FRONT PANEL EXPRESS

FRONT PANELS ▪ ENCLOSURES ▪ MILLING PARTS

INFORMATION SHEET
PRINT FILES AND
PRINT OPTIONS
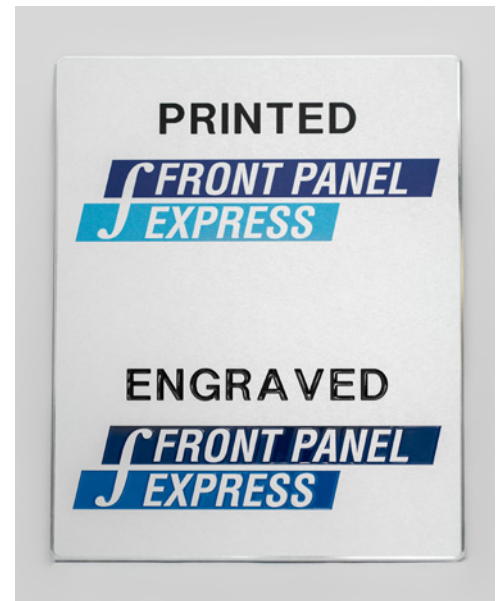
www.frontpanelexpress.com

INTRODUCTION

Front Panel Express offers the latest in digital print technology allowing customers to customize aluminum panels and enclosures. By using our cutting-edge flatbed direct digital printing technology we are able to accurately produce complex visuals. This along with our specially formulated pretreatment procedure allows for us to consistently provide product with crisp, clear, and durable results.

Digital printing is an ideal choice for designs that desire a gradient effect or require high amounts of detail that may include an array of different colors. It is also ideal for displaying large amounts of text and in times when very small text is required, technical drawings, and diagrams.

To the right is a photo showing the difference between printed and engraved.

HOW IT WORKS

All panels are prepared for printing using our specially formulated pretreatment. Once this is complete the material is ready for printing. The UV digital printing ink does not actually penetrate the material but instead is adhered to its surface. Once the ink is applied onto the material it is hardened with a UV light. This is to ensure that graphics demonstrate high scratch and UV resistance. Our prints are also proven to be very durable when in contact with many chemicals and solvents.
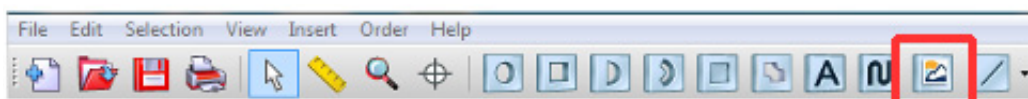
Once printed the panel can then continue on in the standard production flow with no need for any special measures or precautions. During printing an origin is marked on the panel providing our milling machines with an exact guide. This ensures that all of our printed materials are milled with accuracy.
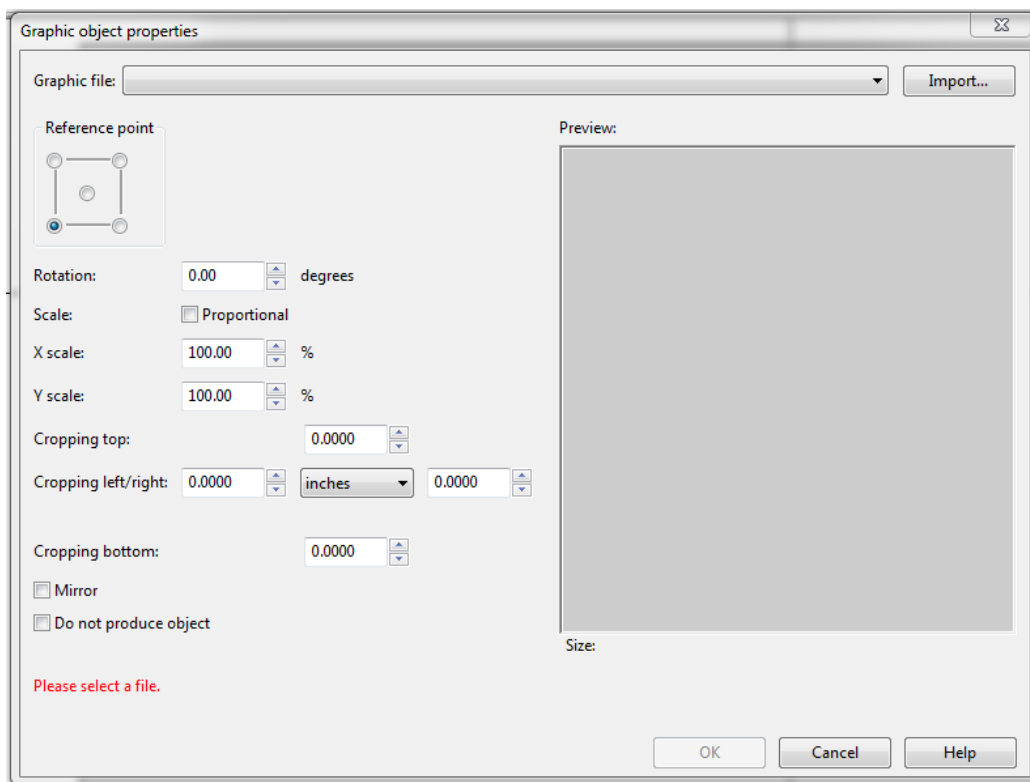
IMPORT GRAPHICS

