TMK Plus™

Version 4
For Windows 2000 & XP

Framon Manufacturing Company, Inc.
909 Washington Ave.
Alpena, MI 49707
Phone: 989-354-5623
Fax: 989-354-4238
Web: www.framon.com
E-mail: tmkplus@framon.com

Please read! Important changes from Version 3

Whether you are upgrading from version 3 to version 4 or have purchased the program new, please be aware of the following items.

- The program's database has been restructured to use Microsoft SQL Server. This is a new component as compared to the old system. It will assure that support for the database engine will be available for years to come. Our previous database component was unusable with most Windows 2000 & XP systems. This will not be a problem for future upgrades.
- Systems saved from version 3 should import into the new program, although any system that does not match up to the database exactly will be kicked out. If you have made custom charts these systems will not import into the new program.
- The manufacturers database cannot be edited at this time. In previous versions, the user was allowed to edit the database to their own specifications. This caused several problems, in that when the program was installed on a new computer, the database would crash when it encountered a system that was not identical in all respects to the original database. Changes to the database at this time will only be done by Framon Manufacturing. As new manufacturer's data is added, it will be available for download on our website.
- You are authorized to use the program on any computer in your shop or any service vehicle used out of that location. Multiple shops are required to purchase another program. If we suspect that the program is being used by more than one location, we will discontinue support and further updates until the additional programs have been purchased.
- Version 4 is only compatible with Windows 2000 and Windows XP. Support will not be offered for other operating systems.
- There is a utility in version 4 which will import old systems from version 2 & 3. There is no way to transfer data from version 4 to an older system.
- If you are using the Framon FRA-2001 code machine, the program now has the ability to communicate directly with the machine. There is no need for the FRA-2001 key cutting system. If you need to cut keys by bitting outside of the masterkey program, you can upgrade your key cutting software to Genericode Me or continue to use the older FRA-2001 Key Cutting System. As of January 1, 2006, the FRA-2001 Key Cutting System will no longer be supported.
- Printouts have changed slightly, and a new printout has been added to the program.

If you have any questions regarding the new update please feel free to contact us. Contact information is on the front page of this manual.

Program Installation

Note: Validation codes for the program are no longer required.

Installing The Program From CD

To install TMK Plus™ from CD, perform the following steps:
1. Insert the TMK Plus™ CD-ROM into your drive.
2. Click on the Start button, and click on **Run…**
3. In the dialog box, type D:Setup.exe (where D: is the letter of your CD drive), and click on OK.
4. Click through the pages with by clicking "Next". The install wizard will install the program and Microsoft SQL Server. If you have old data from version 3 on this computer, select "Upgrade From Version 3.5" (regardless of what version you have) when prompted. Otherwise, click Full Installation.
5. After installation, you will need to restart the computer. Microsoft SQL Server will be running in your system tray after restart.
6. If you have problems running the program after installation, be sure you have the latest Windows 2000 or XP service packs installed before calling for tech support.

USING THE PROGRAM

Pre-set Passwords / Logging On
TMK Plus™ uses passwords for Log-On procedures and configuring the program. To Log-on to the program, simply click on Log-on, be sure that the Counter setting is shown, and click OK. No password is needed to log-on. If you prefer to use the keyboard, simply press the Enter button three times and you will be logged on.

To change the Company Settings or Modify users section of TMK Plus™, the master password is FRAMON (must be in all capital letters). Passwords can be changed in the Maintenance section of the program.

Customers Screen

Options available at this screen:
- Print KBA
- Toggle List/Form View
- Search For / Locate
- Scroll Through Records
- Add / Delete Systems
- Edit Systems
- Enter New Systems

The **Customers** screen is where you will enter information on a new system. You can also look up old systems, delete, and edit system information for those already in place. Please note that some buttons may be unavailable (grayed out) if their use is not applicable from where you are working. For instance, if you do not have any systems entered, the delete button would not be accessible.

Using The Navigation Bar

The navigation bar allows you to scroll through systems, delete systems, generate new systems, and edit data. The keys, from left to right, are: first record, previous record, next record, last record, add, delete, post, cancel. **To enter a new system, click on the plus sign**. This will place the cursor in the Customer Name box. Enter information for the system with the keyboard.

NOTE: Once you click on the plus sign to add a new system, you will have to go through the Generate System and Select Level screen before the program will allow you to exit. If you do not wish to add a new system, click the minus button to delete the system you just created.

