Super L IV™ User's Guide

Large Format Digitizers

GTCO CalComp
PERIPHERALS

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Digitizing & Measurement Products/Large Format Digitizers

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What is the Super L IV?

The **Super L IV** belongs to a class of computer input devices called *graphic tablets*, or *digitizers*. A digitizer is an electronic tablet work surface. The position of a transducer, a handheld cursor or stylus pen, on the work surface of the Super L IV is converted—*digitized*—into data for computer processing. Data output from the Super L IV digitizer is in the form of an X/Y coordinate pair that pinpoints the precise location of the transducer on the tablet surface. By placing a drawing or sketch on the tablet's surface and tracing over it, graphical information can be easily converted into accurate digital information for entry into the computer. The Super L IV digitizers are the next generation of the Super L family of digitizers that set the standard in large-format digitizing. These high performance tools are engineered with a state-of-the-art positioning grid to ensure reliability and quality. Professionals in construction, estimating, CAD, textiles and other fields appreciate the flexibility and performance of the Super L IV series.

The Super L IV family of large-format digitizers boasts resolutions of up to 2540 lines per inch, accuracy of 0.010 inch, and a wide range of sizes, providing the perfect solution when the work demands precision data input over a large surface area. A variety of cordless and corded cursors and stylus pens are available to use with the Super L IV. An integrated mounting channel allows accessories, such as a plan holder, to be quickly and easily mounted. The high-productivity Super L IV can be used as both a digitizer and a mouse, eliminating the need for multiple devices at your computer.

The Super L IV works with many graphic, CAD, and estimation applications. These applications use the digitized data from the Super L IV to:

- Determine the dimensions of objects on drawings and blueprints
- Move the pointer on the display screen
- Create and manipulate objects in a graphic composition
- Trace a drawing, or other source material, to create an image on the screen
- Select commands or functions from an application menu placed on the tablet surface
- Select items from a pull-down menu on the screen

In order to send data from your Super L IV to your digitizing application, your Super L IV must be physically connected to your computer, and it must be able to transmit that data in such a way that the digitizing application recognizes and understands it.

Before you set up your Super L IV, you should determine:

☐ The requirements of the digitizing software application you are using

☐ Whether your digitizing application requires software drivers to communicate with the Super L IV

☐ The hardware communications connection (Serial or USB) you will be using between the Super L IV and the computer

When the Super L IV is setup for a serial connection, it must be configured so that it can send data in a way the application software will recognize and understand. Different applications have different requirements when interacting with a digitizer. The Super L IV has been designed to provide the appropriate serial requirements for a wide variety of graphic, CAD, and estimating applications using a simple code system. The Super-Set Menu located at the top of the Super L IV is used to enter the appropriate code for the software you are using. Table 1 in the *Using the Super-Set Menu* section of this manual lists the SuperSet Codes for a wide variety of applications. All you have to do is input the code for the application you are using, and the Super L IV will be able to communicate properly with the application software on your computer. Table 2 lists the configuration details for each SuperSet Code in Table 1.

If for some reason, the communication requirements for your software cannot be found in the two tables provided in the SuperSet Menu section, the Tablet Configuration Utilities on the enclosed TabletWorks CD can be used to configure your Super L IV so it has the appropriate information it needs to communicate successfully with your software.

Parts Checklist

✓ **Super L IV** digitizing tablet

✓ Transducer (corded or cordless pen, 4-button cursor, or 16-button cursor)

✓ Computer interface cable with 9-pin connector for serial connection

✓ USB Cable

✓ Power supply – required only for serial installations

✓ A CD (TabletWorks drivers, documentation, or third party software drivers)

✓ *Super L IV User's Guide* (this booklet)

✓ *Super L IV Quick Start*

✓ Registration Card

✓ Accessory Tray

✓ Plan Holder (optional)

What You Will Need to Use Super L IV

This version of the Super L digitizer is equipped with both an RS-232 serial interface and a USB interface. It is compatible with most industry-standard PCs. The TabletWorks CD contains drivers provided by GTCO CalComp and is the only software described in this manual. TabletWorks supports *reduced functionality Wintab* and *TabCon*-compatible applications. If you are not sure which drivers are required consult with your application vendor.

A USB connection requires use of the TabletWorks drivers, while a serial installation requires their use only with Wintab-compliant application software. After installing the TabletWorks software, the Super L IV will work with *all* Windows-based applications as a mouse, in addition to working as a digitizer with Windows-based applications that are specifically designed for use with digitizers.

PC Requirements

For a Serial Installation

- Microsoft Windows 98, Me, NT 4.0, 2000, or XP

- One available RS232C serial communication port (Serial signal levels must conform to EIA RS232C specifications.)

- 10 MB of free disk space

- Application software that directly accepts digitizer input via the computer's RS232C serial port, or via the Wintab API or TabCon API

For a USB Installation

- Microsoft Windows 98se, Me, 2000, or XP

- One available USB port

- 10 MB of free disk space

- Application software that accepts digitizer input via the Wintab API or TabCon API

Super L IV Overview

The Super L IV digitizer consists of:

SuperSet Menu

Indicator Light

Active Area

Transducers
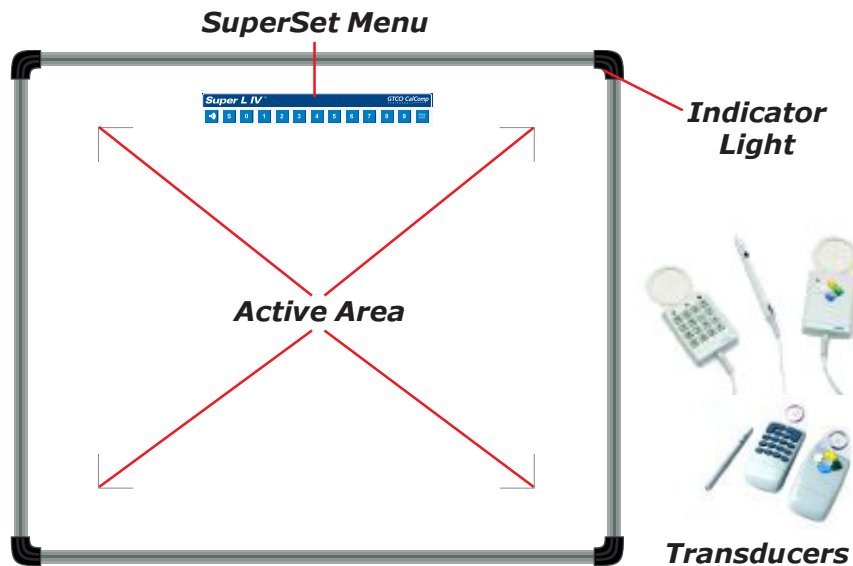
Active Area

The drawing area—the *Active Area*—is that portion of the tablet surface designated for digitizing. Its boundaries are marked at each corner by a right-angle crop mark.

SuperSet Menu

The SuperSet Menu is the row of keys located across the top of the digitizer. It provides a means of configuring your tablet so that it sends the appropriate information for a serial connection to the software you're using on your computer.

Indicator Light

The **power/proximity** LED in the upper right corner of the Super L IV frame is the Indicator light. It blinks green when the power is On. It is solid green when the transducer is *in prox* (within the range) of the Active Area.

Transducer

Two types of transducers can be used with the Super L IV: **pens** and **cursors**. Both are available in corded and cordless versions. The corded transducers get their power from the digitizer. Cordless transducers are powered by batteries. They will go into a battery-saving *Sleep Mode* when no button has been pressed for one to five minutes, depending on the type of transducer you are using. To reactivate a sleeping transducer, press one of its buttons.

Cursors

The cursor is similar in appearance to a mouse, except that it has an attached lens with crosshairs for highly accurate detail work. Cursors are available in 4- or 16-button models.

Pens

Each pen is similar in appearance to a ballpoint pen. The pen transducer has three buttons, two on the side of the barrel and one in the pen tip. Two different types of pens, identified by a colored ring on the pen barrel, are available for use with the Super L IV. The *Click Tip* pen has a light blue ring and the *Lite Touch Tip* pen, a red ring.

Setting Up Your Super L IV

The instructions below describe how to set up your Super L IV. Before you begin, please take a moment to fill out and mail the Warranty Registration Card.

Preparing the Super L IV

Mounting on the Stand

You can place the Super L IV on a table, desk, or drafting table. Or, you can mount your Super L IV on a stand or a pedestal. The tablet's Universal Mounting Brackets attach directly to those stands that have *tilt arms.* Stands with *tilt pads* require right-angle mounting brackets, which are attached to the tilt pads. The tablet's Universal Mounting Brackets are then attached to the right-angle mounting brackets. Center the tablet over the attached Universal Mounting Brackets and screw the Thumbscrews into the T-Nuts in the mounting channel in the tablet's frame.

Attaching the Accessory Tray or Optional Plan Holder

Additional T-Nuts have been included in the perimeter mounting channels on the Super L IV frame. You can position the Plan Holder or Accessory Tray where it is most convenient for you by attaching it to any one of the available T-Nuts. The following instructions and the graphic below detail the installation of the Accessory Tray.

Simply slide the Tray Rails into the channel and line up the hole in the tray with the hole in the T-Nut. Tighten the Thumbscrew to secure the Accessory Tray.
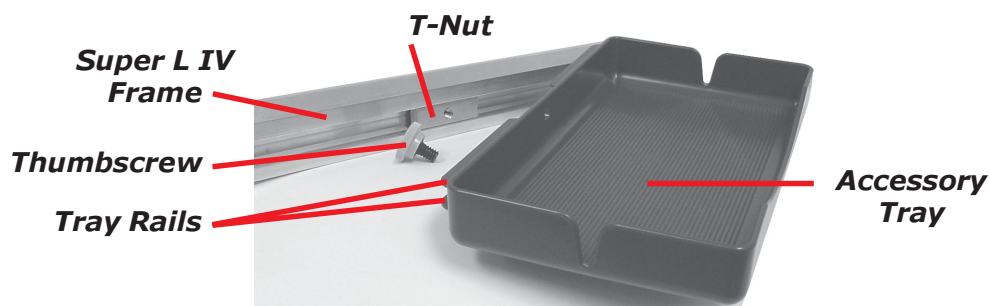
Software Configuration

Software drivers provide the communication bridge between your digitizing software application and your Super L IV. You should install only the drivers necessary for the Super L IV to work with your application software. If you are not sure which drivers are required, consult with your application vendor.

