



## Getting Started

[The Design Workspace](#)

[Design Workspace Setup](#)

[Paper Size](#)

[Page Orientation](#)

[Double sided printing \(Duplex\)](#)

[Tombstones](#)

[Grid](#)

[Custom Grid Definition](#)

[Scan from Image Forms](#)

[Response Grid](#)

[Manual Timing Marks](#)

["Fat" Response Shape](#)

[Blind and Other Colors](#)

## Prepare Your Workspace

PDF version

### Paper Size

Select a paper size for your printer. To change a form's page size, select one of the standard page sizes available in the list.

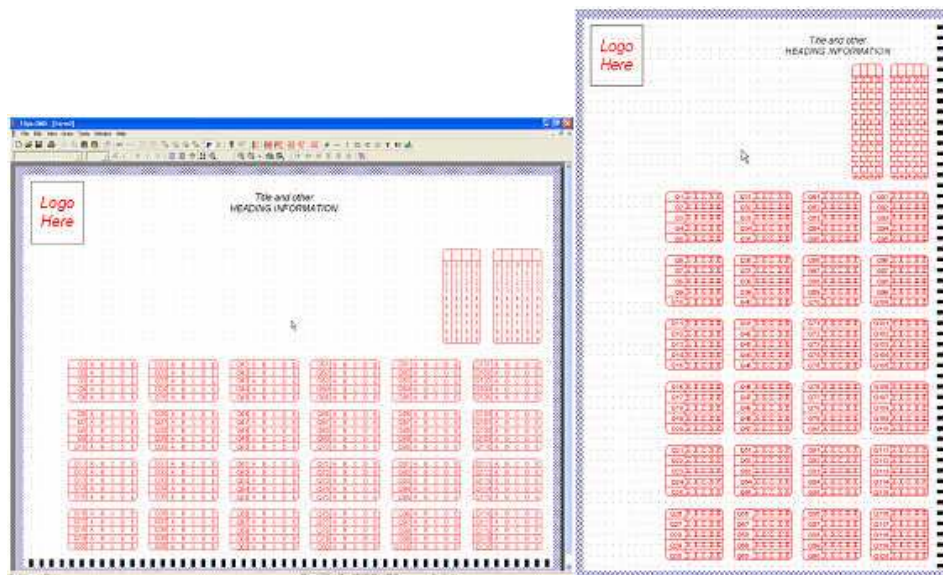
[Top](#)

### Page Orientation

Portrait (vertical page) and landscape (horizontal page) orientations are available with different timing track placements.

Orientation should be chosen to reduce skew on laser printed forms and/or to reduce sheet damage where the sheet enters the scanner on commercially printer forms.

**Laser printed forms** should generally have timing marks bottom or right for normal use, where the objective is to have response positions closer to the timing marks, thus reducing skew.



**Booklet Forms** should be printed to avoid damage on the timing mark entering the scanner first.

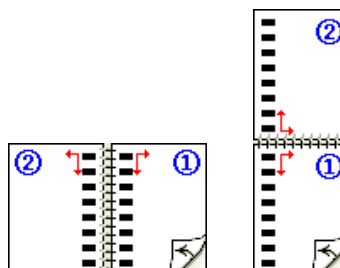
Your scanner may include restrictions on Form ID marks (generally best on the first line into the scanner) and for paper folds across the short dimension (generally use a large timing mark and IGNORE erroneous marks in this area).

[Top](#)

### Double Sided Printing (Duplex)

Select the type of double sided printing (duplexing) to be used for the form. Choose from simplex (one sided printing), flip on long edge or flip on short edge.

When Duplex printing is selected the Front **F** and Back **B** buttons on the toolbar become available. Click the buttons to move from one side to the other.



- Number 1 indicates the front of the form

- Number 2 indicates the back of the form
- The arrows indicate how the form is fed through the scanner, for a left to right scanner.

