you do upload net item prices to your computerised accounting package you may have to make manual adjustments to the sales data to account for these small rounding errors.

NOTE: This issue is restricted to calculating the net item price from the gross item price and storing it in the sales data. E4E does calculate the total VAT on the sale and display this on the receipt and in the sales data (Sale Total VAT) accurately.

KNOWN ISSUE: Due to the way Excel imports .CSV files the 'sale memo' column in the sales data, cells may contain more text than is visible when you first open the sales data in Excel. If you highlight the whole 'sale memo' column and select the 'wrap text' option in Excel then any extra text in the cells will become visible.

Changing the transaction number prefix

On the sales data setting screen you change the prefix of the transaction number in the sales data by typing in a different prefix in the box.

Backing up the sales data, customer order data and system data.

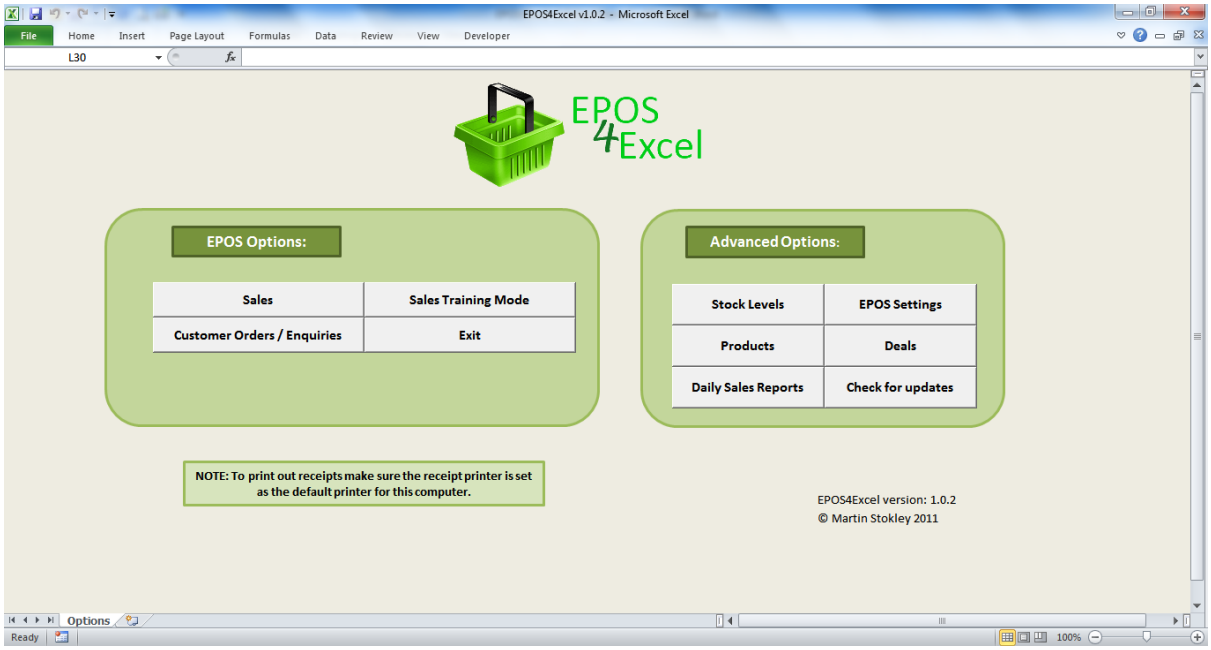
There are two options for backing up the sales data, customer order data and system data:

1. Manually navigate to the E4E folder containing the data and make a copy of it
2. On the file settings screen click the back up sales, orders and system data button. Choose the folder location you wish to back the data up to. (You will be able to choose to create a new folder here). E4E will then back up the data for you to your chosen location.

It is advisable to back up the storage folder at the end of each day of selling.