Configuring Non-Wintab Applications

Many application programs provide configuration information for specific digitizers. If the Super L IV digitizer is not listed, you can use the configuration for GTCO Digi-Pad Type 5 or Type 5A (T5/T5A), Roll-Up II, CalComp 9100/9500, or Summagraphics Microgrid III or ID Series.

Installing the TabletWorks Driver

Insert the CD into the CD-ROM drive on your computer. The installer will autoload. If it doesn't, click on the **Start** button on the Windows Task Bar and select *Run* from the menu. Type *X:\setup.exe* (**X** represents the CD drive letter). Follow the onscreen prompts to complete the installation.

A TabletWorks icon will display in the System Tray on the Windows Task Bar. Right-click on the icon to display the TabletWorks Menu, which provides access to all the TabletWorks features.

Hardware Configuration

The Super L IV must be configured so that it can send data in a way the application software will recognize and understand. Different applications have different requirements when interacting with a digitizer. The Super L IV has been designed to provide the appropriate serial requirements for a wide variety of graphic, CAD, and estimating applications using a simple code system. The SuperSet Menu on the surface of the Super L IV is used to enter the appropriate code for the software you are using. A table in the *Using the SuperSet Menu* section of this manual lists the SuperSet Codes for a wide variety of applications.

Determine, if you haven't already, which communication connection you will be using—serial or USB.

QuikRuler III   Transducer   USB   Power   Serial   Power Switch
(QR)   (POINTER)   (USB) (9V DC) (RS 232)   (I/O)

Controller Box

Super L IV Connector Panel
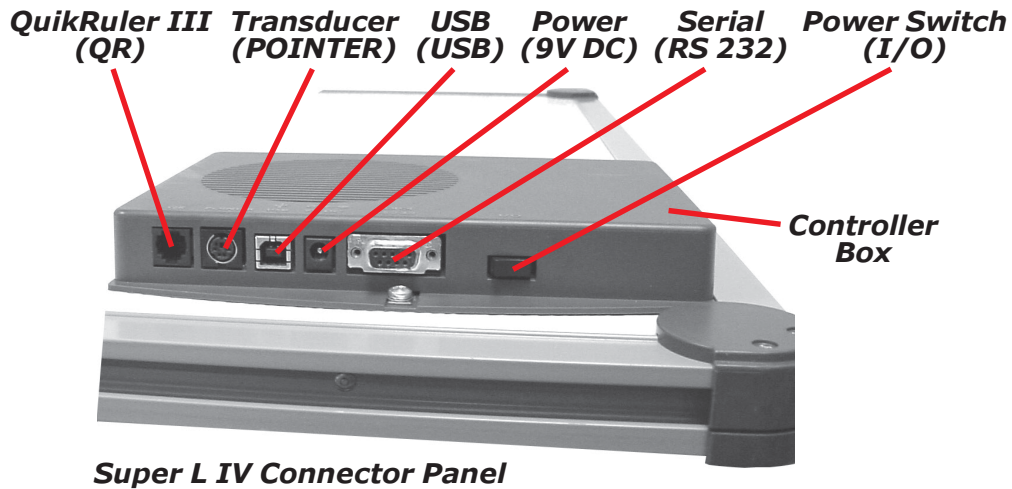
The Super L IV has a connection socket for the QuikRuler III. The Quik-Ruler III is a portable measuring system that quickly and accurately automates blueprint takeoff and drawing measurement processes. Contact GTCO CalComp for price and availability.

◻ Connect the corded transducer – cursor or pen – to the appropriate jack on the digitizer's Connector Panel. The connector is keyed and will fit only the correct jack. Do not force it.

RS232 Serial Connection

1   Connect the RS232 serial cable to the serial jack on the Connector Panel. The connector is keyed and will fit only the correct jack. Do not force it. Connect the 9-pin connector of the serial cable to the serial port on your computer.

2   Plug the power supply into an AC outlet. Connect the power supply to the appropriate jack on the Super L IV Connector Panel. Turn the Power Switch on. The green Indicator Light will begin blinking and the digitizer will beep four short tones (see the *Super L IV Tones* section on page 26 for a complete table of Super L IV tones), indicating it has power.

Super L IV Serial Connection

Computer

Transducer (POINTER)

Power (9V DC)

Serial (RS 232)
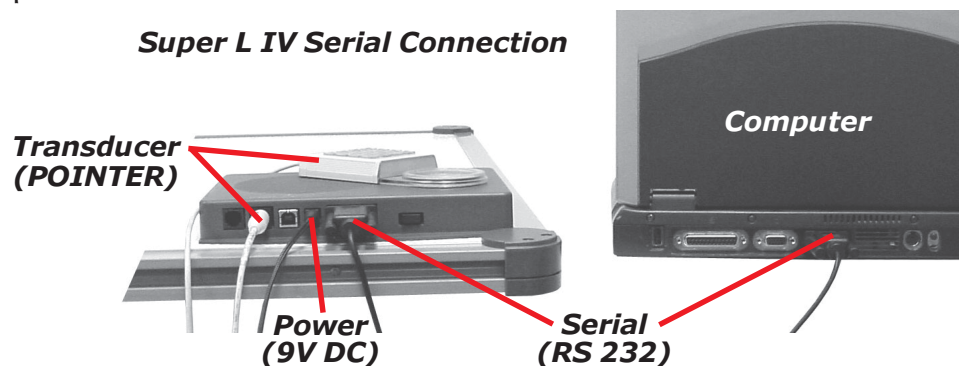
USB Connection

The Super L IV USB port connection is USB 1.1 and 2.0 compatible. When the digitizer is connected to the USB port, Windows will recognize that there is a new device connected. If Windows displays the *Found New Hardware* prompt, follow the onscreen instructions to complete the driver installation.

1 Connect the interface cable to the USB jack on the Super L IV Connector Panel. The connector is keyed and will fit only the correct jack. Do not force it. Connect the other end of the USB cable to any one of the USB ports ⟳ on your computer or USB hub.

2 Turn the Power Switch on. The green Indicator Light will begin blinking and the digitizer will beep four short tones, indicating it has power. See the *Super L IV Tones* section on page 26 for a complete table of the Super L IV tones.

Super L IV USB Connection

Transducer (POINTER)

Computer

USB (USB)
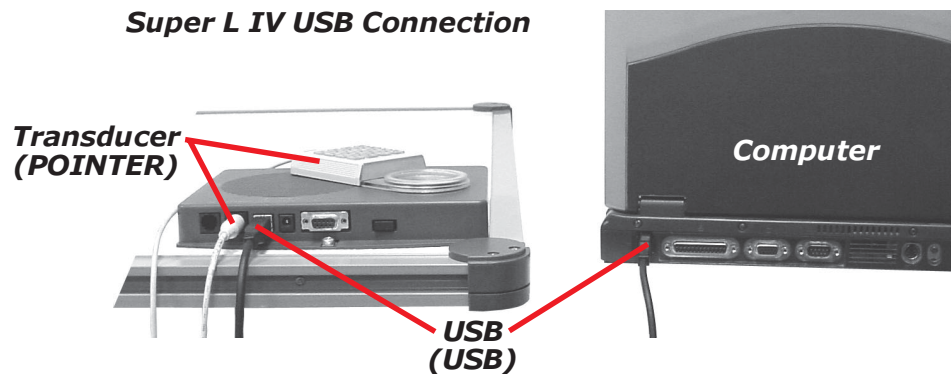
> **Note** **Power is supplied through the USB port. No additional power source is needed for this installation.**

Tablet Power-On

The Super L IV Power Switch is located at the rear of the tablet on the Connector Panel. When turned On, the Super L IV's Indicator light will begin blinking and four *Success* tones will sound.

If you are using a cordless transducer, turn it on by pressing any button on the tool. The Indicator light will glow steadily when the transducer is inside the Active Area of the tablet. If the transducer is outside the Active Area, the Indicator light will blink.

Using the SuperSet Menu

The SuperSet Menu is the row of buttons printed across the top of the digitizer.

The SuperSet Menu makes it possible for you to configure your Super L IV so that it sends the appropriate information for a serial connection to the software you're using on your computer. It is used to prepare the digitizer to receive specific, detailed custom configuration information from the Tablet Configuration Utilities for some serial installations. For both serial and USB connections, the SuperSet Menu can be used to reset the Super L IV, turn the digitizer alarm Off and On, and test the grid, or Active Area. Use your transducer, pen or cursor, to click on the menu buttons to make your selections.

The **S** menu button initiates **Select Mode**. Two-digit numeric codes are entered after Select Mode is activated. The table of software-specific SuperSet Codes (Table 1) can be found starting on page 17. The configuration details of each SuperSet Code can be found in Table 2 on page 23.

> **Note** **The Select Mode will not work with the USB interface. USB digitizers are used exclusively with Wintab drivers.**

Most software supports Wintab using the TabletWorks drivers, whose *SuperSet Code* is **S** **0** **1** on the SuperSet Menu. The Super L IV comes from the factory with the SuperSet Code **S** **0** **1** pre-configured.

The **◄))** button toggles the digitizer alarm Off and On. The **PROX TEST** button tests the digitizer grid in the Active Area.

