

Operating Manual

Libertas

Automatic Chime Control System

VERSION 3.1

Doc 11604



Important Safety Instructions

WARNING

When using this electric product, basic precautions should always be followed, including the following:

- I. Read all instructions before use.
- II. Do not use this instrument near water - for example, near a bathtub, washbowl, sink, wet basement, or near a swimming pool, or the like.
- III. This instrument, either alone or in combination with a PA amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- IV. This instrument should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- V. Care should be taken so that objects do not fall and liquids do not spill into the enclosure through openings.
- VI. The instrument should be serviced by qualified service personnel when:
 - A. The power supply cord has been damaged; or
 - B. Objects have fallen, or liquid has been spilled onto the instrument; or
 - C. The instrument has been exposed to rain; or
 - D. The instrument does not appear to be operating normally or exhibits a marked change in performance; or
 - E. The product has been dropped, or the enclosure damaged.
- VII. Do not attempt to service this instrument beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

Grounding

This instrument must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This instrument is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local rules and ordinances.

DANGER

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the instrument is properly grounded. Do not modify the plug provided with the instrument - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Lightning

The Chime Master[®] System is provided with surge protection circuits. Lightning strikes near, or directly to nearby power lines can cause an excessive surge of voltage that can damage the unit.

Lightning damage is uncommon, but it can occur to any electronic device. We suggest that you unplug all electronic products during storms, especially if you are concerned about it or if you live in an area with frequent and/or severe electrical storms. Since there is an internal battery backup, all system information and files will be restored the next time the system is powered up.

As with any valuable equipment purchase, you should review your insurance policy to be sure that your Chime Master System is covered for fire, theft, vandalism or damage due to electrical storms.

Radio Interference

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at owner expense.

The above instructions apply only to units that will be operated in the United States.

About this Manual

Congratulations on the purchase of a state of the art Chime Master Systems Millennium Bell Controller. In this manual you will find important information regarding the installation and use of one of the most advanced systems available. Careful attention has been given to ensure that the information contained in this manual is correct. However, Chime Master Systems assumes no liability for errors or omissions. All specifications and features are for reference only and are subject to change without notice. For exact specifications, contact:

Chime Master Systems
P. O. Box 936
Lancaster, OH 43130

International toll free 1-800-432-3977

Shipping address:

Chime Master Systems
6312 Goss Rd
Sugar Grove OH 43155

You may also contact Chime Master Systems through our web site:

www.ChimeMaster.com

The features described herein are applicable to firmware editions 2208 and 2210 revision 0610 and newer.

Selection Codes

Random Music

Press **[cursor▲]** then number of the group when selection field is blinking.

Grp1	Sacred hymns mixed with non-sacred music, follows the almanac seasons
Grp2	Sacred hymns mixed with non-sacred music, always non-seasonal
Grp3	Sacred hymns only, follows the almanac seasons
Grp4	Sacred hymns only, always non-seasonal
Grp5	Non-sacred music only, will play patriotic and Christmas in season
Grp6	Non-sacred music only, always non-seasonal
Grp7	Patriotic music independent of season
Grp8	Marian hymns independent of season
Grp9	User Defined Playlist - requires optional Millennium Suite to set up

Random Selection Blocks

Random selections may also be programmed as blocks of multiple selections. Enter them as 70xy where x signifies the ending time and y signifies the random group to use.

70xy Random Music Blocks

x (Length of Block)	y (Music Group)
0 Plays four selections	0 Sacred hymns alternated with non-sacred music, always non-seasonal
1 Plays until 5 min before next quarter hour (up to 10 minutes)	1 Sacred hymns mixed with non-sacred music, follows the almanac seasons
2 Plays until end of current quarter hour (up to 15 minutes)	2 Sacred hymns mixed with non-sacred music, always non-seasonal
3 Plays through current and next quarter hour (up to 30 minutes)	3 Sacred hymns only, follows the almanac seasons
	4 Sacred hymns only, always non-seasonal
	5 Non-sacred music only, will play patriotic and Christmas in season
	6 Non-sacred music only, always non-seasonal
	7 Patriotic music independent of season
	8 Marian hymns independent of season
	9 User playlist (requires Millennium Suite)

Specific Song

Use the onscreen title lookup for music titles available on your system. These selections vary according to the number of bells available. Whenever a four digit number is flashing on the editing display, and you don't remember the number for your favorite selection, press the [NO] button (as in 'No, I don't know what number I want"). Then use the cursor buttons to select Musical Selections and press [ENTER].

Pause

Pauses are used to delay subsequent selections beyond the quarter hour. They are only used when programming or editing the automatic play schedule. Press [cursor▲] [cursor▲] to display Pau_ followed by [1] to [8] which will indicate the number of minutes to delay. Multiple pauses may be used to increase the delay.

Peals and Swinging Bells

Stationary bells can be made to sound as if they were swinging by setting the back-swing time and cycle time for each bell in the *Setup Menu*. When more than one bell swings (or simulated to swing) at once, it is said that the bells are *pealing*. This table lists which of the bell outputs are turned on for various swing and peal selections. All of the functions are for a duration of one minute. For other durations, replace the last two digits with the number of quarter minute intervals you wish the bells to ring.

One Minute Swinging/Pealing Bell Functions					
Selection	Bells	Selection	Bells	Selection	Bells
3104	1 - _____	4104	1,2,5	5104	1,2,3,4
3204	2 - _____	4204	1,3,5	5204	1,2,3,5
3304	3 - _____	4304	2,3,5	5304	1,2,4,5
3404	4 - _____	4404	1,4,5	5404	1,3,4,5
3504	5 - _____	4504	2,4,5	5504	1,3,4,6
3604	6 - _____	4604	3,4,5	5604	3,4,5,6
3704	1,2,3	4704	2,4,6	5704	1,2,3,4,5
3804	1,2,4	4804	3,4,6	5804	2,3,4,5,6
3904	1,3,4	4904	3,5,6	5904	1,2,3,4,5,6
4004	2,3,4	5004	4,5,6		

The second two digits select the length of time to ring in 15 second intervals.

Example Swing/Peal Selections:

3201 = 15 second bell 2 only

4004 = 1 minute peal bells 2,3 and 4

5110 = 2:30 bells 1,2,3,4

3120 = 5 minute bell 1 only

5999 = 2:45 (maximum) all bells 1,2,3,4,5,6

Funeral Toll

The steady striking of a bell is called a toll. Tolling functions are numbered 6100 to 6699. The second digit selects which bell to toll (1 through 6, only one at a time). The last two digits again indicate length of time in 15 second intervals. For example, to ring the second to largest bell for 3 minutes, program **6212**.

Frequently for funerals you may wish to manually play a certain number of tolls. A single toll may be repeated from 1 to 199 times in either the *Play Selections* menu or programmed on a function button. The single strike toll function is numbered similar to the timed functions above, but the last two digits is 00. For example, to ring the large bell for 56 strikes, program **6100 056 time(s)**.

Angelus Prayer Bells

1101 Bell 1 333 4 sec tempo	1102 Bell 3 333 4 sec tempo
1103 Bell 1 333 4.5 sec tempo	1104 Bell 3 333 4.5 sec tempo
1105 Bell 1 333 5 sec tempo	1106 Bell 3 333 5 sec tempo
1107 Bell 1 3339 4 sec tempo	1108 Bell 3 3339 4 sec tempo
1109 Bell 1 3339 4.5 sec tempo	1110 Bell 3 3339 4.5 sec tempo
1111 Bell 1 3339 5 sec tempo	1112 Bell 3 3339 5 sec tempo

The Angelus may be followed by your choice of swinging or tolling bells.

Other Bell Ringing

Changes

0051	Change, Old Oxford Delight Minor (Low Bells)	0026	Trezvon III	Orthodox	
0052	Change, Old Oxford Delight Minor (High Bells)	0027	Trezvon II	Orthodox	
0021	Funeral Chain Peal	Orthodox	0029	Trezvon IV	Orthodox
0024	Trezvon I	Orthodox	0030	Call to Church	Greek
0025	Blagovest	Orthodox			

Function Button Macros

The eight programmable remote/function buttons can hold useful programs that you may want to use in a schedule. F1 through F8 may be scheduled using codes **7901** through **7908**. For instance, you might schedule the default peal to ring at several days or times several days using macro code **7902**. Whenever you wish to change the style of the peals, all you have to do is edit button F2. This saves you from having to reprogram each time slot.

Another reason to use the function macro codes is to take advantage of the counted tolling bell. Tolling bells are available on a function button or in the Play Selections mode, but until now were unavailable in the schedule. If we program function F8 to repeat selection 6100 33 times, placing **7908** anywhere in the program schedule will toll the bell 33 times.

You can also use this feature to combine several selections into one that you might want to use often. An example would be to play an Angelus 3-3-3, followed by your favorite peal. This group of selections can be programmed 3 times a day, seven days a week with one code. Editing the function button changes all of the scheduled macro functions.

It is not possible to enter a function button macro on another function button or in the manual Play Selections mode.

