

ST SECURE-TECH

DETENTION ELECTRONIC SYSTEMS

ETECH CONTROLS CORPORATION - MANUFACTURER



2016 CATALOG

www.secure-tech.com

4051 ALVIS COURT #3. ROCKLIN, CALIFORNIA 95677 • PH-916-630-1300 FAX 916-630-1100



DETENTION ELECTRONIC SYSTEMS

YEAR 2016 EDITION





DETENTION ELECTRONIC CONTROL SYSTEMS

ABOUT US:

ETECH CONTROLS CORPORATION manufactures **Secure-Tech** state-of-the-art modular electronic communication and control system products to meet the specialized needs of modern justice and correctional facilities. Over one-hundred modular electronic function products, and end-of-the-line communication devices, are currently available to provide for the integration of control, monitoring, and communication systems. Secure-Tech's product line has been the industry leader in innovative off-the-shelf solutions for every detention electronics need for over twenty-nine years!

Custom engineered control electronics assemblies, and their mating control panels or touchscreen type operator interfaces, are available as turnkey products, labeled for field wiring connection and factory tested to assure that they provide the intended functionality. All Secure-Tech products and assemblies are manufactured **NEC 725** compliant, using the highest quality materials and construction methodology. Secure-Tech products have a reputation for quality and reliability that is backed by over thirty-five years of proven dependability and unequalled customer support.

Secure-Tech's history goes back to 1972, when an electronics design team, led by an ex-NASA electronics engineer, accepted the challenge to develop a modular line of electronic control products, specifically for detention facility applications. This original product line was completely solid-state, and handled most of the intercom and door control functions that are prevalent today.

A fully distributed microprocessor based products design was introduced in 1976, using the revolutionary (now an industry standard) RS-485 data protocol, which allowed unprecedented four-thousand foot data runs, between each of many microprocessor based controllers located throughout a facility, via a single twisted pair of shielded conductors. With a continued focus on systems reliability and integrity, highly redundant microprocessor based designs were introduced to the product line in 1982, which utilized not only fully redundant microprocessors, but also separate redundant communication circuits and power supplies.

Secure-Tech's first large-scale touchscreen operator interface detention facility project was completed in 1988, incorporating a total of seven touchscreen terminals. Each of these touchscreens were capable of full facility control, and were interconnected via redundant communication servers and data paths. Over one-hundred stand-alone distributed processors were incorporated, so that all remote detention housing area controllers would remain operational even in the event of a total failure of all touchscreen based central control terminals. These were highly innovative systems for their time. And, due to their solid-state circuitry, high reliability design, and Secure-Tech's guaranteed technical support, were still working properly when replaced to match a new "sister" facility.

Secure-Tech products and systems remain at the forefront of the industry for quality, innovation, and proven reliability. No other brand of equipment can compare with the diversity of industry specific features, options, and capabilities that are available in Secure-Tech's off-the-shelf electronic modules and assemblies.

continued

continued

The vast majority of Secure-Tech's product line features all plug connection. All conductors attached to an individual module can be dis-connected and re-connected in less than sixty seconds. This makes the troubleshooting and replacement of failed system components easy to accomplish, using on-staff facility maintenance personnel.

Secure-Tech opto-isolates all end-of-line field device signal input points to 7500 volts. Opto-isolation is a quality and reliability design feature that Secure-Tech believes will save you money, during both initial installation and long-term maintenance. This feature provides the ability to stop dead shorts, wrong voltages, and other mis-connections, from destroying multiple system components, and is also helpful in minimizing the damage caused by lightning strikes. Damage is isolated to the initial field wire connection point, and is not allowed to continue on causing further damage to other internal system components.

All Secure-Tech products are functionally tested before shipment to our customers. This insures that when you receive products manufactured by Etech Controls to meet the Secure-Tech standard, they are guaranteed to perform the intended functionality, when installed for use in the proper application.