When using the SuperSet Menu, a tone will sound indicating a successful selection when you click on the **S** button. Four tones will sound when you click on the **◄))** button. (See the *Super L IV Tones* section on page 26 for a complete table of the Super L IV tones.) The number buttons **0** through **9** are active only after clicking on the **S** button to activate Select Mode.

Resetting the Super L IV

The Super L IV can be reset by:

- ☐ Turning Off the Power Switch on the Controller Connector Panel,

- ☐ Unplugging and replugging the power supply, or

- ☐ Clicking **S** **0** **0** on the SuperSet Menu.

When one of these events occurs, the Super L IV will revert to the configuration that was last defined. Any remote commands that were active before the reset will be lost.

Turning the Alarm Off and On

You can disable the alarm if you don't want to hear a tone each time the transducer button is pressed. When the alarm is off, you will still hear diagnostic and menu-related tones.

To turn the alarm Off and On:

- ☐ To toggle the tones On or Off, click on the 🔊 button on the SuperSet Menu.

Testing the Active Area

To test the Super L IV grid, or Active Area:

1   Using your transducer, click on the 〔PROX TEST〕 button to activate the test.

2   Move your transducer around in the Active Area. If there is a break in the grid, or the transducer is out of prox, the tablet will beep.

3   Reclick the 〔PROX TEST〕 button to end the test.

Note	**The following is relevant only for RS232 serial installations. USB does not require configuration.**

Configuring Your Super L IV for Specific Applications

To configure your Super L IV for use with specific applications:

1 In Table 1, find the application program you will be using with your Super L IV. Note the corresponding SuperSet Code.

- ▪ If your application program is not listed in Table 1, find the configuration settings in Table 2 that your application program requires and use the corresponding SuperSet Code.

- ▪ If an appropriate SuperSet Code is not listed in Table 2, then use the Tablet Configuration Utilities to configure your Super L IV.

2 On the SuperSet Menu, click on the `S` button, then click on the two digits of the SuperSet Code indicated for your application.

You will hear four short tones after a successful menu configuration.

Example: Configuring for a Specific Application

Suppose you wanted to configure your **Super L IV** to operate with Autodesk's AutoCAD application. You would:

1 Find the entry for AutoCAD in Table 1. The SuperSet Code is `S` `0` `1`.

2 Click on the `S` button on the SuperSet Menu. You will hear one short tone, indicating the digitizer is in **Select Mode**.

3 Click on the `0` button on the SuperSet Menu. You will hear one short tone. This enters the first digit of the SuperSet Code for AutoCAD.

4 Click on the `1` button on the SuperSet Menu. This enters the second digit of the SuperSet Code for AutoCAD.

You will hear four short tones, indicating that the configuration is complete. The Super L IV is now configured to operate with AutoCAD. Select Mode is no longer active. You can begin digitizing.

Note	**For more information about digitizer software application driver requirements, please go to the Technical Support section of the GTCO CalComp Web site.**

Table 1: SuperSet Menu Codes for Selected Applications

Program	Company	SuperSet Code
Access	Bautech	39
Advanced Construction Estim.	Software Shop Systems	28
A.G.E.	CEIA, Inc.	75
AGTEK Earthwork Engineering (DOS)	AGTEK Development Co.	09
APS	Gunold & Stickma	52
ARC/CAD	ESRI	01
ARC/INFO (DOS)	ESRI	12
ARC/INFO	ESRI	01
ARC/GIS	ESRI	01
ARC/View	ESRI	01
ARCT, ACA		47
ArenaSoft Estimating	Arena Soft	01
ATLAS*DRAW low res	Strategic Locations Planning	07
ATLAS*DRAW high res	Strategic Locations Planning	08
ATLAS GIS	Strategic Mapping	01
AutoCAD	Autodesk, Inc.	01
Autodesk 3D Studio	Autodesk, Inc.	01
AutoSketch	Autodesk, Inc.	01
Autoship	Coastdesign	01
Autoyacht	Coastdesign	01
Autumn	Zenographics	36
Batisoft		46
Best Est II	Bird Construction Software	23
Bid Team	Construction Data Control, Inc.	58
Bidpoint	Vertigraph, Inc.	01
Bidworx for DOS	Vertigraph, Inc.	31
Bidworx for Windows	Vertigraph, Inc.	01
BP-340	Barudan America, Inc.	77
BuildNet	Homesphere	09
Buildsoft	Homesphere	09
BuildWare	1SqFt	01
BVH-Gregg Estimating	BVH Gregg Incorporated	04
Cadkey low res	Cadkey	18
Cadkey high res	Cadkey	25
Callidus	Oak Leaf Software	81
Carpet Estimating Systems	Ramco	54
Calrson Takeoff	Carlson Software	01
Civilcad	Bloomfield Computer Services	03
CMS Estimating	Contractor Management Systems	29
CNG Survey	CNG Survey	05
Coastal	Oceanographics	42
Cogo-PC Plus	Civilsoft	01
COINS Estimating	Shaker Computer & Management	41

Program	Company	SuperSet Code
Composer Gold	Building Systems Design	42
Computer Methods Est.	Computer Methods	45
Comquest	Pinnacle Technology	38
Conception 3D	Serbi	22
Construction Link	The Construction Link	04
Contour Plus	Civilsoft	01
Cost Engineer, The	Cost Engineering Technologies	49
Counterpoint	Counterpoint	04
CPS/SP	Radian Corp.	34
Curve Digitizer	West Coast Consultants	33
Cut & Fill (DOS)	Paydirt Systems, Inc.	31
Cut & Fill/Precision (DOS)	Paydirt/Timberline	42
Datacad	Microtecture	14
DATAMINE	Datamine International	82
Deed Mapping System	US Soft Tech	13
DEEM	Met-Coil, Ltd.	69
Design CAD	American Small Business Computers	01
Designer	Micrografix	02
DigiPlus	Civilsoft	01
DigiPro	Prosoft	66
Digitool	Roctek Corp.	24
DigiWin	Prosoft	68
DMS Premiere	Tally Systems	57
DQ 2000	DQ Technologies, Inc.	85
DrawPlus	Micrografix	02
Earth Graphics - Deluxe	Earth Graphics	01
Earthwork	Civilsoft	01
Earthwork 3D	AGTEK Development Co.	01
Earthwork Estimating	Ground Rules	01
Earthworks	Tally Systems, Inc.	01
Earthworks (for Windows) -OR-	Trakwear	01
Earthworks (for Windows)	Trakwear	56
Easydij EJBIN#4	Geocomp, Ltd.	16
Easydij EJAF#2	Geocomp, Ltd.	35
Easydij EJBIN#30	Geocomp, Ltd.	19
Easy Cad	Easy Cad	01
Eclare	Prosoft, Inc.	66
Edge, The (DOS)	Advanced Estimating	01
Edge, The	Advanced Estimating	01
Equinox	Roctek Corp.	64
ESI 6000 Estimating System	McCormick Systems	09
EST-Duct Estimating	Technical Sales International	01
EST-Mechanical	Technical Sales International	01
Estimagic	Estimagic	63

Program	Company	SuperSet Code
Estimate Software	Estimate Software	04
Estimation, Inc. (700 Series)	Estimation, Inc. (Tradepower)	89
Estimation, Inc. (800 & Win Series)	Estimation, Inc. (Tradepower)	88
Execucom	Execucom Systems Corp.	36
Expose	Roctek Corp.	64
Fastcad	Evolution Computing	26
FastPIPE - Gold	FastEST, Inc.	01
Floor Rite	RFMS	01
GAP 01	GTCO CalComp	39
Gemini	Excel	79
Generic CADD	Generic Software, Inc.	01
Geoquest	Softdesk	08
GM-SYS	NW Geophysics Association, Inc.	13
GraphPlus	Micrografix	02
GTCOTEST (default)	GTCO CalComp	01
GTCO WinTab Driver	GTCO CalComp	01
HALO products	Media Cybermetics	13
Hotdij	Geocomp, Ltd.	35
IBM GFIS	IBM	55
Ice System, The (DOS)	MC2	56
ICE 2000	MC2	01
IDRISI	Clark University	74
IKE (DOS)	Comput-Ability, Inc.	72
IKE	Comput-Ability, Inc.	42
Imagine 8.X	ERDAS, Inc.	61
Insite Earthwork Estimating	Software Shop Systems	19
Insite 2	Software Shop Systems	28
Insite Sitework	Insite Software	01
Insulcomp	Technical Sales International	42
JAVA	Jandel Scientific	24
Job Boss	Small Systems Design, Inc.	39
Job Power	Job Power	42
Kolvin Pro	Damon, Inc.	01
Landmarke	Cambridge Software, Inc.	23
Lasercad	The Software Machine	01
Logdigi, Planimeter	The Logic Group	12
Lumena	Time Arts, Inc.	10
Mach Lite	Ziatek, Inc.	04
Mach 2	Ziatek, Inc.	04