To scroll through previously saved systems, use the four arrow buttons on the left. First record will take you to the first system entered, and last record will take you to the most recent system entered. Previous & next will scroll for the systems in between.

If you wish to delete a system, click on the minus (-) button. You will be prompted to verify that you wish to delete it. Once deleted, there is no way to retrieve the record.

Once you enter all of the customer information, you may edit it later. At the customer screen, you can retype any information you wish to change or update. While entering new information, click on the post button (box with the check mark) to save the changes, and cancel to erase the changes.

Using The Print, List/Form, and Locate Icons

To the left of the navigation bar are the Print, List/Form, and Locate icons. Once a system has been generated (KBA done & level selected), you may print out the KBA page & system information. The program will prompt you to verify you wish to do this, as it is sensitive information.

The List/Form icon switches the view from a list format, showing a horizontal listing of each system, to a form view, showing only one system at a time. You can toggle the view by clicking on the icon.

Click on the Locate icon if you wish to search saved systems by information previously entered, such as address or phone number. A dialog box will appear when you click on the locate icon. At the bottom of the dialog box, select which field you want to program to search for the information in (customer name, address, phone, etc.). Next, select what type of match you would like; exact, partial match at beginning of the field, or partial match anywhere. Next, type in the data you would like to program to find, and click First. If the program finds a match, it will show the record. If this is not the record you are looking for, click on the locate icon again, and click Next. The next match will be displayed. You can continue clicking the locate icon / next button until the correct record is shown.

Using The Search Box
To quickly locate a system, use the **Search**: box. Type in the first few letters of the customer name you are looking for. TMK Plus™ will locate a system that matches the letters you type in. You do not need to push the enter key to have the program search for your entered text.

The Comments Field
At the bottom of the screen is the comments section. You can type in as much additional information as you wish to detail the system.

Generate System Screen

Options available at this screen:

- Select Manufacturer
- Generate KBA/SOP
- Edit KBA/SOP
- Edit MACS/Steps
- Check System for possible problem areas
- Regenerate a random system

The **Generate System** screen is where you will pick your lock manufacturer, generate the system, and make any changes if necessary. TMK Plus™ automatically checks your system for possible problem areas, which will be highlighted in yellow or red, based on the severity of the problem.

Generating A System

To generate a system with TMK Plus™, simply begin typing in the name of the lock manufacturer you wish to make a system for. For example, to generate a Schlage 5-pin system, type in sch. A listing of all lock manufacturers in the database will appear, with information regarding the number of pins & series. Once selected, TMK Plus™ will automatically generate a system for you.

Editing The System

If you don't like the system the program has generated, you can edit any part of it. To edit information, click the mouse in the box you wish to change, and enter a different value. You can do this for the masterkey, KBA (key bitting array), and SOP (sequence of progression). Once you finish editing the information, click on the Check button at the top of the screen to have the program review & lock in your changes. You can also click on the Regenerate button to recalculate an entire new system.

Indicated Errors

TMK Plus™ reviews your system for possible errors. There are two types of errors you will encounter in using the program. The first, Undesirable, is illustrated in the KBA by a yellow box. Systems can be generated with an undesirable error, but you will be reminded when switching screens that the error is there. The second type of error, Forbidden, is illustrated in the KBA by a red box. Systems cannot be generated with a forbidden error.

Error checking in TMK Plus™ can be turned off in the Maintenance section. If you decide to design a system with the checks turned off, a message will be printed on hardcopies of the system that reads "KBA Checks Bypassed". With the KBA checks turned off, you can enter any type of masterkey settings you wish. The one exception is the sequence of progression – a minimum of three chambers must be rotated in any system to generate a page.

Changing the MACS and Steps

At the Generate System screen, you can change the MACS (Maximum Adjacent Cut Specification) in the system. You may reduce the MACS by one cut, but cannot increase it above the default setting (you can go from a 7 MACS to a 6 but not from 7 to 8). You can also change from a single step system to a two-step system, or from a two-step to a one step. To change either the MACS or Steps, click the mouse in the appropriate box and change the value. Click on the Check button to enter the changes.

Changing the KBA & SOP

TMK Plus™ allows you to eliminate cuts from a system. If you do not want deep cuts in the system (for a Schlage system, a 9 would be a deep cut), simply click the mouse in the box with the 9 cut, and change the number to an "x". This cut will be eliminated from the system. If you do not want to rotate a particular chamber, click the mouse in the appropriate box in the SOP line, and replace the number with an "x". Remember, with SOP (sequence of progression), you must have ascending numbers. For example, your SOP may be 3-x-4-2-1, but 3-x-5-2-1 will not

work. Also remember, you must rotate at least three numbers for a page to be generated.

