

## SigTrak Specification

## Overview

SigTrak is a windows based, central computer program designed to provide a complete traffic signal maintenance/inventory management capability. It has been designed to run under most Microsoft Window operating systems. SigTrak supports a client/server architecture using most network operating systems. The software has been designed using the latest development systems. The software architecture is modular in design, allowing for ease of maintenance and expandability.

## Features

- Call management allows for the logging and tracking of trouble calls received from citizens, police, employees or any other sources. Reports are provided that show calls grouped by code, date, location and technician. There is also a report showing unanswered calls. A record consists of:
  - ✓ Date and time call was received.
  - ✓ Status of the call.
  - $\checkmark$  Employee taking the call
  - $\checkmark$  Name and phone number of person reporting the problem.
  - $\checkmark$  Name of technician to whom the call was dispatched.
  - ✓ Location of the problem.
  - ✓ Code describing the reported problem.
  - ✓ Detailed description of the problem being reported.
- Complaint management allows for the logging and tracking of complaints or suggestions received from citizens, police, employees or any other sources. Complaints or suggestions are not really trouble calls, but instead are complaints or suggestions about operational matters such as timing, intersection design, etc. A record consists of
  - ✓ Date the complaint was received.
  - ✓ Name of employee receiving the complaint.
  - ✓ Type, name, address and phone number of person filing the complaint.
  - $\checkmark$  Location that the complaint is concerning.
  - $\checkmark$  Short description of the complaint.
  - ✓ Detailed description of the complaint
- Drawings management allows for the tracking of any and all drawings and images related to signal maintenance and inventory. This module supports drawings of virtually any type including bmp, jpg, dwg, etc. SigTrak will also allow editing the drawings from within SigTrak using the drawing editor associated with the particular file type. A records consists of:
  - ✓ The ID number of the drawing.
  - $\checkmark$  The location (typically the intersection) that the drawing represents or is assigned.
  - $\checkmark$  The description of the drawing.
  - $\checkmark$  The path to the image of the drawing



- Inventory management allows for the tracking of all inventory, including both stockroom and field inventory. The inventory tracks quantities on hand and provides reorder status reports. Reports show inventory by location or part number. Photos of all parts are supported. Parts may be moved from one location to another simply by reassigning the location. SigTrak also tracks warranty status of all parts as well as mean time between failures for all parts. A records consists of:
  - ✓ Part number.
  - ✓ Serial number.
  - $\checkmark$  Purchase date.
  - ✓ Install date.
  - ✓ Warranty period.
  - $\checkmark$  Shelf warranty period.
  - ✓ Location of the part (Intersection, repair lab, or stock)
- Notes management allows the user to add and maintain notes of any type. The notes may pertain to construction, temporary conditions, reminders or any other information the user may find useful. A record consists of:
  - ✓ Date of the note.
  - $\checkmark$  Author of the note.
  - ✓ Location the note describes (typically an intersection)
  - ✓ Short description of the note.
  - $\checkmark$  The note detail.
- Repair management logs and tracks all repairs. It tracks both in-house and vendor repairs. Reports show repairs by date, employee, location, part number and vendor. There is also a report showing all open (unfinished) repairs. A record consist of:
  - $\checkmark$  Date the part is received for repair.
  - ✓ The part number.
  - ✓ The serial number of the part.
  - $\checkmark$  The employee doing the repair.
  - ✓ The location where the part belongs.
  - ✓ The type of repair, internal or vendor.
  - ✓ The vendors name, date sent and repair authorization number if the repair is a vendor repair.
  - $\checkmark$  The date the repair is completed.
  - $\checkmark$  A detailed description of the repair.
- Service management -logs and tracks all service performed, including preventative maintenance and relamping. Reports are provided that show service grouped by code, date, employee and location. There are also reports showing preventative maintenance and relamping. SigTrak also tracks response times by date and employee. A record consist of:
  - ✓ The Call Reference number.
  - $\checkmark$  The date and time the technician arrives.
  - $\checkmark$  The date and time the technician leaves.
  - ✓ The location of the service.
  - $\checkmark$  The technician performing the service.
  - ✓ The code for the service performed. This can include preventative maintenance and relamping.
  - $\checkmark$  A detailed description of the service performed.



- Pre-defined reports Seagate's Crystal Reports used for all reporting. Any report may be exported to a wide variety of formats including Microsoft Word, Microsoft Excel, CSV, ASCII, etc. Users may define custom reports and add to menu of SigTrak. Reports may be filtered and previewed prior to printing.
  - ✓ Calls by Code, Date, Employee and Location.
  - ✓ Unanswered calls.
  - ✓ Complaints
  - ✓ Drawings
  - ✓ Inventory by Location, Part Number and Mean Time Between Failures.
  - ✓ Notes By Date, Employee and Location
  - ✓ Repairs by Date, Employee, Location, Part Number and Vendor.
  - ✓ Unfinished repairs.
  - ✓ Service by Code, Date, Employee and Location.

- ✓ Preventative Maintenance.
- ✓ Relamping.
- ✓ Response Times By Date and Employee.'
- ✓ Agencies
- ✓ Categories
- ✓ Codes
- ✓ Employees
- ✓ Locations by Agency and Category.
- ✓ Parts by Status and Vendor.
- ✓ Parts Reorder.
- ✓ Streets.
- ✓ Vendors
- Lookup Forms Lookups are used extensively to reduce data entry. Most of the forms use drop-down combo boxes where the user selects from pick lists rather than having to enter repetitive data. Lookup forms are used to enter the data that will be used as pick lists in other forms. The data in the lookup forms is entered only once. This data is then used in drop-down combo boxes in the other forms.
- Relevant Entities Management allows the use to manage such information relevant to Inventory and maintenance management as: Agencies, Categories, Codes, Employees, Locations, Parts, Streets, Vendors, etc
- Database management utilities database backup, restore, replication and synchronization.
- Windows Pocket PC support for field use with a portable device, all the device information can be easily updated synchronized with the central database.

## Requirements

The minimum software requirement for the SigTrak to operate:

- Windows® 95, 98SE, and NT 4.0 Service Pack 6.0
- Windows® 2000, and XP
- Microsoft® Explorer Version 4.02 Service Pack 2 or above Version 5.0 and above preferred

The basic hardware requirements:

- IBM PC Compatible Pentium 200MHz or higher
- 16 Megabytes of Random Access Memory (RAM)
- 420 Megabyte Hard Disk
- VGA Monitor accelerator card with a Local Bus (VLB)