Program	Company	SuperSet Code
Mach 4	Ziatek, Inc.	83
MapGrafix	Comgrafix, Inc.	02
Market America	CACI	11
MasterBuilder (DOS)	Intuit	86
MasterBuilder (2003, 2004)	Intuit	01
Master Touch	Integrated Measurement Systems	35
Measure Mate	Measure Mate (Australia)	01
Measuremate/Measuring Calc.	Paladin Measuring Systems	64
Measure Master	Estimator's Corner	51
Mechanical Construction Manager	Mechanical Professional Services	73
Melco	Melco	78
Metricom	ADII Dynalog	71
Micromine	Micromine Pty., Ltd.	27
Microstation PC	Intergraph Corp.	09
MIKE (DOS)	Comput-Ability, Inc.	68
MIKE	Comput-Ability, Inc.	42
Mirage	Zenographics	36
Molitors & Zimmer	Molitors & Zimmer Estimating Syst.	67
NCE Estimator 2000	National Computer Est., Inc.	01
On Screen Take-Off	OnCenter Software	01
Pagemaker	Adobe Systems Inc.	02
PAD	ModaCAD	50
Paydirt Cross-Section (DOS)	Spectra-Physics Laserplan, Inc.	31
Paydirt Roadwork (DOS)	Spectra-Physics Laserplan, Inc.	31
Paydirt Sitework (DOS)	Spectra-Physics Laserplan, Inc.	31
Paydirt Sitework Basic (DOS)	Spectra-Physics Laserplan, Inc.	31
Paydirt Sitework 3.01 for Windows	Spectra-Physics Laserplan, Inc.	05
Paydirt Sitework 3.2 for Windows	Spectra-Physics Laserplan, Inc.	01
Paydirt	Trimble Navigation	01
P-CAD	Personal CAD Systems, Inc.	20
PC.BAT		46
PC Paintbrush	Z Soft	10
PC Paintbrush/Windows	Z Soft	02
PC3D	Jandel Scientific	24
PDS/SHADOW	Polygon Software & Technologies	53
PG01	Hirsch International	22
Phoenix Estimator	Phoenix Estimating	87
Picturemaker	Cubicomp Corp.	15
Piping/DWV Estimating	Esscomate	32
Polynest	Polygon Software	40
Power Takeoff	Ziatek, Inc.	04
Precision Estimating/Digitizer (DOS)	Timberline Software	37
Precision Estimating/Digitizer	Timberline Software	01
ProBid	Promation	06

Program	Company	SuperSet Code
Procad	Teksoft	13
Prodesign II	American Small Bus. Comp., Inc.	01
ProEst Estimating Digitizer Takeoff	CMS	04
ProExcel	Excel	80
Professional Estimating	Enterprise Computer Systems, Inc.	01
PTO	CDCI	58
QED	Roctek Corp.	64
Quest Earthwork	Quest Solutions	01
Quest Estimator	Quest Solutions	01
QuickBid	OnCenter Software	01
QuickCalc	Constructive Computing	58
QuickCALC - Windows	Constructive Computing	01
QuickDirt	Constructive Computing	23
QuickDirt - Windows	Constructive Computing	01
QuickDirt II/QuickEst III	Constructive Computing	58
QuickEst	Constructive Computing	43
QuickEst - Windows	Constructive Computing	01
QuickMeasure	Tally Systems, Inc.	01
QuickPen AutoBid	QuickPen International	04
QuickPen CAD	QuickPen International	09
QuickPen Estimating	QuickPen International	59
QuoteExpress	Quote Software	01
Ramco Estimating System	Safeharbor Software, Inc.	54
Remodeling Estimator	National Computer Estimating, Inc.	01
Right Hand Man	Johnston & Associates, Inc.	04
Roadeng	Softree Technical Systems, Inc.	27
Robocad, Robosolid	RoboSystems International	21
Rock-it	Ziatek	04
Roof Cad	True North Estimating Systems	12
Roof Estimator 3000	Essential Technology	65
SDP	Civilsoft	01
Sheetmetal/Ductwork	Esscomate	32
SigmaPlot	Jandel Scientific	24
SigmaScan	Jandel Scientific	24
SiteCalc	Eagle Point	01
Smartcam	Point Control Co.	17
Softplan	Softdesk	08
Sonnet CAD	Interworld Electronics	03
Sonnet Gap	Interworld Electronics	20
Subway	Roctek Corp.	64
Starbid	Geac	29
Super-Duct, Super-Pipe	Wendes Mechanical Consulting	48
Surpac	Surpac Mining Systems	27

Program	Company	SuperSet Code
Takeoff 2000+	Comput-Ability	42
Takeoff Pro	WinEstimator, Inc.	01
TakeoffTool	US Cost	01
Terra Model (DOS)	Plus 3 Software	09
Terramodel	Trimble Navigation	01
Terrasoft	Digital Resource Systems	01
Topographics IIID	CEIA, Inc.	75
Tops II Digitizer	Software Shop Systems	28
TOSCA	Clark University	74
Tradesman	Tradesman Software	01
Turbo Map CAD	U.S. Softtech	01
Versacad	Versacad Corp.	01
Vision	Bidtek	70
Visual Takeoff +	Comput-Ability, Inc.	42
Wall to Wall Estimator	Safeharbor Software, Inc.	11
WenDuct Takeoff	Wendes Systems, Inc.	48
WenPipe	Wendes Systems, Inc.	48
Wilcom Ltd.	Wilcom Ltd.	76
Windows	Microsoft	01
WinEst Pro & WinEst Pro Plus	WinEstimator, Inc.	11
WinEx & WinEx Pro	Roctek Corp.	01
WinMeasure	DeLoach Corporation	01
WinScale	Roctek Corp.	01
2D CAD	West Coast Consultants	33

Table 2: Configuration Details for SuperSet Menu Codes

> **Note**
> Max ≈ 100 coordinates/second
> lpi = lines per inch   lpmm = lines per millimeter

Code	Commun.	Output Options	ASCII Options
01	9600,N,8,1	GTCO Binary, 1000 lpi, Cont Max	
02	9600,N,8,1	GTCO Binary, 1000 lpi, Cont Incr	
03	9600,N,8,1	GTCO Binary, 1000 lpi, Cont Max	
04	9600,N,8,1	GTCO Binary, 1000 lpi, Point	
05	9600,N,8,2	GTCO Binary, 1000 lpi, Cont 100	
06	9600,N,8,1	GTCO Binary, 1000 lpi, Point	
07	9600,N,8,1	GTCO Binary, 200 lpi, Cont 100	
08	9600,N,8,1	GTCO Binary, 1000 lpi, Cont 100	
09	9600,N,8,1	GTCO Binary, 1000 lpi, Cont 12	
10	9600,N,8,1	GTCO Binary, 200 lpi, Cont Max	
11	9600,N,8,1	GTCO Binary, 1000 lpi, Cont Max, Alarm	
12	9600,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
13	9600,N,8,1	GTCO Binary, 1000 lpi, Cont 12	
14	9600,N,8,1	GTCO Binary, 200 lpi, Cont 100	
15	9600,N,8,2	GTCO Binary, 200 lpi, Cont 100	
16	9600,E,7,1	GTCO Binary, 200 lpi, Point	
17	9600,E,7,2	GTCO Binary, 200 lpi, Cont Max	
18	9600,E,7,2	GTCO Binary, 200 lpi, Cont Max	
19	9600,N,8,1	GTCO Binary, 1000 lpi, Point	
20	1200,N,8,1	GTCO Binary, 1000 lpi, Cont 100	
21	4800,N,8,1	GTCO Binary, 40 lpmm, Cont 12	
22	4800,N,8,1	GTCO Binary, 1000 lpi, Cont Max	
23	2400,N,8,1	GTCO Binary, 1000 lpi, Cont 12	
24	9600,N,8,2	GTCO Binary, 1000 lpi, Cont Max	
25	9600,N,8,2	GTCO Binary, 1000 lpi, Cont Max	
26	9600,N,8,2	GTCO Binary, 200 lpi, Point	
27	9600,N,8,1	GTCO ASCII, 40 lpmm, Point	Pb, Sp, LF
28	4800,O,7,2	GTCO ASCII, 100 lpi, Point	Sp, CR, LF
29	1200,O,7,2	GTCO ASCII, 1000 lpi, Point	Pb, CR, LF
30	1200,N,8,1	GTCO Binary, 40 lpmm, Cont 12	
31	9600,O,7,2	GTCO ASCII, 1000 lpi, Point	Pb, CR, LF
32	9600,E,7,2	GTCO ASCII, 1000 lpi, Point	Sp, CR
33	2400,E,7,1	GTCO ASCII, 100 lpi, Cont 12	Pb, Sp, CR, LF
34	9600,E,7,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
35	9600,E,7,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF

Code	Commun.	Output Options	ASCII Options
36	9600,E,7,1	GTCO ASCII, 1000 lpi, Cont 12	Sp, CR, LF
37	2400,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
38	2400,E,7,2	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
39	1200,O,7,1	GTCO ASCII, 1000 lpi, Cont 12	Pb, CR
40	1200,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
41	9600,E,7,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR
42	9600,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
43	1200,E,7,1	GTCO ASCII, 1000 lpi, Point, Alarm	Pb, Sp, CR
44	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont 12, Alarm	Pb, Sp, CR, LF
45	9600,N,8,2	GTCO ASCII, 100 lpi, Point, Alarm	Pb, CR, LF
46	9600,E,7,2	GTCO Binary, 1000 lpi, Cont 100	
47	9600,O,7,2	GTCO ASCII, 1000 lpi, Cont 100	Pb, CR
48	9600,E,7,1	GTCO ASCII, 1000 lpi, Point	CR, LF
49	1200,E,7,1	GTCO ASCII, 1000 lpi, Cont 12	Pb, CR
50	9600,E,8,1	GTCO ASCII, 40 lpmm, Point, Alarm	Pb, Sp, CR, LF
51	1200,N,7,2	GTCO ASCII, 1000 lpi, Point	Pb, CR, LF
52	9600,E,8,1	GTCO Binary, 1000 lpi, Cont 100, Alarm	
53	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont Max	Pb, CR
54	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont 12	Pb, CR
55	9600,O,7,2	GTCO ASCII, 1000 lpi, Cont Max, Alarm	Pb, CR
56	9600,E,7,2	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
57	9600,O,7,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
58	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont 12	Pb, CR, LF
59	1200,E,7,1	GTCO ASCII, 1000 lpi, Point, Alarm	Pb, Sp, CR
60	9600,O,7,1	GTCO ASCII, 1000 lpi, Point, Alarm	Pb
61	4800,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, CR, LF
62	2400,N,8,1	GTCO ASCII, 1000 lpi, Cont 12	Pb, CR, LF
63	1200,O,7,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
64	9600,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
65	2400,N,8,1	GTCO Binary, 1000 lpi, Cont 100	
66	9600,O,7,2	GTCO ASCII, 1000 lpi, Point	Pb, Sp, CR, LF
67	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont 12, Alarm	Pb, CR
68	9600,O,7,2	GTCO ASCII, 100 lpi, Point	Pb, Sp, CR, LF
69	9600,E,7,1	GTCO ASCII, 40 lpmm, Point	CR, LF
70	1200,N,8,1	GTCO ASCII, 100 lpi, Point, Max, Alarm	Sp, CR