The use of Secure-Tech products significantly reduces project engineering, material, installation and long-term maintenance costs. Our products are available as individual function modules, pre-engineered kits for assembly by the Systems Integrator, or as factory assembled and tested **NEC 725** compliant packages, that are ready for field installation, using **COMPLETE EQUIPMENT DOCUMENTATION** provided by Etech Controls Corporation..

This product catalog, and attendance at our **FREE TRAINING SCHOOL CLASSES**, provides the Systems Integration contractor with the knowledge required to design, install, and maintain integrated security systems equipment, for specific applications using our products.

Architects, Engineers, and Consultants can also benefit from the knowledge to be gained at our free training school classes, and then rest assured that they are serving their client's interests best by specifying Secure-Tech products as **THE HIGH STANDARD** of quality, reliability, and long-term maintainability, that is required to be provided on all of their projects.

Etech Controls supports every system ever installed with Secure-Tech systems, for the lifetime of the facility! We are so confident in the reliability of our products that we provide an extended **TWO YEAR WARRANTY**, and **LIFETIME TELEPHONE TECHNICAL SUPPORT** is provided to all end users! This warranty conveys to our customers that Etech Controls is committed to providing high quality products, and to the long-term satisfaction of the end user.

Secure-Tech's research and development engineering staff continues to provide new and innovative product solutions to address the needs of a changing detention facilities marketplace. Application specific products, in either discrete or programmable functionality, and modular format, are under constant development. **Present us with your special application product requirement and we will engineer a solution for you!**

PLEASE VISIT OUR WEBSITE AT

www.secure-tech.com



The secure-tech.com website provides for your immediate online access to our information. You will find comprehensive information on the products and services offered by Secure-Tech, including our entire product line catalog. The product catalog is presented in Adobe PDF format, and a link is provided for you to download the free viewer software if you do not already have it.

All of our individual product hook-up diagrams, and systems configuration example hook-up drawings, may be viewed in detail online, with Autodesk's Whip viewer. A link is provided to download the free Whip viewer software, that provides the ability to pan about and zoom in to see the details. This viewer utility also allows you to print the drawings, or download the AutoCad drawing files to your computer.



[About Us](#) [New Products](#) [Product Catalog](#) [Price List](#) [Contact Us](#) [Events](#) [Español](#)

The New Products section showcases those products that have been most recently introduced. You may print these new product sheets to update your personal copy of the Secure-Tech catalog.

A Contact Us section is provided, allowing you to request a product catalog shipment to your office, or to obtain specific answers to your questions, via e-mail.

An Events section shows those upcoming industry trade shows at which Secure-Tech will be exhibiting, where you can visit our exhibition booth to see actual product samples, and talk with our sales and technical engineering staff.

Outline style construction contract project specifications, are available for download in either Word or WordPerfect formats. The outline style provides automatic Construction Specifications Institute type paragraph numbering to enable you to easily edit the specifications for use on your current and future projects that require the highest quality reliable electronic security systems.

We continually update our website to accommodate the changing needs of our industry, and to provide new features as appropriate to serve you better. Please provide us with your comments on how our website might better serve your online needs.

TRAINING SCHOOL

Etech Controls provides free Secure-Tech training classes once a year, in Rocklin, California, to present detailed technical instruction on how to design, construct, install, and easily maintain the economical and highly reliable electronic control and communication systems for the modern correctional facility.

Our training classes cover such subjects as: typical and non-typical detention facility security systems configurations and the integration of those systems to function interactively; detention facility security design considerations; NEC code requirements and how Secure-Tech's products and assemblies are specifically designed to meet them; audio intercommunication and paging systems design including audio threshold alarm monitoring; door control and monitoring systems design; detention area lighting and miscellaneous control systems design; fabrication materials and methodology; grounding and protection issues; documentation methods; recommended installation practices; maintenance and service procedures.

Training classes, group or individual, are tailored to address the specialized needs of Architects, Engineers, Consultants, Systems Integrators, and facility Maintenance Personnel.