Using the latest version of the Front Panel Designer Customer's are able to easily import images onto their designs. Our software will support all common graphic file formats such as PDF, JPG, TIFF, PNG, or BMP. Once imported graphics are able to be scaled, cropped, moved, or rotated to fit your needs.
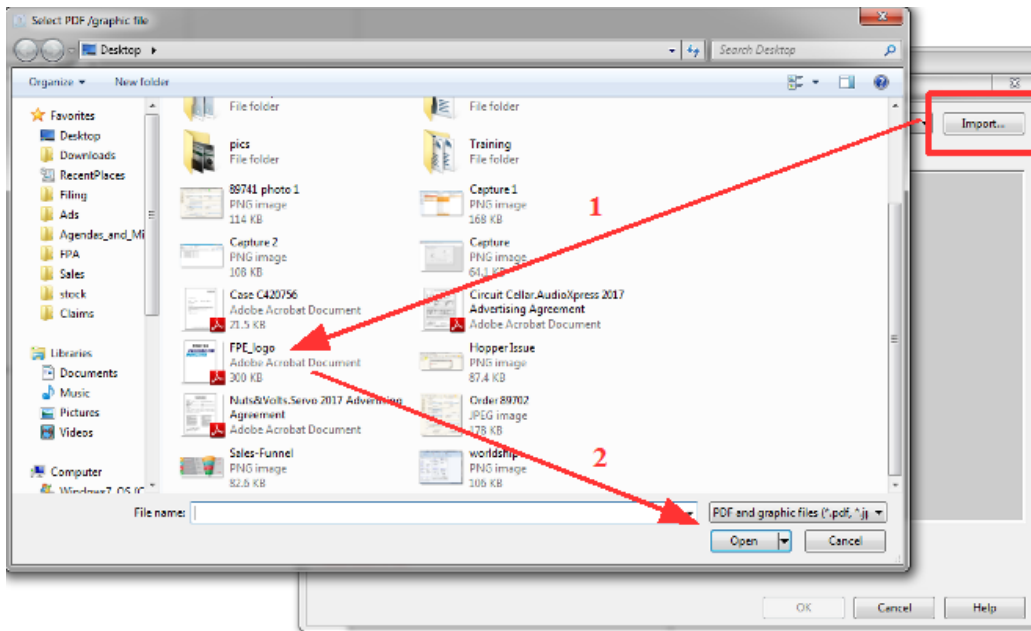
Importing an image is simple:
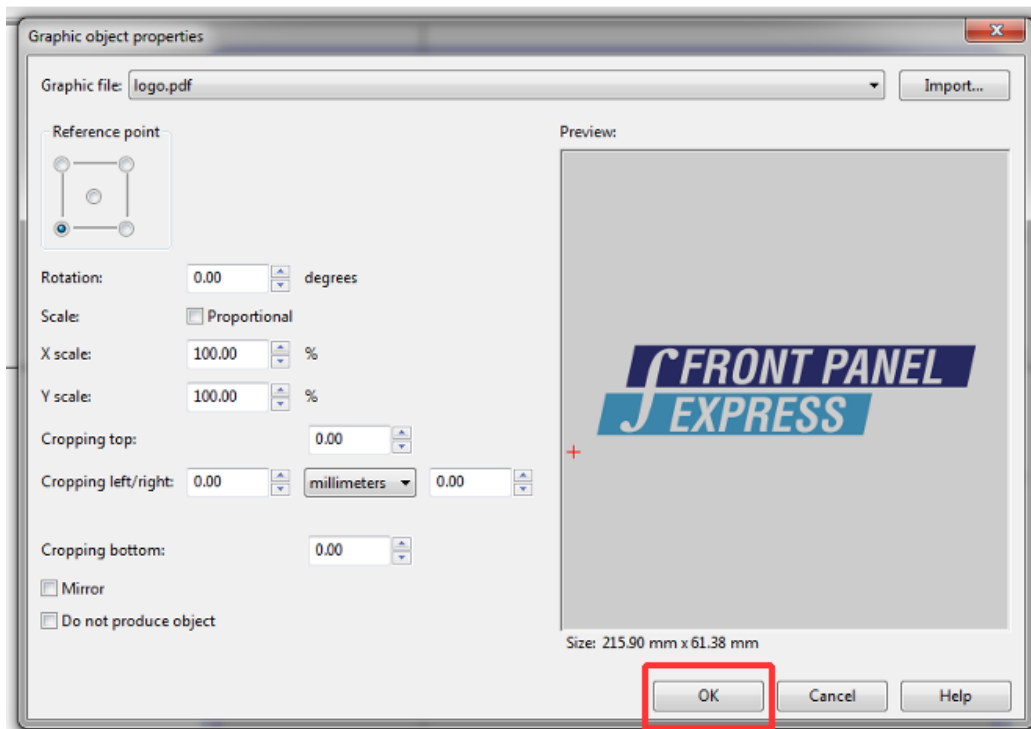
1) In the FPD click the 'Insert Print Graphic' button