Code	Commun.	Output Options	ASCII Options
71	9600,N,8,1	GTCO Binary, 40 lpmm, Cont	
72	1200,O,7,2	GTCO ASCII, 100 lpi, Point	Pb, Sp, CR, LF
73	9600,N,8,1	GTCO ASCII, 1000 lpi, Point	CR, LF
74	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont 100, Alarm	Pb, Sp, CR, LF
75	9600,N,8,1	Calcomp ASCII 3, 1000 lpi, Point	CR
76	9600,N,8,1	Summa ASCII 2, 10 lpmm, Point	CR
77	9600,N,8,1	Summa ASCII 2, 10 lpmm, Cont 100	CR
78	2400,N,8,1	Summa Binary, 10 lpmm, Point	
79	9600,O,7,2	Summa ASCII 1, 10 lpmm, Cont 100	LF
80	9600,O,8,1	Summa Binary, 10 lpmm, Point, Alarm	
81	9600,E,7,2	Summa ASCII UIOF, 40 lpmm, Point	CR, LF, Decimal
82	9600,N,8,1	GTCO ASCII, 1000 lpi, Point, Max, Alarm	Pb, Sp, CR, LF
83	9600,N,8,1	GTCO ASCII, 1000 lpi, Cont Incr	Pb, Sp, CR
84	9600,N,8,1	GTCO ASCII, 1000 lpi, Point	Pb, LF
85	9600,N,8,1	Summa ASCII UIOF, 1000 lpi, Point	Pb, LF
86	*Special		
87	*Special		
88	*Special		
89	*Special		
90-98		User configuration storage locations	

*86-89 require special firmware to activate.

Super L IV Tones

The Super L IV produces an *alarm* in the form of audio tones to inform you of various events. The table below describes the kinds of tones you might hear while operating the digitizer.

Table 3: Super L IV Tones

Length	Number of times	Meaning
Short	Four at power up	Diagnostics passed
Short	Four	Successful end of menu mode
Short	Once	Transducer switch pressed, if the alarm tone is enabled
Medium	Three	Alarm tone toggles On/Off
Medium	Three at power up	Configuration error*
Long	Three	SuperSet Code aborted
Long, once per second, followed by short	Eight long beeps, followed by four short	Grid disconnected*
Continuously on	At power up	Diagnostics failed*

Short = 1/16 second   Medium = 1/4 second   Long = 1/2 second

Configuration error tones*, **Grid disconnected tone, or **Diagnostics failed tones** indicate a serious problem. If you hear any of these tones, call GTCO CalComp Technical Support at 410.312.9221, or 480.443.2214.

Note **You might hear tones produced by the Super L IV which are actually sent by your application program. (Programs can send commands to the digitizer to turn the audio tone generator On and Off.) If you hear tones during digitizing, and they don't correspond to the tones listed in the table above, they are produced by the application program.**

Note **This information applies to serial installations only.**

Introduction to the Tablet Configuration Utilities

The **Super L IV** with its Controller uses the Tablet Configuration Utilities to control baud rate, data format and other operating characteristics for the RS232 interface. It is used to relay configuration information to the Super L IV in those cases where Table 1 and Table 2 do not supply the information or a SuperSet Menu Code for the graphic application software you are using.

The configuration parameters for the Super L IV are divided into three categories:

- Communication Options
- Output Format Options
- Mode Options

Communication Options

- **Baud** The rate, in bits/second, at which characters are transmitted across the RS232C serial interface. Choices are: 1200, 2400, 4800, 9600, 19200, or 38400.

- **Data Bits** Data bits represent the actual data being sent from one device to another. Both devices must be set for the same number of data bits. Choices are: Seven (7), or Eight (8).

- **Stop Bits** Each character has one or two stop bits, which tell the receiving device that a character is complete. The number of stop bits usually does not matter. Setting for two stop bits instead of one may overcome a mismatch in parity or data bits. Choices are: One (1), or Two (2).

- **Parity** One bit can be allocated for parity (parity is a simple error-detecting scheme). Both devices (sending and receiving) must be set for the same parity—either odd parity, or even parity—or they must be set for no parity. Choices are: None (N), Even (E), or Odd (O).

Output Format Options

- **GTCO** Selects GTCO-compatible formats. See Advanced Programming Information in the Super L IV Online Help for greater detail on GTCO format structure. Choices are: Binary, or ASCII.

- **CalComp** Selects CalComp-compatible formats. See Advanced Programming Information in the Super L IV Online Help for greater detail

on CalComp format structure. Choices are: Binary, ASCII 1, ASCII 2, ASCII 3, or ASCII 4.

◻ **Summa**   Selects Summagraphics-compatible formats. See Advanced Programming Information in the Super L IV Online Help for greater detail on Summagraphic format structure. Choices are: Binary, or ASCII.

ASCII formats can be modified by including, or excluding, a button code, space, decimal point, carriage return, or line feed, depending on whether GTCO, CalComp, or Summa formats have been selected.

◻ **Button**   Defines whether the Pushbutton (Pb) value is included in the ASCII output report. This option is available only with GTCO formats. Choices are: Include, or Exclude.

◻ **Space**   Defines whether the Space (Sp) character (hex 20) is included in the ASCII output report as a delimiter between the X and Y coordinate values. This option is available only in GTCO formats. Choices are: Include, or Exclude.

◻ **Decimal**   Defines whether the period character (hex 2E) is included in the ASCII output report between the units and tenths digits. This option is available only in Summagraphics formats. Choices are: Include, or Exclude.

◻ **Return**   Defines whether the Carriage Return (CR) character (hex 0D) is included in the ASCII output report as a terminator. This option is available in GTCO and Summagraphics formats. Choices are: Include, or Exclude.

◻ **Line Feed**   Defines whether the Line Feed (LF) character (hex 0A) is included in the ASCII output report as a terminator. This option is available in GTCO, CalComp and Summagraphics formats. Choices are: Include, or Exclude.

Mode Options

◻ **Mode**   Defines how output reports are sent from the digitizer. Choices are: Point, Line, Continuous, Line Incremental, or Continuous Incremental.

◻ **Rate**   Determines how fast output reports will be transmitted from the digitizer. Choices are: 12, 50, or 100 reports per second.

◻ **Resolution**   The smallest reported value returned by the digitizer. Choices are: 1000 lpi, 2000 lpi, 4000 lpi, 40 lpmm, 100 lpmm, or 150 lpmm.

See the *Advanced Programming Information* section in the Super L IV Online Help at www.gtcocalcomp.com for more details.

Using the Tablet Configuration Utilities

If your application is not represented in the SuperSet Menu and does not have a SuperSet Code, or if a different configuration is required, you can use the Tablet Configuration Utilities to configure the Super L IV. The Tablet Configuration Utilities replace the 24 switches that were associated with older GTCO digitizers and the Custom Configuration Menu Card used with the Super L II Plus.

To configure the Super L IV with the Tablet Configuration Utilities:

1   Make sure the Super L IV is plugged into a Serial Port, powered On, and all the tablet drivers have been uninstalled or disabled.

2   Install the Tablet Configuration Utilities from the *Select Utility Software to Install* section on the TabletWorks CD, or download them from www.gtcocalcomp.com.

3   After the installation has completed, run the *Tablet Configuration Utilities* from the **Programs** list under *GTCO CalComp TCU*.

4   The Tablet Configuration Utilities will begin searching the Serial Ports for a supported tablet.

   a) If the tablet is found, information about the tablet will display under **Device Info** near the bottom of the screen.

   b) If the tablet is not found, a message will appear under **Device Info** near the bottom of the screen.

      i)   If Wintab files were found, it is possible that the TabletWorks) driver has the Serial Port open.

      ii) If the Serial Port is open by another application, it will not be displayed under **System Info**. Close any application, or uninstall any driver that is using the Serial Port and select *Refresh System Info* from the **File** drop-down list at the top of the screen. Click on the Serial Port icon under **System Info** to search that Serial Port.

> **Note** **The Tablet Configuration Utilities can use the TabletWorks driver to *test* the tablet, but it *must be* communicating directly with the tablet, via the Serial Port, in order to configure it.**

5   Once the Super L IV has been found on a Serial Port, select *Advanced Configuration* from the **Options** drop-down list at the top of the screen.

   a) If Advanced Configuration is not an option, make sure *Wintab Compatible Driver* is not listed under **Device Info**.

6 Select a predefined, `0` `1` through `8` `9`, SuperSet Code, or select one of the User Defined, `9` `0` through `9` `8`, SuperSet Codes to customize.

   a) User Defined (`9` `0` through `9` `8`) SuperSet Codes are initially read from the tablet when the Advanced Configuration screen opens. This is to prevent loss of custom settings. Selecting **Read Current Settings** from the Options menu will:

      i) Read the Power-Up settings and User Defined SuperSet Codes from the tablet.

      ii) Overwrite all Custom Settings not yet saved to the tablet.

   b) **Restore Factory Settings** from the Options menu will prompt for:

      i) Power-Up settings reset to factory default and set current.

      ii) User Defined SuperSet Codes cleared and reset to factory default.

