

# Manual Shipping Plugin for Hikashop by Brainforge.UK

## 8.0 Size / Weight Price Calculation

Using a simple CSV structured text area this feature allows the shipping price to be calculated using the order and product(s) dimensions, volume and weight.

This feature was originally developed for sites using [Royal Mail](#) . Later it was also used with international shipments from a site using [Japan Post](#).

### 8.1 Basic Configuration

- **Size / Weight prices (CSV style format)**  
The *Edit* button displays a pop-up dialog box where you can enter the size / weight price information.
- **Weight restrictions by country zone**  
Some postal services have weight restrictions for certain countries within the same weight / size price structure. This feature allows you to group these restricted countries into Hikashop zones. So one shipping method can be used to cater for all countries.
- **Require size & weight**  
When enabled this shipping method will only be available when size & weight has been specified for all the item in the shopping cart.

#### 8.1.1 Royal Mail Domestic Example (2018 Prices)

Prices taken from [Royal Mail 2018 leaflet](#) .

Royal Mail 1 <sup>st</sup> Class	Royal Mail 2 <sup>nd</sup> Class	Parcelforce Worldwide Express 9
# RM 1st Valid from 26 March 2018	# RM 2nd Valid from 26 March 2018	# PFW-E9 Valid from 26 March 2018
DISPLAY,NAME	DISPLAY,NAME	VATPC,20
NAME,Letters	NAME,Letters	DISPLAY,NAME
SIZE,240,165,5	SIZE,240,165,5	NAME,Large Parcel
WEIGHT,100,0.67	WEIGHT,100,0.58	SIZE,1500,+,3000
NAME,Large Letters	NAME,Large Letters	WEIGHT,2000,39.90
SIZE,353,250,25	SIZE,353,250,25	WEIGHT,5000,40.92
WEIGHT,100,1.01	WEIGHT,100,0.79	WEIGHT,10000,44.34
WEIGHT,250,1.40	WEIGHT,250,1.26	WEIGHT,15000,51.18
WEIGHT,500,1.87	WEIGHT,500,1.64	WEIGHT,20000,56.58
WEIGHT,750,2.60	WEIGHT,750,2.22	WEIGHT,25000,67.80
NAME,Small Parcels	NAME,Small Parcels	WEIGHT,30000,72.00
SIZE,450,350,160	SIZE,450,350,160	
WEIGHT,1000,3.45	WEIGHT,1000,2.95	
WEIGHT,2000,5.50	WEIGHT,2000,2.95	
NAME,Medium Parcels	NAME,Medium Parcels	
SIZE,610,460,460	SIZE,610,460,460	
WEIGHT,1000,5.75	WEIGHT,1000,5.05	
WEIGHT,2000,8.95	WEIGHT,2000,5.05	
WEIGHT,5000,15.85	WEIGHT,5000,13.75	
WEIGHT,10000,21.90	WEIGHT,10000,20.25	
WEIGHT,20000,33.40	WEIGHT,20000,28.55	

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## 8.1.2 Royal Mail International Example (2018 Prices)

See <http://www.royalmail.com/international-zones> for international zone definitions.

Prices taken from [Royal Mail 2018 leaflet](#) .

