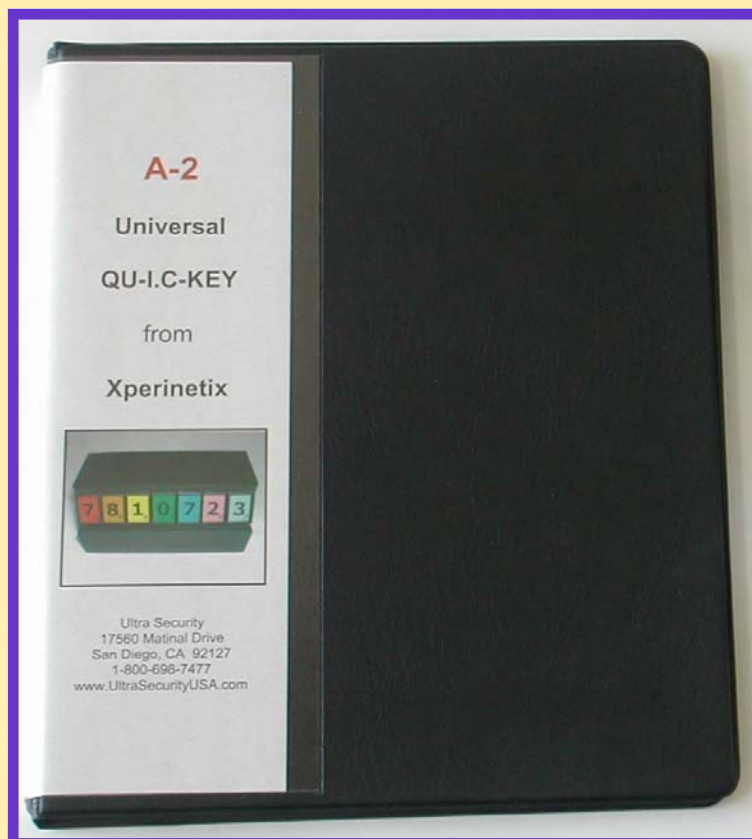


# Ultra Security / Xperinetix

*Manufacturer of Premium  
Interchangeable Core Systems,  
IC Service Tools & IC Products*

## Technical Manual



# Ultra Security / Xperinetix Technical Manual

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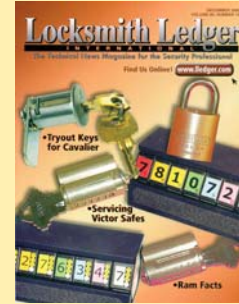
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## Overview

**Ultra Security** and its product development division, Xperinetix, have been crafting innovative interchangeable core tools, premium IC products and ground-breaking SFIC systems for over 15 years. President and Owner, John Ulaszek is known throughout the security industry and takes pride in the quality craftsmanship of the USA-made products that he creates and markets.



The **ULTRA Core** [manufactured by BEST for Ultra Security] with its revolutionary side groove allows the user to label without pounding or stamping. Finally a premium SFIC that provides a secure place to label, or re-label without removing etched or stamped numbers and figures has arrived.

The **Key Retainer Device** [made in multiple layouts for small or large format cores] is an addition to the arsenal of key control. Its visual orientation provides an instant verification of key usage, so important in today's world.



The service tools that define Xperinetix are part of the **QU-I.C** Family. They were designed to allow those who combine SFICs to do so by means of an efficient and accurate methodology.

The **QU-I.C-System**, the father of Xperinetix products, is now available in a variety of forms – the **Dedicated QU-I.C-Key**, the **Universal QU-I.C-Key** and designed for either the A2 or A4 Systems.

You probably have noticed the use of "color" and color-coding in the Xperinetix service tools and master key systems. This is no accident. **Ultra Security** has been the pioneer in color-coding in the Small Format Interchangeable Core arena and has proven time and time again that color-coding saves time and decreases errors, whereby promoting efficiency and allowing for increased profits.

These are some of the reasons that **Ultra Security** / Xperinetix has truly become the leader in innovative, high quality and time-efficient IC tools & IC products.

## SFIC Explained

SFIC stands for "Small Format Interchangeable Core." It represents a category of interchangeable cores with set dimensions and functionality accepted within the industry. If you are used to working with cores manufactured by Arrow, BEST, Schlage, KSP, Falcon, etc, then the ULTRA Core will present no difficulties.

### Construction & Operation

In general, SFICs have a basic construction, though some subtle differences may occur based on design and use. However, they are designed to fit into each SFIC manufacturer's hardware with little to no modification of that hardware.



The parts within the Core assembly include: Shell, Plug, Sleeve and Plug Retainer. Most SFICs are not designed with the intention of disassembly, though the Arrow CHOicE cores do permit modular disassembly and reassembly. The ULTRA Core, as well as most other brands do not need to (and should not) be disassembled to combine or recombine.

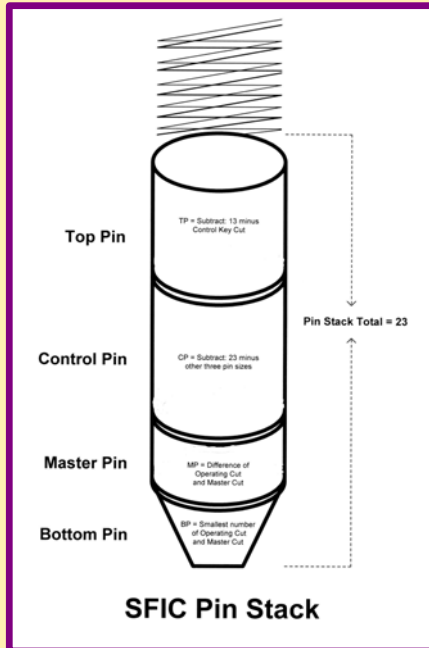
The ULTRA Core is top-loaded for combination.



The individual chambers are capped, either by hand or by a capping press.

### Dual Shear Lines

Notice that there exists TWO SHEAR LINES: The Top of the Plug shows the Operating Shear Line and the Top of the Sleeve shows the Control Shear line. The operating shear line is for all keys that must operate the locking hardware, such as change keys (operating keys), masters, submasters, grand masters, top masters, etc. The degree of rotation ( $0^\circ$  to  $360^\circ$ ) is established by the specific locking hardware. The control shear line is reserved only for insertion and removal of the core relating to its housing. When the pins line up at the control shear line, the key will turn clockwise about  $15^\circ$  and shift the control lug to a position inside the core assembly. When this has occurred, the core can be either withdrawn or replaced into its housing.



## Pins

Pins used in the ULTRA Core are standard SFIC pins (including caps and springs) manufactured by BEST, LAB, Specialty, OEM and a variety of original and after market suppliers. Their diameter is .108" and varies in length, dependent on the pin increment system being used. Nickel-silver is the recommended bottom pin for an ULTRA Core.

## A2 System

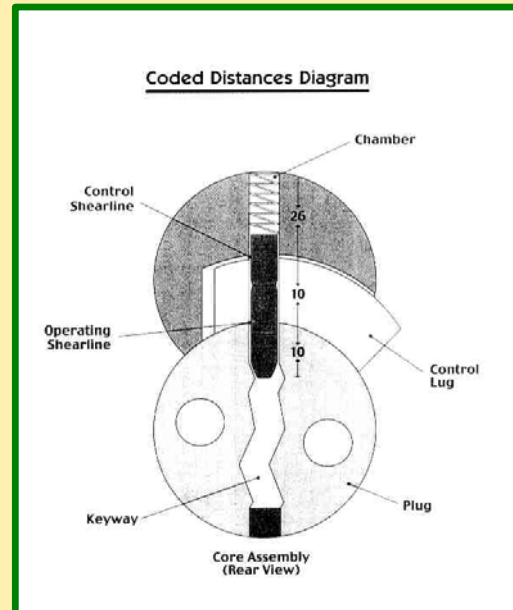
The most common and widely used of the three pin increment systems created by BEST Lock Company is the A2 System. There exist 10 bottom pin depths and 18 upper pin depths. The depth increment of the A2 System is **.0125"**. The pin stack total should equal .397" and the Coded Stack Length should be 23. It is a two-step master keying system.

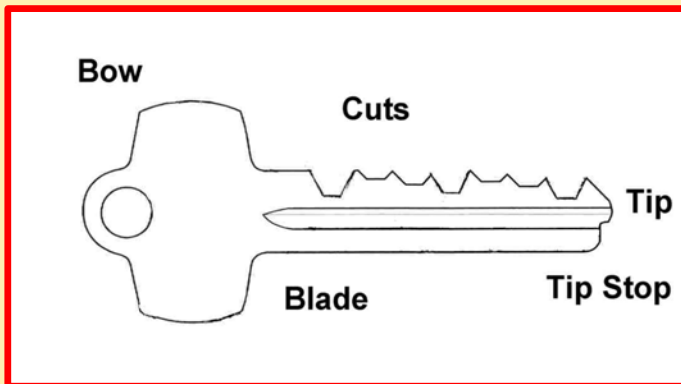
## A3 System

The A3 System was discontinued by BEST based on the discovery of key interchange and core failure, due in large part to the thin .018" master wafer. Today it is only used to service existing systems. There exist 7 bottom pin depths and 13 upper pin depths. The depth increment of the A3 System is **.018"**. The pin stack total should equal .398" and the Coded Stack Length should be 16. It is a single-step master keying system.

## A4 System

Another pin increment system to achieve greater biting possibilities is the A4 System. There exist 6 bottom pin depths and 11 upper pin depths. The depth increment of the A4 System is **.021"**. The pin stack total should equal .404" and the Coded Stack Length should be 14. It is a single-step master keying system.





### Keys

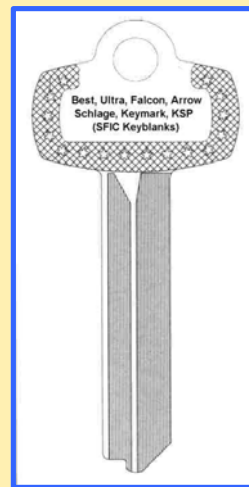
SFIC keys are gauged by the tip stop rather than by the shoulder stop (common for conventional non-IC keys). The tip stop is present BELOW the tip and slightly recessed. Do NOT gauge from the tip itself! SFIC keys are cut and read TIP to BOW. Again this is opposite

conventional non-IC keys.

SFIC keys are usually of the 6-pin or 7-pin configuration, though blanks are a standard length to accommodate either core configuration. 5-pin cores/keys are becoming less common and are not a standard manufacturing option today.

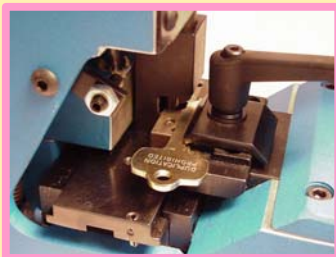
### Spacing & Angles

Regardless of the increment system being used, the spacing from the key center cut to center cut is .150" (and again, is gauged from the tip stop) and is called cut #1 and progresses to the bow of the key (cut# 6 or #7). The angle of the cut is 90° and the root of the cut should be approximately .054".