NOTE: For descriptions of the data the system data files contain see Appendix D

13. Checking for updates to the EPOS 4 Excel worksheet



If you are connected to the internet you can check to see if a newer version of the E4E worksheet (containing bug fixes or new features) has been released. On the main options screen click the check for updates button. E4E will now attempt to connect to the internet and download a file containing the latest E4E version number. Please be patient as this may take while. If a newer version is available you will be told to visit the E4E website (epos4excel.weebly.com) to download it.

After you have downloaded a new version you will have to go through the process of setting up E4E again (see section 3 of this manual), although if you have the older version of the worksheet and the new version of the worksheet open at the same time you should be able to simply copy and paste (for example) your receipt layout.

E4E automatically warns you on start-up if you have not checked for updates for more than a month. You can turn this feature of on the EPOS settings screen if you wish.

Appendix A – Using EPOS 4 Excel with multiple tills on a network

Why use a network?

To connect multiple tills together over a network all you need is a network drive that all tills can store data on. What are the benefits of networking multiple tills together?

- You can update the price list once from a single till and it will be updated on all tills automatically.
- You can have an accurate list of stock based on what all tills have individually sold
- You can keep all customer orders / enquiries stored in one place no matter what till they are entered on and at the end of the day this file could be emailed back to the main company office for processing.
- You can keep the sales data from every till in one place, so it is easy to back the data up.

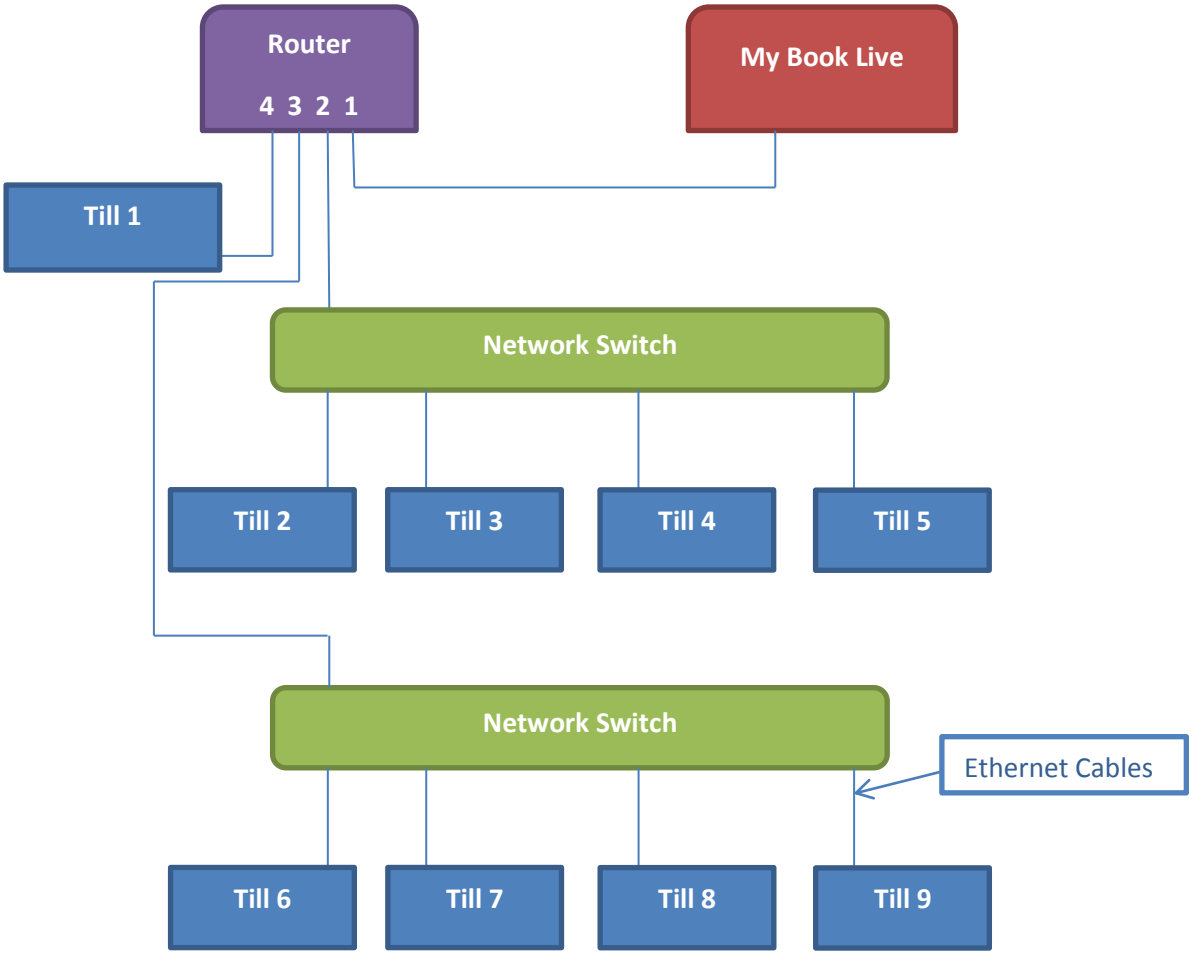
Example of simple network for use with EPOS 4 Excel