Royal Mail Europe Zone	Royal Mail International Zone 1	Royal Mail International Zone 2
# RM Europe Valid from 28 March 2018 VATPC,EXEMPT DISPLAY,NAME NAME,Letters SIZE,240,165,5 WEIGHT,10,1.25 WEIGHT,20,1.25 WEIGHT,100,1.55 NAME,Large Letters SIZE,353,250,25 WEIGHT,100,2.65 WEIGHT,250,3.85 WEIGHT,500,4.90 WEIGHT,750,5.95 NAME,Small Parcels SIZE,600,600,900 WEIGHT,100,4.15 WEIGHT,250,4.45 WEIGHT,500,6.20 WEIGHT,750,7.45 WEIGHT,1000,8.65 WEIGHT,1250,9.75 WEIGHT,1500,10.90 WEIGHT,1750,11.70 WEIGHT,2000,12.10	# RM Zone 1 Valid from 28 March 2018 VATPC,EXEMPT DISPLAY,NAME NAME,Letters SIZE,240,165,5 WEIGHT,10,1.25 WEIGHT,20,1.45 WEIGHT,100,2.25 NAME,Large Letters SIZE,353,250,25 WEIGHT,100,3.30 WEIGHT,250,4.85 WEIGHT,500,7.10 WEIGHT,750,9.15 NAME,Small Parcels SIZE,600,600,900 WEIGHT,100,4.85 WEIGHT,250,5.55 WEIGHT,500,8.50 WEIGHT,750,10.95 WEIGHT,1000,13.35 WEIGHT,1250,14.80 WEIGHT,1500,16.30 WEIGHT,1750,17.50 WEIGHT,2000,18.30	# RM Zone 2 Valid from 28 March 2018 VATPC,EXEMPT DISPLAY,NAME NAME,Letters SIZE,240,165,5 WEIGHT,10,1.25 WEIGHT,20,1.45 WEIGHT,100,2.25 NAME,Large Letters SIZE,353,250,25 WEIGHT,100,3.45 WEIGHT,250,5.15 WEIGHT,500,7.50 WEIGHT,750,9.70 NAME,Small Parcels SIZE,600,600,900 WEIGHT,100,5.25 WEIGHT,250,6.05 WEIGHT,500,9.20 WEIGHT,750,11.65 WEIGHT,1000,14.10 WEIGHT,1250,15.75 WEIGHT,1500,17.55 WEIGHT,1750,19.00 WEIGHT,2000,20.50

## 8.2 Example Royal Mail Domestic Checkout Display

The CSV configured prices are in the shipping method currency (£).

The shipping method price, if any, will be added to the calculated carrier price. Used to cover shop packing overheads.

The carrier's method name can optionally be added to the shipping method name using the optional CSV configured DISPLAY parameter.

SHIPPING METHOD

☒



Royal Mail 1st Class (Small Parcels) £ 3.35

☐



Royal Mail 2nd Class (Small Parcels) £ 2.85

☐



Parcelforce Worldwide - Express 9 (Large Parcel) £ 39.48

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## 8.3 Basic CSV Format Parameters

- Comments

Lines beginning with # and blank lines are ignored.

It is recommended that the first line be a short descriptive comment. If present that comment will be used as the edit button label.

### Specific configuration

Size / Weight prices (CSV style format)	RM 1st Valid from 26 March 2018
Weight restrictions by country zone	Select an option
Require size & weight	Yes No

### ☒ Restrictions

Zone	5945 Royal Mail UK Zone  
------	---

- Data Lines

The first column of each line contains the value property name.

All lines are required.

**NAME**, **SIZE**, **WEIGHT** lines may appear more than once.

Property	Description
<b>UNITS</b>	Dimension units Optional, defaults to: <i>mm,g</i> Dimension units, weight units of following data.
<b>VATPC</b>	<b>VAT</b> percent included in carrier prices. Optional, defaults to: <i>EXEMPT</i> If exempt enter <i>EXEMPT</i> (this is not the same as 0%).
<b>DISPLAY</b>	Optional. Specify <i>NAME</i> to include carrier's method name in checkout display.
<b>NAME</b>	The <i>unique</i> name which applies to following <b>SIZE</b> line and <b>WEIGHT</b> lines. For convenience this is typically derived from the carrier's method name.
<b>SIZE</b>	The largest length, width, thickness to which the following <b>WEIGHT</b> lines apply. The carrier's methods must be entered in <i>ascending</i> order of size. (e.g. letters then parcels) A plus (+) size is used to represent a girth specification. For instance <i>SIZE,1500,+,3000</i> represents 1.5m length and a girth of 3.0m
<b>WEIGHT</b>	The price associated with orders weighing up to the specified value.

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## **8.4 Shipping Method Availability Calculation**

For a shipping method to be available for a particular order it must match the following criteria.