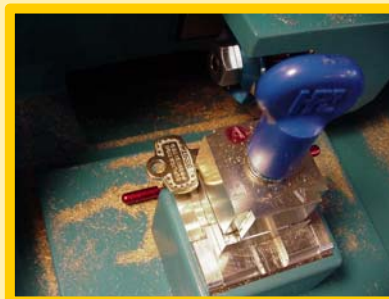


### Key Origination

Keys for SFIC are usually originated (never duplicated) by code equipment. The most widely used method is by manual punches. These are dedicated key punches created for a single manufacturer or style of key. These include BEST, Pro-Lok, etc.. Rotary code cutters such as ITL, HPC Blue Shark and others can originate SFIC keys as well.



A letter, number or combination of the two usually identifies the key blank. Most often, one side of the blank is flat, where the other changes its profile based on the specific keyway grooves.



## ULTRA Core

The ULTRA Core, with the unique "*QU-I.C.-MARK*" groove offers so much more than any other small format interchangeable core on the market. Manufactured by BEST for **Ultra Security**, the ULTRA Core not only is of exceptional quality, but will outlast other cores due to the fact that each core has the Xperinetix "*QU-I.C.-MARK*" groove which allows you to use a 21<sup>st</sup> Century, state-of-the-art computerized desktop thermal labeling system (see "*QU-I.C.-MARK*" System) designed especially for the IC Specialist, including anyone in large institutions and facilities where core "turn-over" is frequent.



### Construction & Operation

The ULTRA Core is a premium small format core that is designed to be interchangeable with housings that accept SFICs. Even with the ULTRA Groove, no housing/hardware modification is necessary. It is strongly recommended, however, that if you are using any 6-pin core in a 7-pin housing (ex.; mortise, padlock, etc.), a spacer be placed on the throw member before inserting the core. This will provide a balanced force when turning torque is applied.



### Labeling the ULTRA CORE

It is not recommended that any stamping be done on an ULTRA Core. Stamping defeats the purpose of the side groove and depletes the integrity of any core. This is a precisely made mechanical locking mechanism to which damage can occur when beating with metal stamps. Crushing and binding are eliminated via the *QU-I.C.-Mark System*.



If face stamping were necessary, etching would be the least destructive. **HOWEVER, DO NOT** metal stamp in the flat, recessed *QU-I.C.-MARK* Groove area. This is only to be used for labels and is milled closer to the internal mechanisms. Should you insist on old-fashioned metal stamping (which was used in the last century) the ULTRA Core will accept your beating in the normal rounded area above the locking lug on the left (active) side of the core.





Labels for the ULTRA Core are easy to custom print and apply, making this procedure much more cost effective. A small, simple to operate desktop printer is all that is necessary. Labels are easily removed when re-combating, thus, there is no need to file off, grind off or "X" out (with additional useless stamping) the previous core mark. Needless to say, labeling is a much safer than stamping with a hammer and stamp set -- No ear and eye protection is necessary and stamps never become dangerous projectiles.

### **Preamed**

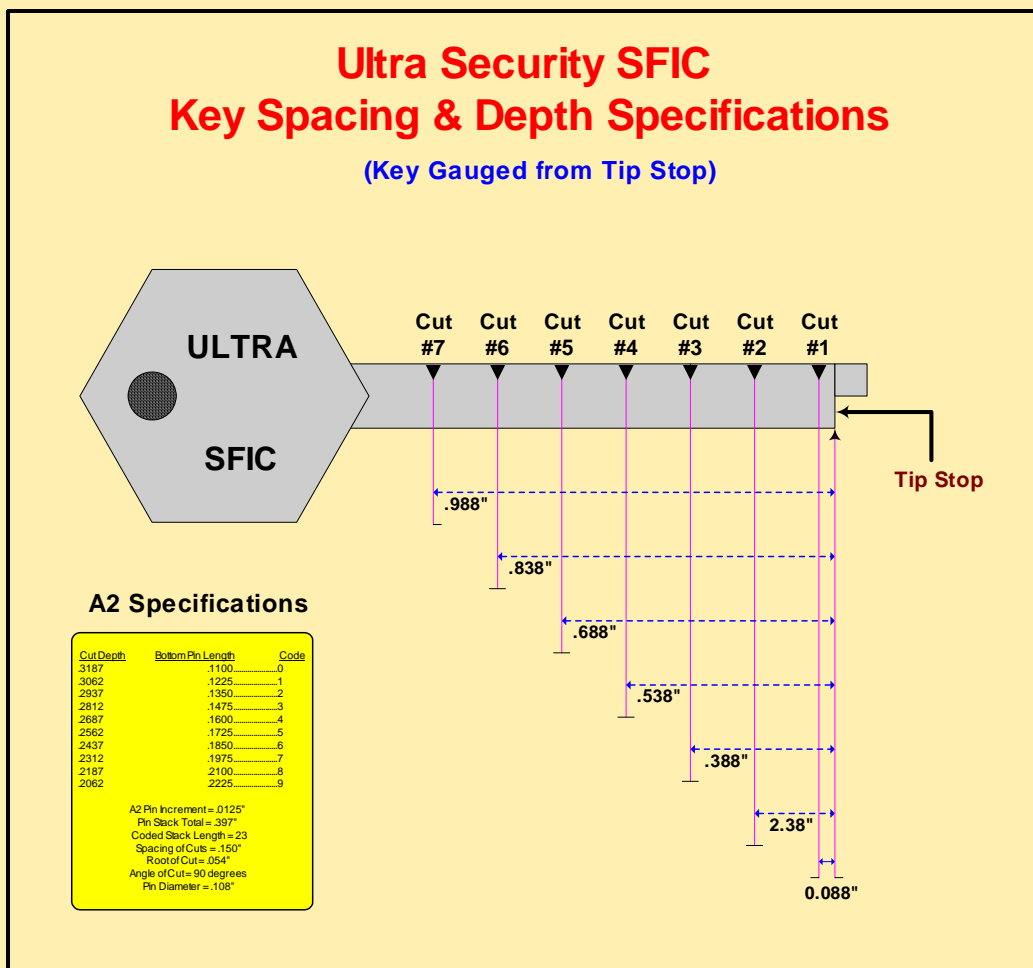
The ULTRA Core is "preamed" which stands for Pre-reamed. You'll notice that the pin chamber holes have been slightly reamed. Preaming removes all nicks and burrs from the pin chamber openings and makes it much easier to insert pin segments of all sizes. This unique Xperinetix "funnel feature" minimizes jamming so pin segments drop in with no forcing. In addition, you'll find that when capping cores, the caps will press in smoother with less burring at the top of the core. In the event that you find it necessary to eject pins from a chamber, you'll also experience less burring.



*QU-I.C-Preamers*



# SFIC Key Spacing & Depth Specifications



## Reading Key Cuts and Depths

To reinforce, SFIC keys are read from TIP to BOW, just as the chambers are numbered. This is different from the standard orientation of reading / decoding most non-IC cylinder keys. Underneath the bottom of the key tip you will find an indented area that is called the Key Stop (or just Stop). It does, oddly enough, just that: it stops the key from moving any farther into the core. The cut found above that point is called Cut #1, and so on toward the Bow (or Head) of the key. Note that with SFIC keys no shoulder stops are found in most cases, with the exception of Peaks, BEST Premium and Scorpion keys. This indicates that cutting this type of a key is different than a typical pin tumbler key. When duplicating a SFIC key (though not recommended), it must be done from the STOP gauge and not the TIP, even though this may be done on conventional keys.

## QU-I.C-Key (Dedicated)



Part # QKD- 6 or 7 (includes Viewing Base)

The "**QU-I.C-KEY**" [with two versions] makes "doing the math" for pin segment calculations on an interchangeable core system (small format-figure 8) a snap...actually fun! Imagine having all of the calculations for every code in an A2, A3 or A4 (5,6 or 7 pin) system in the palm of your hand – no math skills required; no pen and paper necessary; no slide charts; no computer programs; no power needed (except for a twist of your wrist) and no paper records to store or destroy. Every calculation clearly displayed in a highly visual manner incorporating a truly innovative color-coded system.

The **QU-I.C-KEY Viewing Base** allows only the necessary information to be visible by displaying only one core or key code at a time. This helps to maintain focus and eliminates time consuming errors and unnecessary mistakes.

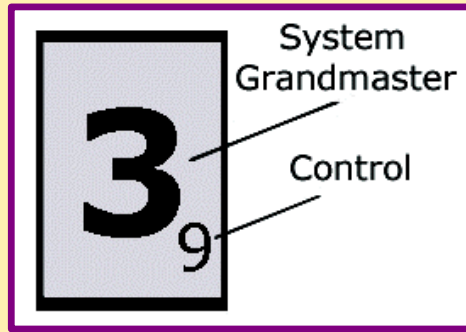
The effectiveness of this device is greatly enhanced when used in conjunction with the companion color coded "**QU-I.C-LOAD**" Tool – together greatly increasing productivity and virtually eliminating errors.

There are two versions of this ingenious tool:

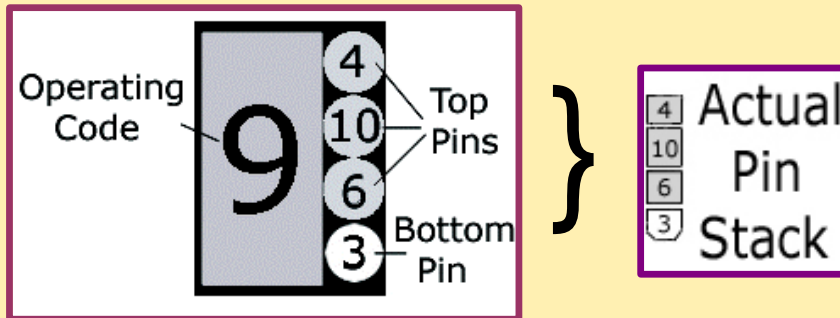
- The **Dedicated QU-I.C-KEY**, which is created by the manufacturer for ONE SPECIFIC Keying System. You supply the information to us confidentially and it is produced.
- The **Universal QU-I.C-KEY**, which allows you to create the system yourself. Use it over and over. Though more time-consuming to construct, it works well for the end-user who may have many small systems to combine.

### QU-I.C-KEY INSTRUCTIONS

**GENERAL DESCRIPTION** – The *QU-I.C-KEY* is designed to make combining faster and easier. It puts every pin segment calculation for your entire system in the palm of your hand. Each color-coded wheel on the *QU-I.C-KEY* represents a chamber in your core. Each chamber wheel has six sections. The one that is solid colored with only a large and small subscript number (in the lower right hand corner) is referred to as the Home Row – it identifies the system. The large number represents the Grandmaster (or TMK) code and the small number is the Control code:



**COMBINATING INSTRUCTIONS** – Rotate each *QU-I.C-KEY* chamber wheel to the operating code you desire for your core. Slide your *QU-I.C-KEY* into its Viewing Base so it displays only the operating code and correct pin segment calculations you need. The small circles with numbers in them represent the pin segments that you need to put in your core – shown as a visually correct stack. The white circle represents the bottom pin segment and the gold-tone circles represent the top pins.