2) Click on the panel and the following pop-up will appear

3) At the top of the pop-up select 'Import' to upload your graphic file –> Select the file –> Click 'Open'
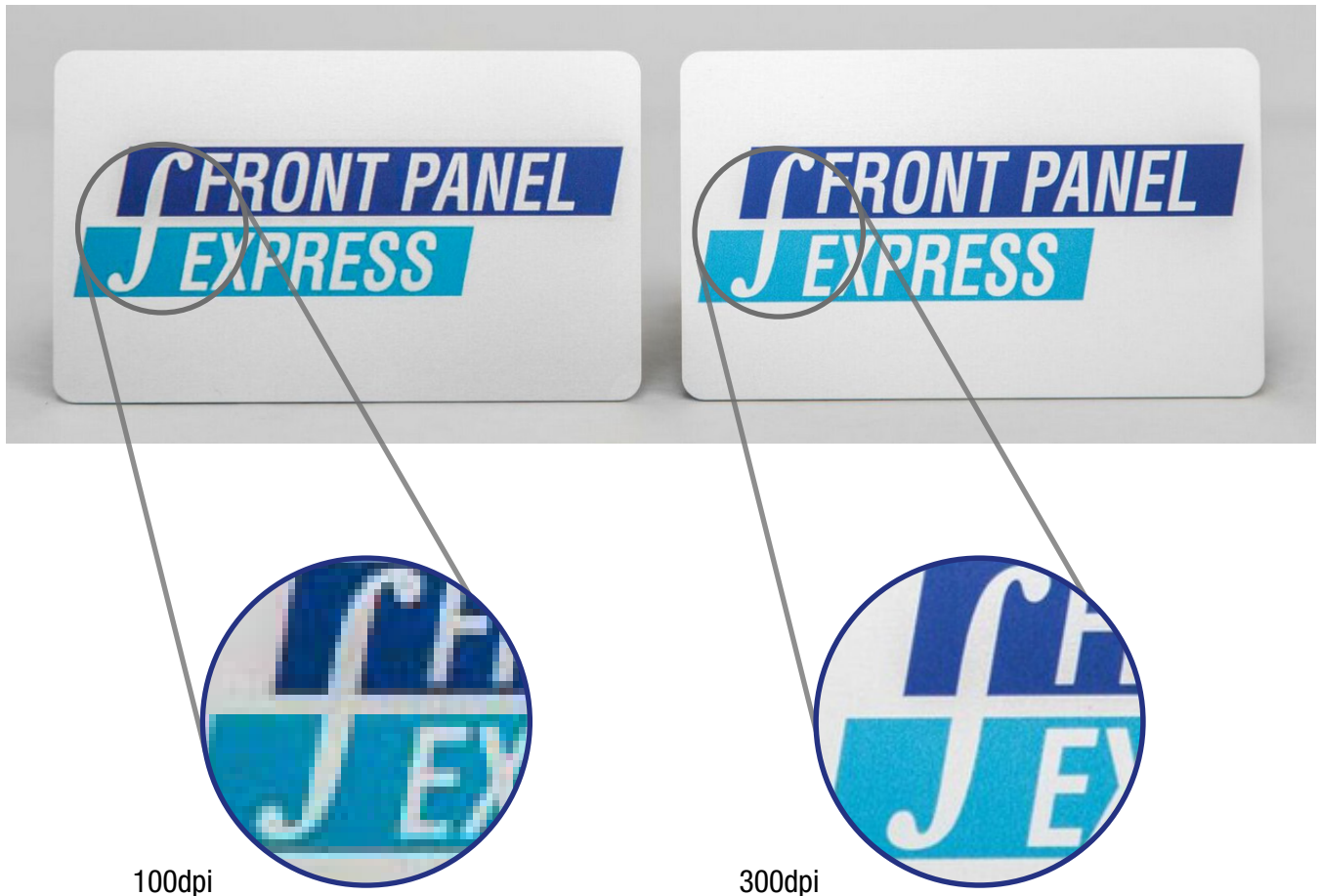