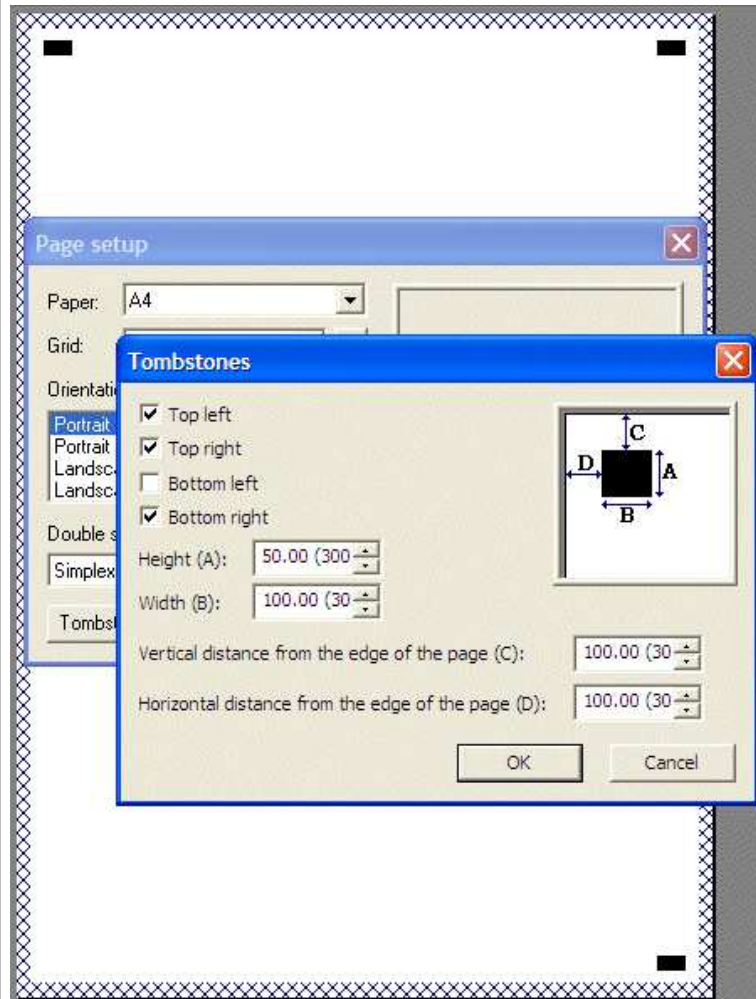
Note: Many laser printers induce skew on the reverse side, please check your laser's performance before using double sided pages for OMR. For from-Image forms, this does not matter as the form is normally de-skewed electronically.

[Top](#)

### Tombstones

Tombstones are rectangles in the corner of Scan-from-Image forms. Press [Tombstones...](#) at bottom if you require a form where the data is scanned from an image rather than being defined by OMR marks.

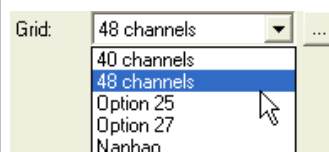
This screen appears on which you define the tombstone height and width and whether tombstones are printed in each of the four corners. The offsets are for the top left Tombstone and repeat for all of the others, from the edge of the page.



[Top](#)

### Grid

The Response Grid is a set of possible positions, aligned with the timing track, where the reader scans form responses. On your form design, the response grid is shown as red cross-hairs. The position of the timing marks defines one dimension of the grid, the other is defined by the read head of the OMR scanning the form.



To change the response grid, select a compatible grid for your OMR reader, or create a custom definition.

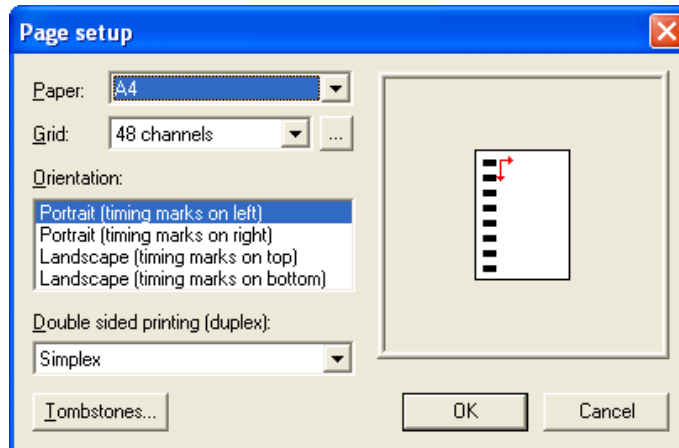
Note: Ensure you select the timing mark spacing compatible with your OMR scanner.

