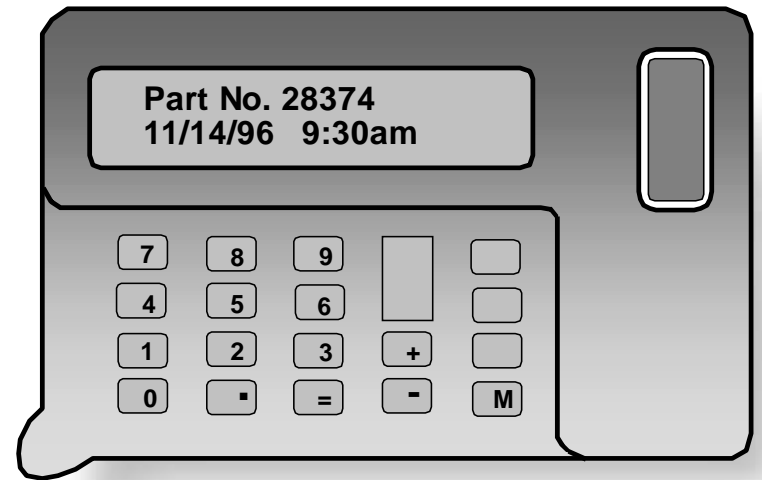


BAR CODING

TW2 Installation Guide



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 **LSG Inc.**
1718 E. Rose Lane Phoenix, AZ 85016

Step 2:

Scan bar-code next to step just completed.

Dr's Date
05/16/2002
Thursday

Account ID: 1
Dr. John Smith
1234 N. 10th St.
Phoenix, Az 85016
(602) 555-1234

Pan#: 44
Case Number: 0105-0012
Dr's Date: 05/16/2002
Received: 05/30/2001
Ship By Date: 05/15/2002

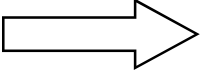
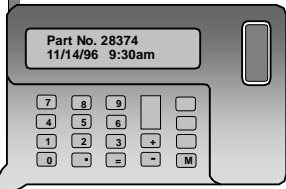
Clinic Dr: Patient: Farquart, Martha

Qty	Product Description	Schedule	Tooth#s
1	1 FULL CAST GOLD CR.	0	

Product Step	Description	Date
1	1 Preparatory	05/31
1	2 Frame Waxup	06/01
1	3 Frame Finish	06/04
1	4 Porcelain Buildup	06/05
1	5 Porcelain contour	06/06
1	5 Porcelain contour	06/06
1	6 Final finish	06/07
1	7 Inspect	06/08
1	8 Deliver	06/11

Dr. Preferences:
This is a preference for Dr Smith, This is another pref for Dr. Smith

Notes:
Items Received from Doctor: U-Mold, L-Impressions, U-Bite Block



Step 3: Scan bar-code next to your name.

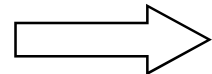
List of Employees

Monday, October 08, 2001

ID	Employee's name
3	Billy Bob Smith
5	Billy Joe Wright
2	Mandi Mueller
4	Martha Ray Stuart
6	Richard Nixon
1	Tom Mueller

Part No. 28374
11/14/96 9:30am

... Goes Here



Scanning Work Tickets

General Scanning Tips: Place the work ticket on a flat surface and then place the lower left tip of the reader on the paper to the left of the bar-code at least one half inch. Next, hold down the large "scan" button on the scanner and drag the tip of the scanner across the bar-code quickly (less than a second from end to end) keeping the tip on the paper and in the middle of the bar-code. Release the scan button.

Follow these three easy steps to scan the work ticket for technician production.

Part No. 28374
11/14/96 9:30am

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05/16/2002
Thursday

Account ID: 1
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1234 N. 10th St.
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Dr. Preferences:
This is a preference for Dr Smith, This is another pref for Dr. Smith

Notes:
Items Received from Doctor: U-Mold, L- Impressions, U-Bite Block

Step 1:
Scan bar-code at top of work ticket.

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LM Bar-coding

Bar-code Definition

A Bar-code is a self-contained message with information encoded in the widths of bars and spaces in a printed pattern. Since Bar-codes are used with computers, binary code is used. Essentially, the black bars and white spaces represent ones and zeros - the language computers understand. With the proper software drivers and printer, Bar-codes can be printed to represent most any information. The advantage of printing information in the form of a Bar-code is the speed and accuracy in which it can be retrieved. A good example of this is the check out counter at the modern grocery store. Bar-codes can, when used properly, save both time and money.