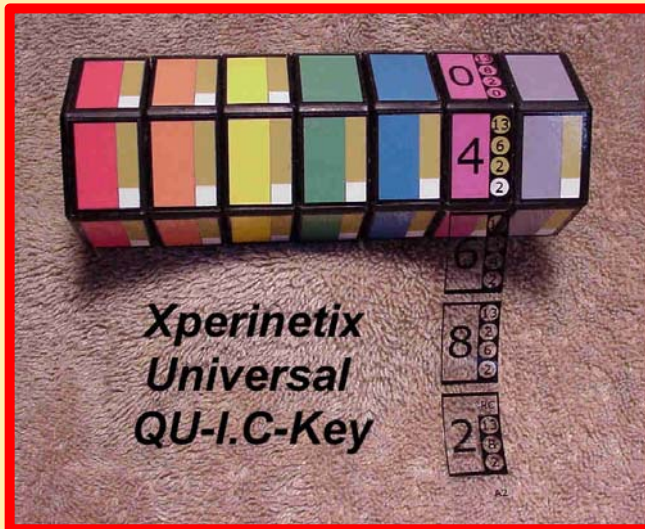


The *QU-I.C-KEY* is color-coded to be used with the *QU-I.C-LOAD Tool*. If you are combining without the aid of the *QU-I.C-LOAD Tool* begin combining with the red chamber (#1 chamber) at the back of the core. If your *QU-I.C-KEY* contains sections marked "RC" it has been prepared for systems that use the Rotating Constant Method of master keying. These calculations are also useful when doing "direct to" combining.



**KEY CUTTING INSTRUCTIONS** – When cutting operating keys, use the larger numbers next to the circles that you just used to combine. You can cut Grandmaster (TMK) by rotating the wheels to the LARGE numbers in the solid colored space. The control code is also displayed (small numbers) in this position and can be used for key cutting. For convenience, the entire *QU-I.C-KEY* and Base can be moved from the combining area to your key cutting area.

## QU-I.C-Key (Universal)



Part # QKU- 6 or 7 (includes Viewing Base)

This version (of two) shows the advantages of this ingenious tool.

- The **Universal QU-I.C-KEY** which allows you to create the system yourself. Use it over and over. Though more time-consuming to construct, it works well for the end-user who may have many small systems to combine.

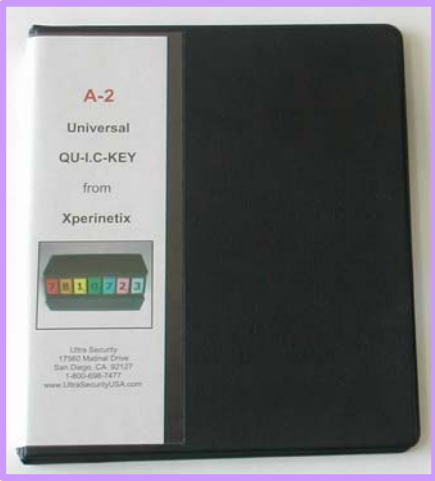
The "**QU-I.C-KEY**" [with two versions] makes "doing the math" for pin segment calculations on an interchangeable core system a snap...actually fun! Imagine having all of the calculations for every code in an A2, A3 or A4 (5,6 or 7 pin) system in the palm of your hand - no math skills required; no pen and paper necessary; no slide charts; no computer programs; no power needed (except for a twist of your wrist) and no paper records to store or destroy. Every calculation clearly displayed in a highly visual manner incorporating a truly innovative color-coded system.

The **QU-I.C-KEY** Viewing Base allows only the necessary information to be visible by displaying only one core or key code at a time. This helps to maintain focus and eliminates time consuming errors and unnecessary mistakes.

The effectiveness of this device is greatly enhanced when used in conjunction with the companion color coded "**QU-I.C-LOAD**" Tool – together greatly increasing productivity and virtually eliminating errors.

**The Folder**

The genius of the *Universal QU-I.C-Key* lies in the moveable plastic strips that fit onto the color-coded *QU-I.C-Key* rotating wheel. These constitute the system code files that can make up thousands upon thousands of bitting combinations.

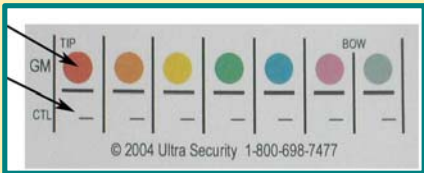


Each page is set up based on all possible combinations of the Grandmaster, or TMK bitting – one for zero, one for one, one for two, and so on. Each page contains the ten possible strips associated to the top master bitting that you may select.

The strips are durable and can be reused many times if care is taken with them. The Folder comes complete with instructions, color photos and a *removal tool* for the plastic strips. The *Universal QU-I.C-Key* Folder can be ordered for the A2 or A4 Systems.

**Making the *Universal QU-I.C-Key***

Let's assume that you now have the Grand Master (GM) also called the Top Master Key (TMK) bitting and the Control Key (CK or CTL) for your SFIC system. Then, you can create it on the blank *Universal QU-I.C-Key* in only minutes.

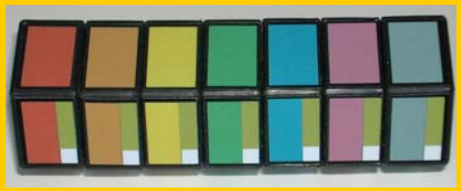


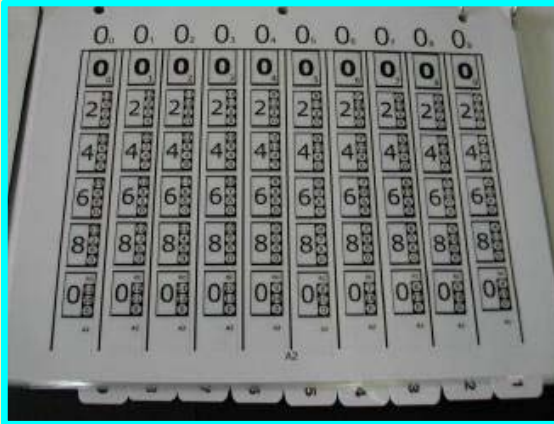
First, write down the Grand Master code and the Control code on the *QU-I.C-System* Color Coded Labels. there are 30 labels supplied with each *Universal QU-I.C-Key*. There are numerous guidelines and rules for selecting a GM and CTL for a new system, which is beyond the scope of this Technical Manual. However, you may refer to the IC Reference Books at the end of this Manual for more guidance.



Often times you work with a pre-existing Master Key System that may violate some or all of the convention master key principles. Because of that fact, the *Universal QU-I.C-Key* supplies ALL of the possible code combinations within the *Universal QU-I.C-Key Folder*.

Rotate the color-coded wheels so that the pure color boxes are at the top. The remainder of the facets will have a pin segment section shown to the right side.





Apply the first strip beginning with the red wheel. The solid color section is where the GM (TMK) and Control will be located. The strips have a small angled point at the bottom, designed to help break the clinging properties when removing for use.

Lay the strip over the GM and Control block, but don't press it down yet! Use the section below it for alignment. Place the first operating code option on the wheel (tool) so that all of the four pin segment

representations are properly centered and displayed.

Once positioned, use one finger (or thumb) to press down around the tool, but **DO NOT** pull or stretch. Even though the strips have elastic properties, they will elongate when stretched and future alignment may prove difficult. Continue with the strip until the last portion is wrapped around and displays the A2 (or A4) over the top of the GM and Control section.

Continue to follow the *QU-I.C.-System* label and wrap one strip over each colored wheel, finishing your *Universal QU-I.C-Key*.



## Demonstration of system strip application

(It takes 2 minutes to build a *QU-I.C-KEY* for any Master Key System)

## QU-I.C-Mark System



Manufactured by BEST, the ULTRA Core is the finest quality small format interchangeable core available today. Each core has the Xperinetix **QU-I.C.-MARK Groove** which allows you to use a 21<sup>st</sup> Century, state-of-the-art computerized desktop thermal labeling system designed especially for the I-Core Lock Specialist, as well as those who combine interchangeable cores in high-volume.

**Labels are easy to custom print and apply, making this procedure much more cost effective. A small, simple to operate desktop printer is all that is necessary.**

- ❖ **Labels are easily removed when re-combinating. No need to file off, grind off or "X" out (with additional useless stamping) the previous core mark**
- ❖ **No damage to this precisely made mechanical locking mechanism, which can occur when beating with metal stamps. Crushing and binding are eliminated**
- ❖ **Much safer than stamping with a hammer and stamp set. No ear and eye protection is necessary and stamps never become dangerous projectiles**



## QU-I.C-MARK SYSTEM!!!



QU-I.C-MARK PRINTER SYSTEM

This tool works with the ULTRA Core

Never beat another defenseless core again. Don't damage and deface your precision cores. Simply use the all-new *QU-I.C-MARK* system printer with the revolutionary ULTRA Cores and your core marking problems are over.

The *QU-I.C-MARK SYSTEM* increases lock shop safety and productivity. NO ear and eye protection are required. No smashed fingers and no more metal stamps that become dangerous airborne projectiles. Core marking is fully professional – safe (first-aid free), fast, and fun.

- Professional 21st Century, state-of-the-art technology for the core identification portion of your key control system. User friendly with high print quality.
- Compact and convenient 110 Volt powered desktop tool. Includes a dust cover.
- Eliminates damage and chamber distortion that occurs with metal stamp beating.
- Recombinating is quick and easy - NO filing, grinding or "XXX"-ing out old core markings. Just peel off the old label and stick on a new one. It's that simple.
- One size label (750 per roll) with aggressive adhesive fits all 5, 6, and 7-pin cores.
- Multiple font sizes - Two line capability - Maximum of 17 characters per line.
- Advertising/Notes can be added to cores - not something you could easily do with the old "caveman" hammer and 36+ piece stamp sets.

## QU-I.C-MARK PRINTER PORTABILITY PACKAGE



The *QU-I.C-MARK* printer was intended to be an "always available" – ready to use – workbench / desktop tool just like the metal core stamps it replaces. That means it has to operate from a reliable power source which is a 110 VAC outlet. Never a reason why it "doesn't work" when you need it most.

Naturally, with more and more of these systems in use we have received some special requests from security professionals that do a significant portion of their core combining / recombining in the field. One major customer at a large university actually has a nifty mobile locksmith cart with everything he needs that he rolls from door to door. They want to take their printer with them and they can't constantly be looking for outlets to plug into.

Now for "*the rest of the story*" as Paul Harvey says. When it's in your shop we firmly believe the *QU-I.C-MARK* printer should always be plugged in and ready to go – but if you do want to make it portable for use in your service vehicle on a job site we are now offering the following options:

### Basic Portability Package

#### **QMP-BPP**

This consists of a battery pack and charger only. It takes less than 30 seconds to install this pack in place of the standard AC power system.

### Deluxe Portability Package

#### **QMP-DPP (Printer not included)**

Includes the above Basic: battery pack and charger along with a custom soft sided case to protect your printer from bumps, bruises and dust when it leaves your shop environment



### Write-On Labels

#### **QMP-WOL**

For those who have the need for hand-written labels, 1000 ct. in white, then this is a solution!