Zone Switching¹ Macros

7920	Manual Outside/Automatic Outside	7925	Manual Inside/Automatic Both
7921	Manual Outside/Automatic Inside	7926	Manual Both/Automatic Outside
7922	Manual Outside/Automatic Both	7927	Manual Both/Automatic Inside
7923	Manual Inside/Automatic Outside	7928	Manual Both/Automatic Both (default)
7924	Manual Inside/Automatic Inside		

Load Weekly Schedule Macros

The optional Millennium Suite scheduler application can store up to ten schedules in the carillon's FLASH memory. Then you can use the annual or one-time event schedules to let the carillon know when to make each schedule active. You may also 'play' the macros manually in the Play Selections mode to activate a schedule at any time. The macro functions used to activate the schedules are **7930** through **7939** (for schedules 0 through 9). Schedules are made active by copying the schedule data from FLASH memory to editable RAM. Changes made to the current schedule will be lost unless they are stored in FLASH memory using the Millennium Suite.

See the Millennium Suite manual for loading instructions and annual/one-time event programming. This programming cannot be accomplished from the system front panel.

¹ On *Veritas* systems (bells augmented with tower speakers) "Inside" indicates the activity of all audio outputs. Inside monitoring is facilitated through tower microphones.

Reference Tables

Operational Menus

Press [ENTER] to bring up the Main Menu. Press the [cursor▲] or [cursor▼] button until the desired menu selection flashes, then press [ENTER] to go into that menu. Pressing a numeric button for the item number will also quickly access each menu item.

Item #	Main Menu Item	Description
0	Tower Performance	Enables the keyboard for performance both inside and outside.
1	Play Selections	Allows pre-recorded selections to be performed manually.
2	View/Edit Schedule	Viewer/Editor for the program schedule. Allows searches for selections programmed to play, and modifications to the automatic schedule.
3	System Setup Menu	Additional sub-menu with options described in the Setup Table below.
4	Recording Librarian	Titles and categorizes user recordings for retrieval and automatic play.
5	Record a Performance	Inside only (if sound option installed) keyboard performance and recording menu.

Item #	Setup Menu Item	Description
0	Program Time Strike	Programs periods of time for time striking style.
1	Set System Clock	Allows adjustments to the clock/calendar.
2	Edit Remote Button	Editor for four programmable remote buttons and functions 5-8.
3	Seasonal Options	Enables or disables Daylight Saving Time adjustment, and allows customization of the seasonal almanac. Also used to disable factory recorded musical arrangements.
4	Keyboard Sensitivity	Allows keyboard dynamic adjustments to be made for optional touch sensitive strikers.
5	Keyboard size/MIDI	Interactive plug and play set-up for MIDI channel and keyboard size and transposition.
6	Swinging Bell Timing	Adjustment for simulated swinging bell timing (for stationary bells).
7	Time Strike Melody	Allows selection of time strike chiming melody.
8	Miscellaneous Options	Options for enabling swinging bell coasting delay (to protect tolling hammers) and toll speed.

SmartAlmanac™ Seasonal Options

Available seasonal options are described in the following table. You may set each option to **Yes** or **No** with the results shown in each column. See page 35 for further instructions.

Seasonal Option	Yes Results	No Results
Daylight Time	System will automatically adjust the clock between Daylight Saving and Standard time.	System will never adjust the clock.
Patriotic	Independence Day (July 4) and Memorial Day (Last Monday of May).	Continues to play non-seasonal selections.
Lent	From Ash Wednesday until Good Friday.	Continues to play non-seasonal selections.
Good Friday	Will not play random selections on Good Friday and Holy Saturday (other bells or specific hymns will continue to ring).	Continues to play Lenten selections on Good Friday and Holy Saturday.
Easter	From Easter Sunday until End of April if Marian also selected. Otherwise plays for one week.	Continues to play non-seasonal selections.
Marian	August 15 and 22, December 8, and the entire month of May. Switches the non-general playlist from Protestant to Catholic.	Continues to play non-seasonal selections
Thanksgiving	Thanksgiving Day and the previous Sunday	Continues to play non-seasonal selections
Advent	First Sunday in Advent until date selected for 'Christmas from.'	Continues to play non-seasonal selections
Christmas from	Christmas cannot be disabled. The date Christmas starts can be selected from 12/1 to 12/24. If Advent is enabled, Christmas music will continue to play until January 5. If Advent is disabled, then Christmas ends on 12/26.	
Use Pre-Recorded Music	Factory pre-recorded music arrangements will play randomly.	Only user recordings will play (if Librarian option used).
Ring Bells in Auto Modes	Automatically scheduled programs will play: Inside/Outside/Both (if option installed). This setting can be modified using the zoning macros.	
Ring Bells in Manual Modes	Remote control, front panel function and Play Selections programs (manual modes) will play: Inside/Outside/Both (if option installed). This setting can be modified using the zoning macros.	

Input Sheet

Weekly Schedule (View/Edit Schedule screen)

Date Programmed _____

Circle all that apply	Time	Sel 1	Sel 2	Sel 3	Sel 4	TS	Remark
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							

Time Strike (Set-Up - Program Time Strike)

FROM		TO		Time Strike Mode
Day	Time	Day	Time	

Weekly Schedule (View/Edit Schedule screen)

Date Programmed _____

Circle all that apply	Time	Sel 1	Sel 2	Sel 3	Sel 4	TS	Remark
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							
SU - MO - TU - WE - TH - FR - SA							

Time Strike (Set-Up - Program Time Strike)

FROM		TO		Time Strike Mode
Day	Time	Day	Time	

Table of Contents

Operating Manual	1
Important Safety Instructions	2
WARNING	2
Grounding	2
DANGER	2
Lightning	3
Radio Interference	3
About this Manual.....	4
Selection Codes	5
Random Music	5
Random Selection Blocks	5
Specific Song	6
Pause.....	6
Peals and Swinging Bells	6
Funeral Toll.....	7
Angelus Prayer Bells	7
Other Bell Ringing.....	7
Function Button Macros	7
Zone Switching Macros	8
Load Weekly Schedule Macros	8
Reference Tables	9
Operational Menus.....	9
SmartAlmanac™ Seasonal Options	10
Input Sheet.....	11
Table of Contents	12
Introduction.....	17
Maintenance	17
Quick Reference Guide	19
Trying Out the System for the First Time	19
Entering Selections	19
To Play Specific Selections	19
To Delete or Change Selections.....	19
Let the SmartAlmanac™ Choose a Random Selection	19
To Play a Random Block of Selections	19
To Program a Pause (Automatic Schedule Only).....	20
Macro Codes	20
Access Online Music Titles	20
Play Selection(s) Using the Manual Mode.....	21
Set the Automatic Play Schedule	23
Review the Automatic Play Schedule	24
Make Changes to the Automatic Play Schedule.....	25
Turn on the Keyboard Using the Remote Control.....	26
Tower Performance (inside and outside)	26

Inside Only Performance.....	26
Record a Keyboard Performance with the Front Panel.....	27
Add a Recording to the Library with Title and Category.....	28
Set the Time Clock.....	29
Set Clock Chiming (Globally).....	30
Reprogram the Remote Control Function Buttons.....	31
Connections and Setup.....	33
Tower Connections.....	33
Keyboard Connections.....	33
Remote Control Connections.....	33
Inside Monitoring Systems.....	33
Optional Organ Chamber Speaker Connections.....	33
Sanctuary PA System Connections.....	33
AC Power.....	34
Security Options.....	34
Setting the Time Clock.....	34
Tower Clocks.....	35
Daylight Time.....	35
SmartAlmanac™ Seasonal Setup.....	35
Disabling Random Seasons.....	36
Selecting Factory Pre-recorded Music Arrangements.....	36
Inside/Outside Zone Auto-Mute™.....	37
Time Strike Tune Setup.....	37
Swinging Bell Timing.....	38
Overview of Important Features.....	39
Front Panel.....	39
Push Buttons.....	39
Inside Monitor Speaker Volume Level.....	40
Status Indicators.....	40
Display.....	40
Standby Mode.....	41
SmartAlmanac™ Current Season.....	41
Automatic Reset.....	41
Pushbutton Manual Operation.....	42
Function Buttons.....	42
Remote Control.....	42
Operational Tips.....	42
Selecting Menus.....	43
Other Operational Features.....	44
While Selection is Playing.....	44
On Screen Title Lookup.....	44
Suspending Automatic Operation.....	44
Scheduling Automatic Performances.....	45
Navigating the View/Edit Schedule Screen.....	45
Viewing the Current Schedule.....	45
Changing the Schedule.....	46

Onscreen Titles.....	46
Selection Carry Forward.....	47
Clock Striking (for a Specific Time Slot).....	47
Time Strike Scheduling	49
Schedule Clock Striking.....	50
Verify Global Settings.....	51
Selecting Chime Melody.....	51
Play Selections (Manually)	53
Function Buttons.....	53
Play Selections Menu.....	53
To Change Selections.....	54
To Enter More Than One Selection.....	54
To Repeat a Single Selection.....	54
Programmable Toll.....	54
STOP or NONSTOP.....	54
Reprogramming Remote/Function Buttons.....	54
Editing the Function's Selection(s).....	55
Editing the Function's Label.....	55
WAIT or NOW!.....	55
Saving the Changes.....	55
Restoring the Factory Defaults.....	55
Playing the Carillon Keyboard	57
Tower Performance.....	57
Inside Only (Record Menu).....	57
Recording from the Keyboard	59
Entering the <i>Record a Performance</i> Menu.....	59
Practice Mode.....	59
Recording a Selection.....	59
Playback the Recording.....	60
Save Selection.....	60
Adding Recordings to the Library	61
Librarian Overview.....	61
Activating the Librarian.....	61
Processing New Recordings.....	62
Play the Selection.....	62
Categorize for Random Play.....	62
Title the Selection.....	62
Saving Your Changes.....	63
Editing Previously Processed Selections.....	63
Removing Selections from the Random Play Lists.....	63
Deleting User Recordings.....	64
Troubleshooting Guide	65
Error in Program Schedule Detected.....	65
Blank Screen.....	65
Time Clock Errors.....	66
Returning the System for Service or Upgrades.....	66

Transportation Preparation Procedure.....	66
Use Only Original Chime Master Systems Packaging.....	66
Packaging Your Unit.....	67
After Your Carillon has Been Serviced.....	67
Before Turning On Power.....	67
Millennium Automatic Chime Warranty	68
Index.....	69

Introduction

The Chime Master[®] Millennium Automatic Chime is designed to be the master controller of a musical chime (at least one octave of bells with optional semitones) or carillon (two or more octaves of chromatic bells). We have created a custom musical bell library the bells available in your tower.