E4E has been tested on a simple network using a NAS (Network Attached Storage) drive with the following equipment:

1. A Western Digital 'My Book Live' NAS drive
2. A gigabit router – a gigabit router enables to network to run at the fastest possible speed
3. 5-port gigabit network switches to allow you to connect as many tills as you need to the network
4. Enough network cables to connect all the equipment together

E4E has currently been tested in a setting with up to six tills networked together with no problems. It is unknown how many tills could successfully work together before the network becomes overloaded, however E4E allows you to assign till numbers between 1 and 99.

The following diagram shows the basic layout of the network under which E4E has been tested:



Each till consists of a laptop, USB barcode scanner and USB printer.

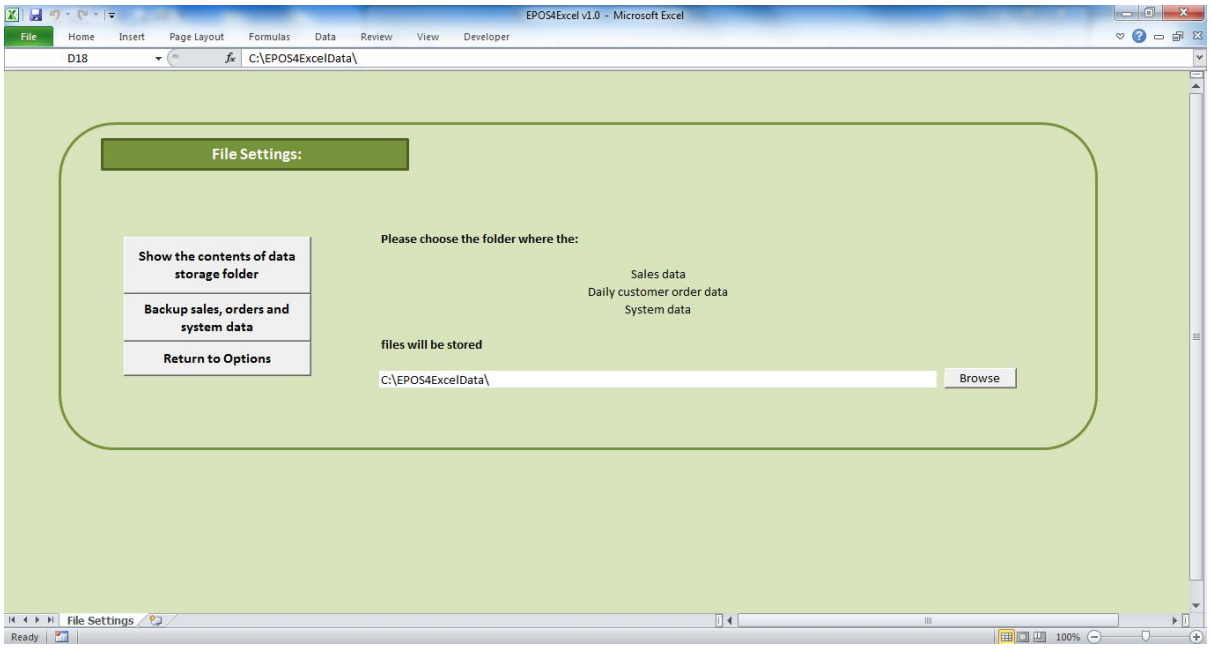
- If you have 3 or less tills connected to the network you do not need to worry about connecting the network switches. In this case you can connect the tills directly to ports 2-4 on the router.
- If you need 4-6 tills you only need to connect one network switch to the router.
- If you need 7 or more tills you will need to connect both network switches to the router.
- The maximum number of tills you can network together using this equipment is 9.