7 After making your selections, choose one of the following from the **File** menu at the top of the screen.

   a) **Save Temporary Settings** will configure the tablet as shown until the tablet is powered off, reset, or another SuperSet Code is selected.

      i) After saving temporary settings, select **File/Exit** to test with other applications. This will leave the tablet configured to the temporary settings selected and close the Serial Port, enabling other applications to communicate with the tablet.

   b) **Save Power-Up Settings** will configure the tablet as shown. Every time the tablet is powered off and back on, or reset, it will restore these settings.

   c) **Save Custom Settings** will reconfigure all nine of the tablet's User Defined SuperSet Codes to the settings specified in the corresponding SuperSet Code drop-down list.

      i) You can click on the SuperSet Menu buttons on the tablet using the tablet's transducer to activate these configurations: `S` plus `9` `0` through `9` `8`.

8 When you have finished, select *Exit* or *Close* from the **File** menu.

   a) *Exit* will close the Tablet Configuration Utilities.

   b) *Close* will exit the Advanced Configuration Screen and return to the **Tablet Configuration Utilities** window.

Learning the Basics

You will find that using your **Super L IV** tablet is as easy, or easier, than using a mouse. The Super L IV transducers are more accurate than a mouse, giving you greater control over your movements.

Using the Transducer

The transducer does not need to be in contact with the tablet surface in order for the digitizer to sense its presence. It can be detected up to 1/2" above the Active Area. When the transducer is in the zone above the surface of the digitizer, it is referred to as being *in prox*. The Indicator light will go from a blinking green light to a solid green light when the trans-ducer is in prox of, or touching, the tablet's surface. The *in prox zone* allows you to trace through materials placed on the digitizer's surface, such as a drawing or a book. Before using the cordless transducer, be sure that Sleep Mode is turned off by pressing a button, or in the case of the pen, touching the pen tip to the tablet's surface.

Using the Cursor

When you use the cursor, the intersection point of the crosshairs on the lens identifies the point you are selecting. The crosshairs are etched on the bottom of the lens to increase accuracy. For maximum precision, look through the lens from a position directly over it.

Button 0 on the cursor is used as the *pick*, or left mouse, button. All other buttons are defined by the TabletWorks software, or through your own software application.

Using the Pen

There are two variations of pens: the click tip and the lite touch tip. On both pens, the pen tip is Button 0 and is used as the *pick*, or left mouse, button. The lower side button is Button 1 and the upper side button is Button 2.

The functions these buttons provide are defined through the TabletWorks software, or through your own software application.

Click Tip Pen

The click tip pen is available in both corded and cordless versions. It is primarily used for tracing and menu picking. To use the click pen, press down until you feel the tip *click*.

Lite Touch Pen

The lite touch pen is available only in the cordless version. It is similar to the click tip pen, except that it calls for, as the name implies, a lighter touch, without the click.

Learning Basic Movements

The Super L IV transducers provide all the basic movements of a mouse, including clicking, double-clicking and dragging.

Clicking and Double-Clicking

Clicking is the action of making a selection. You may be selecting a key on the digitizer surface, or making a selection from your computer monitor screen. To click, place the transducer, or move the screen pointer using the transducer, to the item to be selected. Tap the pen or press Button 0 on the cursor. A *double-click* requires you to quickly tap the pen or press the button two times, while the tool remains in the same place. You can also double-click by pressing the pen or cursor button that has been defined as a *double-click* button (see TabletWorks Help).

Dragging

Dragging is the action of moving the transducer during a selection. To drag, click on an object, but instead of lifting the pen tip or releasing the cursor button, hold it down while moving the transducer, or corresponding object on the screen, to the desired new location.

Caring for the Tablet and Transducer

Follow these precautions at all times to avoid damaging your Super L IV:

- Avoid discharging static electricity to the tablet.
- Do not place heavy objects on the tablet surface.
- Do not use sharp objects, such as compasses or knives, on the tablet surface.
- Do not use the tablet surface for any purpose other than drawing, tracing, or digitizing.
- Do not drill holes on any part of the digitizer or controller.

Cleaning the Tablet

To clean the tablet's surface, use a soft, non-abrasive cloth. Hardened dirt can be removed with a slightly dampened cloth. Do not clean pencil lines with a soft cleanser or pencil eraser. This could create an undesirable shiny spot on the tablet's surface that cannot be removed.

Do not use abrasive cleaners, acrylic, or lacquer paint thinners – or cleansers with an acetone or solvent base, such as MDC or EDC – on the tablet surface. They will damage the tablet.

Cleaning the Cursor

To clean the cursor body, use a mild cleanser. Do not spray the cleanser directly on the cursor—instead, dampen a soft cloth with a mixture of water and the cleanser. Clean the cursor reticles with alcohol.

> ⚠ **Excessive cleaning can dissolve the filled black crosshair on a reticle.**

Replacing the Pen Tip

To replace the pen tip, grasp the tip and pull straight out (see figure). Insert the new tip and press until it *clicks* into place.
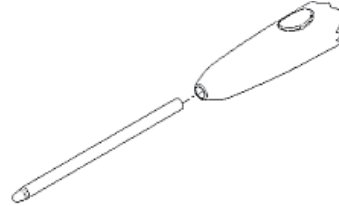
Replacing the Cordless Pen Batteries

The pen requires two 393 silver oxide batteries. The average battery life is 200 hours.

> ⚠ **Do not use ZINC AIR batteries as replacement batteries. They will corrode the electronics of the pen.**

To replace the batteries:

1   Unscrew the pen cap. Hold the pen from the bottom and gently slide off the pen cover to expose the batteries.

2   Remove the old batteries by turning the pen over and gently tapping it, letting the batteries fall into your other hand.

3   Insert the new batteries as they are shown in the figure above (+ towards pen tip).

4   Replace the pen cover and screw the pen cap onto the pen.
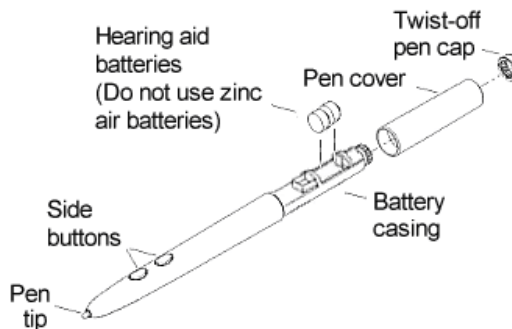
> **Note**   **When you replace the pen batteries, the pen will reset to the default frequency. If you changed the frequency of the pen before replacing the batteries, you will need to do so again after replacing the batteries (see the *Reducing Monitor Interference* section in the *Troubleshooting Guide*).**

Replacing the Cordless Cursor Batteries

The cordless cursor requires two AAA batteries. The average battery life for the cursor batteries is 2,000 hours.
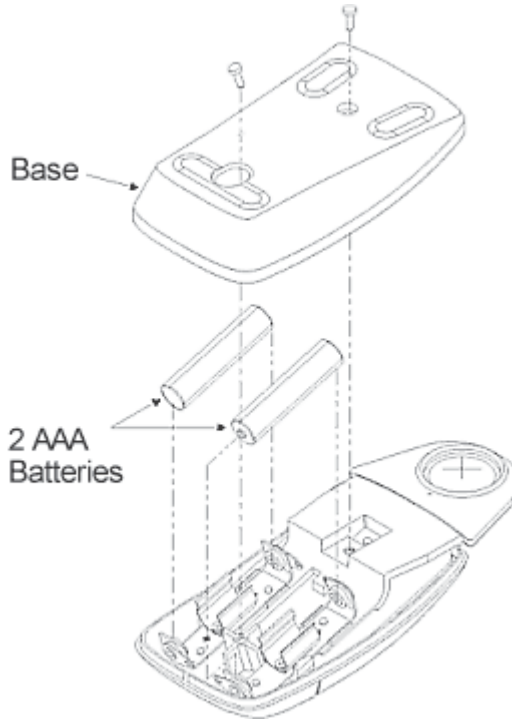
To replace the batteries:

1   Place the cursor face down in the palm of your hand. Use a Phillips screwdriver to remove the two screws located on the bottom of the cursor (see figure). Remove the cursor base.

2   Remove the old batteries from the battery casings.

3   Place the new batteries in the casings, matching the polarity of each battery with the markings on the connector strips (match + to +).

4   Reposition the cursor base. Replace the screws with the Phillips screwdriver.

| Note | **When you replace the cordless cursor batteries, the cursor will reset to the default frequency. If you changed the frequency of the cursor before replacing the batteries, you will need to do so again after replacing the batteries (see the *Reducing Monitor Interference* section in the *Troubleshooting Guide*).** |

Troubleshooting Guide

As with any computer peripheral, Super L IV problems sometimes do occur. Most of these problems are easy to find and correct. This troubleshooting guide provides clear instructions for finding and solving all common digitizer problems. In most cases, you will be able to quickly take care of the problem yourself by following these steps:

1   Install properly first.

This troubleshooting guide assumes you have already correctly installed your Super L IV according to the detailed instructions in the *Installing your Super L IV* section. If you have not followed the step-by-step instructions in that section, do so now.

2   Read the topics below to check for a solution to your problem. Work through the troubleshooting flowcharts on the following pages in this troubleshooting guide. The GTCOTEST application referenced there can be found in Super L IV Online Help.

Record any unusual observations. Your notes will be useful if you need assistance from GTCO CalComp later.

3   If your system still doesn't work...

Call our Technical Support Department at 410.312.9221, or 480.443.2214. Be prepared to discuss the observations you made while troubleshooting. A Technical Support Specialist will help you resolve the problem as quickly as possible.

> Note   **Refer to the Super L IV Tones table on page 26, while using this *Troubleshooting Guide*.**

Reducing Monitor Interference

If you are experiencing monitor interference with your tablet, you can reduce the interference by changing the frequency your transducer uses. Transducers with the following FCC ID numbers support two frequencies: ECPPPP, ECPPP2, ECPPLTP, ECPPCURSOR4, ECPPCURSOR16, and ESPPCURSORII. Transducers with FCC ID numbers other than those listed must have frequencies changed by GTCO CalComp.