This controller provides unparalleled flexibility when the system is used in churches, cemeteries, civic buildings, and universities. While these are the most common installations, the controller will provide superior performance in virtually any bell ringing application.

The Millennium Automatic Chime Controller may be connected to a keyboard (or MIDI compatible keyboard interface) for live performance. Chime Master can provide a MIDI Keyboard developed specifically for use with the Millennium System if you are interested in this feature.

As an option, your controller may be equipped with audio generation capability to simulate bells indoors or augment existing bells outside. Another popular option allows you to use the MIDI keyboard to record and save your own library of music.

A quartz crystal controlled clock, calendar and seasonal almanac follow a user defined weekly schedule. You may select any of the musical selections in the system for playing any time and in any order. Random music functions let the Chime Master automatically select appropriate music for the current season.

A multitude of bell functions, such as swinging, striking, pealing, tolling and Angelus bells, are all provided with the system. These bells can ring manually or automatically at preset times.

Included with the bell functions are time strike functions. These functions include the Westminster quarter hour and hour strikes. Several other traditional tower clock chiming melodies are also available. Any quarter hour of the day may be programmed to use the Time Strike function.

Maintenance

Your Chime Master system electronics are generally maintenance free! Bell mountings, clappers, tollers and swinging mechanisms should be periodically inspected, tightened and lubricated. For information regarding service contracts on such mechanical equipment, contact Chime Master Systems or your installer.

(blank page)

Section 2

Quick Reference Guide

This section of the Chime Master® Millennium® Carillon Operating Manual is organized as several step-by-step procedures that you may refer to after the carillon has been installed. Connection and setup instructions are found in Section 3.

Trying Out the System for the First Time

If you have just installed your system, you are probably eager to hear how it sounds. Simply press **[1]**, then **[ENTER]**. This will ring a call-to-worship swinging bell (either using a swinging motor or simulating a swinging bell using a special simulation for stationary bells). To play a musical selection, press **[4]**, then **[ENTER]**.

If the system security settings have been set to lock the keypad, you will need the four-digit pass code to unlock it first – see page 34.

You have just played two of the eight re-programmable functions. These functions are explained on page 20.

Entering Selections

Many of the following pages show how to play or program selections. As you follow those instructions, it will be helpful to know how to enter selections. When a four-digit number is flashing on the display, the system is waiting for you to enter a selection. You may enter the selection using one of the following methods.

To Play Specific Selections

If you know the number of the selection or macro, you can enter it directly using the numeric buttons. Commonly used codes are listed in the beginning of this manual. Specific musical selections can be entered by looking them up on screen (see below).

To Delete or Change Selections

Press **[0] [0] [0] [0]** while a selection is flashing to remove it. To change a selection, just enter a new selection number over the old one.

Let the SmartAlmanac™ Choose a Random Selection

Press the **[cursor▲]** button once to display Grp_, and then press **[1]** to **[8]** to select a random music group. Grp3 designates a random hymn, and Grp5 will play a non-sacred song. You will find these random groups listed on page 5.

To Play a Random Block of Selections

Random blocks are used to schedule random music for a block of time. They are four-digit numbers beginning with 70, and are listed on page 5.

To Program a Pause (Automatic Schedule Only)

Use a pause in the schedule to delay subsequent selections a specific number of minutes beyond the even quarter hour. Press the **[cursor▲]** button twice to display Pau_ followed by **[1]** to **[8]** which indicate the number of minutes to delay. Use multiple pauses to increase the delay time.

MO 3:15P SRCH L6 OFF Pau5 1225 Grp2 7023

This view shows a five-minute pause, which allows Amazing Grace (#1225) to play at 3:20 P.M., followed by a random music selection from group 2, followed by random music filling the quarter hour from group 3.

Macro Codes

Other codes to perform advanced functions may be found on page 7.

Access Online Music Titles

To enter a specific music selection, you may do it by title rather than number. This procedure works from the schedule editing screen (as shown), the manual-selection entry screen and the function-button programming screen. You may use this procedure whenever a four-digit selection number is flashing.

1

MO 3:15P SRCH L6 OFF 0000 0000 0000 0000

Press **[cursor▼]** to open the title index. Select between user selections, chime, carillon or bell ringing libraries then press **[ENTER]**.

2

Select Series: Chime Library

Use **[cursor◀]** or **[cursor▶]** to select which series listing to show then press **[ENTER]**. Separate lists are available for music and bell ringing and the optional user recordings.

3

Music Title Index ABCDEFGHIJLMNOPRS
--

Use **[cursor◀]** or **[cursor▶]** to select where in the alphabet to open the alphabetical listing then press **[ENTER]**.

4

O Beautiful for Spacious Skies

Use **[cursor▼]** or **[cursor▲]** to scroll through the listing until you find the selection you desire. If you wish to move to another alphabetical index point, press **[CANCEL]** then return to step 3.

5

MO 3:15P SRCH L6 OFF 1174 0000 0000 0000

Press **[ENTER]** to use the displayed title. The four-digit selection number will be automatically entered into the flashing selection field. The next selection field will flash. Press **[ENTER]** to save or go to step 1 to choose additional selections.

Play Selection(s) Using the Manual Mode

Detailed instructions are located on page 53.

Step

1

N 3:07 PM MON 07-25
Swng Peal Toll Hymn

If the Standby screen (shown here) is not displayed, press **[CANCEL]** to return to Standby mode. Press **[ENTER]** for the “Main Menu.”

2

Main Menu
Play Selections

Press **[1]** to select “Play Selections,” then **[ENTER]**.

Edit Play NONSTOP
1225 001 Time(s)

The display will show the last program played in the Manual mode.

3

Edit Play NONSTOP
1225 001 Time(s)

To Play a previously created program:
Press **[cursor▶]** to get to play. Go to step 6 to continue using this program.

Edit Play NONSTOP
1225 001 Time(s)

To Edit/Create a program to play:
Select **Edit** by pressing **[ENTER]**.

5

Edit Play NONSTOP
1174 0000 0000 0000

Enter the new selection number (see **Entering Selections** on Page 19) and then number of times to repeat. Enter zero then **[ENTER]** for repeat if you wish to play more than one selection. The lower line holds up to four selections, or one selection repeated from 1 to 199 times².

6

Edit Play NONSTOP
1225 001 Time(s)

Press **[ENTER]** to select **Play**. Press **[ENTER]** to cue the program.

ENT: Play CAN: Quit
Ready to Play

The selection remains ready to play for up to one hour. To play, press **[ENTER]** again. To cancel the performance, press **[CANCEL]**.

² Pressing **[ENTER]** when the last three selections are 0000 will display the repeat field. Pressing **[0]**, then **[ENTER]** when the number of repeats is flashing will display the three additional selection fields.

Stop a Selection or Reject the Entire Performance

(Manual Mode, continued)

3:10 PM MON 07-25
Playing 1225

The current time and the selection number will be displayed until the selection is completed. If additional selections have been entered, the system will retrieve the next one.

ENT: Play CAN: Quit
Ready to Play

The next selection will start to play if “NONSTOP” has been selected. If “STOP” was selected, the system will wait for you to press **[PLAY]** on the remote control or **[ENTER]** on the front panel to continue. You may also press the red buttons marked **[STOP]** or **[CANCEL]** to reject the next selection.

3:14 PM MON 07-25
Operator Cancel

While a selection is playing, you may reject it by pressing **[CANCEL]**. If additional selections are programmed, the system will continue to play them unless you press **[CANCEL]** (twice).

3:14 PM MON 07-25
Canceling All...

After double clicking the **[STOP]** or **[CANCEL]** buttons, the display will indicate that all selections were cancelled.

Edit **Play NONSTOP**
1225 001 Time(s)

After the last selection is complete, the system will remain in the Manual screen for two minutes to allow you to play or edit additional performances. You may press **[CANCEL]** to quit sooner.

Set the Automatic Play Schedule

Detailed instructions may be found on page 45.

Step

1

N 3:07 PM MON 07-25
Swng Peal Toll Hymn

Press **[ENTER]** for the **Main Menu**.

2

Main Menu
View/Edit Schedule

Press **[2]** for the “**View/Edit Schedule**,” then **[ENTER]**.

3

SU 9:30A SRCH L6 OFF
0000 0000 0000 0000

This is the time slot navigational mode. Press **[cursor▼]** or **[cursor▲]** to set the day. Press **[cursor▶]** to move to the time fields, then **[cursor▼]** and **[cursor▲]** to set the hour and minute of the time slot you wish to program.