The following tips apply if you are seeking to set up this example network:

1. You will need to set up 'My Book Live' so it can be accessed on each individual till. Use the software CD that came with 'My Book Live' to install it on each till if this has not been done before. Follow the on screen instructions for installation and make sure you choose the same drive letter for 'My Book Live' when you install it on each till.
2. You need to set up the network and make sure the router, my book live and the network switches are powered on and all the cables are connected before you install the software.
3. If you have previously installed the 'My Book Live' software and you are having problems with the computer recognising 'My Book Live' then try switching the computer off and restarting it whilst it is connected to the switched on network.
4. You can always check if the 'My Book Live' has already been installed by going to My Computer and checking if you can see the network hard drive.

Setting up EPOS 4 Excel for use on a network

You need to choose the folder where the EPOS 4 Excel sales data, customer order data and the system data files will be stored to be on the network. To choose / change the location of the storage folder:



On the file settings screen (found via the EPOS settings screen) click the 'browse' button next to the folder name and change the storage folder location as appropriate. You will need to repeat this process on every instance of E4E running on the network (ie. on every till) so that they all point to the same folder.

E4E is now set up for use on a network. When you import products etc. these will now be accessible to every instance of E4E running on the network.

Appendix B – The full software license for the EPOS 4 Excel workbook

GNU LESSER GENERAL PUBLIC LICENSE Version 3, 29 June 2007

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Appendix C – Calculations used in the EPOS 4 Excel source code

Sales promotions such as '3 for 2' offers are not as simple as people sometimes think. You cannot just set one item's price to zero as you have to take into account the HMRC VAT rules for promotions on mixed VAT sales (See http://www.hmrc.gov.uk/vat/managing/charging/discounts-etc.htm, Accessed 19th October 2011). The following calculations outline how the E4E program calculates VAT on promotions. They enable you work out the individual item prices in a promotion after discounts have been applied such that the VAT charged is right.

NOTE: These calculations have been checked by an accountant to check that they calculate the VAT correctly for mixed rate VAT products, however use them at your own risk. No guarantee is given that they are correct and if you wish to use them in your own program you are advised to check that they continue to accurately reflect UK VAT rules before use. No liability will be accepted if they are found to be wrong!

VAT fraction calculation

How can we calculate the VAT amount from the items gross price (including VAT) and the VAT fraction?

N = Net Price; G= Gross Price; V = VAT Rate in %; F = VAT Fraction

Gross Price = Net Price + VAT amount which implies

$G = N + N \times \frac{V}{100} = N\frac{100+V}{100}$ (1)

$VAT\ amount = G - N = G \times F$ which implies

$G - G \times F = N$ (2)

Substituting (1) into (2)

$$N\frac{100+V}{100} - N = N\frac{100+V}{100}F$$

$$\frac{100+V}{100} - 1 = \frac{100+V}{100}F$$

$$\frac{100+V}{100} - \frac{100}{100} = \frac{100+V}{100}F$$

$$\frac{V}{100} = F\frac{100+V}{100}$$

$$F = \frac{V}{100+V}$$

If V =0 (non-vatable item) then N=G

Using the VAT fraction we can therefore calculate the net item price from the gross item price and the amount of VAT due on the item.