4) A preview of your graphic will show. Select 'OK' to complete the import

5) Imported image will then appear on the panel
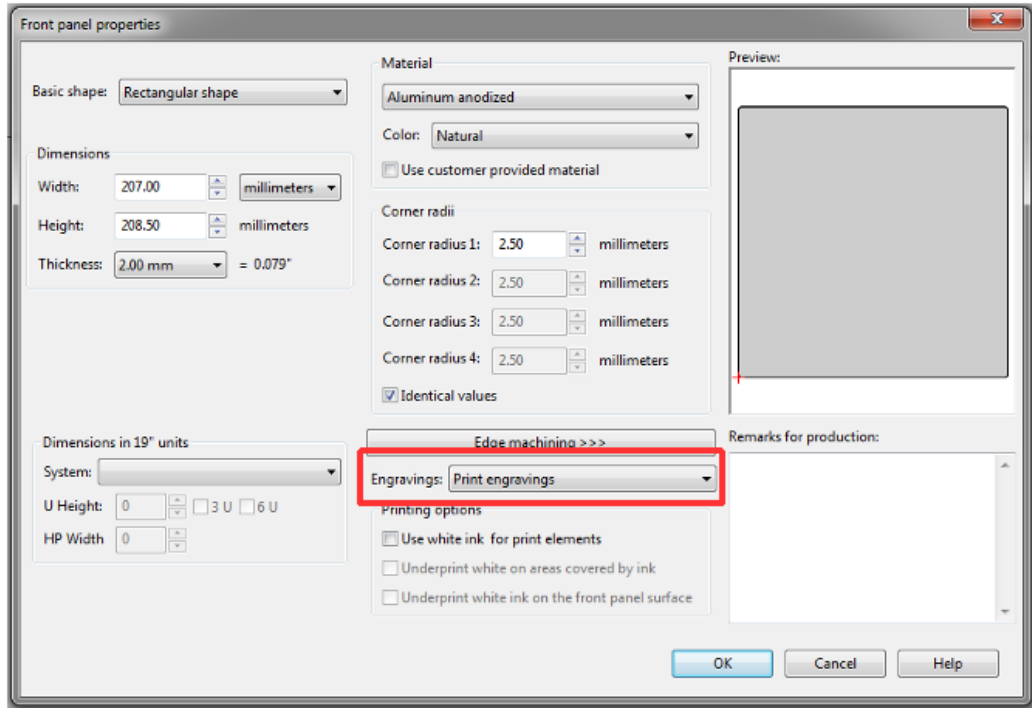
GET THE BEST QUALITY

To ensure the highest print quality we recommend the use of vector graphics files using a PDF. We also recommend that customers use a resolution of 600dpi or higher and that graphics are not under 300dpi.
Below is the same panel at 100dpi and 300 dpi. You can see that the output affect is a lower quality print.