- The volume must be less than or equal to the volume specified for the carrier's method.
- The weight must be less than or equal to one of the carrier's specified weights.
- No product dimension must exceed any of the carriers specified dimensions.  
For example the volume of a large cardboard sheet may be less than a letter volume but its dimensions may exceed the allowable dimensions for a letter.
- If the order contains multiple products with different sizes and weights the price is calculated according to the following criteria.
  - Total weight.
  - Total volume.
  - Sum of the smallest dimension for each product (i.e. depth).
  - Largest dimensions for each product (i.e. length, width).

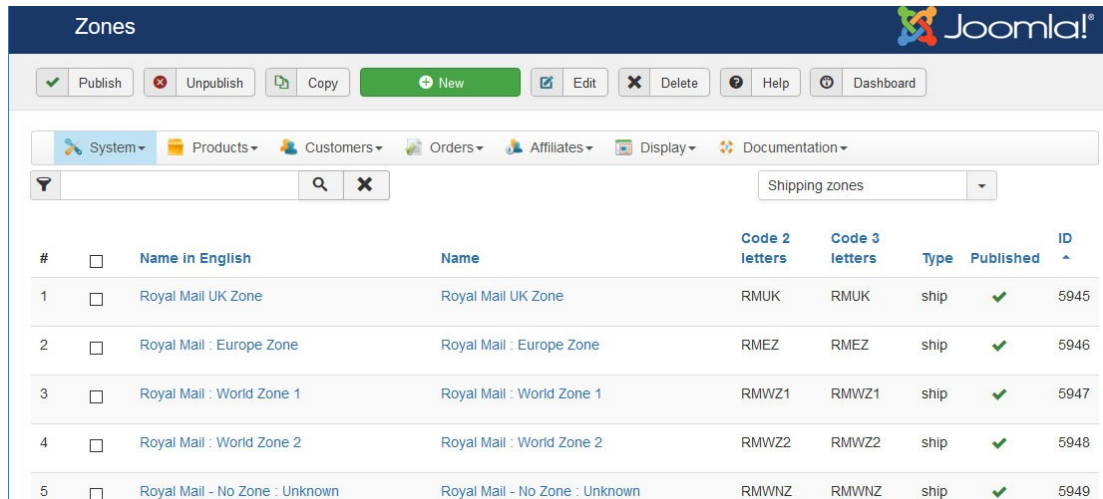
Automatically splitting an order into multiple packages for shipping is not supported.

When using product variants the variant weight / dimensions will take preference over the product properties. If all variants have the same dimensions, but different weights, you only need specify the variant weight.

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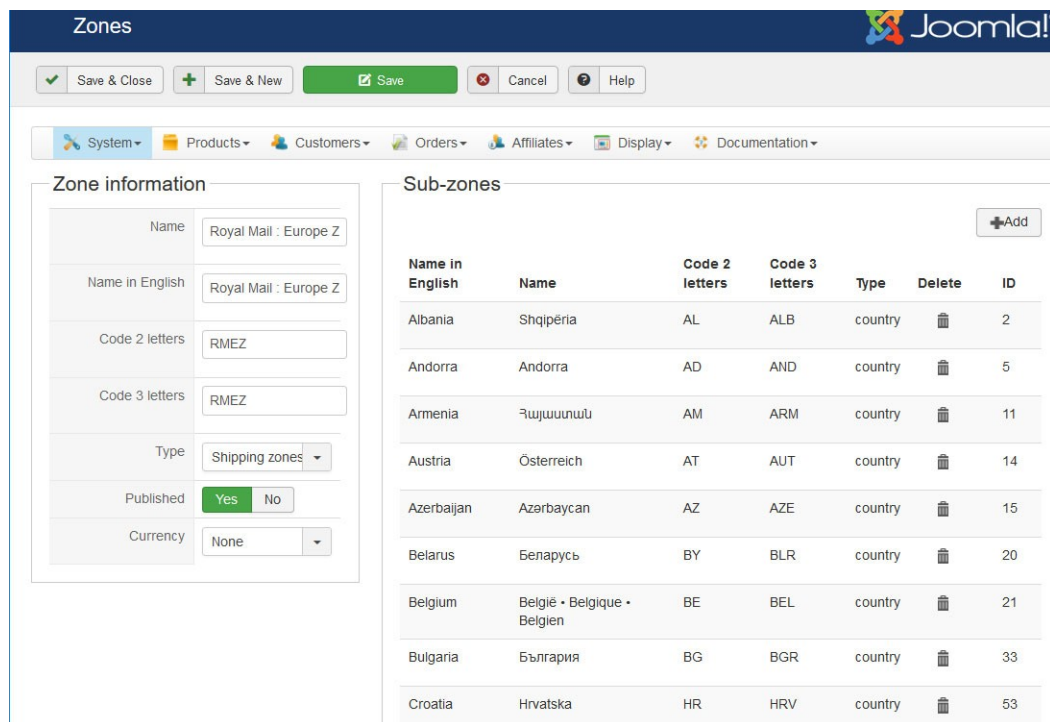
## 8.5 Hikashop Shipping Zone Restrictions