4

SU 9:30A SRCH L6 OFF
1225 1464 1313 **0000**

Press **[ENTER]** and the first selection will flash (this is the programming mode. Four digit selections may be directly entered from the *Selections Catalog*. Four zeros will clear a selection. Pressing **[cursor▲]** will allow random selections and pauses to be entered. See page 19 for selection entry instructions.

5

SU 9:30A SRCH L6 OFF
1225 1464 1313 0000

Press **[ENTER]** to save the program in memory. Go back to step 3 to set additional times to play. The selections will carry forward to subsequent time slots.

6

N 3:07 PM MON 07-25
Swng Peal Toll Hymn

Press **[CANCEL]** to return to Standby mode.

While a selection is flashing:

[cursor▲]= Grp (Random Music Group 1-8 opt. 9)

[cursor▲][cursor▲]= Pau (1-8 Min. Pause)

[cursor▼]= Online Title Catalog

Review the Automatic Play Schedule

Detailed instructions are located on page 45.

Step

1

N 3:07 PM MON 07-25
Swng Peal Toll Hymn

Press **[ENTER]** for the “Main Menu.”

2

Main Menu
View/Edit Schedule

Press **[2]** for the “View/Edit Schedule” screen, then **[ENTER]**.

3

SU 9:30A **SRCH** L6 OFF
0000 0000 0000 0000

Press **[cursor▶][cursor▶][cursor▶]** to select **SRCH** (search).

4

SU 9:30A **SRCH** L6 OFF
1225 1464 1313 0000

Press **[cursor▼]** and **[cursor▲]** to step forward and backward through the schedule. Only time slots with selections scheduled to play (on the lower line) will be displayed. To check time strike and level settings (top right line), select the day, hour or minute using **[cursor◀]** and **[cursor▶]**, then step through the schedule.

5

N 3:07 PM MON 07-25
Swng Peal Toll Hymn

Press **[CANCEL]** to return to Standby mode or **[ENTER]** to edit the displayed time slot (see pg. 25)

Make Changes to the Automatic Play Schedule

Detailed instructions are located on page 45.

- Step*
- 1**

N 3:07 PM MON 07-25 Swng Peal Toll Hymn
--

 Press **[ENTER]** for the **Main Menu**.
 - 2**

Main Menu View/Edit Schedule
--

 Press **[2]** for the **View/Edit Schedule**, then **[ENTER]**.
 - 3**

MO 3:15P SRCH L6 OFF 0000 0000 0000 0000
--

 Press **[cursor▶][cursor▶][cursor▶]** to select **SRCH** (search).
 - 4**

SU 9:30A SRCH L6 OFF 1225 1464 1313 0000
--

 Press **[cursor▼]** and **[cursor▲]** to step forward and backward through the programmed schedule. To go to a time slot without a program, select the day, hour or minute using **[cursor◀]** and **[cursor▶]**, then step through the schedule by time or day using **[cursor▼]** and **[cursor▲]**.
 - 5**

SU 9:30A SRCH L6 OFF 1225 1464 1313 0000
--

 Press **[ENTER]** and the first selection will flash. Four digit selections may be directly entered over existing ones. Four zeros will clear a selection. Pressing **[cursor▲]** will allow random selections and pauses to be entered.
 - 6**

SU 9:30A SRCH L6 CHM 1225 1464 1313 0000
--

 To change volume level and time strike settings, use the **[cursor▶]** and **[cursor◀]** to cause them to flash. Numeric buttons 1 through 8 may be used to enter new volume levels. Press **[cursor▲]** when Time Strike status is flashing to select between Chiming and Strike modes. Press **[cursor▼]** to disable clock striking.
 - 7** Press **[ENTER]** to save the changes in memory. Go back to step 4 to make further changes.
 - 8** Press **[CANCEL]** to return to Standby mode.

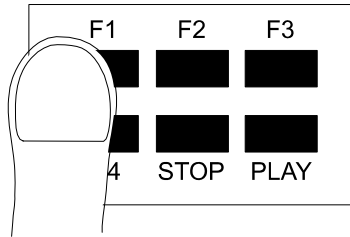
Turn on the Keyboard Using the Remote Control

Using large remote, detailed instructions are located on page 57.

Tower Performance (inside and outside)

Step

1



Use your thumb to press **[F1]** and **[F4]** at the same time. The keyboard light will come on when the system is ready to play.

2

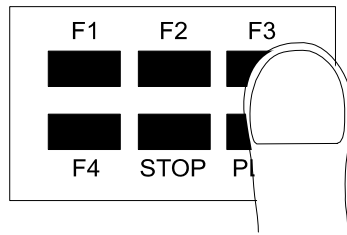
Tower Performance
Swng Peal Toll Hymn

When you are finished performing on the keyboard, you may exit this mode, either by pressing **[STOP]** or by selecting one of the programmed function buttons **[F1]** to **[F3]**. The keyboard light will go off.

Inside Only Performance

Step

1



Use your thumb to press **[F3]** and **[PLAY]** at the same time. The keyboard light will come on when the system is ready to play.

2

Record Menu
Recd Play Save Rehrs

While this mode provides quick access to playing inside, you are really in the Record Menu's practice mode. Buttons **[F1]** to **[F3]** perform the same recording operations detailed on the next page.

3

Press **[STOP]** twice when you are finished. The keyboard light will go off.

Record a Keyboard Performance with the Front Panel

Detailed instructions are located on page 59.

Step

1

N 3:07 PM MON 07-25
Swng Peal Toll Hymn

Press **[ENTER]** for the **Main Menu**.

2

Main Menu
Record a Performance

Press **[5]** to select “**Record a Performance**,” then **[ENTER]**.

3

Record Menu
Recd Play Save **Rehrs**

You may rehearse for the recording at this time. If you have the inside sound option, the bells will only be heard through the inside speaker system. Otherwise the tower bells will ring. Press **[4]** to re-enable rehearsal mode after other actions.

4

Replace Last Take?
Yes/F1 No/Cancel

The lower line labels the record menu buttons (duplicated on the remote control). Press **[1]** to begin recording. If the last recording wasn't saved to permanent memory, you will have to press **[1]** again to overwrite it.

5

Record Performance
Ready to Begin..

Play your performance on the keyboard. The bar graph will indicate the amount of selection recording memory remaining. You should only record one song per recorded selection.

6

Record Performance
|||||

End the selection by pressing **[CANCEL]**. The system will assume that you are at the end of the recording after 15 seconds of silence.

7

Verify OK
Saved Selection 8068

Press **[2]** to play back your recording. If you like it, press **[3]** to save it to permanent memory. The system briefly displays the selection number that it assigns to the recording. Write it on a log sheet with the song title to make adding selections to the library easier. The system will occasionally skip sequential numbers in order to store selections efficiently.

8

Press **[CANCEL]** to return the system to Standby Mode or to access the Record Librarian screen.

Add a Recording to the Library with Title and Category

Detailed instructions are located on page 61.

- | | | |
|-------------------------|--|---|
| <i>Step</i>
1 | N 3:07 PM MON 07-25
Swng Peal Toll Hymn | Press [ENTER] for the Main Menu . |
| 2 | Main Menu
Recording Librarian | Press [4] to select " Recording Librarian ," then press [ENTER] . If the display says, 'Option not installed,' see page Error! Bookmark not defined. |
| 3 | Warning! Can't Undo
Permanent Changes | A warning will be displayed that the changes made will affect permanent memory. Press [ENTER] if you wish to continue. |
| 4 | User Music Librarian
New/Edit Recordings | Press [ENTER] to select New recording, or [cursor▶] to select Edit a previously titled selection. Press [cursor▲] or [cursor▼] to locate selection number to be edited. |
| 5 | Untitled 8127
8127 Play Not Random | Press [cursor▶] to make Play flash, then [ENTER] to play selection. If you are sure of the selection, you may [cursor▶] to season/category. |
| 6 | Untitled 8127
8127 Play Patriotic | When selection is complete, category field will be flashing. Use [cursor▼] and [cursor▲] to select category, then press [ENTER] . |
| 7 | My Country Tis Of Thee
8127 Play Patriotic | Use the letter keys to title selection. Use [cursor▶] to advance to the next letter or for a "space" in the title. Press [ENTER] when complete or to quit. |
| 8 | My Country Tis Of Thee
8127 Save Patriotic | After you have titled the selection, Play will change to Save . Press [ENTER] to make your changes permanent. Go to step 5 to continue to process all new recordings. |

Set the Time Clock

Temperature compensated crystal clock circuitry gives the clock accuracy greater than +/- two minutes per year. Periodic checks and settings of the clock may be necessary to insure accurate operation of the system. The clock is factory set to your local time before shipment and should not require setting at the time of installation.

- | | | |
|-------------------------|--|---|
| <i>Step</i>
1 | N 3:07 PM MON 07-25
Swng Peal Toll Hymn | Press [ENTER] for the Main Menu . |
| 2 | Main Menu
System Setup Menu | Press [3] to select “ System Setup Menu ,” then [ENTER] . |
| 3 | Setup Menu
Set System Clock | Press [1] to select “ Set System Clock ,” then [ENTER] . |
| 4 | 3:10 PM MON 07-25
Year = 2004 Set Time | Use [cursor◀] and [cursor▶] to select hour, minutes, month, day and year, then use [cursor▲] and [cursor▼] to change settings. |
| 5 | Setting Real Time
Clock... | Use [cursor▶] to select Set Time , double check settings (especially AM/PM) and press [ENTER] to start the clock from the selected time. |

If the system is also used to control tower clock dials, the following screen will appear to let you synchronize the tower clocks with the system time. While this screen is displayed the clock will be stopped. Select the time to which the tower dial hands point, then press **[ENTER]**.