# QU-I.C-System Packages

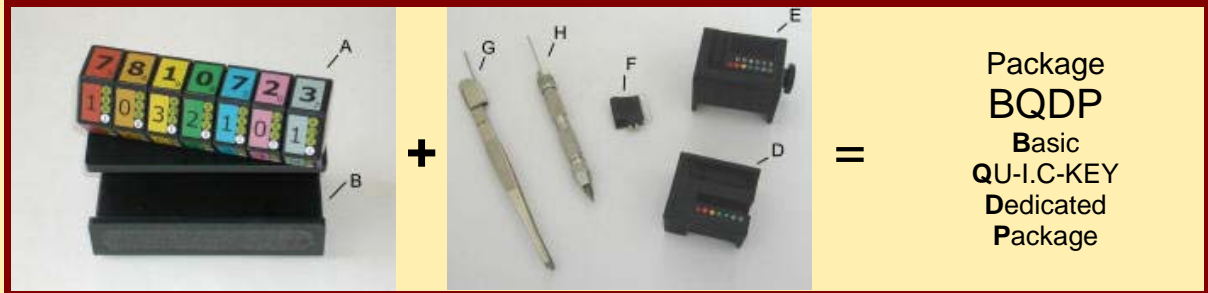
## 6 PACKAGES FOR YOU TO CHOSE FROM

THIS SAVES YOU MONEY OVER HAVING TO BUY  
INDIVIDUAL TOOLS

AND GIVES YOU EVERYTHING YOU NEED TO  
INSTANTLY BEGIN

COMBINATING YOUR CORES LIKE A FACTORY VETERAN

### Package #1



### Package #2

Package  
BQUP  
Basic  
QU-I.C-KEY  
Universal  
Package

### Package #3

Package  
PQDP  
Professional QU-I.C-KEY Dedicated  
Package

### Package #4

Package  
PQUP  
Professional QU-I.C-KEY Universal  
Package

### Package #5

The diagram for Package #5 shows a sequence of components: A (a row of colored keys), B (a keyboard base), C (a row of keys), D (a keyboard base), E (a keyboard base), F (a keyboard base), G (a keyboard base), H (a keyboard base), I (a keyboard base), J (a keyboard base), K (a keyboard base), L (a keyboard base), and M (a keyboard base). These components are combined to form the final product.

**Package - EQDP**

- Expert
- QU-I.C-KEY
- Dedicated
- Package

### Package #6

The diagram for Package #6 shows a sequence of components: A (a keyboard base), B (a keyboard base), C (a keyboard base), D (a keyboard base), E (a keyboard base), F (a keyboard base), G (a keyboard base), H (a keyboard base), I (a keyboard base), J (a keyboard base), K (a keyboard base), L (a keyboard base), and M (a keyboard base). These components are combined to form the final product.

**Package - EQUP**

- Expert
- QU-I.C-KEY
- Universal
- Package

## Combining the "Xperinetix Way" - 21<sup>st</sup> Century



So many of the brilliant and talented IC Specialists are still combining the way it was done during the last century. Why? Many reasons — fear of change, "comfortability," and, ignorance. Xperinetix has introduced a streamlined method of SFIC combining that eliminates the need for paper and pencil, slide charts, calculators, computer programs and volumes of manufacturer biting sheets. The process is so simple, children can combine — and they have!

The secret lies in well-defined color-coding system coupled with the revolutionary *QU-I.C-Key* that supports efficiency and error-reduced combining. Let's take a look at why color-coding is so vital in order to combine quickly and easily.



### Color-Coding – Why?

Color-coding has been around since the time of Noah. The rainbow is an excellent example of the sequential use of color by nature. Granted, its use in that example is based on the scientific principle of light refraction; however, color-coding has been used in other ways by industries that have recognized the value of color associations promoting greater productivity via accessing, processing, retention and accuracy.



## Differences

There is a difference between the use of color and color-coding. Color has always been helpful in advertising, home industries, food & hospitality, safety and many other areas.

Who hasn't heard that the color of an inmate's cell can either ease tension or create it? Stoplights and stop signs use primary colors so that even those with colorblindness can distinguish warnings. Is color choice ever a consideration at home? Of, course. We choose the colors of our walls, exterior, furniture, and even our landscaping. Color can also be an indicator: Brown meat in the grocery store is usually shunned. Don't M&MS taste better in color? Advertising has long known that the appropriate placement of color can have a positive effect on a purchaser. The list is almost endless of how color impacts our lives. But, what exactly is color-coding, how do we use it and how does it apply to the lock and security area?



## Color-Coding – Explained

Color-coding can be easily defined as:

***“The sequential use of varying colors to support visual recognition via association.”***

It is a direct, planned out use of color to aid in the process of seeing and recalling something that may look similar to something else. In other words, colors are associated to items. The color then redefines the item, helping to eliminate confusion or improper assimilation of like items.



Some examples of color-coding include medical files in a doctor's office. Like colors might be associated to gender, time frames, or even to which doctor a patient belongs. Teachers have long used color-coding for grade level materials, testing and even for alphabet and numerical instruction. Entire curriculums have been designed based on color-coding. The U.S. Government has applied the concept of color-coding within its security warning levels. The electrical and communications industries have long used color-coding to differentiate wires. Have you ever seen a 24-strand of telephone cable line? It's amazing how creative the phone company can become with color-coding (less creative with our phone rates). Ever consider digging near your home or business? Color-coded signs tell what is buried beneath your property – red, blue, green, yellow, etc. will identify the types of buried services such as cable, phone, gas, water, electrical, etc. Colored light strobes in amber, blue, green and red act as emergency indicators relating to severe weather, evacuation or other emergency situations. Even the beach in San Diego uses color-coded flags so that children who swim out and drift can return to the correct area – another use of color-coding to ensure safety for children and adults.

### It's a Mental Thing

Scientists and psychologists understand the value of color associations in everyday life, and why they work. It all happens in the brain.



You've probably heard the Chinese adage: "A picture is worth a thousand words" which exemplifies the fact that mental images have a more profound impact within our mind than mere words or numbers. Remember, words are coded symbols that are structured to render some type of associated image in our minds.



If I write the word: *clouds*, one visualizes wispy or billowy white puffs that float across the sky. That six-letter combination of symbols evokes a specific idea in our minds, albeit some people may view clouds somewhat differently, the basic image is similar enough.

When trying to remember things that are in a series, color associations often help in retention and recall. Numbers are so abstract that color-coding gives a redefined meaning that can be visualized – like an image, reinforcing the original numbers. If I write out one through seven, you may understand the value and sequence of those numbers, but, if I add colors, it provides heightened value to those symbols. An example would be:

#1	#2	#3	#4	#5	#6	#7
Red	Orange	Yellow	Green	Blue	Violet	Gray

If this publication were in color, I would write out each number in the color suggested below the number. The value of the sequence then would be intensified for recall and use.

The implications in business and in the locksmithing industry are enormous. Employees are expected to perform at optimum level. When working with numbers on a constant basis, the mundane nature of numerical symbols lends itself to miscalculations, decreasing productivity by the introduction of errors. Color-coding helps to minimize such mistakes.



When a mental image by way of color is associated to a pin chamber, key biting or pin sequence, a redefined meaning is created, whereby promoting accuracy and ultimately productivity. Based on science and nature, color-coding has been introduced to the SFIC world, and this is the concept behind the Xperinetix **QU-I.C-SYSTEM of Combining**.



## How to Do It

The method is simple: Locate the desired bitting by rotating the *QU-I.C-Key* wheels until the complete bitting is aligned in a straight row. Place the *QU-I.C-Key* into the viewing base so that only the desired bitting is visible.



At this point you are free to originate the key (from the large number) or combine the core. Each large number has to its right the pin segments necessary to pin up the core. The bottom number is the bottom pin, and so on. The color-coded numbers on the *QU-I.C-Key* help in associating the order and position of each chamber or key cut — a system so easy, virtually anyone can combine.

In this more contemporary method, there are no mathematical calculations needed or use of slide charts. A computer program will only be necessary if the bitting lists have not been provided to you. This method is known as the *QU-I.C-System of Combinating*. It utilizes specialized tools that allow the individual a quick and precise technique of combining SFICs. It also incorporates color-coding for ease of combining and pinning accuracy.

1) Rotate the *QU-I.C-Key* to the correct bitting for combining. It can also be used to originate keys, without the need for using bitting lists or hand copying the bitting on paper to be originated at the punch. Each wheel can be individually rotated (starting from the left for chamber #1) to display the desired bitting.



*Dedicated QU-I.C-Key*



*QU-I.C.-Load Tool*

2) Place core in the *QU-I.C-Load Tool*. Make sure the control lug is extended. It is possible to combine with the plug upside down (at the 6 o'clock position) so that visual measurement can occur. If a pin is inserted incorrectly, the holes will be in alignment to eject from the bottom. Notice that the colored dots align with each chamber of the core.

3) Follow the pin segments shown on the *QU-I.C-Key* for each chamber by the color-coding on the *QU-I.C-Key*. Start with red to the far left for Chamber #1, orange for Chamber #2, yellow for Chamber #3, green for Chamber #4, blue for Chamber #5, purple for Chamber #6 and gray for Chamber #7. Notice that the colors are similar to the rainbow. Begin inserting the pins into each chamber, one chamber at a time.



*Tweeze-jector*

If you should accidentally drop in the wrong pin, lift the loading block and you'll see the color row on the bottom. This takes the guessing out of what chamber goes where and counting from one side to the other. Simply flip your Tweeze-jector tool over and eject the incorrect pin.

4) When your core is loaded with the correct pins, place the ***QU-I.C-Test Tool*** over the core in the loading block and test your keys (NOTE: There is a hand-held adapter available that works with the Test Tool if you chose not to use the Loading Tool at this point). No need for springs because the specially designed trumpet pins are spring loaded in the Test Tool.



***QU-I.C-Test Tool on top of Loading Tool***



***Ready to Test Keys***

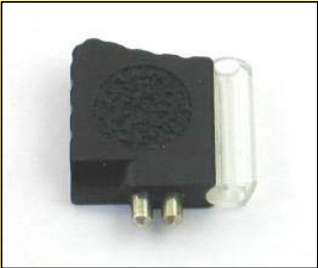
5) If you locate a troubled pin segment, or keys do not work properly, use the ***QU-I.C-Chex Tool*** to view that individual chamber for inspection and/or correction.

This series of photos shows the ***QU-I.C-Chex Tool*** being used to examine a pin segment stack by placing it on the ***QU-I.C-Test*** Troubleshooting Area, aided by the ejector pin portion of the ***QU-I.C-Pream Tool***.





If you choose to do so, you can remove the core from the Loading Block and use the *QU-I.C-Chex Tool* with core in hand. The incorrect pin stack can be transferred onto the top platform (loading dock) of the Loading Block, as pictured above, so the specific pin can be removed from the pin segment and changed, as necessary.



*QU-I.C-Chex Tool*

If you find that a new or repinned core has small burrs, you can easily remove them by using either the Preamer Tool or the Power Preamer Tool. For occasional use, the Preamer Tool is hand-held and is gently turned at the chamber's top to create a mild "funnel effect", especially useful for those stubborn #4 top pins. If you are combining hundreds of cores, the Power Preamer can be used instead. It fits into a power drill and makes deburring a fast but pleasurable experience!



*Preamer & Power Preamer Tools*

6) Cap your cores via a Capping Press or an individual capping tool.

If you utilize a number of different systems, you may require the *Universal QU-I.C-Key*. It can be changed in minutes to create any system, again without the need for mathematical computations.