Shipping zones are configured through Hikashop, under Hikashop / System /Zones.



#	<input type="checkbox"/>	Name in English	Name	Code 2 letters	Code 3 letters	Type	Published	ID
1	<input type="checkbox"/>	Royal Mail UK Zone	Royal Mail UK Zone	RMUK	RMUK	ship	✓	5945
2	<input type="checkbox"/>	Royal Mail : Europe Zone	Royal Mail : Europe Zone	RMEZ	RMEZ	ship	✓	5946
3	<input type="checkbox"/>	Royal Mail : World Zone 1	Royal Mail : World Zone 1	RMWZ1	RMWZ1	ship	✓	5947
4	<input type="checkbox"/>	Royal Mail : World Zone 2	Royal Mail : World Zone 2	RMWZ2	RMWZ2	ship	✓	5948
5	<input type="checkbox"/>	Royal Mail - No Zone : Unknown	Royal Mail - No Zone : Unknown	RMWNZ	RMWNZ	ship	✓	5949

The Edit page allows you to add / remove countries as needed.



Name in English	Name	Code 2 letters	Code 3 letters	Type	Delete	ID
Albania	Shqipëria	AL	ALB	country		2
Andorra	Andorra	AD	AND	country		5
Armenia	Հայաստան	AM	ARM	country		11
Austria	Österreich	AT	AUT	country		14
Azerbaijan	Azərbaycan	AZ	AZE	country		15
Belarus	Беларусь	BY	BLR	country		20
Belgium	België • Belgique • Belgien	BE	BEL	country		21
Bulgaria	България	BG	BGR	country		33
Croatia	Hrvatska	HR	HRV	country		53

### 8.5.1 Hikashop Zone Plugins

These above zones can be entered manually or Brainforge.UK is able to provide a *hikashopzone* plugin for your postal service which will generate all required shipping zones. If necessary these can still be manually managed.

The following *hikashopzone* plugins are currently available, please [contact us](#) to discuss your requirements.

<b>Royal Mail</b>	plg_hikashopzone_bfroyalmail.zip
<b>Japan Post</b>	plg_hikashopzone_bfjapanpost.zip