Group technical training is also available at your facility. Please call us for details.

SECURE-TECH PRODUCT USE LOCATION MAP (PARTIAL)

Pushpins

-  Prison
-  Jail
-  Brig
-  Juvenile
-  Sheriff
-  Court
-  Police
-  Medical
-  Other

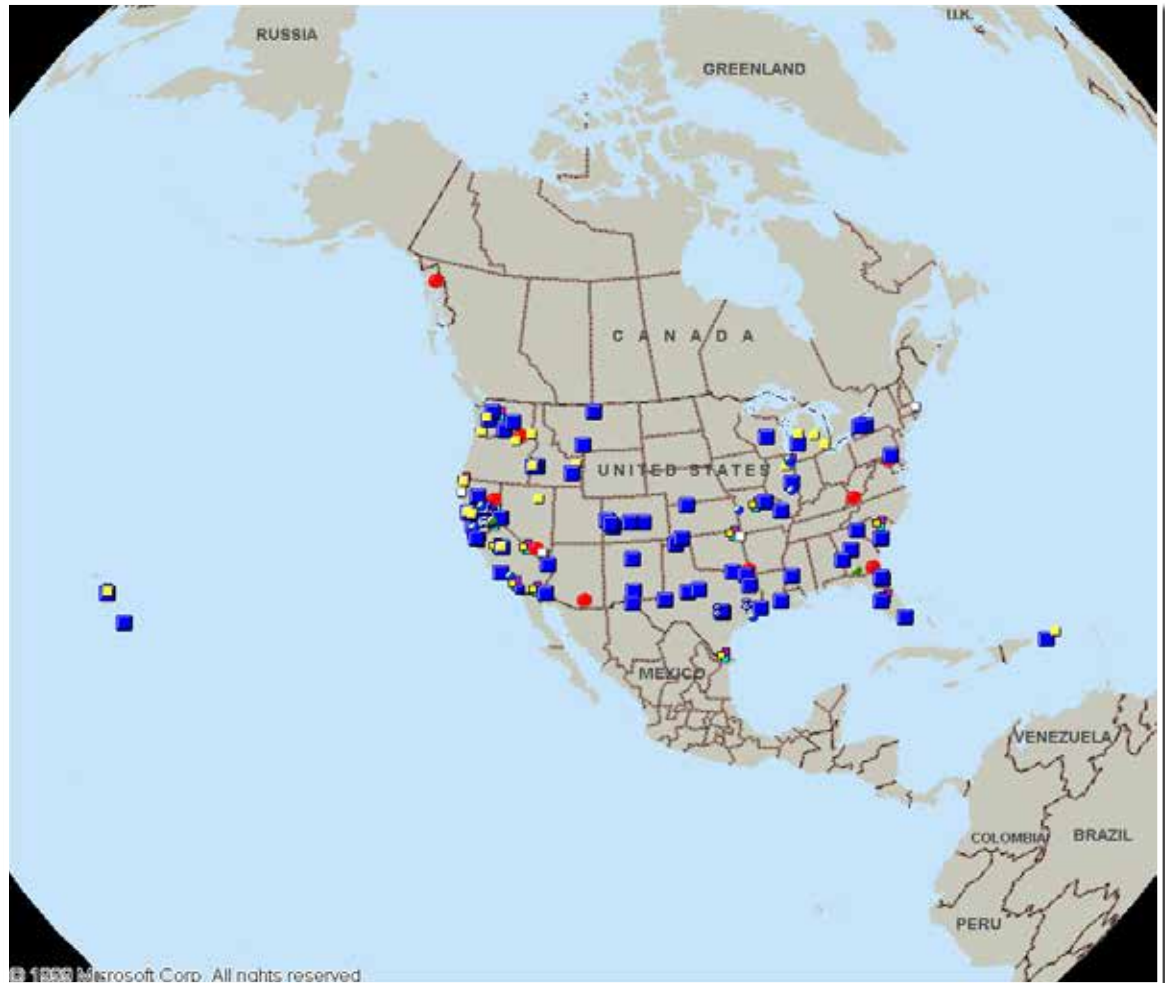


TABLE OF CONTENTS

PAGE	MODEL	PRODUCT ASSEMBLIES AND MODULES
SECTION 1 OPERATOR INTERFACE		
1-0	WOW	The Whole Shebang
1-1	GCP-TOUCH	Touchscreen User Interface
1-2	GCP-MEMBRANE	Membrane Switch Panel Assembly
1-3	HC-0841 & HC-0842	Single and Dual Membrane Switch Packages
1-4	OVERLAY	Graphic Panel Overlay
1-5	GCP-SWITCH	Manual Switch Panel Assembly
1-6	Panel Parts	Complete Security Electronics Package
SECTION 2 COMMUNICATIONS		
(See Section 4 for PLC intercom modules)		
2-0	LOC-COM	Intercom / Paging Assemblies or Kits
2-1	HC-0644	8 Station Intercom Selector
2-2	HC-0826	Intercom Amplifier
2-1A / 4-4	HC-0845	PLC 16 Station Intercom Selector
2-1B / 4-5	HC-0846	PLC 8 Station Intercom Selector, DUAL channel, music, multi-master, use with HC-0654 Sound Alarm module
2-3	HC-0654	Sound Alarm
2-4	TSS-1	Tamperproof Staff Station, Door Jamb Mount
2-5	TSS-2	Tamperproof Staff Station
2-6	TPB-1/TKS-1	Tamperproof Pushbutton Station, Key Station
2-7	JUST-TALK	Duplex Talk Through Communicator
2-8	TELEPHONE	Telephone Wallsets and Handsets, Visitation, Intercom
