

## **High Performance KLAS Supported Mailing Card Printers**

### **Background:**

Over the past eighteen years Keystone has worked with printers for mailing cards containing bar coded information. We have found that the most robust and durable printers have been the Okidata 2410 (no longer available) and the Lexmark 4226/4227/4227+. Unfortunately, these printers have been noisy and not fast enough for libraries printing more that 500 – 700 cards per day.

In the mid 90's, some of the Keystone's customers asked us to support the Output Technology LaserMatrix printers. Now, many of you, KLAS customers, are using either the OT1000 or the OT2400/2405. These printers are quiet and fast. Also, they are expensive to operate, expensive to maintain, not very robust or reliable, and becoming increasingly difficult to get maintenance contracts for.

In recent years, Keystone has had several customers ask us to support Zebra printers. Currently the New Mexico State Library is the only Keystone customer using Zebra printers for mailing cards. Prodded by the requests of others, Keystone has researched options and has summarized what we have learned in the following comparison of the Zebra 140XiIII and the OT2405.

### **Output Technology LaserMatrix Printer:**

Output Technology is the only manufacturer who produces laser matrix printers. The LaserMatrix printer handles pinfed continuous cardstock mailing cards and prints at laser printer speed and quality. Currently they produce only models OT2405 (PCL format) and OT2406 (PostScript format), both print at speed of 24ppm. KLAS uses the model OT2405 (PCL format). The optional powered stacker unit provides smooth handling and stacking the cards after printing.

Some considerations regarding the Output Technology LaserMatrix printer:

1. It is a laser printer and best works with white stock. The preprinted portion on the front of the card should be arranged such that there is sufficient white space for KLAS printed information and Barcodes. The back of the card should be printed with the library return address with its ZIP barcode.
2. It operates best in clean and climate controlled environment.
3. It requires supplies of toners, cleaners, fusers, drum kit, etc, at hand.
4. It is serviced by IBM for onsite warranty and maintenance contract services. Also, Output Technology has a flat rate mail-in repair service for the OT2405 for \$950, or \$2300 if the printer has been used more than 600,000 feet (Approximately 2,400,000 mailing cards) with a turnaround of six days and customer pays shipping each way.

**Zebra Printer:**

Some considerations regarding the Zebra printer:

1. It uses a thermal ink transfer and works best when used with a special paper stock. There will be some who will tell you the paper stock you have been using for years will work satisfactorily, and that may be correct, but Keystone can not recommend it. For one thing, Zebra says that if you use a paper other than the one they provide, it will void the print head warranty (six months).
2. The mailing cards most libraries are using are for pin feed tractors. The Zebra uses friction feed and does not have the pin feed holes. You will need to print new cards. If you are using Lexmark 4227 printer, you may wish to keep some of your existing cards for use for front desk printing or printing one or two cards at a time.
3. The estimated cost of the cards from Zebra is based on purchase of 1,000,000 cards, printed on one side and using a stock about the weight of a business card.
4. Some Zebra printers can have a knife to cut the cards as they are printed and drop them in a stack. This eliminates the need for a stacker and card bursting (mechanical or manual.) However, Keystone’s supplier says that the knife is a high maintenance item and the major source of problems with the printer and recommends against it. He recommends die-cut perforations and tearing by hand or burster.
5. The Zebra printer must be specifically programmed/formatted for each customer. If Keystone does that, the charge is a one time fee of \$1200.
6. The Zebra printers are serviced on a variety of plans by a number of differing organizations, including mail in service to Zebra. Mail in service with Zebra and turnaround typically 3-4 days is \$515 per year. On-site service is available at additional costs.

**Cost Comparison of the Two Printers:**

The comparison is a look at the five year cost of each option. It considers initial cost, cost of setup, card stock, consumables and annual maintenance contracts.

	Initial	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Zebra140XIII							
Initial Cost	\$4,695						
Keystone Setup	\$1,200						
Annual Maintenance			\$515	\$515	\$515	\$515	
Card stock		\$4,650	\$4,650	\$4,650	\$4,650	\$4,650	
Consumables							
Ribbons		\$110	\$110	\$110	\$110	\$110	
Print Heads		\$500	\$500	\$500	\$500	\$500	
Total	\$5,895	\$5,260	\$5,775	\$5,775	\$5,775	\$5,775	\$34,255

OT2405 with card stacker

Initial Cost	\$8,500						
Keystone Setup	Included with purchase						
Annual Maintenance (one mail-in per year)		\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	
Card stock		\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	
Consumables							
Toner (12 per year @\$100)		\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	
Drum (5 per year @\$200)		\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Developer (1 per year)		\$500	\$500	\$500	\$500	\$500	
Fuser (1 per year)		\$450	\$450	\$450	\$450	\$450	
Total	\$8,500	\$6,650	\$7,750	\$7,750	\$7,750	\$7,750	\$46,150

This information is for planning purposes only and Keystone makes no guarantees as to accuracy, completeness, or appropriateness. It is highly recommended you do your own investigation before committing to a course.