Select Level Screen
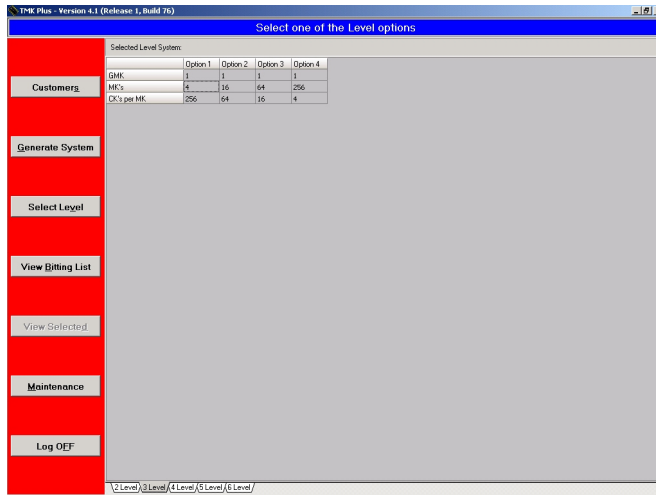
Options available at this screen:
- Select Level
- Select Option

The **Select Level** screen is where you will select the level & option of your system.

The number of levels available will vary based on the lock manufacturer you have chosen.

Each level will have different options available. Option selection is simply the way you are utilizing the different sub-masters available in the system.

Selecting a Level

To select a level for the system, use your mouse to click the appropriate tab at the bottom of the screen.

Selecting an Option

In the example shown above, there are four possible options for the three-level system shown. In option 1, the grand master, four four-page sub-masters, and 256 change keys below each sub-master ould be part of the system. In option 2, the grand master, single page sub-masters, and all change keys would be included in the system. In option 3, the grand master, vertical group sub-masters, and change keys would be included in the system. In option 4, the grand master, block sub-masters, and change keys would be included. To select the option, double-click the mouse in the GMK row below the option number. Once selected, you will see the option parameters shown next to the title "Selected Level System".

NOTE: Selecting the level changes the way the keys are labeled in the program. Regardless of the level & option you pick, all of the change & sub-master keys will be available for your current system.

View Bitting List Screen
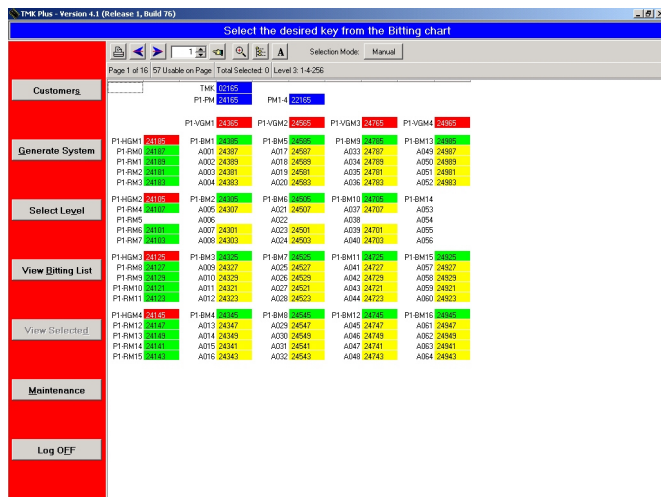
Options available at this screen:

- Scroll through pages of the system
- Go to page #
- Zoom page
- Tree View
- Change font (screen only)
- Print page view
- Selection Mode
- Select Keys

Once the system is designed, much of your work will be done in the **View Bitting List** Screen. You can scroll through pages of the system, select keys for your system, look at a tree view, and print reports.

Using The Scroll Buttons

To the upper left of the screen, you will see the scroll buttons. Click on the left-pointing arrow to see the previous page (if you are on page 1, page 16 will be displayed), and the right pointing arrow to see the next page.

Using the Go To Page # Button

Instead of paging through the system page by page, you can use the Go To Page # button. Simply click the mouse in the white box, enter a number from the keyboard, and click on the icon next to the box. You will be taken to the page entered.

Using the Zoom Button

Click on the zoom button to show the bitting list without the screen buttons along the left side of the screen.