% Discount

How do we work out the individual item prices after percentage discount such that the VAT is calculated correctly for a sale which contains products with different VAT rates?

A percentage discount is a percentage off the sale. A percentage discount is equivalent to the multiplying the sale price by $D_{\%}$ where

$$D_{\%} = \frac{100 - \%\ Discount}{100}$$

S = total sale amount without discount; S_i = individual item price without discount

$$Sale\ total\ after\ discount = S \times \frac{100 - \%\ Discount}{100} = \sum S_i \times \frac{100 - \%\ Discount}{100}$$

We can multiply each item price by $D_{\%}$ to find the actual price the item was sold for.

Converting a monetary discount to an equivalent % discount

How do we work out the individual item prices after a monetary discount such that the VAT is calculated correctly for a sale which contains products with different VAT rates?

A monetary discount is a monetary amount of discount off the total sale price. We can convert a monetary discount to an equivalent percentage discount.

S = total sale amount without discount; S_i = individual item price without discount; $D_{£}$ = monetary discount (amount in pounds to discount sale by)

We can consider a monetary discount as equivalent to a percentage discount:

$$D_{\%} \times S = S - D_{£}$$ (see % discount section above for definition of $D_{\%}$)

Where $S = \sum S_i$ (sum of the individual item prices)

The equivalent percentage discount to the pound discount is:

$$D_{\%} = \frac{S - D_{£}}{S}$$

$$= \frac{\sum S_i - D_{£}}{\sum S_i}$$

According to HMRC VAT rules for mixed VAT products the monetary discount must be apportioned amongst the items in the sale in proportion to the original item prices.

Item price after the appropriate proportion of the pound discount is applied:

$$S_i - D_{£,i} = S_i - \frac{S_i}{S} D_{£}$$

ie. the proportion of the monetary discount applicable to an individual item is:

$$D_{£,i} = \frac{S_i}{S} D_{£}$$

Total price after monetary discount is the sum of the individual time prices less their portion of the monetary discount:

$$S - D_{£} = \sum(S_i - D_{£,i}) = \sum(S_i - \frac{S_i}{S} D_{£}) = \sum S_i \times \left(1 - \frac{D_{£}}{S}\right) = \sum S_i \times \left(\frac{S - D_{£}}{S}\right) \qquad (3)$$

But above we had

$$S - D_{£} = D_{\%} \times S = \sum S_i \times D_{\%} \qquad (4)$$

Comparing (3) and (4) we again find that

$$D_{\%} = \frac{S - D_{£}}{S} \qquad (5)$$

Therefore apportioning the monetary discount across the items of the sale in proportion to the original item price is equivalent to considering a monetary discount as a percentage discount on each individual item price using equation (5). If you multiply each item price by $D_{\%}$ the discounted sale price will be appointed correctly according to HMRC guidelines for mixed VAT products.
When there is both a percentage discount off the sale AND a monetary discount off the sale, we take the monetary discount off first before applying the percentage discount ie.

$$Price\ after\ discount = apply\ percentage\ discount\ \times (original\ price - pound\ discount)$$

Doing it this way works in the favour of the retailer rather than the customer.

If we write a monetary discount as an equivalent percentage then we get:

$$\begin{aligned} &Price\ after\ discount \\ &\qquad = apply\ percentage\ discount \\ &\qquad \times apply\ monetary\ discount\ as\ an\ equivalent\ percentage\ discount \\ &\qquad \times original\ price \end{aligned}$$

This will be apportioned appropriately according to HMRC guidelines for mixed VAT products.

Deals: Buy x items for £y

How do we work out the individual item prices after a buy x items for £y discount such that the VAT is calculated correctly for a sale which contains products with different VAT rates?

