

# Package `gentombow` v0.9j

Hironobu Yamashita

2018/08/30

It is convenient to print documents for final smaller paper sizes on paper of the printer's standard physical paper size; it allows printing close to the logical paper edge and even outside the logical page.

This package `gentombow` provides a Japanese-style crop marks (called 'tombow' in Japanese) for trimming paper stacks, and place the document page at the center of a larger physical paper sheet. It automatically detects the page size (`\paperwidth`, `\paperheight`) which is going to be set by document class. This document itself is a demonstration of this package, with final A4 paper printed on B4 (JIS B4; not ISO B4!) paper.

A basic usage:

```
\documentclass[a4paper]{article}
\usepackage{gentombow}
\usepackage{graphicx}
\begin{document}
The content
\end{document}
```

Note that this package does nothing about output paper size specification; use one of the followings to do it.

- `graphicx` package with `setpagesize` feature added in 2016 (supports all engines)
- `bxpapersize` package (supports all engines; by Takayuki YATO)
- `bounddvi` package (supports only DVI output mode; part of `gentombow` bundle)

This package is part of `gentombow` bundle:

<https://github.com/aminophen/gentombow>

Originally it was part of `platex-tools` bundle, but it has been moved since March 2018.

## 1 Basic Functions

First, I introduce some basic functions of `gentombow` package.

## 1.1 Automatic Determination of Output Size

In this package, the following printer's standard physical paper sizes are predefined; A series (`a0-a10`), B series (`b0-b10`), C series (`c0-c10`), `letter`, `legal` and `executive`. In the current release, 'B series' is JIS standard, not ISO standard (this might be changed in the near future). Also, some variations `a4var` and `b5var` are predefined.

When one of the above sizes (except `a0`, `b0` and `c0`) is detected, the output size is automatically determined along with the following rule:

- When A series detected: the output is going to be larger B series
- When B/C series or `letter`, `legal`, `executive` detected: the output is going to be larger A series

The crop marks are automatically added. The orientation (landscape/portrait) of the input paper is also preserved.

The following list shows common examples:

Detected page size	Output size
a6	b6
b6	a5
a5	b5
b5	a4
a4	b4
b4	a3
a3	b3
b3	a2
c6	a5
c5	a4
c4	a3
c3	a2
letter	a3
legal	a3
executive	a4

## When Automatic Determination Failed

When the page size is different from any of the predefined sizes, the page is placed with the surrounding 1 inch margins. For example, when the page has 100 mm width and 200 mm height, the output size is going to be 100 mm + 2 in width and 200 mm + 2 in height.

## 1.2 Job Info Printing

By default, the crop marks are printed with a banner, which shows a job info like `gentombow (2018-08-30 20:56)`. The format is similar to `tombow` option, which is available in most of the common Japanese classes. The default also reacts to `tombo` (without a job info) or `mentuke` (do not print actual crop marks) class options.

## 2 Package Options

You can specify output size and/or disable job info printing using package options.

### 2.1 Explicit Specification of Output Size

You can also force the output size using package option. For example,

```
\documentclass[a4paper]{article}
\usepackage[tombow-a4]{gentombow}
\begin{document}
The content
\end{document}
```

forces the output size to be a3 (the automatic determination ‘b4’ is discarded). Available sizes are the same as the predefined sizes, that is, A series (a0–a10), B series (b0–b10), C series (c0–c10) and **a4var**, **b5var**, **letter**, **legal**, **executive**. The orientation (landscape/portrait) of the input paper is also preserved again.

The option format is: *<crop mark format>-<output size>*. The crop mark format is one of the following: **tombow** (default), **tombo** (without a job info), **mentuke** (do not print actual crop marks).

### 2.2 Disabling Job Info Printing

When you specify the output size explicitly, the crop mark format can be given at the same time, as described previously. When the output size is automatically determined, you can disable job info printing by **notombowbanner** option.

## 3 Customization of Crop Mark

The `pxgentombow` package provides some commands to customize crop mark format.

### 3.1 Banner content

Using `\settombowbanner`, you can set the banner content. An example using `\pdfcreationdate` (pdfTeX primitive)

```
\documentclass[a4paper]{article}
\usepackage{gentombow}
\settombowbanner{\jobname\space (\pdfcreationdate)}
\begin{document}
The content
\end{document}
```

will result in `gentombow (D:20180830205658+09'00')`. The argument is an arbitrary token list.

### 3.2 Banner font

Using `\setombowbannerfont`, you can change the font with which the banner is printed.

```
\setombowbannerfont{cmss10 at 9pt}
```

This feature internally calls the  $\TeX$  primitive `\font`, and accepts all fonts supported by the engine. When  $\text{Lua}\TeX$  or  $\text{Xe}\TeX$  is used, a native OpenType font can also be given.

### 3.3 Crop mark line width

By default, the line width of crop marks is 0.1 pt. This can be change to 1 pt by `\setombowwidth{1pt}`. The argument is an arbitrary dimension.

### 3.4 Bleed margin width

By default, the bleed margin width is 3 mm. This can be change to 5 mm by `\setombowwidth{5mm}`. The argument is an arbitrary dimension.

### 3.5 Crop mark color

Set the color of crop marks. Package `xcolor` (recommended) or `color` is required. For example, `\setombowcolor{\color[cmymk]{0,1,0,0}}` sets magenta.

## 4 Setting PDF page box (“digital tombow”)

This is an optional driver-dependent feature. When `gentombow` is required with the option `pdfbox`, following page boxes are emitted to the output PDF file. The paper size (`/MediaBox`) is also corrected.

- `/TrimBox`: final paper size.
- `/BleedBox`: paper size plus bleed margin.
- `/CropBox` and `/ArtBox` are not set.

## 5 Additional Notes

Here is some additional notes for use with several classes/packages.

### 5.1 Note for `BXjscls` users

When using `BXjscls` (by Takayuki YATO) with size option other than 10pt, please add `nomag` or `nomag*` to the class option. For example,

```
\documentclass[a4paper,14pt]{bxjsarticle}
\usepackage{gentombow}
```

will not work as expected (`gentombow` throws an error for safety).

## 5.2 Note about Layout Settings

You should not change `\hoffset` or `\voffset` to non-zero value, for the purpose of layout settings. Such settings will conflict with the feature of `gentombow` package. To set page layout correctly, you should adjust `\oddsidemargin` or `\topmargin`, or leave it to `geometry` package.

## Change History

- 2017/12/17 v0.9 First CTAN release
- 2018/03/16 v0.9e Add `\setombowbanner`, `\setombowbannerfont` and `\setombowwidth`.
- 2018/05/17 v0.9g Add `pdfbox` option, `\setombowbleed` and `\setombowcolor`.
- 2018/08/20 v0.9h Add `hagaki` size for paper detection, improve patches for `pdfpages`.
- 2018/08/30 v0.9j Support `jsclasses-style` `\mag` employment also with `pdfbox` option. Fix a bug that `\setombowbleed` is not considered by `/TrimBox`.