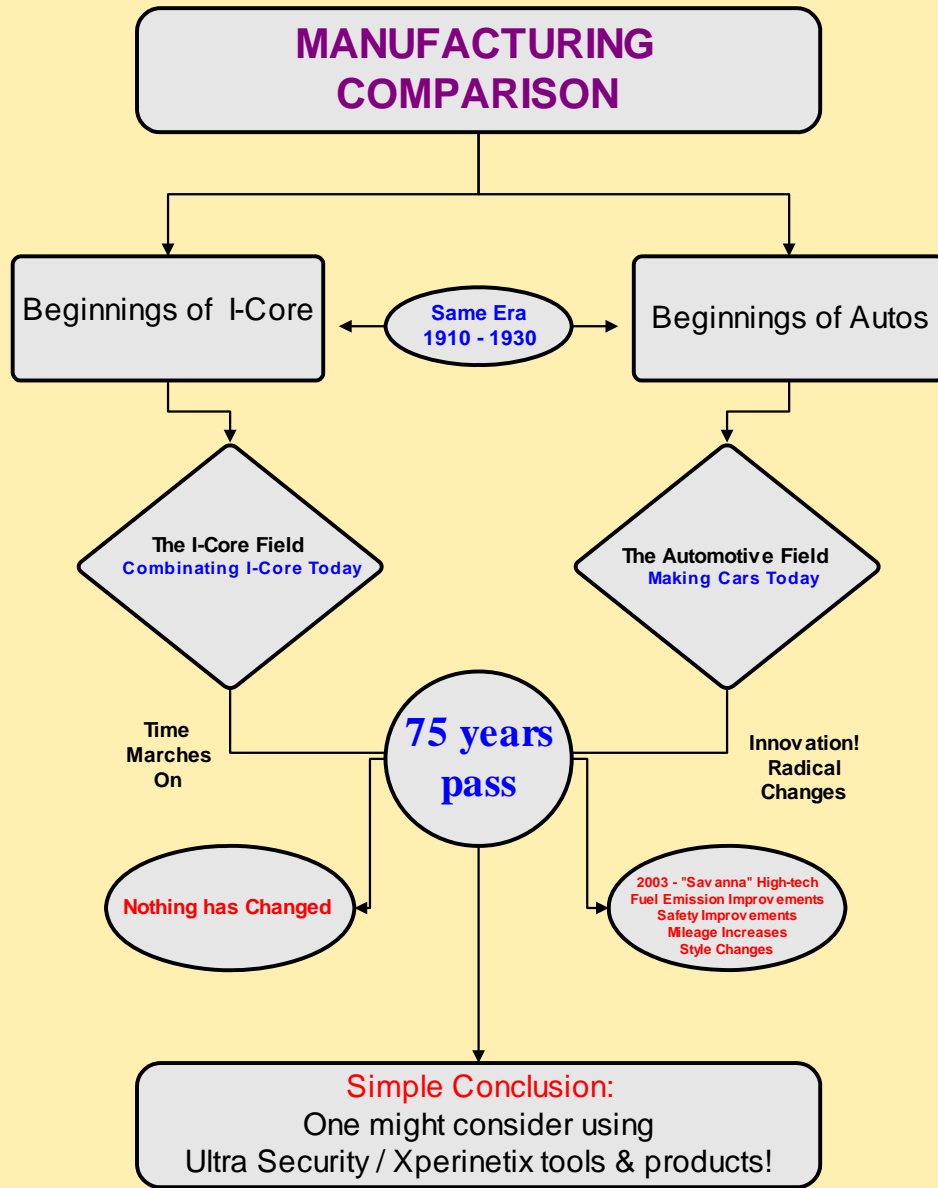
Trying Something New

Quite often people are leery of trying something new.....even if it means improving their quality of life or their income level! As absurd as it sounds, this phenomenon is prevalent throughout the world, including people of all cultures. This, too, involves animals. We as people have one thing up on the critters, we can evaluate, rationalize, conceptualize, comprehend, compare and alter our ways of doing things if it is appropriate.



So why, then have the major SFIC manufacturers done so little to affect change in the way we combine small format interchangeable cores? The following flow chart may

illustrate and reinforce the almost electrifying **Fear of Change**. If something's not broken....why fix it???



## QU-I.C-Load



Part number QLT- 6 or 7 (7-pin model shown above)

### QU-I.C-Load Description

This tool is one of the first to recognize color-coding, remedying a problem that has plagued IC Specialists over the years. Loosing track of where you are....turning a core over to eject with no ideas where you are? Don't feel alone....this has happened to every seasoned IC Specialist over the years. So, why wait until this happens to you? Research has proven that color associations help to retain short-term memory segments. With the "Sure Grip" inserts, this tool is a Solid one-piece, lightweight aluminum body, black anodized work-horse and hardened for durability. It is designed to visually contrast with nickel silver, brass and colored pin segments.

### Attributes

The *QU-I.C-Load* 6 and 7-pin models are available to accommodate all existing manufacturer's SFICs, including the ULTRA Core. This tool includes the unique Color Coded Chamber Identifiers – one set on the top loading surface and another on the hi-visibility ejector ramp at the bottom, which eliminates "blind" searching for the right chamber to de-combinate. This direct access to the de-combination holes also eliminates

alignment problems caused by manufacturing variances when using different brands of cores. Standard ejector pin tools can be used with the ***QU-I.C-LOAD Tool***.

Although this tool was originally developed to be a companion to the ***QU-I.C-KEY System Pin Segment Calculator*** (with corresponding Chamber Color Coding) it can be used independently.

This tool provides a flat surface with edge guards to catch "stray" pin segments. When combining, these features help to make pin segment "landing" and insertion much easier than using the rounded surface of the core.

An integral Pin Catcher Cavity aids during the pin ejection process. (*Ideally, you won't have to use this very often!*) The left end of this cavity contains a Pin Positioning Pocket for those who like to orient the pin segment a particular way in their tweezers before the actual insertion step

### **Optional**

Xperinetix offers the "***Tweeze-jector***" Tool. This convenient and time saving device is a combination of special tweezers and an ejector tool that also functions as a pin tamper and manual control lug activator.



- ❖ A convenient core push-out port also provides clear access to the back of the core when it is necessary to manually move the control lug in or out. (*This is only necessary when troubleshooting and ejecting pins.*)
- ❖ A spring-loaded ball device helps to retain the core and prevents accidental slip-out while handling.

Yes, at first this tool will seem "ALIEN" because it is so different than anything that has ever been used before. We suggest that you allow a period of time to familiarize yourself with it and all of its features. As with any new tool it takes time to develop a "feel" for it – so put it into use and experience how efficient it will make your job of working with interchangeable cores. Beware because soon you'll find that you won't want to combine cores without your ***QU-I.C-LOAD Tool***!

If you've ever had to eject pins from a core that you've just combined, **you NEED this tool!** You should always test combined cores **BEFORE** you cap them!

## QU-I.C-Test



Part # QTT-1

The "QU-I.C-TEST" tool is designed to work with the "QU-I.C-LOAD" Block.  
The following series of pictures shows how this tool works.



After all pin segments have been inserted you just place this tool onto the top of the "QU-I.C-LOAD" block.

The "QU-I.C-TEST" tool is universal. Working with Best, Falcon, Arrow, Peaks, Schlage SFIC, Medeco Keymark, and KSP. It works on 5-pin, 6-pin and 7-pin cores as well as partially capped cores that are being re-combinated.





The unique "trumpet keys" will visually indicate any chamber(s) that may have a problem with proper initial pin seating. With a simple push on them the pin stacks are moved to their normal resting point.

With the two units coupled, temporary spring pressure is applied in all chambers so you can test every key. If a problem occurs you can correct it while it's easy to do - without having to punch out any caps and springs. If the core works properly you can then cap it with total confidence.



### **Additional Features**

- ❖ Compact and lightweight with built-in storage cavities located under end plate
- ❖ Top of tool has color coded chamber slots, caliper groove, pin pocket and docking area (see "QU-I.C-CHECK" tool)
- ❖ All sides have grip surfaces for ease in handling



## Optional Accessories

### QU-I.C-TEST Adapter

When this adapter is attached to the original "QU-I.C-TEST" Tool you can test the operation of your cores without having to insert them into the companion "QU-I.C-LOAD" Tool.

Adapter includes grip inserts, tactile grooves and a "never gets lost" captive screw for ease of use and installation.

It can be installed and removed in seconds. One button head hex cap screw holds it firmly in place.

It's NOT permanent! Put it on...

Take it off... as often as you desire!



### View of Adapter attached to the "QU-I.C-TEST" Tool.

This now allows those that combine by holding the core in their hand (not holding it in the Xperinetix "QU-I.C-LOAD" Tool) a quick and easy way to test their combined cores before they cap them.

The thumb screw, shown in the insert photo, has two functions. It holds the core retainer plate onto the "QU-I.C-TEST" Tool and it is also used to add and remove the adapter. The specially machined, properly sized hex tip is always available because it is stored on the "QU-I.C-TEST" Tool. You will never have to look for your allen (hex) wrench set. It is always available when you need it!



"QU-I.C-TEST" Tool and its adapter works with all Best, Falcon, Schlage SFIC, Medeco Keymark, Arrow, Peaks, and KSP cores.

Additional special cores can be checked by using the optional four-sided turret core retainer plate shown in the photo to the right. The core being tested here is a Best dust cover core. This special turret plate allows ample clearance for the dust cover to be lifted and the core's plug accessed for proper testing.

(A close-up of this optional core retainer plate is also shown below.)



This four-sided turret core retainer plate converts the standard "QU-I.C-TEST" Tool to allow use with more specialized Interchangeable cores.

This custom plate is for use with:

- Best Dust Cover Cores
- Three spare sides for your future custom needs.



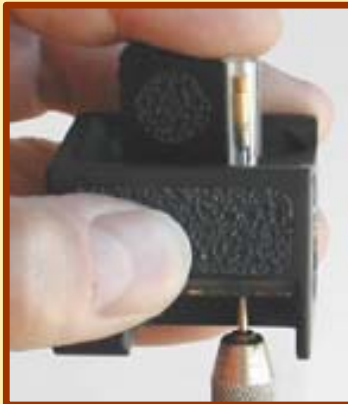
## QU-I.C-Chex



**QU-I.C-CHEX**  
Part # **QCT-1**

(Intended for use with 6 or 7 pin cores  
but will also work with 5 pin cores)

The *QU-I.C-Chex Tool* is used to check individual chamber pin stacks through a quick visual inspection and also allows you to easily move pin stacks as a unit



The Clear View Tube holds the pin stack **intact** as it is elevated out of the core chamber - once checked it can be simply pushed (usually they fall back naturally) back down into that chamber - or moved for troubleshooting or transfer purposes

The *QU-I.C-Chex Tool*:

- ◆ Has a special light reflective surface to aid viewing
- ◆ Dual chamber indexing pins for positioning stability
- ◆ Contoured to conform to your fingers
- ◆ Grip-Grooves around the outer edge
- ◆ Grip inserts in front and back

Can be used with the core held in your hand  
or in the Xperinetix QU-I.C-LOAD TOOL



To transfer / transport a pin stack once it is inside the  
viewing tube of the QU-I.C-CHEX it will be  
necessary to tip (or rotate) the core to a more  
horizontal orientation so that the pins don't fall out  
when you separate it from the core

The QU-I.C-CHEX was designed to work  
with The Troubleshooting Top chamber  
grooves on the QU-I.C-TEST Tool. Using the  
QU-I.C-CHEX you can easily transfer pin  
stacks from the core and back again when  
your troubleshooting is complete.



## QU-I.C-Adapter



Adapter before attaching to QU-I.C-TEST Tool



Adapter attached to QU-I.C-TEST Tool

### ***QU-I.C-TEST Adapter***

Part # QTA

When this adapter is attached to the original *QU-I.C-TEST Tool* you can test the operation of your cores without having to insert them into the companion *QU-I.C-LOAD Tool*.