- | | | |
|----------|---|--|
| 6 | Tower clock dial
Hands indicate: 3:08 | Press [cursor▲] and [cursor▼] to change settings to match the tower dials. Tower dial movement is suspended while the time setting screens are active. |
|----------|---|--|

Set Clock Chiming (Globally)

Detailed instructions are located on page 49.

- | | | |
|-------------------------|--|---|
| <i>Step</i>
1 | N 3:07 PM MON 07-25
Swng Peal Toll Hymn | Press [ENTER] for the Main Menu. |
| 2 | Main Menu
System Setup Menu | Press [3] to select “ System Setup Menu ,” then [ENTER] . |
| 3 | System Setup Menu
Program Time Strike | Press [0] , then [ENTER] to select the “ Program Time Strike ” screen. |
| 4 | 12A to 12A TS Off
SUN . . SAT SET PROG | Use the [cursor▼] and [cursor▲] buttons to change the beginning time. |
| 5 | 12A to 12A TS Off
SUN . . SAT SET PROG | Press [cursor▶] to select ending time, then change with [cursor▼] and [cursor▲] . The program will be set from the beginning time up to, but not including, the ending time. For example: 8A to 10P will program from 8:00 AM to 9:59PM. |
| 6 | 12A to 12A Full Chm
SUN . . SAT SET PROG | Similarly, select and change the beginning day, ending day, and the program type/level as shown in the table below. |
| 7 | 12A to 12A Full Chm
SUN . . SAT SET PROG | Select “ Set Program ” and then press [ENTER] to put the selected program into schedule memory. |
| 8 | Modifying
Program Memory | When finished, press [CANCEL] . You should verify all changes using the View/Edit Schedule mode screen. |

Time Strike Mode Options:	TS OFF (Time Strike OFF)
	Full Chm (Chime Clock All Quarters)
	Half Chm (Chime Clock on Hour and 1/2 Hour)
	Top Chm (Chime Clock on the Hour Only)
	Chm Stk (Chime Clock on the Hour, 1-Strike Quarters)
	Full Stk (Strike the Hour, 1-Strike Other Quarters)
	Half Stk (Strike the Hour, 1-Strike the 1/2 Hour)
	Top Stk (Strike the Hour Only)

Reprogram the Remote Control Function Buttons

Follow these steps to reprogram the four function buttons at the top of the front panel keypad and on the remote control. Detailed instructions are located on page 54

- | | | |
|-------------------------|---|---|
| <i>Step</i>
1 | N 3:07 PM MON 07-25
Swng Peal Toll Hymn | Press [ENTER] for the Main Menu. |
| 2 | Main Menu
System Setup Menu | Press [3] to select “ System Setup Menu ,” then [ENTER] . |
| 3 | System Setup Menu
Edit Remote Button | Press [2] to select “ Edit Function Button ” then press [ENTER] . |
| 4 | F1 Swng Wait Nonstop
1123 001 Time(s) | Use [cursor▼] to select which function button (F1-F4) to reprogram then press [ENTER] . |
| 5 | F1 Swng Wait Nonstop
1123 001 Time(s) | Input the new selection number (see To Enter Selections on the next page) and number of times to repeat. Press [0] then [ENTER] in the repeat field if you wish to play more than one selection. |
| 6 | F1 Swng Wait Nonstop
1123 001 Time(s) | Press [cursor▶] to select the button label. You may select each letter and change it using the [cursor▲] and [cursor▼] buttons. |
| 7 | F1 Swng Wait Nonstop
1123 001 Time(s) | Select and change WAIT/NOW! and STOP/NONSTOP flags by pressing [cursor▶] to select the desired field and then [cursor▲] to change the options. |
| 8 | F1 Swng Wait Nonstop
1123 001 Time(s) | Press [ENTER] to save your changes then [CANCEL] to exit when the function number is flashing. |

A single selection may be repeated up to 199 times. To change from multiple selections (shown below) to a single selection for repeating, zero out the last three selections and press **[ENTER]**.

(blank page)

Section 3

Connections and Setup

Tower Connections

The carillon controller connects to a tower bell control relay panel via the CAT5 connector labeled “Tower” or “Tower Options Control.” This single data cable also supplies commands to operate tower clocks if they are installed. Optional audio connections should be labeled by the installation technician if applicable. The other end of the cable may pass through custom interfaces according to the needs of your installation.

Keyboard Connections

A 7 pin circular DIN jack on the rear of the Millennium Module allows connection of either a Chime Master keyboard (requiring a 7 pin cable) or a compatible MIDI keyboard (requiring a standard 5 pin MIDI cable). The length of the keyboard cable should be less than 50 feet. Lengths greater than 50 feet can be accommodated using a CAT5 line driver extension accessory available from Chime Master.

Remote Control Connections

The remote control receiver plugs into the *Remote Control* jack located on the rear panel. If the supplied cable is not sufficiently long enough for proper positioning of the receiver, a 1/8” stereo headphone extension cable may be employed up to 25 feet. For longer extensions, Chime Master can supply a CAT5 extension accessory that allows one or two (diversity) antenna(s) to be placed up to 1000 feet from the carillon system.

Inside Monitoring Systems

These connections only apply to systems that have optional inside sound capability. This is an option requiring sound generation circuitry to be customized to simulate the sound of your bells.

Optional Organ Chamber Speaker Connections

An optional monitoring system may be built-in for inside listening. A pair of 3-way binding posts will be located near the center of the rear panel and labeled *60W/8 Ohm Speaker*. Do not connect speakers to the carillon that are simultaneously connected to any other device.

Sanctuary PA System Connections

The rear panel of the controller has a 1/4" phone jack labeled *Line Output, Inside*. This output carries an unbalanced line level signal suitable for connecting to the Line Input of a nearby PA or instrument amplifier.

Plugging a cable into this jack will mute the carillon’s built-in speaker. If you should wish to mute the speaker without making a connection to the PA system (because you’re using monitor speakers described in the preceding section), you may insert a 1/4” plug without a cable, such as an RCA to 1/4” adapter.

Whenever the system is in Standby or Play modes, the inside monitoring speaker level can be adjusted using the [cursor▲] and [cursor▼] (scroll up and down) buttons. While pressing the buttons, the display will show the current level from 0 (muted) to 15 (maximum). Adjustments to the monitor level also affect the output level of the *Line Output Inside* jack, and the built-in monitoring amplifier, if installed.

AC Power

Power supplied to the Chime Master System should be from a properly grounded receptacle connected to a clean circuit capable of providing 10 Amps of current. By clean, we mean that the circuit should not also provide power to large motors associated with air conditioners or refrigerators. Most electrical supply and hardware stores sell simple test plugs that can verify that the receptacle is wired properly. You may add a surge suppressor to the receptacle that the carillon plugs into.

Security Options

Set the security options to prevent unauthorized operation or programming if the system is located in an accessible area. A four digit pass code is all that is required to access the system. Choose a meaningful code so you can remember it. If you forget the pass code, call us for help unlocking the system. To enable the security option for the first time, press [ENTER] [3] [ENTER] [9] [ENTER] and a four digit number.

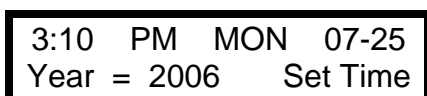
To change the password, press [ENTER] [3] [ENTER] [9] [ENTER] [ENTER]. Input the old pass code then enter a new pass code. If verification fails, the new code will not be set.

The system can be configured to lock automatically after a delay, or only lock when you hold the [CANCEL] button for 2 seconds. To set the auto-lock feature on, press [ENTER] [3] [ENTER] [9] [ENTER] 1 [ENTER] [cursor▲] (Yes) [ENTER].

Monitor level control buttons and the Stop/Cancel button will still function during play while the keypad is locked. All automatically scheduled performances as well and the remote control function buttons continue to operate the system when the front panel buttons are locked. Store the remote control in a secure location when it is not being used.

Setting the Time Clock

Periodic checks and settings of the clock may be desired to insure accurate operation of the system. From Standby mode, press the [ENTER] button to access the main menu. Then press button [3] (or cursor through the list) for the System Setup Menu and [ENTER] to select it. Press button [1] (or cursor through the list) and press [ENTER] to select the Set System Clock screen.



3:10 PM MON 07-25
Year = 2006 Set Time

Press [cursor▶] to select the digit(s) to change, then [cursor▲] to reverse and [cursor▼] to advance the settings. Use [cursor] or [cursor▶] to choose the parameter to change.

Since minor adjustments are more frequently made, the minute digit is flashing on entry. Once all settings are correct, Press [cursor▶] until Set Time flashes on the lower line of the display. As soon as [ENTER] is pressed, the real time clock will be updated to the displayed settings. Pressing [CANCEL] will abort the Set Time menu without making any changes to the actual time settings.



Important: Make sure the AM - PM selection is correct before setting the time. It is also important to properly set all of the time parameters. Easter Sundays and Leap Year adjustments will only work properly if the Day of the week and Year are set correctly.

Tower Clocks

After setting the system time, you will be prompted to input the position of any tower clock hands that the system controls. The tower clocks will be stopped at this time to give you time to verify their positions. Newly installed clocks generally have their hands at 12:00.