First, assume for our calculation purposes that we only have the x items that are in the discount.
(If there are other items these will have to be dealt with separately)

I_x = Original item price; I = Sum of original item prices; $D_{£}$ is the monetary discount we need to add to make the sale cost = £y

$$I = \sum I_x \qquad \text{(Sum of item prices)}$$

$$y = I - D_{£} = \sum I_x - D_{£} \qquad \text{(Sale total after discount is applied)}$$

According to HMRC guidelines for mixed VAT products we need to apportion the sale total £y amongst the items in proportion to the original item prices.

$$Price\ of\ item\ x\ after\ apportioning = y \times \frac{I_x}{I} = (I - D_£) \times \frac{I_x}{I} = I_x - D_£ \frac{I_x}{I}$$

Apportioning the discounted price is therefore equivalent to apportioning a monetary discount of $D_£$ to the x items. Simplifying this further:

$$Price\ of\ item\ x\ after\ apportioning = I_x - D_£ \frac{I_x}{I} = I_x \left(\frac{I - D_£}{I}\right)$$

$$multiplier = \frac{I - D_£}{I} \qquad (6)$$

We can therefore consider that the discount needed to make x items cost £y is equivalent to multiplying each individual item price before discount by (6), which is the same for each item. The item prices will then be apportioned appropriately according to HMRC rules for mixed VAT products.

Deals: Buy x get cheapest y free

How do we work out the individual item prices after a buy x items get cheapest y free such that the VAT is calculated correctly for a sale which contains products with different VAT rates?

First, assume for our calculation purposes that we only have the x items that are in the discount. (If there are other items these will have to be dealt with separately)

I_x = Original item prices for the x items; I_y = item prices of the y cheapest items; I = Sum of original item prices; $D_£$ is the monetary discount we need to take off to effectively make the y cheapest free ie. the sum of the prices of the y cheapest items; I_D = Sale total after discount

$$I = \sum I_x \qquad \text{(sum of all item prices)}$$

$$D_£ = \sum I_y \qquad \text{(sum of the cheapest y item prices)}$$

$$I_D = I - D_£ = \sum I_x - \sum I_y \qquad \text{(sale total after discount)}$$

According to HMRC guidelines for mixed VAT products we need to apportion the buy x get y free price amongst the items in proportion to the original item prices.

$$Price\ of\ item\ x\ after\ apportioning = I_D \times \frac{I_x}{I} = (I - D_£) \times \frac{I_x}{I} = I_x - D_£ \frac{I_x}{I}$$

This is equivalent to apportioning a monetary discount of $D_£$ to the x items, where the monetary discount is equal to the total of the y cheapest prices. However simplifying this further:

$$Individual\ item\ price\ after\ discount = I_x - D_£ \frac{I_x}{I}$$

$$I_D = \sum (I_x - D_£ \frac{I_x}{I})$$

$$I_D = \sum I_x \left(\frac{I - D_£}{I}\right) = \sum I_x \left(\frac{I - \sum I_y}{I}\right)$$

$$multiplier = \left(\frac{I - \sum I_y}{I}\right) \qquad (7)$$

We can therefore consider that the discount we need to apply to each item to make them add up to the 'x items with the cheapest y free' price is equivalent to multiplying each individual item price before discount by (7) which is the same for each item. The item prices will then be apportioned appropriately according to HMRC rules for mixed VAT products.