### **Adapter Features**

- ✓ It includes grip inserts, tactile grooves and a "never gets lost" captive screw for ease of use and installation.
- ✓ It can be installed and removed in seconds. One button head hex cap screw holds it firmly in place. It's NOT permanent!
- ✓ Put it on... Take it off... as often as you desire!
- ✓ QU-I.C-TEST Tool and its adapter works with all Best, Falcon, Schlage SFIC, Medeco Keymark, Arrow, Peaks, and KSP cores.

## QU-I.C-Preamer Tools



### **QU-I.C-PREAM**

The QU-I.C-PREAM allows you to pre-ream the top of your core chambers. This allows those nasty #4B top pins to drop right into the core. This dual sided tool also includes a convenient ejector rod.

### **QU-I.C-POWER PREAMER**

The QU-I.C-Power Preamer attaches to any hand held screw driver and allows you to pre-ream your cores assembly line fashion. We found this tool works well when used with the Milwaukee screwdriver on high speed = 400 r.p.m.

Remember: You are not trying to countersink the heads of flathead screws – just trying to remove the slight burr to create a funnel like effect.

## QU-I.C-Block (Decoder)



A-1's The BLOCK has been an industry favorite for over 20 years.

**NOW** a part of the QU-I.C-SYSTEM LINE with several new features added. This tool allows you to decode cores from existing systems when you have no documentation, or when a problem occurs and you need to carefully open the core and "autopsy" it.

**(See sequence photos below)**

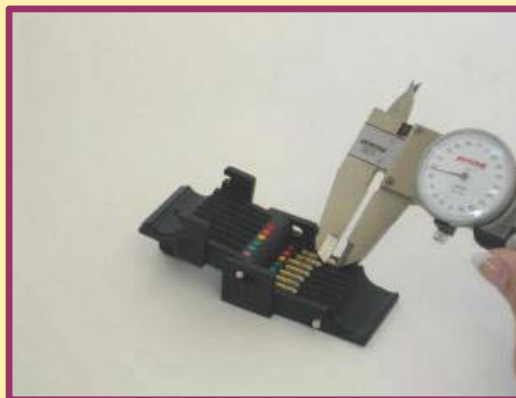
### New Features

- ✓ QU-I.C-SYSTEM Color Coding - The tool contains our unique color coding system for both 6 and 7 pin cores. No longer will there be any confusion as to which chamber is the tip or bow. It will be instantly obvious and unnecessary mistakes will be avoided.
- ✓ The special QU-I.C-SYSTEM grip surfaces have been added to 6 locations on the tool to make it more comfortable to use and to reduce accidental slippage/accidents. You don't want your pin stacks to get scrambled when you are doing a critical decoding operation.
- ✓ The QU-I.C-BLOCK has also been modified so it will now accommodate the High Security Best 5C core which has an "oversized" control lug.



With the core locked in place you simply drive out the pin chamber(s) with the ejector tool that is included. The pin stack(s) are then automatically held inside the tool

With the tool opened all the pin stacks that you ejected are now visible and you can easily examine them and take caliper measurements as necessary to assist you in your decoding process



The tool has also been provided with a slight "ledge" to allow for use with the QU-I.C-CHEX Tool which gives you an easy way to move complete pin stacks

## Tweeze-jector Tool



Part # QTJ-1

### Tweez-jector

Have you ever been combining interchangeable cores and wished you had three hands? An all too common scenario: you're pinning a core - you need to "tamp" down a pin stack or push one out because the wrong pin "mysteriously" got into a chamber - you put down your tweezers and search for the "elusive" ejector pin tool and it's nowhere in sight - you get unnecessarily distracted and lose track of where you were at on the core. The "**Tweez-jector**" solves that problem by integrating the two most used combining tools into one convenient tool.

Simply flip your "**Tweez-jector**" around (like a rock band drummer twirling his sticks) when you need to switch from pinning (tweezers) to troubleshooting (ejector pin) mode.



DO NOT HAMMER the ejector pin that is attached to your precision tweezers. It is intended to be used for non-force purposes only. Use a standard ejector pin tool for de-capping a core.

These tweezers are custom ground and hand honed to facilitate handling even the smallest master pins.





## Core & Key Trays

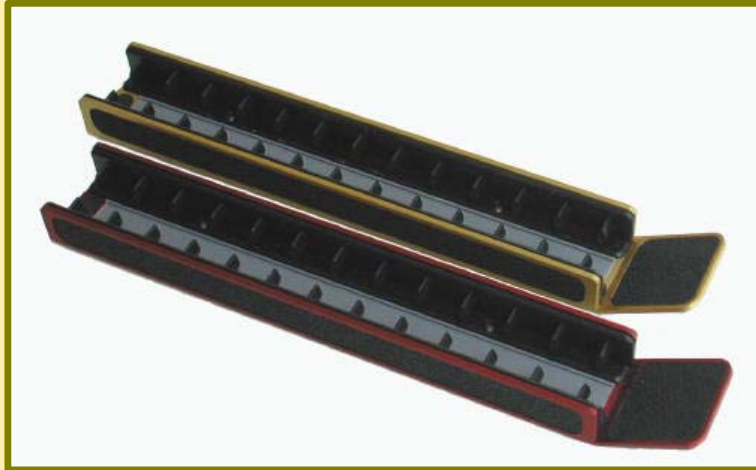


Part # **CKT-12**

**Actual Size: 2" wide x 14" long**

**If you've ever searched for places to put your cores while combinating, or if you've ever had a core spill while waiting to be capped  
You NEED these new Core & Key Trays!**

- ✓ Works with all 5, 6 and 7-pin small format interchangeable cores (Including the 7 pin Peaks™ - which also has a slightly extended plug face)
- ✓ The tray has 12 positions for cores and/or keys. Cores can't fall over and are easily put in and taken out. It is a convenient transport method.
- ✓ Each tray has 6 grip inserts (2 full-length side and 4 top and bottom) for ease and sureness in handling and 4 rubber feet are attached.
- ✓ Includes a label holder for marking each position. This label method is helpful in keeping track when doing large, repetitive combinating projects. This requires a replaceable ½" x 11" label strip that can easily be cut from any standard sheet of paper.
- ✓ Machined from lightweight aluminum. Black is the standard anodized finish, but optional colors are available as a special order.



Trays above shown with color-coded identification



Part # **CKT-60**

**Actual Size: 10" wide x 17" long**

- ✓ Works with all 5, 6 and 7-pin small format interchangeable cores (Including the 7 pin Peaks™ - which also has a slightly extended plug face)
- ✓ The tray has 60 positions for cores and/or keys. Cores can't fall over and are easily put in and taken out. It is a convenient transport method.
- ✓ Each tray has 4 grip inserts along with standard handles for ease and sureness in handling.
- ✓ It has 4 large rubber feet to straddle / clear small items on your work area

# Key Retainer Devices (KRDs)

Key Retainer Devices (KRDs) are in the industry forefront as a proven way to prevent crime by providing **visual authorized accountability**. This means that as a Top Master



Key is issued for legitimate purposes, the employee's key is temporarily "retained" in the KRD. When they return and replace the Master Key, the employee's key is released and the Master Key is again locked into place. This procedure accentuates safety since accountability is required and Master Keys stay "on premises." Thus, potential crime and security vulnerability is lessened.

Ultra Security offers the world's largest selection of various types of key retainer devices (KRDs). Some, such as BEST, Schlage, Sargent, CorbinRusswin, Medeco and Yale have proven very popular.

### HOW IT WORKS ... A simple put-and-take method of operation



1 or any high level key securely retained in KRD pending for authorized user

Authorized user inserting their personally identified release key

User rotates their release key and now the high level retained key is in the upright position and ready for removal

Authorized user removing the previously secured high level key and can use it as needed

Authorized user key is retained (held captive/trapped) until the high level key is returned to its secure location

To follow are some of the Key Retainer Devices offered at this time.

**MODEL****KRD-2**

(shown actual size)

New "Bolt-less" Version

Accepts 5, 6 and 7-pin cores - not supplied

Other models are available

(Consult Distributor)

**DESCRIPTION** The KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a "mechanical sign-out sheet" for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent "tool" in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are "buried" in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another "release" key is inserted in the other core and rotated 90° (¼ turn). Then the "retained" key can be removed for use while the "release" key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally "retained" key is returned and the "release" key is removed (retrieved) by the authorized user - a very simple, but highly effective "put-and-take" system.

**SPECIFICATIONS**

Case: Precision machined from solid aircraft aluminum bar stock

Size: 2¼" High x 4½" Long x 2¼" Deep      Weight: 2 Pounds

Mounting: Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

Finish: Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: **-S** = an internal low-voltage SPDT micro-switch with 36" of 3-wire, 22 gauge jacketed cable. **-T** = Tamper Alarm switch is included (specify type)



**Model KRD-3** (Function "A" Dual Custody shown above)

**DESCRIPTION** The KRD-3 Key Retainer Device (3 core model) is unique, versatile and very valuable. This model offers the capability of providing two different functions depending on how the user / installer initially configures the retained key core(s) and the release key core(s). It is an excellent "tool" in your key control arsenal – a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are "buried" in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** A very simple, but highly effective "put-and-take" system with 2 possible configurations:

Function "A" Dual Custody – 2 keys must be present to release 1 retained key

One key is retained in a core (at ¼ turn) until two "release" keys are simultaneously inserted in the other cores and rotated 90° (¼ turn). Then the "retained" key can be removed for use while the "release" keys are held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally "retained" key is returned and the "release" keys are removed (retrieved) by the authorized users.

Function "B" – 1 key releases 2 retained keys

Two keys are retained in cores (at ¼ turn) until a "release" key is inserted into the remaining core and rotated 90° (¼ turn). The "release" key is now held (trapped) for visual accountability purposes while BOTH "retained" keys MUST be simultaneously removed (**Warning! They are both now untrapped/unprotected**) at this stage in the sequence of operations. This cycle is repeated in reverse when the normally "retained" keys are returned and the "release" key is removed (retrieved) by the authorized user.

**SPECIFICATIONS** (Accepts 5, 6 and 7 pin cores – not supplied)

Case: Precision machined from solid aircraft aluminum bar stock

Size: 2¼" High x 6¾" Long x 2¼" Deep      Weight: 3 Pounds

Mounting: Three - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected ? . Five ¼-20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼-20 hardware (not supplied) will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available.

Finish: Clear anodized – 628. Optional colors / special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: -S = an internal low-voltage SPDT micro-switch with 36" of 3-wire, 22 gauge jacketed cable.-T = Tamper alarm switch is included (specify type)

Standard package includes: Three #10 x 2" FHSMS, three #10-24 x 1¼" FHMS ? , an instruction sheet for installation and operation and a Mounting Template

**MODEL****SCH-KRD-2****FSIC**Accepts all Schlage Large Format  
Interchangeable Cores

Other models are available

(Consult Distributor)

**DESCRIPTION** The SCH-KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a “mechanical sign-out sheet” for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent “tool” in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are “buried” in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another “release” key is inserted in the other core and rotated 90° (¼ turn). Then the “retained” key can be removed for use while the “release” key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally “retained” key is returned and the “release” key is removed (retrieved) by the authorized user - a very simple, but highly effective “put-and-take” system.