Daylight Time

When enabled, Daylight Saving Time (DST) will be entered on the second Sunday in March and end on the 1st Sunday in November. The DST dates can be adjusted if needed for future energy law changes or for use in other countries. To adjust the dates, power on the system while holding the [1] button. After a few seconds the DST setup display will appear as follows.

Start: 2nd Su Mo:Mar
End: 1st Su Mo:Nov

[◀cursor] and [cursor▶] buttons select between the changeable fields and the [cursor▼] and [cursor▲] buttons make the changes. You may choose first, second, third, fourth or last of any day of the week in any month to start or end Daylight Time. Unless you live in the Southern Hemisphere, the start day should come before the ending day. The [ENTER] button will exit and save the settings. Pressing [CANCEL] at any time exits without saving your changes.

When an asterisk follows the day of the week, the system is in Daylight Time mode.

N 3:07 PM. MON*07-25
Swng Peal Toll Hymn

SmartAlmanac™ Seasonal Setup

One of the Millennium's most attractive features is its 'set it and forget it' ease of programming. The seasonal almanac makes this possible and you have total control. In addition to daylight saving time, you may enable or disable liturgical seasons and set the date in December that Christmas music begins to play.

To enter the seasonal options setup menu from Standby mode, press [ENTER] to bring up the Main Menu, [3] to select the setup menu, [ENTER] to go to the Setup Menu, [3] to select Seasonal Options, then [ENTER]. The lower line displays the current seasonal option on the left and its current setting on the right.

The [◀cursor] and [cursor▶] buttons select between the left and right sides of the screen. When the left side of the screen is flashing, [cursor▼] and [cursor▲] move forward and back through the list of options. When the right side of the screen is flashing, the cursor buttons turn into [YES] and [NO] buttons allowing the features to be enabled or disabled. When the Christmas From option is displayed with the right side of the screen flashing, [cursor▼] and [cursor▲] move forward and back through the list of dates Christmas can begin.

When the right side of the screen is flashing, **[ENTER]** advances through the list of options. So the easiest way to go through the menu is to press **[YES]** or **[NO]** to enable or disable the option, then **[ENTER]** to go to the next option. When you press **[ENTER]** for the last option, all options are saved. Pressing **[CANCEL]** at any time exits without saving your changes.

Optionally, you can press the [**◀cursor**] button to select the option (left) side of the display to back up to a previous option then press the [**cursor▶**] button to change your answer. Available options are described in the following table below.

Seasonal Option	Yes Results	No Results
Daylight Time	System will automatically adjust the clock between Daylight Saving and Standard time.	System will never adjust the clock.
Patriotic	Independence Day (July 4) and Memorial Day (Last Monday of May).	Continues to play non-seasonal selections.
Lent	From Ash Wednesday until Good Friday.	Continues to play non-seasonal selections.
Good Friday	Will not play random selections on Good Friday and Holy Saturday (other bells or specific hymns will continue to ring).	Continues to play Lenten selections on Good Friday and Holy Saturday.
Easter	From Easter Sunday until End of April if Marian also selected. Otherwise plays for one week.	Continues to play non-seasonal selections.
Marian	August 15 and 22, December 8, and the Entire month of May. Switches the non-general playlist from Protestant to Catholic.	Continues to play non-seasonal selections
Thanksgiving	Thanksgiving Day and the previous Sunday	Continues to play non-seasonal selections
Advent	First Sunday in Advent until date selected for 'Christmas from.'	Continues to play non-seasonal selections
Christmas from	Christmas cannot be disabled. The date Christmas starts can be selected from 12/1 to 12/24. If Advent is enabled, Christmas music will continue to play until January 5. If Advent is disabled, then Christmas ends on 12/26.	
Use Pre-Recorded Music	Factory pre-recorded music arrangements will play randomly.	Only user recordings will play (if Librarian option used).
Ring Bells in Auto Modes	Automatically scheduled programs will play: Inside/Outside/Both (if option installed).	
Ring Bells in Manual Modes	Remote control, front panel function and Play Selections programs (manual modes) will play: Inside/Outside/Both (if option installed).	

Disabling Random Seasons

Typically each time you want the carillon to play music you will select one or more random selections. This allows the system to pick selections at random from seasonal or non-seasonal play lists. There are several reasons why you may not want the system to always do this. For example, a Protestant church will typically not play Marian Hymns during the month of May. Some churches do not wish to play patriotic selections on Memorial and Independence days.

Selecting Factory Pre-recorded Music Arrangements

If you have used the optional record librarian to build a large library of music, you may wish to disable all of the factory recordings in favor of your own. The seasonal setup option allows you to disable music we've supplied by pressing **[NO]** when the Use Pre-Recorded music option is displayed. This setting only affects random music playback.



Important! If factory pre-recorded musical arrangements are disabled, and you don't have many (or any) user recordings set for random playback; the system may not play when programmed with random selections. When the system is supposed to play, watch for an error message that says "Seasonal Play list Empty."

Inside/Outside Zone Auto-Mute™

This feature requires optional inside monitoring sound generation and amplification modules. It also applies only to music and time strikes, not swinging or tolling bells.

Both automatic play (any music or bell ringing activated by the automatic schedule) and manual play (music activated by the remote control or *Play Selections* menu) can be set so that the speakers will operate inside only, ring on the bells outside only or both (inside and outside). These options are displayed in the menu as In, Out or Bth. Use the [cursor▼] and [cursor▲] buttons to rotate the selection between **In**, **Out** and **Bth**.

Generally you would set the automatic mode to play either both or outside only. The factory defaults are to play both inside and outside for automatic and manual selections.

When the system is playing, the green front panel lights will indicate which zones are active. Be aware that the zone switching macro codes listed on page 7 changes these settings.

Time Strike Tune Setup

To enter the time strike melody setup menu from Standby mode, press [ENTER] to bring up the Main Menu, [3] to select the setup menu, [ENTER] to go to the Setup Menu, [7] to select Set Time Strike Melody, then [ENTER].

Main Menu
System Setup Menu

From Standby mode, press the [ENTER] button to get to the main menu. Now press button [3] (or cursor through the list) for the System Setup Menu and [ENTER] to select it.

Setup Menu
Time Strike Melody

Press button [7] (or cursor through the list) and press [ENTER] to select the Time Strike Melody screen.

Time Strike Melody:
Westminster High

The currently selected time strike melody will flash. Use the [cursor▲] and [cursor▼] buttons to scroll through the melodies until the one you wish to use is flashing then press [ENTER].

The View/Edit Schedule and Program Time Strike screens will always show CHM to represent the time strike melody, even if you have selected a different melody.

Available melodies as of this writing are:

Westminster High	from the Houses of Parliament (London)	St. Michael's	Eight-bell melody with different Changes than Whittington
Westminster Low	as above, but played on larger bells	Avondale	two-bell Tin-Tan or Ding-Dong
Christus Vincit	"Christus vincit, Christus regnat, Christus, Christus imperat"	Warren	Early American tower clock chime
Lourdes	<i>Ave Maria</i> "Immaculate Mary"	Bigelow	American four-bell chime
Praise Peal	"Holy God We Praise Thy Name"	Parsifal	Classical four-bell chime
Whittington	Eight-bell melody reminiscent of Change ringing	Nautical	one-bell Traditional Ship's Time
		User's Time Strike	Requires <i>Optional</i> Recording Librarian and Millennium Suite

Swinging Bell Timing

The adjustments made in this menu allow stationary bell strikers to simulate a swinging bell. Six of the tower bells are selected for this purpose according to complimentary pitches. The overall time between strikes may be lengthened (for a large bell) or shortened (for a small bell). The time difference between the forward swing and the backward swing may also be independently adjusted to provide additional realism.

To enter the bell timing setup menu from Standby mode, press **[ENTER]** to bring up the Main Menu, **[3]** to select the setup menu, **[ENTER]** to go to the Setup Menu, **[4]** to select Swinging Bell Timing, then **[ENTER]**.

Main Menu
System Setup Menu

From Standby mode, press the **[ENTER]** button to get to the main menu. Now press button **[3]** (or cursor through the list) for the System Setup Menu and **[ENTER]** to select it.

Setup Menu
Swinging Bell Timing

Press button **[4]** (or cursor through the list) and press **[ENTER]** to select the Swinging Bell Timing screen.

Pressing buttons **[1]** through **[6]** will cause each striker to strike once as well as selecting that bell and displaying its timing parameters. Pressing the **[ENTER]** button while a particular bell is displayed will demonstrate the swing simulation of that bell for fifteen seconds.

Swing Bell 1 Timing
Swing:1.0 BackSw:40%

Pressing **[1]** rings bell one and displays its settings. It is currently set to cycle once every 1.0 seconds (forward and backward swings). The back-swing timing is set to be 40% of the total cycle time.

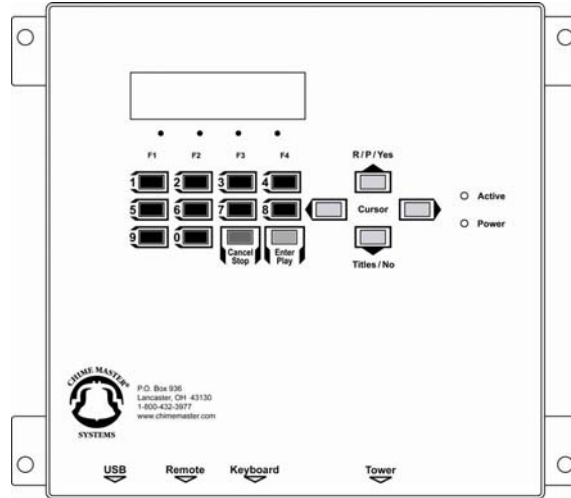
While the swing timing is flashing, pressing the **[cursor▲]** and **[cursor▼]** buttons will allow you to adjust the timing. Press **[cursor▶]** to allow adjustments to be made to the back-swing timing.