Using the Tree View Button

The Tree View button can only be used once keys have been selected for the system (see selecting keys, below). Once keys are selected for the system, the tree view gives you a visible breakdown of which keys operate under which masters & sub-masters. After you click on the tree view, you will have two choices: list all keys or list only master / sub-master keys. Select the appropriate radio button and click OK to view the tree view. At the tree view, you can double click on any key shown to see those that operate below it.

Tree view also allows you to mass-label branches of the system. To label a branch of the system with your own custom label, select the appropriate master key and click on the Label button. You will be prompted to enter a label for the branch. Enter the label and press Enter or click OK. The master / sub-master and all change keys below it will reflect your new label. As an example, if you label a page master RED, all change keys below it will also be labeled RED, plus an ascending number, RED1, RED2, RED3, etc. You must click on Save to save the changes.

Using the Font Button

You can change the screen font by clicking on the font icon. This change is for the screen only, and does not affect the printout.

Printing The Bitting List

Click on the Printer icon to print the page view of the bitting list. You will be asked if you wish to print horizontal masters. It is suggested that you answer "No" to this prompt for best printout quality. The next prompt will enable you to preview your page before you print, print to a file, or go ahead and print the report. You may print a single page or a range of pages.

Viewing & Selecting Keys

TMK Plus™ uses colors to make key identification quick & easy. Top master keys, 16 page, 4 page, and single page masters are shown in dark blue. Vertical & horizontal group masters are shown in red, block & row masters are shown in green, and change keys are shown in yellow. Black keys have MACS violations and cannot be chosen and should not be used in the system. If you see only blank areas where a key is expected, the "Show Unusable Keys" box is unchecked in the Maintenance section.

To select keys for your system, use the mouse in conjunction with the Manual/Automatic selection mode button at the top of the screen. By default, the selection mode is in Manual mode. In manual mode, double clicking on a key bitting will turn only that key light blue to indicate is has been selected. In automatic mode, double clicking on any master key will bring up a prompt asking which sub-masters to include as well. Regardless of the sub-masters that you pick, all change keys that operate below that key will be selected as well. Double-clicking on a block or row master in automatic mode will also select the change keys for that block or row master.

Once keys have been selected for the system, you can go to the "View Selected" screen to review those keys that you have chosen.

View Selected Screen

Options available at this screen:
- Locate System
- Scroll Systems
- Locate Key
- Print Reports
- Export File
- Pin Count
- Tree View
- Scroll Keys
- Copy
- Paste
- Key Details
- Key Data Input

The **View Selected** screen allows you to enter custom information regarding each key chosen for the system, and has many other options available.

Using Locate System & Scroll System

Locate, Search & Scroll can be used to find existing systems that you wish to work on. In the Customer Search box, enter the first few letters of the customer name you wish to find. TMK Plus™ will perform a search and return the closest match. Clicking on the Locate button next to the box will bring up a listing of systems already saved to the disk. You can also use the scroll buttons to page through existing systems. See page 2, *Using The Navigation Bar*, for more information on scrolling with the arrow keys.

Locating a Key in the Selected Keys List

There are two locate buttons on the View Selected screen. The Locate icon near the top of the screen is explained above. The lower Locate icon allows you to search the bitting list for a particular value; you can search by cuts, label, bottom pins, top pins, control pins, and a variety of other criteria to locate the exact value you are looking for. For more information on using the locate button, see page three, *Using The Print, List/Form, and Locate Icons*.

Printing Reports

TMK Plus™ allows you to print three types of reports from the View Selected screen. You can print out a pinning

list, a customer key list, or a selected keys list. The pinning list will print out the key label (you have your choice of using the default labels or user labels), cuts, and all pinning data in a report. The selected keys printout will show all other information regarding the selected keys, such as user label, and the three data fields. Both printouts are available as a preview, to view before printing. The customer key list will print out the key label, location, hardware, comments & # used, but will not print out the bitting of the keys.

Using the Pin Count Icon

The pin count button is a helpful tool that will count the pins you will need for the selected keys to be pinned to the top master key and all sub-masters below it. Please remember, if you have written a small system and plan on using a page master as the top master key, the pin count will not be correct!

Using the Tree View

The tree view in the View Selected screen works the same way as the tree view in the View Bitting List screen. Refer to page five for more information on tree view.

Navigating Through Selected Keys

You can use the navigation buttons to move from one key to another in the View Selected screen. By default, you will see a black arrow next to the first key in the list. Use the arrow buttons to move to the next, previous, first, or last key in the list. You can also remove keys from the list with the minus (-) button. If you remove a key from the list, it will appear as unselected in the View Bitting List page.