**SPECIFICATIONS**

**Case :** Precision machined from solid aircraft aluminum bar stock

**Size:** 2¼” High x 4½” Long x 2¼” Deep      **Weight:** 2 Pounds

**Mounting:** Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

**Finish:** Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

**Options:** **-S** = an internal low-voltage SPDT micro-switch with 36” of 3-wire, 22 gauge jacketed cable.-**T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2” FHSMS, two #10-24 x 1” FHMS ? , an instruction sheet for installation and operation and a Mounting Template

**MODEL****KRD-2H**

"Hybrid"

Accepts SFIC and FSIC

Other models are available

(Consult Distributor)

**DESCRIPTION** The KR-D-2H **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a "mechanical sign-out sheet" for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent "tool" in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are "buried" in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another "release" key is inserted in the other core and rotated 90° (¼ turn). Then the "retained" key can be removed for use while the "release" key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally "retained" key is returned and the "release" key is removed (retrieved) by the authorized user - a very simple, but highly effective "put-and-take" system.

**SPECIFICATIONS**

**Case:** Precision machined from solid aircraft aluminum bar stock

**Size:** 2¼" High x 4½" Long x 2¼" Deep      **Weight:** 2 Pounds

**Mounting:** Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

**Finish:** Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

**Options:** **-S** = an internal low-voltage SPDT micro-switch with 36" of 3-wire, 22 gauge jacketed cable. **-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2" FHSMS, two #10-24 x 1" FHMS ? , an instruction sheet for installation and operation and a Mounting Template



Model **SCH-KRD-3** (Function "A" Dual Custody shown above)

**DESCRIPTION** The KRD-3 Key Retainer Device (3 core model) is unique, versatile and very valuable. This model offers the capability of providing two different functions depending on how the user / installer initially configures the retained key core(s) and the release key core(s). It is an excellent "tool" in your key control arsenal – a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are "buried" in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** A very simple, but highly effective "put-and-take" system with 2 possible configurations:

Function "A" Dual Custody – 2 keys must be present to release 1 retained key

One key is retained in a core (at ¼ turn) until two "release" keys are simultaneously inserted in the other cores and rotated 90° (¼ turn). Then the "retained" key can be removed for use while the "release" keys are held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally "retained" key is returned and the "release" keys are removed (retrieved) by the authorized users.

Function "B" – 1 key releases 2 retained keys

Two keys are retained in cores (at ¼ turn) until a "release" key is inserted into the remaining core and rotated 90° (¼ turn). The "release" key is now held (trapped) for visual accountability purposes while BOTH "retained" keys MUST be simultaneously removed (**Warning! They are *both* now untrapped/unprotected**) at this stage in the sequence of operations. This cycle is repeated in reverse when the normally "retained" keys are returned and the "release" key is removed (retrieved) by the authorized user.

**SPECIFICATIONS** (Accepts 5, 6 and 7 pin cores – not supplied)

Case: Precision machined from solid aircraft aluminum bar stock

Size: 2¼" High x 6¾" Long x 2¼" Deep      Weight: 3 Pounds

Mounting: Three - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected ? . Five ¼-20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼-20 hardware (not supplied) will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available.

Finish: Clear anodized – 628. Optional colors / special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: -S = an internal low-voltage SPDT micro-switch with 36" of 3-wire, 22 gauge jacketed cable.-T = Tamper alarm switch is included (specify type)

Standard package includes: Three #10 x 2" FHSMS, three #10-24 x 1" FHMS ? , an instruction sheet for installation and operation and a Mounting Template



**MODEL****CR6-KRD-2****IC Version****Accepts 6-Pin CorbinRusswin  
Interchangeable Cores**Other models are available  
(Consult Distributor)

**DESCRIPTION** The CR6-KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a "mechanical sign-out sheet" for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent "tool" in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are "buried" in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another "release" key is inserted in the other core and rotated 90° (¼ turn). Then the "retained" key can be removed for use while the "release" key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally "retained" key is returned and the "release" key is removed (retrieved) by the authorized user - a very simple, but highly effective "put-and-take" system.

**SPECIFICATIONS**

**Case:** Precision machined from solid aircraft aluminum bar stock

**Size:** 2¼" High x 4½" Long x 2¼" Deep      **Weight:** 2 Pounds

**Mounting:** Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

**Finish:** Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

**Options:** **-S** = an internal low-voltage SPDT micro- switch with 36" of 3-wire, 22 gauge jacketed cable.

**-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2" FHMS, two #10-24 x 1" FHMS ?, an instruction sheet for installation and operation and a Mounting Template

**MODEL****CR7-KRD-2****IC Version****Accepts 7-Pin CorbinRusswin  
Interchangeable Cores**Other models are available  
(Consult Distributor)

**DESCRIPTION** The CR7-KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a “mechanical sign-out sheet” for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent “tool” in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are “buried” in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another “release” key is inserted in the other core and rotated 90° (¼ turn). Then the “retained” key can be removed for use while the “release” key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally “retained” key is returned and the “release” key is removed (retrieved) by the authorized user - a very simple, but highly effective “put-and-take” system.

**SPECIFICATIONS**

Case: Precision machined from solid aircraft aluminum bar stock

Size: 2¼” High x 4½” Long x 2¼” Deep      Weight: 2 Pounds

Mounting: Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

Finish: Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: **-S** = an internal low-voltage SPDT micro- switch with 36” of 3-wire, 22 gauge jacketed cable.

**-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2” FHSMS, two #10-24 x 1” FHMS ?, an instruction sheet for installation and operation and a Mounting Template



**Model YA6-KRD-2 \* 6 Pin**

**KEY RETAINER DEVICE**

**RC Version**

**Fits - Yale Removable Cores**

**DESCRIPTION** The YA6-KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a "mechanical sign-out sheet" for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent "tool" in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are "buried" in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another "release" key is inserted in the other core and rotated 90° (¼ turn). Then the "retained" key can be removed for use while the "release" key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally "retained" key is returned and the "release" key is removed (retrieved) by the authorized user - a very simple, but highly effective "put-and-take" system.

#### SPECIFICATIONS

Case: Precision machined from solid aircraft aluminum bar stock

Size: 2¼" High x 4½" Long x 2¼" Deep      Weight: 2 Pounds

Mounting: Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

Finish: Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: **-S** = an internal low-voltage SPDT micro- switch with 36" of 3-wire, 22 gauge jacketed cable.

**-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2" FHSMS, two #10-24 x 1" FHMS ?, an instruction sheet for installation and operation and a Mounting Template



Model **YA7-KRD-2** \* 7 Pin

KEY RETAINER DEVICE

RC Version

**Fits - Yale Removable Cores**

**DESCRIPTION** The YA7-KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a “mechanical sign-out sheet” for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent “tool” in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are “buried” in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another “release” key is inserted in the other core and rotated 90° (¼ turn). Then the “retained” key can be removed for use while the “release” key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally “retained” key is returned and the “release” key is removed (retrieved) by the authorized user - a very simple, but highly effective “put-and-take” system.

#### SPECIFICATIONS

Case: Precision machined from solid aircraft aluminum bar stock

Size: 2¼" High x 4½" Long x 2¼" Deep      Weight: 2 Pounds

Mounting: Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

Finish: Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: **-S** = an internal low-voltage SPDT micro- switch with 36" of 3-wire, 22 gauge jacketed cable.

**-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2" FHMS, two #10-24 x 1" FHMS ?, an instruction sheet for installation and operation and a Mounting Template



MODEL

**MED-KRD-2**

IC Version

Accepts Medeco Large Format  
Interchangeable Cores

Other models are available  
(Consult Distributor)

**DESCRIPTION** The MED-KRD-2 **Key Retainer Device (2 core model)** is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a “mechanical sign-out sheet” for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent “tool” in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are “buried” in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another “release” key is inserted in the other core and rotated 90° (¼ turn). Then the “retained” key can be removed for use while the “release” key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally “retained” key is returned and the “release” key is removed (retrieved) by the authorized user - a very simple, but highly effective “put-and-take” system.

#### SPECIFICATIONS

Case : Precision machined from solid aircraft aluminum bar stock

Size: 2¼” High x 4½” Long x 2¼” Deep      Weight: 2 Pounds

Mounting: Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

Finish: Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: **-S** = an internal low-voltage SPDT micro- switch with 36” of 3-wire, 22 gauge jacketed cable.

**-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2” FHSMS, two #10-24 x 1” FHMS ?, an instruction sheet for installation and operation and a Mounting Template

**MODEL****SAR-KRD-2**

(shown actual size)

**RC Version****Accepts all Sargent Large Format Removable Cores**Other models are available  
(Consult Distributor)

**DESCRIPTION** The SAR-KRD-2 Key Retainer Device (2 core model) is unique, versatile and very valuable. Applications include Janitorial / Custodial, Irregular Users / Guests that require access. It acts as a “mechanical sign-out sheet” for desk and cabinet keys, carpools, evidence and gun lockers, hospital narcotics carts and storage cabinets. It is an excellent “tool” in your key control arsenal – it is a simple solution to complicated problems that is often ignored – it provides an easy way to establish accountability and eliminate human mistakes by physically controlling the desired locking sequence or procedure(s) and it drastically reduces the risk exposure to higher level keys (GM, M and Controls) by requiring them to remain on-site. The actual keys are “buried” in the core for additional security. The cores are spaced and oriented to allow for large bow keys and key rings with I.D. tags attached.

**OPERATION** One key (High Level / Special) is retained in a core (at ¼ turn) until another “release” key is inserted in the other core and rotated 90° (¼ turn). Then the “retained” key can be removed for use while the “release” key is held (trapped) for visual accountability purposes. This cycle is repeated in reverse when the normally “retained” key is returned and the “release” key is removed (retrieved) by the authorized user - a very simple, but highly effective “put-and-take” system.

**SPECIFICATIONS**

Case : Precision machined from solid aircraft aluminum bar stock

Size: 2¼” High x 4½” Long x 2¼” Deep      Weight: 2 Pounds

Mounting: Two - #10 screw size through-holes are provided behind the cores. When the cores are installed these screws are concealed and protected (see ? below). Four ¼ - 20 tapped holes are provided in the back for attachment. The creative usage of readily available ¼ - 20 hardware: standard bolts, threaded rod, rod couplings, large washers, custom backplates and nuts, as required, will provide a super-secure additional method of mounting to panels and through thick walls or other objects where access to the back of the mounting surface is available (this hardware is not supplied).

Finish: Clear anodized – 628. Optional anodized color-coding is available as a special batch order: Red, Blue, Black, Gold, Green, Bronze and Purple

Options: **-S** = an internal low-voltage SPDT micro- switch with 36” of 3-wire, 22 gauge jacketed cable.