Pressing **[CANCEL]** at any time exits the menu while retaining any changes you have made.

Section
4

Overview of Important Features

Wall-mounted controller



Rack-mounted controller



Front Panel

The bell control head is supplied either as a wall mount panel or rack-mountable cabinet. If the controller has audio options it is always supplied in the larger rack cabinet or in an oak cabinet. The button and display layouts are the same. The status lights work differently if audio options are installed as explained below.

Push Buttons

Ten black buttons have numbers printed to the left of them. They are generally used for entering numeric information such as selection numbers into the programming schedule.

The top row of black buttons ([1] through [4]) represent the four remote control functions displayed on the lower line of the Standby Menu screen. In addition four more buttons ([5] through [8]) may also be programmed for one-touch functions accessible from the front panel.

The four gray buttons arranged in a diamond pattern are the cursor buttons. They will be referred to in this manual as [**◀cursor**], [**cursor▶**] (select left and right), [**cursor▲**] and [**cursor▼**] (scroll up and down). When the [**cursor▲**] and [**cursor▼**] are needed to answer 'Yes' and 'No' to questions appearing on the display, they will be shown in this manual as [**YES**] and [**NO**]. In most cases, the left and right buttons move around the display, while the up and down buttons change the flashing data.

When the system is prompting for a selection, it will flash four digits. The number of the desired selection can be entered directly, or selected from the onscreen title display by pressing the [**NO**] button. Random Groups and Pauses (in the View/Edit Schedule screen) may be entered by alternately pressing the [**YES**] button.

Inside Monitor Speaker Volume Level

Whenever the system is in Standby or Play modes, the (interior sound is an option) inside monitoring speaker level can be adjusted using the [**cursor▲**] and [**cursor▼**] (*scroll up and down*) buttons. While pressing the buttons, the display will show the current level from 0 (muted) to 15 (maximum) unless in keyboard mode.

Status Indicators

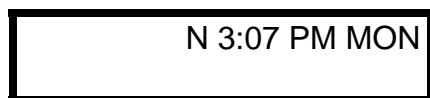
To the right of the push buttons are two indicator lights. When the system is playing or ready to play, the top light will light if the program will play through the outside bells/speakers; the bottom light will light if the program will play through the optional inside monitor or organ chamber speakers.

The *Setup – Seasonal Options* menu (see page 35) allows inside/outside/both options to be set independently for automatic (scheduled) programs and remote (manual function) programs. This allows, for example, a system that has frequent programs scheduled to be set so that the inside speakers are muted when the system plays automatically. The automatic programming would not interrupt any special events occurring in the church. Bells played from the remote control would be played through the inside speakers. The keyboard performance modes always play inside.

NOTE: Units without the interior sound option will also have two lights. The lower light indicates power to the unit, and the upper light indicates that the unit is ready to play. The inside/outside seasonal setup option is not available without sound.

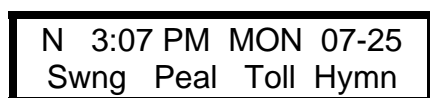
Display

If the system has been in Standby mode for more than a few minutes, the display will be dimmed and the current time will scroll. This increases the life of the display. The display intensifies and shows the Standby Menu when you push any of the gray cursor buttons.



An example of the display screen saver. The current season code, time and day of the week scroll around the display.

Press the [**CANCEL**] button to exit the screen saver, or [**ENTER**] for the Main Menu.



Standby screen after the screen saver has cancelled. Pressing [**ENTER**] bring up the Main Menu.

Standby Mode

Standby mode is the normal operating mode of the system. Programmed selections and bell functions will not play automatically, unless the system is in Standby mode.

When it is time for a programmed sequence to play, the *Active* or *Outside* light will illuminate and the selection numbers playing will be shown on the lower line of the display.

N 3:07 PM. MON*07-25
Swng Peal Toll Hymn

The 'N' denotes a non-seasonal time of year. This changes with the seasons as described on the next page. This is followed on the top line by the current time and date. The lower line labels the four function buttons.

The dot after the "PM" in the top line indicates that the clock is synchronized via GPS or the Millennium Suite (both optional), while the star after the day indicator means that the unit is in Daylight Savings mode.

SmartAlmanac™ Current Season

During the selected seasons, a seasonal play list is substituted for the non-seasonal lists as described in the Selections Catalog. Supported seasons are Non-seasonal, Lent, Good Friday, Easter, Marian, Patriotic, Thanksgiving, Advent and Christmas.

A letter in the top left corner of the standby screen shows which seasonal play list is currently in use. A disabled season will result in an N displayed during that time. The display always indicates the current season music list in use.

Automatic Reset

Diagnostic reset circuits and programming continually monitors the system for proper operation. If it detects anything out of the ordinary, it will attempt to correct itself without operator intervention. If that is not possible, it locks up and displays a message. Refer to the *Troubleshooting Guide* located on page 65 for specific instructions for dealing with error messages.

The reset program places highest priority on automatic performance. For this reason, the system will reset from most setup menus after a few minutes of push button inactivity. A ninety second countdown warning screen will allow you to continue the current operation by pressing any button.

System Resetting to
Standby in 90 secs.

Countdown warning screen appears after a period of inactivity in the setup screens. To return to the previous operation press any key.

Cued selections ready to play and waiting for either the front panel **[ENTER]** or remote **[PLAY]** buttons will hold for up to 60 minutes before the system resets. Tower Performance and Record Menu (Inside practice performance) screens will reset after 60 minutes of inactivity.

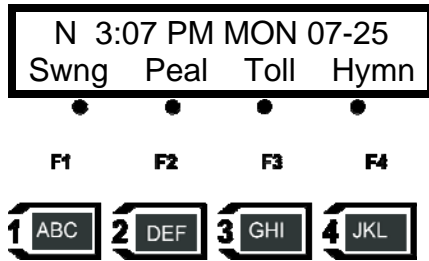


Important! Be sure to **[CANCEL]** or **[STOP]** the keyboard performance menus when the performance is complete so that the regularly scheduled automatic performances will continue. The keyboard performance modes will remain active for an hour after the last note is played.

Pushbutton Manual Operation

Function Buttons

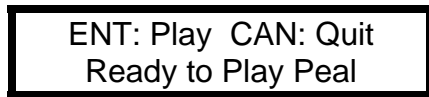
This is **Standby** mode displaying the season, time, day and date, along with a choice of bell functions.



The bottom line holds the labels for the **function buttons** which are the top four alphanumeric buttons.

Pressing the button corresponding to a label causes the system to cue the programmed selection.

You may select a swinging, pealing, tolling bell or play a song by making your selection with the function buttons, ([1], [2], [3] or [4]) directly below the label on the screen. You may also program buttons 5 through 8 to have additional functions. After making your selection, the screen will prompt you to press **[ENTER]** to play or **[CANCEL]**, to reject the selection and return to **Standby mode**.



The selection will remain cued and ready to play for one hour after the function button is pressed. This display and the need for **[ENTER]** will be skipped if the function is programmed to play **NOW!**

Remote Control

The four function selection buttons duplicate the buttons **[1 - 4]** on the front panel of the Chime Master System Unit. When the system is in the Standby mode, these four buttons allow special functions to be played. For information about re-programming the function buttons, see page 54.

The red **[STOP]** button on the remote represents the **[CANCEL]** button on the front panel. Whenever the system is playing, pressing stop will cause the selection to be interrupted. If a function with multiple selections is programmed, then the next selection in the sequence may play after the current one is canceled. To cancel all selections, press **[CANCEL]** at least two times.

When a function selection is ready to play, the green **[PLAY]** button represents the action of the **[ENTER]** button on the front panel.

To send a command from the remote transmitter to the Chime Master, simply press the appropriate button. Each time a button is pressed, it should be held for about one second. The green light on the control surface should illuminate when buttons are pressed. This indicates there is an adequate charge in the battery to send a transmission.



Operational Tips

The remote transmitter operates in the UHF frequency band. This provides a line of sight transmission of about 100 feet. Any mass of metal between the transmitter and receiver will inhibit proper operation. You may also discover a few dead spots where the unit may not operate, even though you are closer than 100 feet. If the transmitter is operated next to microphones or microphone cables, it is possible that the PA system will pick up a noise, similar to a telephone ring tone. To prevent this effect, avoid operating the remote near PA equipment and wiring.

Selecting Menus

Whenever the system is scrolling the time, or displaying the time on the top line and the function button labels on the bottom line (Standby Mode), pressing **[ENTER]** will bring up the Main Menu.

Press the **[cursor▲]** or **[cursor▼]** buttons until the desired menu selection flashes, then press **[ENTER]** to go into that menu.

You may press the number button corresponding to the item number below to quickly access each menu item. Since the numeric method is quicker, it is used in all step-by-step examples in the manuals.

Item #	Main Menu Item	Description
0	Tower Performance	Enables the keyboard for performance both inside and outside.
1	Play Selections	Allows pre-recorded selections to be performed manually.
2	View/Edit Schedule	Viewer/Editor for the program schedule. Allows searches for selections programmed to play, and modifications to the automatic schedule.
3	System Setup Menu	Additional sub-menu with options described in the Setup Table below.
4	Recording Librarian	Titles and categorizes user recordings for retrieval and automatic play.
5	Record a Performance	Inside only (if sound option installed) keyboard performance and recording menu.