Using Copy & Paste

If you are labeling a series of keys with the same data, you can use the Copy and Paste buttons to speed up your work. First, type the information into one of the columns (for instance, type B160N in hardware). Press enter to lock in the data. Next, click the mouse in the box with the data you wish to copy. Click on the Copy icon. Next, click the mouse in the next box down in the column. Click on the Paste icon and the copied data will be placed in the next cell.

Entering Data

TMK Plus™ includes three customizable fields for data entry to help describe each key. By default, the column titles are User Label, Location, and Hardware. These column labels can be changed in the Maintenance screen. You can enter data by clicking the mouse in any cell and typing in your information. Please note, User Label has a maximum of 10 characters, Location has a maximum of 20, and Hardware has a maximum of 40. TMK Plus™ also has a Comments field (you will have to scroll to the right to see Comments), which has a maximum of 255 characters.

Key Details

By double-clicking on the label of any key in the View Selected screen, you can bring up the Key Details dialog box. Key Details allows you to enter information on a key-by-key basis. Key Details will show the Label and cuts for the key, as well as a pinning chart. In Key Details, you can enter the user label, location, hardware, and comments information. TMK Plus™ will also allow you to enter the number of keys required and the number cut so far. If you are using the FRA-2001 Code Machine, simply enter the number of keys needed; as they are cut on the machine, TMK Plus™ will track the number of keys that have been cut so far. Once you have entered information for the first key, use the scroll bar to move to the next key in the list.

Maintenance Screen
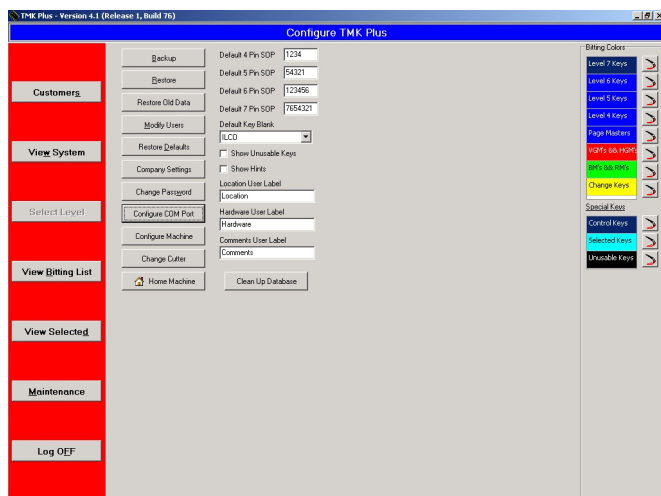
Options available at this screen:
- Change default SOP
- Backup systems
- Restore systems
- Restore old data
- Restore defaults
- Modify user list
- Change company settings
- Change password
- Select default key blank
- Show/hide unusable keys
- Show/hide hints
- Change column labels
- Change key colors
- Clean database
- Machine settings

The maintenance screen allows you to change default settings & backup & restore systems.

Changing the Default SOP (Sequence of progression)

If you wish to change the default sequence of progression (SOP) for your systems, simply click the mouse in the box you wish to edit. Use the backspace key to erase the old values and enter your own preferred settings. Be sure to click on the "Save Settings" button after you make your changes. Any system you generate will use the new settings from this point forward. The sequence is different for 4, 5, 6, and 7 pin systems. Please remember that you must use ascending numbers (1-2-4-3 will work, but 1-2-5-3 will cause an error)!

Using Backup & Restore
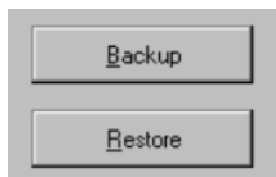
You can use Backup and Restore buttons to save a copy of your system to your hard drive or a floppy disk. As with any other important computer data, we recommend a nightly backup of your files in case of a computer problem. To back up files, click on the Backup button. You will be prompted as to whether you want to backup the entire database (all customers) or Customers (to select some but not all systems). If you select entire database, simply pick the destination for your backup and click OK. The backup file will be named **TMK4Backup_11012004.TMKDB**. The date following the underscore (11012004 in this case) will change based on when you back up the file.