Procedure for applying deals and discounts:

To work out the item prices in the whole sale after all discounts and deals have been applied (in such a way that the VAT is apportioned correctly according to HMRC rules for mixed VAT products) use the following procedure:

1) The sale has deals in it

Calculate the discounts for only the items in each individual occurrence of a deal in the sale basket. ie. Sale basket contains numerous items. X of these items make up an occurrence of a specific deal eg. buy x for 2, buy x for £1

EITHER (1st method is used in the E4E source code)

a) Work out what the total value of the X items ONLY should have been
b) Work out what the amount of discount due on these X items
c) Work out the multiplier calculated above according to which deal you applying
d) Apply that multiplier to the prices for the X items ONLY.
e) Repeat this procedure for any other occurrences of deals in the basket ie. if you have two buy 1 get 1 free deals in the basket you go through the procedure for the first 2 items that make up the first occurrence of the buy 1 get 1 free deal and then you go through the procedure for the second 2 items that make up the second occurrence of the buy 1 get 1 free deal

OR

a) Work out what the total value of the X items ONLY should have been
b) Work out what the total value of the X items is after discount
c) Work out actual value of the X items as percentage of original value of the X items
d) Apply that % across the prices for the X items ONLY.
e) Repeat this procedure for any other occurrences of deals in the basket ie. if you have two buy 1 get 1 free deals in the basket you go through the procedure for the first 2 items that make up the first occurrence of the buy 1 get 1 free deal and then you go through the procedure for the second 2 items that make up the second occurrence of the buy 1 get 1 free deal.

2) Sale has a monetary discount

If the sale has deals in it the calculate item prices after deals have been applied first. Then we add monetary discounts. Calculate the additional discounts due to the monetary discount for EVERY item sale basket as follows:

a) Work out sale total after deals discounts have been added
b) Work out what sale total will be after additional monetary discount has been added
c) Work out b) as percentage of a)
d) Apply that additional % across all items prices in the sale

3) Sale has a percentage discount

If the sale has deals in it, calculate item prices after deals have been applied first. Then calculate item prices after any additional monetary discounts have been applied. Lastly apply any additional percentage discount to these item prices.

This procedure alters the item prices so you can calculate the VAT due on the sale. The item prices are altered in such a way that the VAT is apportioned according the HMRC rules on mixed VAT products. The customer only sees the original item prices + details of any discount amounts on the receipt. To accurately calculate the VAT on the sale calculate the VAT due on the altered item prices and not the original item prices. This correct VAT (after discounts) is detailed for the customer on their receipt.

Appendix D – Description of the system data files created by EPOS 4 Excel

Productdata.xlsx = An Excel workbook containing a list of imported / added products. It also contains a copy of the list of tax codes / classes and corresponding % VAT rates from the tax settings screen. The file layout is as follows:

Column A:	SKU / Item Code
Column B:	Item Description
Column C:	Gross Price (including VAT)
Column D:	Item tax class code
Column E:	A deal code if the item is linked to a specific deal
Column F:	Quantity of the item delivered
Column G:	Quantity of the item in stock
Column H:	Quantity of the item sold
Column L:	Tax class code
Column M:	% VAT rate which corresponds to the tax class code

NOTE: Row 1 contains column headings

Recieptmessage.txt = A text file containing the customisable message that appears at the end receipts

Dealsdata.xlsx = An Excel worksheet containing a copy of the data from the deal code setup screen

Column A:	Deal name (max 20 characters)
Column B:	Buy any X and get the Y cheapest free deal code
Column C:	Buy any X and get for £Y
Column D:	Buy X different for £Y
Column E:	X
Column F:	Y

NOTE: Each individual deal is represented by a row on the worksheet. No column headings

Appendix E – Accessing the visual basic for applications (VBA) source code for EPOS 4 Excel

It is possible to access the source code for EPOS 4 Excel using the developer functions built into Excel. You will need to enter a password to access the VBA source code. The password is:

EPOS4excel (password is case sensitive)

Only those who have knowledge of programming or VBA should attempt to alter this code.

Why have the source code password protected? From experience in the development of E4E, on the rare occasion that E4E has crashed due to a bug, if the source code is not password protected then the user who knows nothing about VBA can accidently make changes to the source code by choosing to 'debug' it. These accidental changes in turn can cause E4E to fail completely! Having the source code password protected prevents this error happening whilst still allowing advanced users to access the source code!