[Top](#)

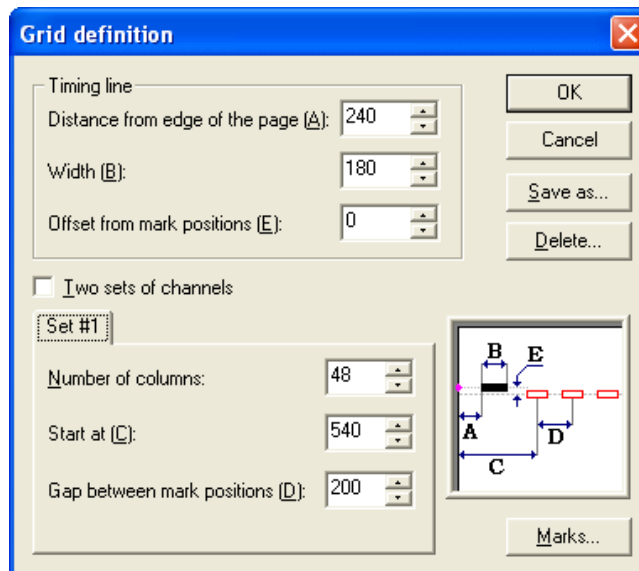
### Custom Grid Definition

To Create a Custom Grid definition:

- Click Page Setup in the File menu.



- Click the **Finder**  button next to the **Grid** list to create a custom grid definition.



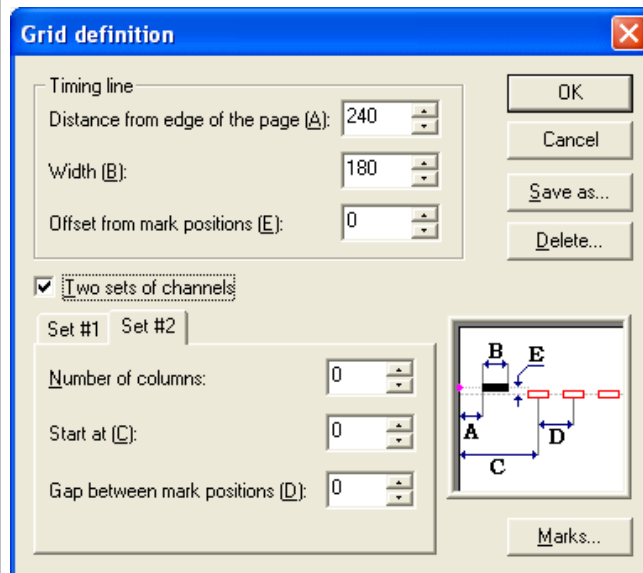
To change the position of the timing track, set the following dimension (in 1/1200 per inch measurements):

- The distance from the edge of the page to the outer edge of the timing mark (value **A** on the dialog box diagram).
- The width of the timing mark (value **B**)
- The offset of the center of the possible response positions from the center of the timing marks (value **E**).

The following settings define a channel bank:

- The number of columns in the channel. This is the maximum number of response positions along each timing line.
- The distance from the paper edge to the middle of the first column (value **C** in the dialog box diagram).
- The distance between response positions in the column (value **D**).

If your OMR supports two channel banks, you can create banks by clicking **Two sets of channels** and setting up the second bank.



**Grid definition**

Timing line

Distance from edge of the page (A): 240

Width (B): 180

Offset from mark positions (E): 0

☒ Two sets of channels

Set #1 Set #2

Number of columns: 0

Start at (C): 0

Gap between mark positions (D): 0

OK

Cancel

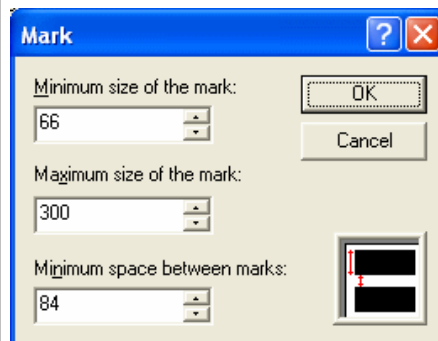
Save as...