2-9	CP100 SERIES - PARTS	Control Panel Kits
2-10	HC-0829	Telephone Disconnect
2-10A	HC-0829 SUP	TELEPHONE DISCONNECT -w- SUPERVISION (Federal Standard)
2-11	CT100	DESKTOP INTERCOM CONTROL TURRET
2-A	Hook-up	Example HC-0826, HC-0644 , HC-0654 System Hook-up Diagram
2-B	Hook-up	Multiple Example HC-0826 Hook-up Diagrams
SECTION 3 DOOR CONTROL		
3-0	LOC-DOOR	Door Control / Monitor Assemblies or Kits
3-1	HC-0819	8 Door Control / Monitor
3-2	HC-0707	8 Door Red and Green Monitor
3-3	HC-0802	8 Door Red or Green Monitor
3-4	HC-0811	8 Door/Groups Interlock Controller
3-6	HC-0803	8 Door, Utilities, 8 10 Amp Fused Contact Relays
3-7	HC-0848	New 8 Slider Doors, 8 Pairs-16 Relays, Fused contacts -10 Amp, OPEN / CLOSE, optional MOVs
3-A	Hook-up	Example HC-0819 System Hook-Up Diagram
3-B	Hook-up	Example HC-0811 Interlock System Hook-up Diagram
SECTION 4 PROGRAM LOGIC		
4-0	LOC-PRO	System Controller Assemblies or Kits
4-1	HC-0682	System Controller
4-2	HC-0714, 15	32 Input, 32 Output
4-3	HC-0701	Remote Panel Controller
4-4 / 2-1A	HC-0845	PLC 16 Station Intercom Selector
4-5 / 2-1B	HC-0846	PLC 8 Station Intercom Selector, DUAL channel, music, multi-master, use with HC-0654 Sound Alarm module
4-6	HC-0821	20 X 20 Controller
4-7	HC-0832, 33, 34	New 32 / 64 / 96 Point, OMRON INPUT / OUTPUT Cable Adapters
4-8	HC-0850, 51	New 48 Input, 48 Output, RS 485, 19.2 BUAD