Overview

Bar-coding systems have been available for some time now, but some systems we have studied have been only marginally helpful. Bar-coding is not for everyone, nor is it right for every application. Laboratory Systems Group, Inc. has spent over 10 years in active study of the use of Bar-codes in the dental laboratory industry and has identified the areas and procedures that lend themselves best to bar-coding.

Lab Manager currently offers bar-coding to aid in technician production, material inventory control, time-card data collection, and delivery and shipping management. In the future, bar-coding features may be expanded to include quality control, marketing, and case tracking.

We believe that bar-coding is here to stay, and we intend to use this technology to it's fullest.

Print Clock-in and Clock-out bar-code labels using this button.

Print employee list with bar-codes using this button.

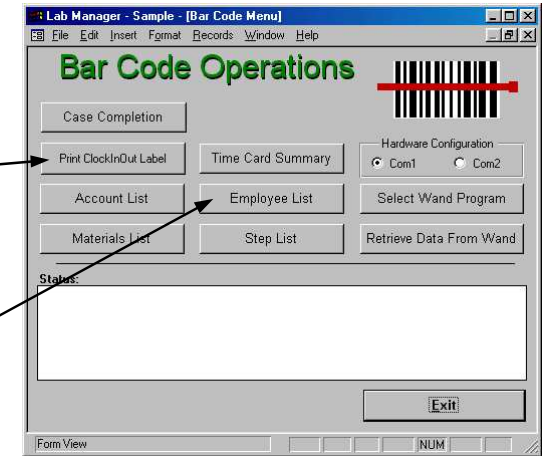


Figure 8



TW2 technician production and clock-in & clock-out program.

Figure 9

To activate bar-code printing, place a check in this box

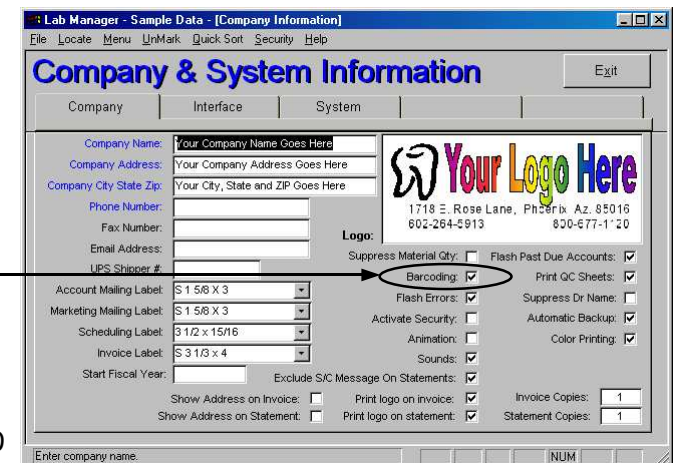


Figure 10

Programming the TW2

Step #1: Start up Lab Manager and go to the Main Program Menu.

Step #2: Click on **Utility Menu**.

Step #3: Click on **Bar Code Scanning**.

Step #4: Make sure that the wand is in the downloader/charger. Select the correct "COM" port under Hardware Configuration. This refers to the port you plugged the downloader/charger into on the back of the computer. If you are not sure which port to use, start with Com1.

Step #5: If the wand has not yet been programmed, then click on "Select Wand Program" and choose the file titled "Lm99.apx" and then click on the OPEN button. This process will program the TW2 to read the Lab Manager bar codes for collecting technician production and time card data collection.

Warning: Do not perform this function if the scanner has data in it that needs to be downloaded. This step erases any stored data in the wand.

Once the wand has been programmed, then it is ready to collect data and won't have to be programmed again unless the batteries go dead or the "reset" button is pressed on the back of the wand.

Transferring Data from Wand to Computer

Periodically, the data collected in the scanner will have to be downloaded to the computer. To transfer the data from the wand to the computer, place the wand into the downloader/charger, wait for about 10 seconds or until you hear a beep come from the wand, and then click on the "Retrieve Data from Wand" button. The process will take about one minute, depending on how much data is in the wand. When completed, all of the data will have been transferred to the computer and the wand is ready (and empty) to scan more bar codes.

Printing Bar-codes and Bar-coded lists

Clock-in and clock-out labels, as well as, an employee list can be printed with bar-codes using the buttons shown in **Figure 8**. **Figure 10** shows the Company and System Information screen where the "Barcode" field is located. Place a check in this box to activate the printing of bar-codes.

Technician Production

This module adds Bar-codes to the work ticket which, when scanned, updates the proper technician production files and notifies the computer which production steps have been completed, by whom, and when. This information, in turn, can be used to print reports which include the Technician Production Summary, Technician Production Detail Report, and the Cases Due Report.