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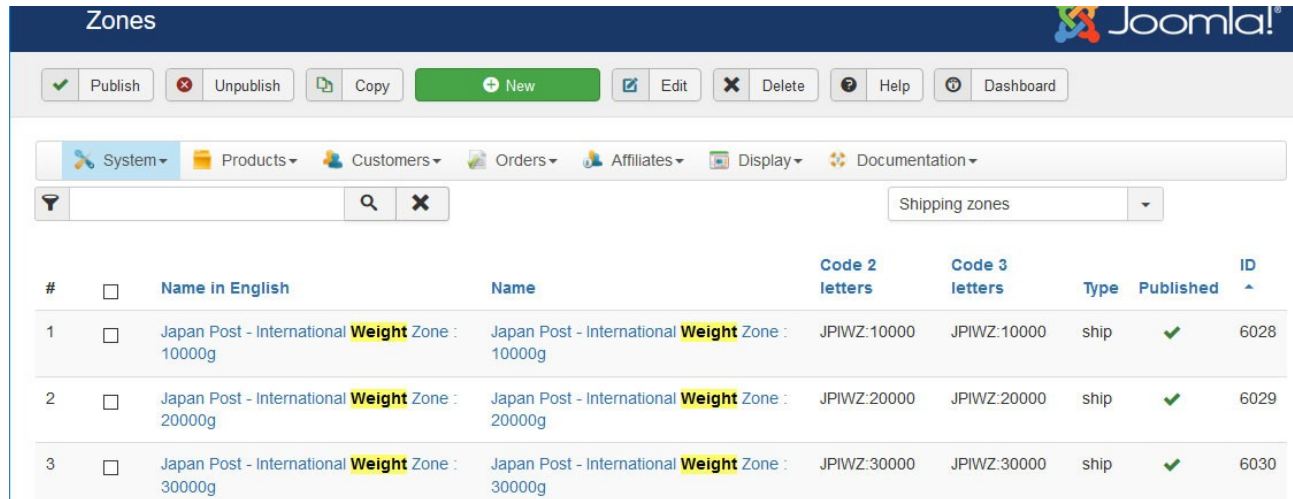
## 8.6 Weight Restrictions by Country Zone

The same *hikashopzone* plugins, mentioned above, are used to populate the shipping zones used for country restrictions.

These zones cannot be entered manually from Hikashop administration.

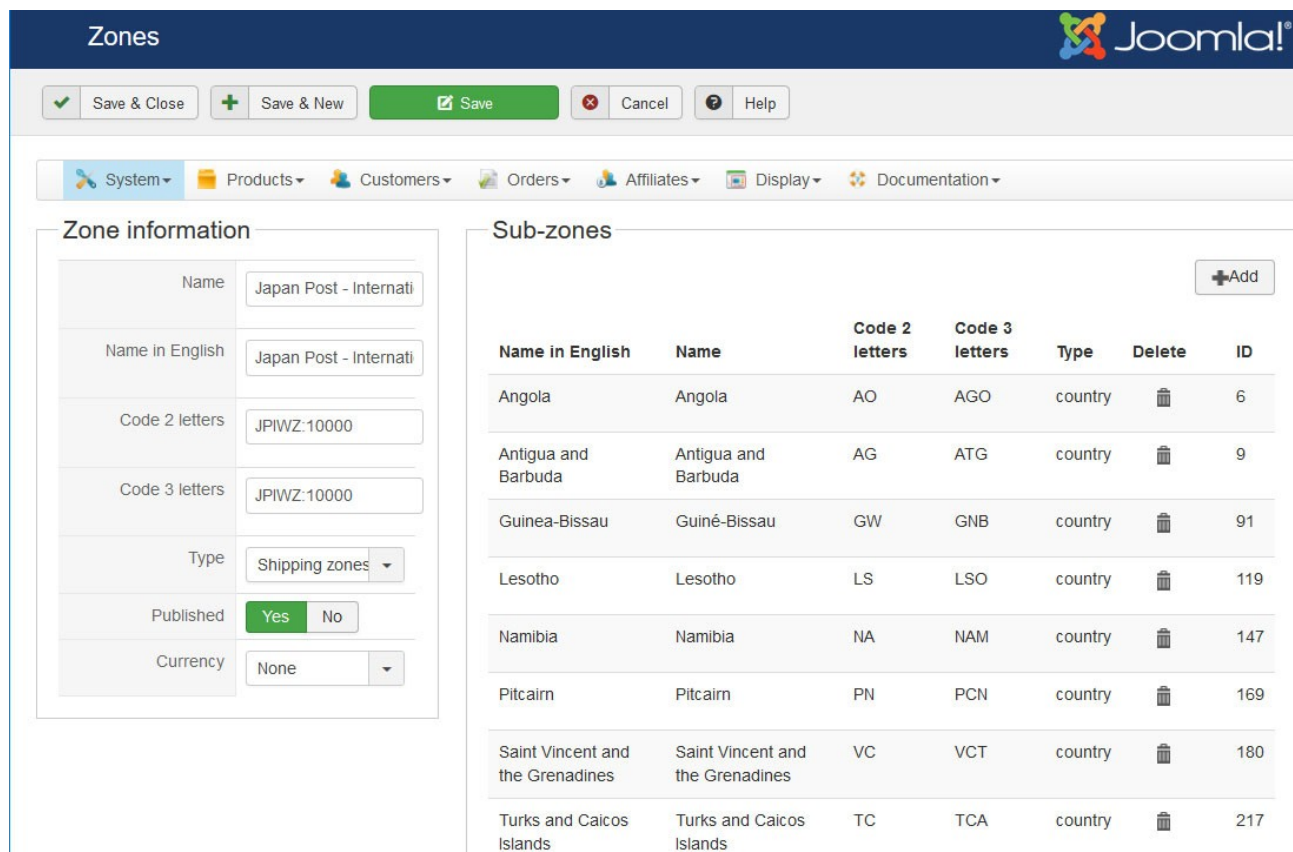
However, once populated, they can be edited manually in the usual manner.