continued

TABLE OF CONTENTS

<u>PAGE</u>	<u>MODEL</u>	<u>PRODUCT ASSEMBLIES AND MODULES</u>
SECTION 4, continued		
4-A.....	Hook-up.....	Example HC-0682 and HC-0701 System Hook-Up Diagram
4-B.....	Hook-up.....	Example HC-0701 Control Panel Hook-Up Diagram
4-C.....	Hook-up.....	Example HC-0682, HC-0845, HC-0819, HC-0803 and HC-0701 LOC PRO System, Touch Screen Hook-Up Diagram
 SECTION 5 UTILITY		
5-1	HC-0803.....	8 Fused 10 Amp Relays
5-2	HC-0695.....	8 Relay Utility - Socketed - 10 Amp
	HC-0724.....	8 Relay Utility - 30 Amp
5-3	HC-0801.....	Dual DPDT 2 Amp Relays
5-4	HC-0675.....	10 Point Adapter
5-5	HC-0731.....	16 Point Adapter
5-6	HC-0639.....	50 Point Adapter
	HC-0476.....	25 Pair Adapter
5-7	HC-0673 / HC-0674	50 Point Resistor / Diode Adapter - 10 Point Diode Adapter
5-8	HC-0815A.....	50 Pin Inline Adapter - Diode
	HC-0815B.....	50 Pin Inline Adapter - Diode Plus Common Anode
5-9	HC-0815C.....	50 Pin Inline Adapter - Driver
	HC-0815D.....	50 Pin Inline Adapter - 680 Ohm Resistor
5-10	HC-0815E.....	50 Pin Inline Adapter - 120 Ohm Resistor
	HC-0815F.....	50 Pin Inline Adapter - Common Cathode
5-11	HC-0815G.....	50 Pin Inline Adapter - Diode Plus Common Cathode
5-12	HC-0642.....	Flasher
5-13	HC-0804.....	LED Supervision motherboard
5-14	HC-0806.....	LED Supervision daughterboard
5-15	HC-0828.....	50 Point Tester
5-16	S-60.....	POWER SUPPLY - 12 VDC 5.0 AMP
 SECTION 6 CUSTOM NURSE ASSISTANCE		
6-1	TSS-2N.....	Call-In Station - Intercom
6-2	TSS-1N.....	Call-In Station - Intercom - frame Mount
6-3	TPB-x.....	Push button and Key Station
6-4	TPB-1M.....	Mushroom Pushbuttons
6-5	KR-x.....	Local Controller Stations (Reset)
6-6	KRI-x.....	Local Controller Stations (Reset), Intercom
6-7	HC-0682.....	System Controller
6-8	HC-0850/0851.....	48 Input / 48 Output
6-9	HC-0826.....	Intercom Amplifier
6-10	HC-0846.....	8-Station Intercom Selector
6-11	JUSTTALK.....	Duplex "Talk-Thru" Communicator - Hand Free
6-12	WC2-AMC.....	Telephone Wall Sets, Armored Cable
6-13	CP100 Series.....	Control Panel Intercom Kits
 SECTION 7 APPENDIX		
7-1	Glossary of Terms	
7-2	Professional / Technical References, Manufacturer's Reps	

Secure-Tech's Nurse Assistance Call System is designed for a specific custom application (See page 6-0), i.e., each hospital cell has a Hall Intercom Master/Reset station with individual "Talk Path" for that cell. All Hall Stations may communicate, simultaneously, with their respective cell, at anytime. When hospital staff enter a cell they are audio monitored while in the cell and are sequentially monitored when more than one cell is entered. System is a owner directed custom application, it is not UL Listed as a Nurse Call System. The system will be NEC 725 compliant.

Secure-Tech equipment has many other application specific electronic function modules that are not presented in this catalog. If your project has specific requirements to be met, that are not filled by the products presented in this catalog, please contact us.

**Etech Controls can engineer and produce high quality electronic
function modules for your special application!**