Material Inventory Control (not yet available)

Using the TW2 Pocket Bar-code Scanner, the user can take inventory by scanning bar-coded labels placed onto material boxes or bins identifying each billable material and then enter the quality currently in stock into the Bar-code reader just as a number is typed into a calculator. After identifying and counting each material in this way, the data is down-loaded to Lab Manager with a couple of key strokes updating the inventory level.

Shipping and Delivery Management (not yet available)

With Lab Manager's shipping department module Lab Manger can display a list of the cases that need to be delivered or shipped today. As cases are delivered or prepared for shipping, each is scanned marking it delivered or shipped, preventing cases from falling "*through the cracks.*"

Time Card Data Collection

By using the TW2 Bar-code Reader, Lab Manager can collect and report the time employees spend at work, greatly reducing the time spent on that tedious process.

A single or multi-user computer with at least 128 Meg. of RAM, 24pin dot matrix printer, Laser, or InkJet printer, Windows 98 or higher, and the Lab Manager for Windows CD.

The TW2 bar-code scanner looks much like a hand-held calculator, with a two line alpha-numeric display and a keyboard. It is typically used to scan technician production, inventory control and/or time card data collection.

General Description of the TW2

To scan a bar-code, simply press the large rectangular button on the keyboard and slide the pointed edge of the pocket scanner across the bar-code. The bar-code information is displayed in plain English on the display of the scanner. Many bar-codes can be scanned in this way, each stored in the hand held device. The number of bar-codes that can be stored depends on the amount of memory the TW2 has. To transfer the data in the hand held scanner to the computer, place the scanner into the down-loader/charger, select the appropriate Lab Manager function and the information is sent to the computer updating the proper files.

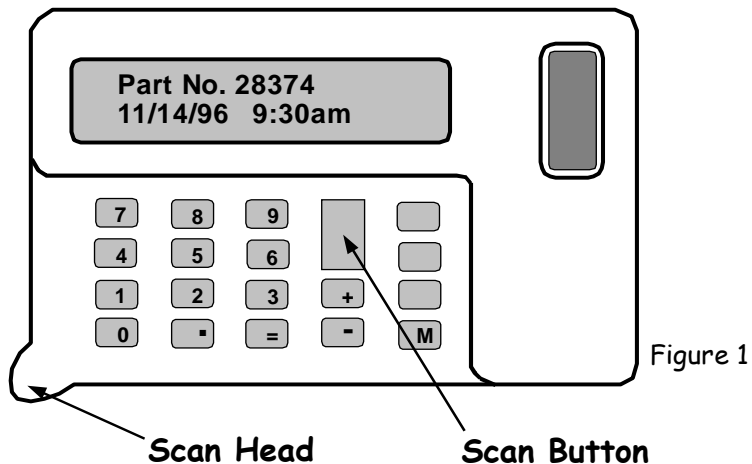


Figure 1

Hooking Up the TW2

Attaching the TW2 bar-code reader to a computer is as simple as connecting the provided cable between the back of the down-loader/charger to one of the serial ports on the back of the computer. Plug in the adapter power supply and slide the pocket scanner into the opening on the top of the down-loader/charger.

It is recommended that the Reader be allowed to charge over night before use.

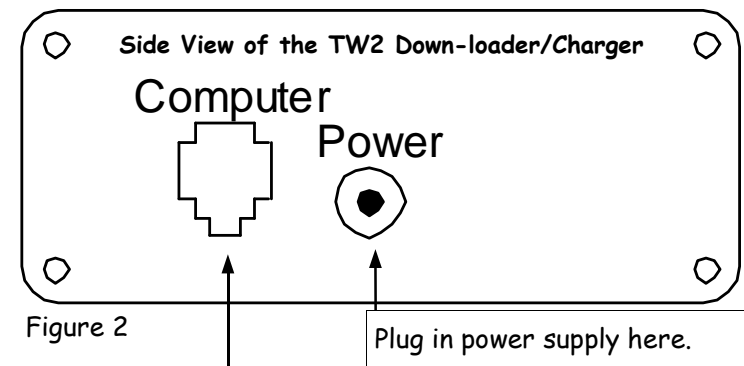


Figure 2

Use cable provided to connect between here and the serial port on the back of the computer.

Resetting the TW2 Pocket Bar-code Reader

Before programming the TW2 for the first time or after loosing power, the TW2 should be reset by pressing a small stiff wire, such as a paper clip, through the hole on the back of the reader. This will cause the reader to display;

TW2 MONITOR 1.75
Baud rate test...

Do not press any keys on the TW2 after resetting it or it will cause the TW2 to communicate only at 9600 baud. In the baud rate test mode, the wand will automatically adjust to whatever baud rate the computer is using allowing it to select the fastest possible download speed.

Warning: Resetting the Reader erases all data stored in the reader.