Delete...

Marks...

Diagram showing timing line (A), width (B), offset (E), and gap (D) between marks.

To change the shape and size of the timing marks, click the Marks button and change the required settings.



**Mark**

Minimum size of the mark: 66

Maximum size of the mark: 300

Minimum space between marks: 84

OK

Cancel

Diagram showing a mark with dimensions.

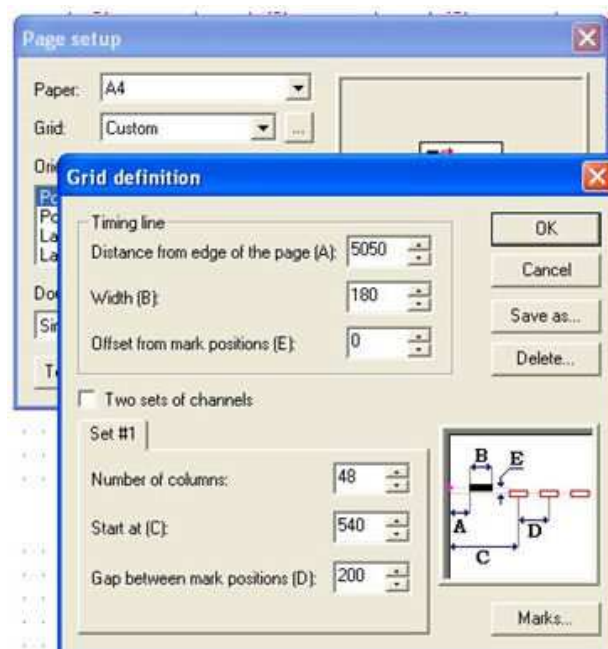
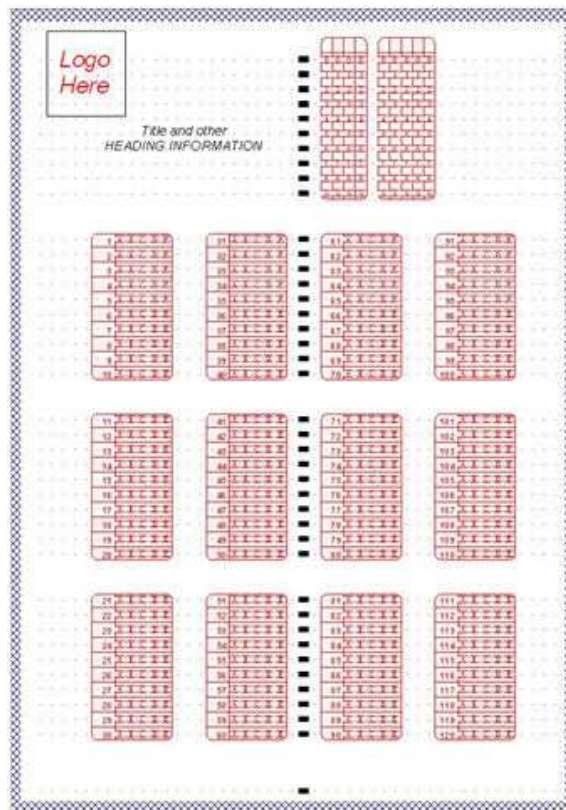
- Minimum size of the mark and Maximum size of the mark set height threshold for all timing marks.
- The minimum space between marks sets the smallest distance required between marks.

[Top](#)

### Scanner using any channel as the timing line

DRS and other scanners have the capacity to use any channel as the "Clock Mark" (Timing Line) set. Below is the form and the Grid window for a form of this type. A central timing line prevents skew, particularly on lasers such as Xerox large scale equipment where sheet travel is long edge first.

This company (TCG information Systems) has used 102 timing lines per A4 sheet, double sided, collecting 400 individual observations per sheet successfully in huge application using a short distance from a central timing line and an over-large response position.



Top

### Saving the custom definition

Once you have created custom timing line and channel definitions compatible with your OMR, click **Save As** and type a grid name to store the grid definition in the list available from the **Page setup** dialog box.

Now that the design workspace is set up for your OMR, the first step in creating an OMR form is to create the timing lines and set up the response grid ready for OMR zones.

Top