Below is an example of these weight restrictions for Japan Post.



The screenshot shows the Joomla! administration interface for managing shipping zones. The top navigation bar includes buttons for Publish, Unpublish, Copy, New, Edit, Delete, Help, and Dashboard. Below the navigation bar is a search bar and a dropdown menu for 'Shipping zones'. The main content area displays a table of shipping zones.

#	<input type="checkbox"/>	Name in English	Name	Code 2 letters	Code 3 letters	Type	Published	ID
1	<input type="checkbox"/>	Japan Post - International Weight Zone : 10000g	Japan Post - International Weight Zone : 10000g	JPIWZ:10000	JPIWZ:10000	ship	✓	6028
2	<input type="checkbox"/>	Japan Post - International Weight Zone : 20000g	Japan Post - International Weight Zone : 20000g	JPIWZ:20000	JPIWZ:20000	ship	✓	6029
3	<input type="checkbox"/>	Japan Post - International Weight Zone : 30000g	Japan Post - International Weight Zone : 30000g	JPIWZ:30000	JPIWZ:30000	ship	✓	6030



The screenshot shows the Joomla! administration interface for editing a shipping zone. The top navigation bar includes buttons for Save & Close, Save & New, Save, Cancel, and Help. Below the navigation bar is a search bar and a dropdown menu for 'Shipping zones'. The main content area is divided into two sections: 'Zone information' and 'Sub-zones'.

**Zone information**

Name	Japan Post - Internati
Name in English	Japan Post - Internati
Code 2 letters	JPIWZ:10000
Code 3 letters	JPIWZ:10000
Type	Shipping zones
Published	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Currency	None

**Sub-zones**

Name in English	Name	Code 2 letters	Code 3 letters	Type	Delete	ID
Angola	Angola	AO	AGO	country		6
Antigua and Barbuda	Antigua and Barbuda	AG	ATG	country		9
Guinea-Bissau	Guiné-Bissau	GW	GNB	country		91
Lesotho	Lesotho	LS	LSO	country		119
Namibia	Namibia	NA	NAM	country		147
Pitcairn	Pitcairn	PN	PCN	country		169
Saint Vincent and the Grenadines	Saint Vincent and the Grenadines	VC	VCT	country		180
Turks and Caicos Islands	Turks and Caicos Islands	TC	TCA	country		217



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## 8.7 Advanced CSV Format Parameters

After the original Royal Mail implementation of this feature additional parameter handling was found useful (e.g. for Japan Post).

These are referred to as *Advanced Parameters* being targetted at the more complex size / weight price scenarios, although they might provide opportunities for useful simplifications elsewhere.