If you only want to backup a part of the database, click on "Customers". You will be shown a list of all of the current systems in place in memory. You can click on **Select All** to save all of the systems, or click on a single system to make a backup of that system. If you wish to save more than one system but not the entire database, click on the first system you wish to backup. Hold down the control (Ctrl) button and click on the other systems you wish to backup. As you select systems, they will be highlighted in blue. Once you are finished selecting systems to backup, select the location that you want to back the data up to. Each customer will generate a record with their customer name followed by ".TMK".

To restore systems from an "Entire Database" backup, click on the Restore button. Select "Entire Database" from the prompt, and locate the backup file. The program will notify you that old data has to be deleted before it can import the new data. **If you click OK, all systems in the database will be deleted and only those in the backup file will be brought into the program**. Highlight the drive & folder that your information is in, and click OK.

If you only want to restore certain customers, the data must be from customer data (you cannot restore one customer from a backup of the entire database). To restore a customer, click Restore and select "Customers". Locate the

backup file and click OK. You can only restore one customer record at a time.

Restoring Old Data
TMK Plus will import data from version 3. To import old data, you must have the three data files located in the same folder (older data consists of three files, MK_KEYS.db, Customer.db, and Customer.mb). Click "Restore Old Data". The program will ask you to locate the data files. Select the appropriate directory and click OK. The program will import all files that match the current database. If the files were generated from a modified database, they will be kicked out. Be sure to compare the imported data with the original version for accuracy and to make sure all files have been imported.

Modifying User Settings

You can modify user settings and allow different users access to different sections of the program by clicking on the Modify Users button. You will be prompted for the master password **(default master password is FRAMON, all capital letters)**. Once the proper password is entered, you can add or edit users and change the areas of the program they have access to. Along the top of the User List window is a navigation bar, which operates in the same manner as the others contained in this program. Use the arrow buttons to scroll through the pre-set users, or click on the plus button to add a new user. You can also delete a user by clicking on the minus button.

If you wish to adjust the settings for a user, click on the Edit button, and use the mouse to turn on or off different portions of the program. Clicking in the box next to a title will place a check mark in the box – when saved, the user will have access to this part of the program. If you do not wish to let the user have access to a part of the program, make sure the box has no check mark in it, and click on the Save button. When finished, click on the Close button to return to the program.

The check box for "May Bypass KBA Checks" should normally be left unchecked. This will assure that the program looks over your new systems to make sure there are no problems with the KBA or top master key. With the box checked, you are allowed to do almost anything with the system which could cause problems to be built into the system.

Company Settings
The company settings button allows you to enter information about your company. You can also load in a company logo to show on hardcopies of your system. Information will appear on printouts as well.

Changing Passwords
Click on the Change Password button to change the password for the Modify Users section of the program. There is no utility available if you forget your password!

11

Default Key Blank Menu
You can change the key blank manufacturer by using the drop-down list. All of the major key blank manufacturers are available.

Show Unusable Keys & Show Hints
Check the Show Unusable Keys box if you wish to view keys that violate the MACS for your system. If the box is left unchecked, key labels will appear but the bittings will be omitted.

Show Hints is a help feature you may find useful when first using the program. When the mouse is hovered above a button for a few seconds, a yellow "hints" window will describe what that button does. Uncheck the box to leave the hints off.

Changing the Column Labels
In the View Selected screen, three columns are available for adding details to the selected keys. By default, the column labels and sizes are: Location (10 characters), Hardware (20 characters), and Comments (255 characters). You can rename each column label for your own purposes. To do this, simply click the mouse in the box you wish to change and type in your own label. You can rename any or all of the columns to your own liking. The "User Label" column cannot be changed.

Changing the Default Colors for Keys
TMK Plus™ allows you to change the color that different level keys will be shown in. To change a key color, click on the paintbrush icon next to the key level you wish to change. This will bring up a dialog box called "Change Colors". To change the color, click on the "# Field" button and choose your preferred color from those shown. The Font button allows you to choose a color for the text. Click on the OK button when you have found your desired color. Click on the OK button to save your changes, or click on Cancel to go back to the default color.

Other Notes Regarding TMK Plus™ …

TMK Plus™ is a comprehensive program to assist you in writing masterkey charts. Please realize that the program does not take the place of an understanding of masterkeying principles.

Periodically, we will update this program to add new features.

If you need to contact us regarding a problem you are having with our software, feel free to contact us at (989) 354-5623. Our hours are 8:00 am to 4:30 pm Eastern time, Monday through Friday. When calling, please have the make & model of your computer, and the Windows version you are using.

Our sincere thanks for purchasing TMK Plus™! We hope you enjoy using it as much as we enjoyed designing it!