100dpi

300dpi

SWITCH FROM ENGRAVING TO PRINT

We offer customers the ability to easily convert all engravings into print with just the click of a button. Common applications for this technology include but are not limited to outlining cutouts, labeling connectors, switches and ports, adding text and special graphics such as a company logo, and printing product identifier graphics.
Using the Front Panel Designer, seamlessly switch all engravings to print by following the below steps.

1) Click Ctrl+F

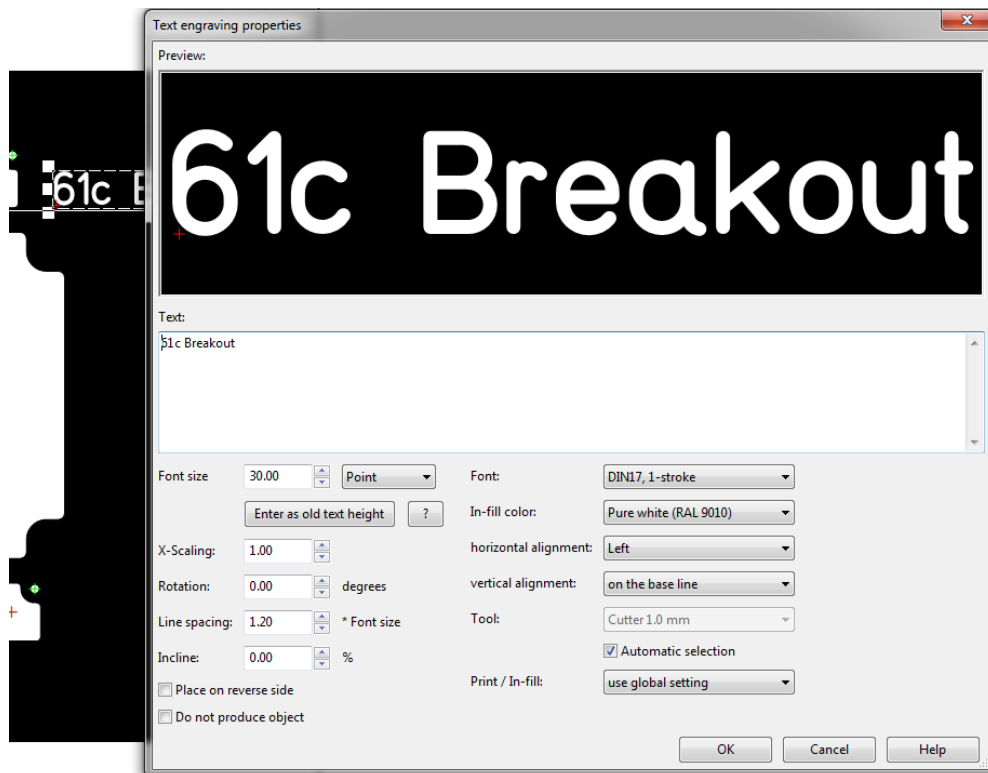2) In the following pop-up use the 'Engravings' drop down to switch from 'Infill Engravings' to 'Print Engravings'

3) Click 'OK' and all engravings on the panel will have been switch from engraving to print.
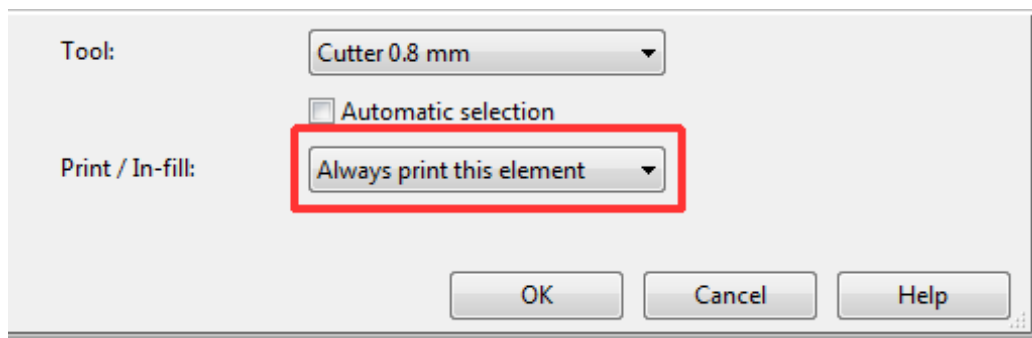
Don't want all engravings on the panel to be printed?