Changing the Frequency of the Cordless Cursor

1   Place the cursor on the tablet surface.

2   Press Buttons 1 and 2 simultaneously and hold for approximately three seconds.

3   The cursor turns itself off. You will know the cursor is off when the Indicator light on the tablet begins blinking.

4 The cursor turns on again at the new frequency. You will know the cursor is on when the Indicator light glows steadily.

To return to the default frequency, repeat the above process. When you replace the cursor batteries, the cursor is automatically reset to the default frequency.

Changing the Frequency of the Cordless Pen

Press both side buttons and the tip simultaneously and hold for approximately three seconds.

To return to the default frequency, repeat the above process. When you replace the pen batteries, the pen resets to the default frequency.

Tablet Checklist

- ☐ Is the tablet power supply plugged into the digitizer and into a live outlet?
- ☐ Is the tablet power switch On?
- ☐ Does the Indicator light glow steadily when the transducer is in prox inside the Active Area? Does it blink when the transducer is outside the Active Area?
- ☐ The Indicator light will blink if the transducer has gone into Sleep Mode. Press any button on the transducer to activate it. If the Indicator light continues to blink and the transducer is in the Active Area, change the transducer's battery.
- ☐ Are all cable connections seated properly?
- ☐ Is the communications cable (either USB or serial) connected to both the digitizer and the computer? Check that the cable is connected to the serial port specified in your software package.
- ☐ Is the transducer cable connected to the digitizer?
- ☐ Is the tablet set up according to the software recommendations?
- ☐ Are any of the connector cables or receptacles damaged? Check for bent pins, cut insulation, and loose wires.

Computer Checklist

- ☐ Is the computer plugged into a live outlet? Did you turn on the computer?
- ☐ Does the computer work with any of your software? Try one of your other programs. If the computer has a diagnostic diskette, use it.
- ☐ Is your software package installed correctly?
- ☐ If your communications connection is USB, does the USB port work? If serial, does the serial port work? The only way to test the port without special equipment is to reinstall something that has worked in the past and see if it still works.

◾ Have there been any recent electrical storms in your area that may have damaged your equipment?

Software Checklist

Does the tablet work with some software?

If your tablet currently works with some software packages, you know that the tablet, USB or serial port, and computer work.

◾ Even if the software package you are trying to install and the software that is working both support the same tablets, it does not always mean that you can use the same tablet settings. The output format may be the same, but the communications protocol, resolution, operating mode, and data rate may be different. Check your software's requirements.

◾ Call the software manufacturer. Perhaps the software package has a problem with another component of your system.

Did the software work in the past?

If the software package worked with the tablet in the past, then the problem lies with the new setup.

◾ Check all the connectors. Is the tablet still plugged into the same port? If yes, reset the tablet by unplugging and replugging the power supply and restart the software.

◾ Did you reset or power down the computer?

◾ During reset and power-on, the computer can send meaningless characters out the serial port and this can disable the tablet. Reset the tablet again.

◾ Have you installed any new software or hardware? Remove it from your system and see if the problem goes away.

◾ Did you move any cables?

◾ If you are using a PC, did the new software alter your AUTOEXEC.BAT file?

◾ Have you updated the software or its drivers?

◾ Are you loading another mouse driver?

◾ Did you reinstall the software, perhaps after a problem with your hard drive? Double check your installation procedure and the driver you selected.

◾ Reinstall the software from its master diskettes. The program files may have been corrupted.
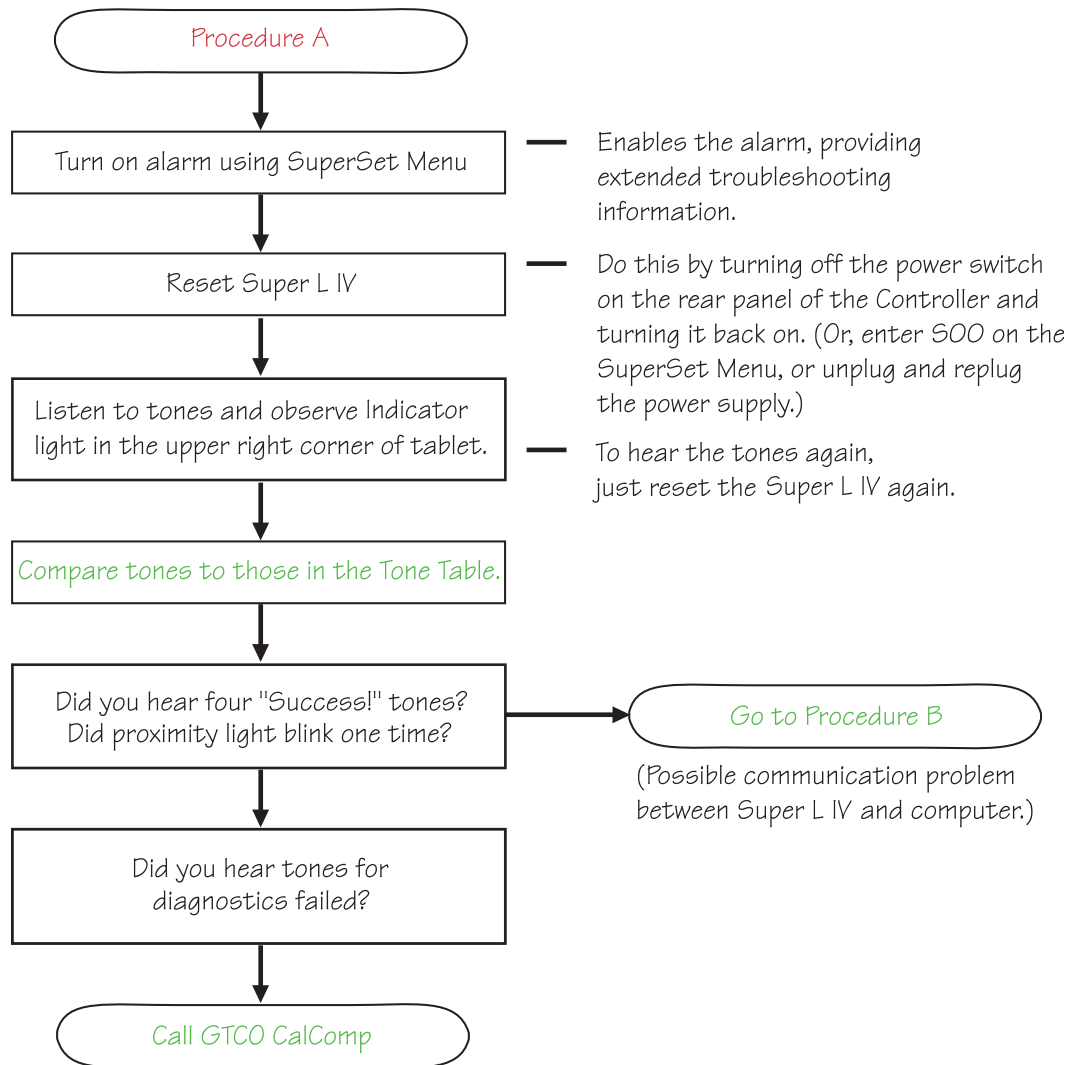
Troubleshooting Chart

The following table lists common Super L IV problems, their causes and their solutions.

Problem	Cause	Solution
Frozen screen pointer	Transducer is in Sleep Mode.	Press any button on the transducer.
	Tablet plugged into the wrong serial port on the computer.	Check that the serial port being used is correctly identified in your software application.
	Tablet not powered correctly.	Check that the power cable is installed correctly.
	Batteries low in transducer.	Replace the batteries in the transducer.
	Software application set up incorrectly.	Check that the tablet is identified in your software application.
	Another device is connected to a COM port that shares the same IRQ as the tablet COM port (*i.e.*, your tablet is connected to COM1 IRQ4 and your modem is connected to COM3 IRQ4).	Move one of the devices to another COM port. Contact your system manufacturer for assistance in relocating the device.
Screen pointer appears to shake or jitter	Tablet is set too close to the screen monitor.	Move the tablet farther away from the screen.
	Tablet's frequency setting may conflict with the display.	Alternate the transducer's frequency. (See the *Reducing Monitor Interference* section.)
Unable to use the entire tablet surface	Incorrect format selected.	Check your selections using the Tablet Configuration Utilities.
	Software application set up incorrectly.	Check that the tablet is identified in your software application.

Procedure A: Begin Troubleshooting

> **Note**   **This procedure should only be used to troubleshoot serial connections.**

Procedure A

↓

Turn on alarm using SuperSet Menu — Enables the alarm, providing extended troubleshooting information.

↓

Reset Super L IV — Do this by turning off the power switch on the rear panel of the Controller and turning it back on. (Or, enter SOO on the SuperSet Menu, or unplug and replug the power supply.)

↓

Listen to tones and observe Indicator light in the upper right corner of tablet. — To hear the tones again, just reset the Super L IV again.

↓

Compare tones to those in the Tone Table.

↓

Did you hear four "Success!" tones? Did proximity light blink one time? → **Go to Procedure B**

(Possible communication problem between Super L IV and computer.)

↓

Did you hear tones for diagnostics failed?

↓

Call GTCO CalComp

Procedure B: Troubleshooting

Procedure B

Use Procedure B if Super L IV sounds "Success!" tones, but doesn't seem to be communicating with the application program.

Is application program set for Super L IV? Are computer communication parameters (baud rate, parity, stop bits, data bits, COM port) set properly?

No → Reconfigure program and/or computer.

Yes

No ← Does Super L IV communicate now?

Yes

Done

With SuperSet Menu   How are you configuring Super L IV?   With Tablet Configuration Utilities

Find SuperSet Code for application program in Table 1.