Property	Description
<b>MULTICHOICE</b>	Optional. Sometimes there can be several possibilities with the same shipping method, e.g. when <b>MINSIZE</b> is used. Specify <i>CHEAPEST</i> to ensure you always get the lowest price option.
<b>MINSIZE</b>	Optional. The smallest length, width, thickness to which the following <b>WEIGHT</b> lines apply.
<b>CNTRYSIZE</b>	Optional. A colon separated list of country codes (code 2) followed by the largest length, width, thickness to which the following <b>WEIGHT</b> lines apply. For example : <i>CNTRYSIZE,CN:HK:TW:GB,1500,+LHHWW,3000</i> This can be used when a small number of countries in the same zone have a different maximum size limitation. Alternatively you can split these countries into their own zone and create a duplicate shipping method.
<b>VALIDITY</b>	Optional. Specifies a date range restriction for the following <b>WEIGHT</b> lines. This may be more convenient than creating duplicate shipping methods and using the shipping method Availability date range feature. For example: <i>VALIDITY,000000000/20180630</i> <i>WEIGHT,100,200</i> <i>VALIDITY,20180701/99999999</i> <i>WEIGHT,110,210</i>
<b>WEIGHT</b>	Additional feature. Where shipping prices are banded into weight groups the grouping feature saves having to enter each weight / price combination individually. Used in conjunction with <b>VALIDITY</b> lines this can be a time saver when managing price changes. For example: <i>WEIGHT,100/50/300,200/20</i> <i>WEIGHT,300/100/500,260/50</i> <i>WEIGHT,500,390</i> Is equivalent to: <i>WEIGHT,100,200</i> <i>WEIGHT,150,210</i> <i>WEIGHT,200,220</i> <i>WEIGHT,250,240</i> <i>WEIGHT,300,290</i> <i>WEIGHT,400,340</i> <i>WEIGHT,500,390</i>  Note how the <i>WEIGHT,500,390</i> line is used as an end marker. It provides a useful validation check, if weight / prices mismatch you get an error message.

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## 8.7.1 Japan Post Example

Specific configuration

Size / Weight prices (CSV style format)	JP Letter Airmail 3rd Zone Valid on 16 August 2018
Weight restrictions by country zone	Japan Post International W... X
Require size & weight	Yes No

☒ Restrictions

Zone	6022 Japan Post - Letter 3rd Zone : South America & Africa
------	--

The corresponding size / weight prices popup dialog box looks like this:

Size / Weight prices (CSV style format)

# JP Letter Airmail 3rd Zone Valid on 16 August 2018

ADDRESS,REQUIRED

UNITS,mm,g

VATPC,EXEMPT

DISPLAY,NAME

NAME,Small Packets

MINSIZE,140,90,0

SIZE,600,+LHW,900

WEIGHT,100/100/2000,200/120

WEIGHT,2000,2480

Return to main form

Brainforge.UK may be able to provide example CSV files for some of these size / weight price configurations. Using copy and paste from these can be used to help your initial configuration. Please [contact us](#) to discuss your requirements.

## 8.7.2 Debug Mode

A simple debug feature is available which allows a site administrator, in the checkout screen, to view the size / weight price configuration being used as in this screenshot.

Each shipping method is listed as a button in the checkout message area. Clicking the button displays / hides the associated configuration information.

This debug mode is configured using the hikashopshipping *bfmanual* plugin screen in the Joomla *extensions* menu.

Notice

Dimensions mm

```
Array
(
    [0] => 200
    [1] => 150
    [2] => 2
)
```

Order Weight g

50

plg\_hikashopshipping\_bfmanual : Japan Post Letter 2nd Zone Airmail

plg\_hikashopshipping\_bfmanual : Japan Post Letter 2nd Zone Economy Air (SAL)

plg\_hikashopshipping\_bfmanual : Japan Post Letter 2nd Zone Surface Mail

```
stdClass Object
(
    [names] => Array
        (
            [Letters : (Standard-size)] => stdClass Object
                (
                    [length] => 235
                    [dimensionmode] =>
                    [width] => 120
                    [thickness] => 10
                    [volume] => 282000
                    [weights] => Array
                        (
                            [20] => 90
                            [50] => 160
                            [100] => 270
                            [250] => 540
                            [500] => 1040
                            [1000] => 1800
                            [2000] => 2480
                        )
                )
            )
        )
)
```