Below see how to easily switch select engravings to be printed:

1) In the FPD double click on the engraving area that you are needing to change to print and the following pop-up will appear:

2) In the 'Print/Infill' area click on the drop down –> select 'Always Print This Element'

3) Once selected click 'OK' and the engraving is now updated print
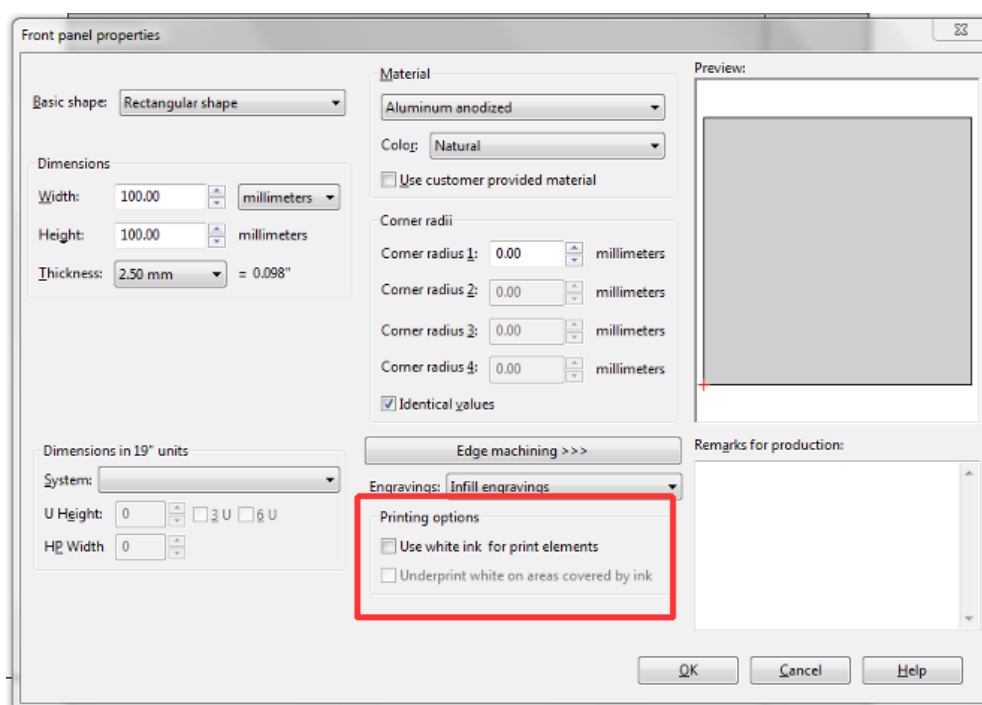
White Printing

Since we print on non-white aluminum surfaces there is the potential to lose the intended color of the image. In order to prevent this from happening we offer two additional printing options for customers to select.

I. Use white ink for print elements: This option makes it possible for the printer to print white elements on to the panel. If not selected white elements will not print on the panel.

II. Underprint white on areas covered by ink: This option instructs the printer to print a white ink base before the final image is printed. Ensuring the true color of the images can be seen.

Check option one when printing anything white onto a panel (Ex: text, lines, etc...). Check option one and two when printing images onto the panel. These options are auto-selected when printing on non-natural colored aluminum.

Printing options found in front panel properties by clicking Crtl+F:

AVAILABLE PRINTING MATERIALS

Front Panel Express offers digital UV printing on all of our anodized aluminum material offerings which include blue, red, green, gold, bronze, natural, natural with conductive passivated reverse side, and black. Using a colo-red material will not affect the color of your graphics. We are able to achieve this by first printing a white ink base and then adding a second print layer with the actual digital graphic.

SUPPORT

Digital printing has many benefits and capabilities that customers can use to their advantage.
If you have any questions or require assistance please contact us by phone at (206) 768-0602 or through Email at info@frontpanelexpress.com.