Configure Super L IV per settings in application program's manual.

Enter code on SuperSet Menu.

Save settings in SuperSet storage locations 90-98, if desired.

Does Super L IV communicate now?   Yes →   Done

No

Go to Procedure C

Procedure C: Troubleshooting

Note: GTCOTEST can be used only for testing serial communications. All WinTab drivers should be disabled, or removed. Instructions for running GTCOTEST can be found at www.gtcocalcomp.com in the Super L IV Online Help.

(Procedure C)

↓

Move RS232C Cable to a different serial port on computer.

↓

Does Super L IV communicate now? —Yes→ (Done)

↓ No

The second time you pass this box, read the note, shown at right. —— Note: If you try all possible port-to-port cable combinations with both your application program and GTCOTEST, and Super L IV still doesn't communicate with the computer, call GTCO CalComp.

↓

Run GTCOTEST.

↓

Does Super L IV work with GTCOTEST? —No→ Make sure WinTab is disabled or uninstalled. Verify that GTCOTEST is set up properly and that Super L IV options are set per instructions for GTCOTEST. Reconfigure as needed.

↓ Yes   ↓

Install application program again. Configure Super L IV to match.   (Go back to beginning of Procedure C.)

↓ |

Try moving cables again.

↓

Does Super L IV communicate now? —Yes→ (Done)

↓ No

(Go back to Procedure B) —— Try checking configuration again.

Returning your Tablet for Repair

If you think you have a defective tablet, first see all topics in this section (above) and visit our Web site at

www.gtcocalcomp.com/supportgtcocalcompcontact.htm

for the latest support information.

If you are still unable to properly operate your digitizer system, call Technical Support at 410.312.9221 EST, 480.443.2214 MST, or email us at

gtcocalcomp.support@gtcocalcomp.com.

Technical Support will assist you in determining if your tablet is defective, and will help you obtain a Return Merchandise Authorization (RMA) number.

Please do not return your product without first discussing the problem with, and receiving an RMA from, a GTCO CalComp Technical Support Specialist.

Repackaging for Shipment

Whenever you ship electronic equipment, try to ship it in its original packing materials. Because packing materials are static-charged, you should ship the cursor or any extra electronics boards inside approved antistatic plastic bags. If you are shipping the tablet or accessories to a GTCO CalComp Service Center for repair, attach a tag to the equipment with the following information:

- Model number
- Serial number
- Maintenance contract number (if applicable)
- Return Merchandise Authorization number
- Detailed description of the problem

Regulatory Statements and Warranty

Radio and Television Interference

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Reorient or coil cables.
- Consult the dealer or an experienced Radio/TV technician for help.

> **Note** **Any cables the user adds to the device must be shielded to be in compliance with the FCC standards. Any unauthorized modification to this device could result in the revocation of the end user's authority to operate this device.**

Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le present appareil numérique n'emet pas bruits radioelectriques depassant les limites applicables aux appareils numériques de Classe B prescrites dans le réglement sur le brouillage radioelectrique edicte par le Ministere des Communications du Canada.

Declaration of Conformity

The "CE" mark on this device indicates compliance under the EMC 89/336/EEC Directive.

Declaration of conformity according to ISO/IEC Guide 22 and EN 45014

> **Manufacturer's Name:**   GTCO CalComp, Inc.
>
> **Manufacturer's Address:**   7125 Riverwood Drive
> Columbia, MD 21046
> U.S.A.

declares, that the product

> **Product Name:**   Super L IV
>
> **Model Numbers:**   SL4-2024, SL4-3036, SL4-2436, SL4-3648, SL4-4460
>
> **Product Options:**   All

conforms to the following product specifications:

> **Safety:**
>
> **EMC:**   CISPR22:1985/EN 55022:1988–Class B
> EN 50082-1:1992
> IEC 801-2:1991–4kV CD, 8kV AD, Criterion B
> IEC 801-3:1984–3V/m, Criterion A
> IEC 801-4:1988–1kV power lines, .5kV data lines,
>   Criterion B

Supplementary Information

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Scottsdale, Arizona, U.S.A.	05-10-2004	Dana Doubrava
Location	Date	Engineering Manager

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> この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
> 　取扱説明書に従って正しい取り扱いをして下さい。

Bescheinigung des Herstellers/Importeurs

Heirmit wird bescheinigt, dass der/die/das

Super L IV

(Geraet, Typ, Bezeichnung)

im Uebereinstimmung mit den Bestimmungen der

Vfg 1046/1984

(Amtsblattverfuegung)

Funk-Entstort ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Geraetes angezeigt und die Berechtigung zur Ueberpruefung der Serie auf Einhaltung der Bestimmungen eingeraumt.

GTCO CalComp, Inc.

(Name des Herstellers/Importeurs)

Dieses Geraet wurde einzeln sowohl als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funk-entstoerbestimmungen geprueft. Es ist jodoch moeglich, dass die Funk-entstoerbestimmungen unter unguenstigen Umstaenden bei anderen Geraetekombinationen nicht eingehalten werden. Fuer die Einhaltung der Funk-entstoerbestimmungen seiner gesamten Anlage, in der dieses Geraet betrieben wird, ist der Betrieber verantwortlich.

Einhaltung mit betreffenden Bestimmungen kommt darauf an, dass geschirmte Ausfuhrungen gebraucht werden. Fuer die beschaffung richtiger Ausfuhrungen ist der Betrieber verantwirtlich.

Limited Warranty for the Super L IV

GTCO CalComp, Inc. warrants these products to be free from defects in material and workmanship under the following terms. Complete and return the enclosed warranty registration card to ensure that your products are covered with this warranty.

Coverage

Parts and labor are warranted for two (2) years from the date of the first consumer purchase for the digitizer tablet, controller, transducers, and tablet accessories. Power supply and cables are warranted for one (1) year. This warranty applies to the **original consumer purchaser only**. This warranty does not apply to any product purchased outside the United States or Canada. For warranty information outside the United States or Canada, contact your local dealer or distributor.

Warranty is only valid if original consumer's purchase or lease date is less than or equal to six months from the original GTCO CalComp sale date. This information will be captured by the system serial number and confirmed by the reseller's purchase order.

A nominal Warranty Handling Fee will be charged after the first year of use and calculated from the date of original consumer purchase. This payment may be made by Visa, MasterCard or American Express. A copy of the sales receipt or invoice will be required for warranty verification.

Conditions

Except as specified below, this warranty covers all defects in material or workmanship in the products. The following are not covered by the warranty:

1   Any product on which the serial number has been defaced, modified or removed (if applicable).

2   Damage, deterioration or malfunction resulting from:

   a   Accident, misuse, abuse, neglect, fire, water, lightening or other acts of nature, unauthorized modification for any purpose, unauthorized product modification, or failure to follow instructions supplied with the product.

   b   Repair or attempted repair by anyone not authorized by GTCO CalComp.

   c   Any damage in shipment of the product (claims must be presented to the carrier).

   d   Any other cause which does not relate to a manufacturing defect.

3   Any product not sold or leased to a consumer within six months of GTCO CALCOMP's original sale date.

GTCO CalComp will pay all labor and material expenses for covered items, but we will not pay for the following:

1   Removal or installation charges.

2   Costs for initial technical adjustments (set up), including adjustment of user controls.

3   Certain shipping charges. (Payment of shipping charges is discussed in the next section of this warranty.)

4   Packaging costs. (Customers should keep their boxes.)

Warranty Service Procedures

1   To obtain service on your GTCO CalComp product, call the Service & Support Department at (410) 312-9221 (EST), or (480) 443-2214 (MST) to obtain a Return Material Authorization Number (RMA#) and shipping instructions.

2   Ship the product to GTCO CalComp with the RMA# marked clearly on the outside of the box. Without a clearly marked RMA# on the shipping box, GTCO CalComp reserves the right to refuse shipment.

3   Although you must pay any shipping charges to ship the product to GTCO CalComp for warranty service, GTCO CalComp will pay the return shipping charges for ground shipment. Other shipping options are available at an additional fee.

4   Whenever warranty service is required, the original dated sales invoice (or a copy) must be presented as proof of warranty coverage, and should be included in shipment of the product. Please also include your name, address, telephone number, fax number, email address, and a description of the problem.

5   If GTCO CalComp determines that the unit is not defective within the terms of the warranty, the consumer shall pay the cost of all freight charges, as well as any repair charges.

Technical Support

Web-based Technical Support is available free of charge at: www.gtcocalcomp.com, where current driver releases, as well as comprehensive technical support, troubleshooting, Technical Bulletins and FAQs can be found.

Telephone Technical Support is available free of charge to the original consumer for a period of 90 days from the date of purchase of the product. Please contact our Service & Support Department at (410) 312-9221 (EST), or (480) 443-2214 (MST). You can also fax your request to (410) 290-9065 (EST), or (480) 948-5508 (MST).

Disclaimer of Unstated Warranties

The warranty printed above is the only warranty applicable to this purchase. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. Assuming the warranty above stated is otherwise applicable, it is expressly understood and agreed that GTCO CalComp's sole liability whether in contract, tort, under any warranty, in negligence or otherwise shall be for the repair or replacement of the defective parts and under no circumstances shall GTCO CalComp be liable for special, indirect or consequential damages. The price stated and paid for the equipment is a consideration in limiting GTCO CalComp's liability.

Notice

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state, or province to province.

To obtain service on your GTCO CalComp product, call our Service & Support Department at (410) 312-9221 (EST), or (480) 443-2214 (MST), fax us at (410) 290-9065 (EST), or (480) 948-5508 (MST). We can also be contacted through our Web site at www.gtcocalcomp.com.

Important! All products returned to GTCO CalComp for service must have prior approval in the form of a Return Merchandise Authorization Number (RMA#), which can be obtained by calling the Service & Support Department.

GTCO CalComp
PERIPHERALS

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