**-T** = Tamper Alarm switch is included (specify type)

Standard package includes: Two #10 x 2” FHSMS, two #10-24 x 1” FHMS ?, an instruction sheet for installation and operation and a Mounting Template

# A2 SFIC Pin Specification Chart

*Two-Step Master Keying System - .0125" Increments*

<u>Key Depth:</u>	<u>Bottom Pin Length:</u>	<u>Coded Number:</u>
.3187	.1100.....	0
.3062	.1225.....	1
.2937	.1350.....	2
.2812	.1475.....	3
.2687	.1600.....	4
.2562	.1725.....	5
.2437	.1850.....	6
.2312	.1975.....	7
.2187	.2100.....	8
.2062	.2225.....	9

<u>Wafer Pin Length:</u>	<u>Coded Number:</u>
.0250.....	2
.0375.....	3
.0500.....	4
.0625.....	5
.0750.....	6
.0875.....	7
.1000.....	8
.1125.....	9
.1250.....	10
.1375.....	11
.1500.....	12
.1625.....	13
.1750.....	14
.1875.....	15
.2000.....	16
.2125.....	17
.2250.....	18
.2375.....	19

**Pin Stack Total:** .397      **Decoding:** Subtract: 13 minus Code of Top Pin  
**Coded Stack Length:** 23      **Multiplier:** Top Pin length x 80 = Coded Length [rounded]  
**Cut:** TIP to BOW      **Root of Cut:** .054      **Angle of Cut:** 90°      **Pin Diameter:** .108  
**Spacing (TIP to BOW from center of cut):** From Tip Stop, each cut:  
 #1=.088    #2=.238    #3=.388    #4=.538    #5=.688    #6=.838    #7=.988

# A4 SFIC Pin Specification Chart

*One-Step Master Keying System - .021" Increments*

<u>Key Depth:</u>	<u>Bottom Pin Length:</u>	<u>Coded Number:</u>
.318	.110.....	0
.297	.131.....	1
.276	.152.....	2
.255	.173.....	3
.234	.194.....	4
.213	.215.....	5

<u>Wafer Pin Length:</u>	<u>Coded Number:</u>
.021.....	1
.042.....	2
.063.....	3
.084.....	4
.105.....	5
.126.....	6
.147.....	7
.168.....	8
.189.....	9
.210.....	10
.231.....	11

**Pin Stack Total:** .404      **Decoding:** Subtract: 8 minus Code of Top Pin  
**Coded Stack Length:** 14      **Multiplier:** Top Pin length x 48 = Coded Length [rounded]  
**Cut:** TIP to BOW      **Root of Cut:** .054      **Angle of Cut:** 90°      **Pin Diameter:** .108  
**Spacing (TIP to BOW from center of cut):** From Tip Stop, each cut:  
 #1=.088    #2=.238    #3=.388    #4=.538    #5=.688    #6=.838    #7=.988



## More About Ultra Security.....

Ultra Security was the brainchild of John Ulaszek, President/Owner/Founder. Xperinetix is the Research & Development arm of Ultra Security, developing SFIC tools and products that are now being used throughout the world.



### John Ulaszek

John's background is massive and his nickname **JOHN ("Edison") ULASZEK** is apropos. John's past includes: Sales Rep. for Intermountain Lock & Supply Co. in Utah, a locksmith for Customized Key Systems in Illinois, a Rep. for Ultra Electric Co. as a Chicago, a CCTV Specialist and a Systems Applications Engineer with ADT in Chicago, a National Sales Manager with Schlage Electronics in Santa Clara, California, and his more current experiences in San Diego, California as: a Service Technician with Diebold, with the City of San Diego, Lockshop, a Manager with Electrotech Construction, and as President/Owner/Founder of Ultra Security Group, as well as the creator/founder of Xperinetix. With this

extensive background, John has created a number of interchangeable core tools and products/devices that fit the market beautifully. As John once stated regarding his tools: *"This increases your producshun and decreases your frustra-shun."* Well stated. John is a true innovator, breaking the paradigms of the past, and, successfully anticipating the market needs of today, and even tomorrow.

Find out more about Ultra Security and their innovative IC tools and IC systems - including the 16 minute video presentation of *"How to Combinate - the Xperinetix Way"*. This free CD can play on any current computer and on most newer DVD players. Learn how, in this visual presentation, these tools and systems are making their mark in the industry - one core at a time.



*[Reprinted, with permission from: "Removable Cores: Large Format" ©2000]*

"Few true innovations occur in the lock-manufacturing arena. I can truly attest to one manufacturer who constantly creates and adapts to the market. In the past I have worked in sales, as a matter of fact, I TAUGHT sales people in one of my past businesses I owned how to sell (modeling). As a result, we became Number 1 in our market. Needless to say, I can spot a true innovator at 1,000 paces. John Ulaszek is one of those!

#### Inventors and the Like

John Ulaszek is one of those rare individuals who not only understands how to fix a predicament, he also senses how this resolution can be utilized by the masses. This is what I call innovative genius. I have always heard about "*blowing one's own whistles*" when a good job is done, but since John is not an ostentatious person, he would not do this. I've had the pleasure of speaking with John countless times over the past several years and realize that he not only "talks", but he also "understands." Most thinkers, those who are *original* in their thoughts, will eventually break paradigms. This is the only way that new and creative solutions to existing problems can be achieved. Edison, Einstein, Ford and Bell were a few of these "paradigm breakers." John Ulaszek is an addition to this formidable list. And, I do not say this lightly. As an aside, in a FAX to John on "*Inventor's Day*" [February 11th] I addressed a FAX to him as: "**John Edison Bell Wright Einstein Ford Ulaszek**" I do not think I was "*off*." Within the "Lock & Key" industry, some have accomplished quite a bit. There are those who are recognized nationally, and even internationally for their work. Kudos. But, aside from Frank Best, Walter Schlage, Joseph Sargent, Linus Yale and the likes, who tends to recognize today's innovative genius? Many slave away within the confines of mega-million dollar manufacturing houses to provide us with security answers. But, who says "thank you" to people such as John Ulaszek? And, what's more, how many of us truly recognize the creative results and the substantial industry efforts contributed by people of the caliber of John Ulaszek?

Aside from John's extensive locksmith and security background, he has introduced into the lock and security market a plethora of creative and timesaving devices. He has worked with the major lock manufacturers and other peripheral manufacturing entities, as well. And, in doing so, has allowed us all to spend more time doing what we all do best—our job. Business-wise, John is President/Owner of **Xperinetix**, a solution-oriented company that re-directs existing "*lock & key*" problems and provides new and practical products within the industry. Aside from his extensive interchangeable core background, his parent company, **Ultra Security**, also expands on this premise and offers common sense solutions to customers ranging from the U.S. Government to smaller end-users—not to forget locksmiths world-wide, with answers derived only from someone well placed within the security industry.

#### A Thought

It should be evident by the work of John Ulaszek that his innovative genius strikes a chord within those of us who truly understand the meaning of the word *creative*. His many tools, products and "creations" (and there are many, many more to come!) are only a small sampling of the way in which a man can see a need, think it through from beginning to end, and manufacture what is beneficial for all. He is truly an innovator who is breaking paradigms. And don't ever forget that Edison was thought, at one time, to be a fool. Einstein was categorized as "retarded" when he was young. Thus, do not underestimate John Ulaszek. He is a force to be reckoned with! But, only the distance of time will tell the true story...and at this point, time is on his side.

## How is Ultra Security Connected to BEST?

This is a good question, asked by many. Ultra Security and BEST have an unusual relationship, to say the least. They work for each other, but are separate from each other. They're like a married couple in many ways, but separated in other ways. What's the real answer?

### **Ultra Security and BEST ACCESS SYSTEMS ?**

Over the past 15 years, **Ultra Security** has developed a *Multi-Tiered Relationship* with **BEST ACCESS SYSTEMS**. Even though many have mistakenly thought of them as a "satellite office", **Ultra Security** might today be considered an anomaly. This may be explained by means of their various relationships with **BEST**, some of which include:

- Functioning in California as a Distributor of **BEST** products to the U. S. Military
- OEM: *Xperinetix*
- Manufacturing & Selling Products to **BEST**
- Working with **BEST** on Special Research & Development Projects
- Established as a New Construction Contract Dealer
- Distributor of After Market Products

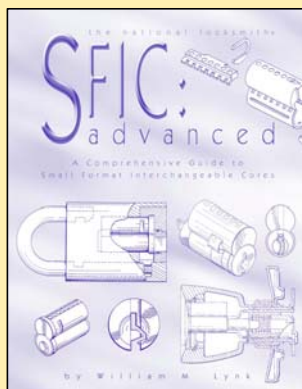
As **Ultra Security** expanded into other markets, **BEST** agreed to manufacture the **ULTRA Core** for them. Conversely, **Ultra Security** now manufactures and supplies the Key Retainer Device to **BEST**, which was originally manufactured, but discontinued by **BEST**. Now....together.....as a team, they are working on fresh and innovative ways to combine interchangeable cores, as well as complete systems that that may someday be embraced by the entire world in the near future. As awesome as this may seem, this is just the process through which **BEST** and **Ultra Security** are working in cooperation to produce quality tools, methods and products for everyone in the Security Industry.

## IC Reference Books



**“Interchangeable Cores: Small Format”**, ©2000 by William M. Lynk/TNL, has now become a standard in the international market! This book covers everything you need to know about how to service, sell, install and troubleshoot small format I-Cores. Learn the basics in an easy-to-understand (and sometimes humorous) format that is excellent for beginning locksmiths or those new to the SFIC world. Forget about the problems with math and all the specifics, William Lynk, an IC Specialist for 30 years, explains it all in a way that is fun to learn. Chapters include: Terminology, IC Advantages, Blanks, Tools, Removing Cores from Stubborn Shells, Decoding Cores, Pinning, Record Keeping, Installing & Planning a System, Master Keying, Billing/Pricing and Tips for Success. Each chapter has a quiz, including a Final Exam to help reinforce your understanding. There are over 140 pages of priceless information designed to make I-Core work quick, easy and profitable! This book is a valuable addition to anyone's library,

**“Removable Cores: Large Format”** ©2003 by William M. Lynk/TNL, is packed with exploded views, photos, diagrams, pictures, charts, line art, drawings and various graphics, that will aid the reader in understanding and in solving individual RC problems on your job site! Written by an IC Specialist who has been working with cores since 1974, why worry about Sargent, Kaba, Schlage, CorbinRusswin, Medeco or Yale again??? Get this book and have an up-to-date resource at your fingertips. Each chapter is dedicated to a single manufacturer (with Chapter Quizzes) and was created under the auspices of the six major core manufacturers, namely: **Yale, CorbinRusswin, Medeco, Schlage, Kaba and Sargent**. This was a cooperative milestone, which became a “first” for the competitive lock manufacturers, and coordinated by Bill Lynk! The book was written and then each chapter was submitted to the respective manufacturer for accuracy and comments. But.....if you are only interested in ONE particular manufacturer for your current job...excellent!! This book, all 240 pages with Final Exam, is organized [with a superb index] just for you! You can look up what you need to know and then move on.....allowing for accurate and fast information delivery. This book is a 'must have' and is essential in understanding and properly servicing the popular large format interchangeable core.



**“SFIC: Advanced”** ©2005 by William M. Lynk/TNL is *THE* book for anyone who has worked on or now works with SFICs on a regular basis. A true break-through in the SFIC arena, this comprehensive 309-page collection contains never-before printed information on keyway profiles, graphic pin segments for all systems, a new IC pin chart, master keyed control key lists, and much, much more! This revolutionary book includes 249 crisp digital photos, 58 easy-to-read charts, 112 superb diagrams (with exploded views) and even nine exams to test your knowledge! Review SFIC original patent diagrams along with historical information, previously only shared with a select few. In addition, this is the most complete, up-to-date assembly of SFIC tools anywhere, coupled with detailed information on creating, decoding and servicing existing and NEW types of SFIC systems. This virtual “*Encyclopedia of SFIC*” was written by one who teaches IC for ALOA, locksmith associations and security conferences nationally. Absolutely everything you need to know is here.....so, don't miss out on an easy way to increase your sales with the help of this SFIC gem!

### Books Available through:

**National Publishing Company/The National Locksmith:** (630) 837-2044 in Chicago, Illinois

**The Associated Locksmiths of America (ALOA):** (214) 827-1701 in Dallas, Texas