If you select the System Setup Menu, you will see additional menu which also has numeric shortcuts as shown in the following table.

Item #	Setup Menu Item	Description
0	Program Time Strike	Programs periods of time for time striking style.
1	Set System Clock	Allows adjustments to the clock/calendar.
2	Edit Remote Button	Editor for four programmable remote buttons and functions 5-8.
3	Seasonal Options	Enables or disables Daylight Saving Time adjustment, and allows customization of the seasonal almanac. Also used to disable factory recorded musical arrangements.
4	Keyboard Sensitivity	Allows keyboard dynamic adjustments to be made for optional touch sensitive strikers.
5	Keyboard size/MIDI	Interactive plug and play set-up for MIDI channel and keyboard size and transposition.
6	Swinging Bell Timing	Adjustment for simulated swinging bell timing (for stationary bells).
7	Time Strike Melodies	Allows selection of time strike chiming melody.
8	Miscellaneous Options	Options for enabling swinging bell coasting delay (to protect tolling hammers) and toll speed.
9	Security Options	Setup keypad locking password and options. Instructions are on page 34.

Use the **[CANCEL]** button to exit most screens when you inadvertently activate them. This will generally also undo any inadvertent changes you make. Most menus are exited normally with the **[ENTER]** button when you wish to keep the changes you make. Screens which allow you to edit system critical settings may require that you press additional buttons to verify your selection.

Other Operational Features

While Selection is Playing

The following screen is displayed while a selection is playing. The current time and date appear on the top line and the selection code for the current song or function are shown on the lower line.

If you have the optional interior sound option, you may adjust the inside volume level by pressing either the **[cursor▲]** or **[cursor▼]** button to raise or lower the volume level. You can also reject the selection or all selections that are queued to play.

<p>9:31 AM Tue 11 - 11 Playing 4266</p>

[Cancel] will reject the current selection. If additional selections are programmed, they will begin to play. **[Cancel] [Cancel]** will reject the entire performance.

On Screen Title Lookup

Whenever a four digit number is flashing on the editing display, and you don't remember the number for your favorite selection, press the **[NO]** button (as in 'No, I don't know what number I want"). This will bring up the Title Lookup Screen which is subdivided into three groups:

Music Library	Titles of factory pre-recorded selections.
User Recordings	User recorded selections available by title if you have titled them with the Recording Librarian.
Bell Ringing/Special	Titles of special use bells, random selections, timed blocks

Suspending Automatic Operation

If you wish to hold the automatic operation for a quiet time like communion or a memorial service, select a selection to play without starting. The system will hold the cued selection for an hour before resetting to **Standby Mode**. For funerals, the **Toll** function can be cued so that when you are ready for it, you can press **[PLAY]** on the remote control.

If you do not wish to use a bell function at the end of the service, the system will reset to **Standby** by itself so that automatic operation may resume.

Section 5

Scheduling Automatic Performances

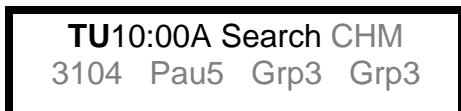
The schedule editing features of the Chime Master Millennium Bell Controller allows you to easily schedule a wide variety of options on a weekly basis.

The time clock program memory is organized in quarter hour slots. Typical performances will begin on quarter hours, but timed pauses can be used to delay the start of a performance to any time. Each quarter hour time slot contains four selection holders, and a time strike option.

Two menu screens are used for changing the performance schedule. **View/Edit Schedule** appears on the **Main Menu**. Use it to review the current schedule and easily make changes to specific time slots. The **Time Strike** screen appears in the **Setup Menu**. Time strike options over larger periods of time are set on this screen.

Navigating the View/Edit Schedule Screen

Bring up the **View/Edit Schedule** screen by pressing **[ENTER] [2] [ENTER]**.



TU10:00A Search CHM
3104 Pau5 Grp3 Grp3

The display will show what is programmed for the next quarter hour timeslot. The day will be flashing, and the **[←cursor]** and **[cursor→]** buttons will select between the day, hour, minute and search mode fields.

The dark areas shown on the above display are the time positioning fields. The grayed out portions of the display are the programming fields. The **[ENTER]** button toggles the cursor between the time positioning and program fields. The **[CANCEL]** button will reject any changes made if the program fields are flashing. When the time positioning fields are flashing **[CANCEL]** will exit the **View/Edit Schedule** screen and return the system to **Standby**.

The four zero fields on the lower line represent events programmed at the current time slot. **3104** represents a one minute swinging bell. This is followed by a five minute pause (**Pau5**) and two hymns from random group 3 (**Grp3**). **CHM** shows that the scheduled program will be preceded by a time strike using the selected time strike melody.

When the day field (SU, MO, TU, WE, TH, FR, SA) is flashing, the **[cursor▲]** button will scroll backwards to the previous day and the **[cursor▼]** button will scroll forward to the next day, at the same time of day. Likewise when the time fields are flashing the scrolling buttons will go back and forth through time showing you what is programmed for each slot.

Viewing the Current Schedule

When the search field (**SEARCH**) is flashing, the **[cursor▲]** button will search backward and the **[cursor▼]** button will search forward to the next time slot which has a program scheduled.

When you press and hold a cursor button, the display will continue to scroll through the schedule so that you can quickly locate any time you desire.

If you search to the first scheduled time slot on Sunday, you can easily document your weekly schedule by copying down what is programmed at each scheduled slot as you step through the schedule while **Search** is flashing. We have provided an input sheet for this on page 11.

Changing the Schedule

Press **[ENTER]** to enable the programming mode. The first selection field will flash. If you know the selection number you wish to play, enter the four digits directly. Codes for commonly used selections are located at the front of this manual on page 5.

Onscreen Titles

If you don't remember the number of the selection you wish to use, just press **[No]**. A handy way to remember how to access the onscreen titles is to say 'NO, I don't remember the number.'

Whenever a four digit selection field is flashing, press the **[NO]** button (the same button as **[cursor▼]**). This will bring up the following screen.

**Select Series:
Bell Ringing/Special**

Use the **[◀cursor]** and **[cursor▶]** buttons to select the series then press **[ENTER]** to access the alphabetical index.

Series:	Type of Selections:
Music Library	Titles of factory pre-recorded arrangements.
User Recordings	User recorded selections available by title if you have titled them with the Recording Librarian.
Bell Ringing/Special	Swinging Bells, Pealing Bells, Tolling Bells, Angelus Prayer Bells, and Random selection blocks.

Press **[◀cursor]** or **[cursor▶]** button until the series you want is displayed then press **[ENTER]**.

**Music Title Index
ABCDEFGHIJLMNOPRSTWY**

Select the index letter you would like to begin your search at and press **[ENTER]**. Let's program an Angelus prayer bell.

**Angelus Bell 1 333
4.5s Tempo**

The first selection available is displayed. Use the **[cursor▲]** and **[cursor▼]** buttons to scroll through the listing.

Press **[cursor▼]** until the desired title is displayed then press **[ENTER]**.

**SU 8:00A Search OFF
1103 0000 0000 0000**

The next selection field will be flashing in anticipation of further programming. If the time slot programming is complete, press **[ENTER]**. This will store your changes in memory.

Selection Carry Forward

After you have moved to the next time slot, press **[ENTER]** to go back to the programming fields. The same program you put in the last time slot gets carried forward to this one.

MO 8:00A Search OFF 1103 0000 0000 0000
--

The selection fields are automatically programmed with the same selections that were programmed into the last time slot. The first field flashes for editing if needed.

The *selection carry forward* feature allows multiple time slots to be easily programmed with the same selections. It remembers the selections you programmed for the last time slot and automatically enters them into the next blank time slot you enter.

If you do not wish to use the same program for the new time slot, simply program over the selections or erase them by entering zeros.

The carry forward will be updated by any changes you make, and will clear when you exit back to standby mode.

Let's schedule two random music selections at noon and 6 P.M. every day. Using the method described above (Selecting the time to play), position the View/Edit Schedule screen to 12:00 P.M. on Sunday. Use the **[cursor◀]** button to make the SU flash, so programming subsequent days will be easier. Press **[ENTER]** to make the first selection field flash.

Press **[cursor▲]** while the selection number is flashing. The number will change from 0000 to Grp_. A number from 1 to 8 (or 9 if you have defined a user group) may be entered signifying which random group the selection will play from. For our example we'll use a hymn from group three, so press **[3]** now. Press **[cursor▲]** **[3]** again for a second random hymn, then **[ENTER]** to exit the programming mode.

To program the remainder of the week with two selections at noon (the day should be flashing), simply press the sequence, **[cursor▼]** **[ENTER]** **[ENTER]**, six times to get back Sunday. The carry forward function will automatically fill in each day's program.

Select the hour and change it to 6:00 P.M. then move back to the day field again and press the sequence, **[cursor▼]** **[ENTER]** **[ENTER]**, seven times to get back Sunday, and you will have two random selections programmed every day of the week at noon and 6 P.M.

Clock Striking (for a Specific Time Slot)

Generally the clock striking is set for periods of time. The procedure to do this is detailed in the next section. The **View/Edit Schedule** screen must be used to verify that the clock striking is programmed correctly. The search function does not check for clock striking, so you must select either the hour or minute fields and hold the **[cursor▼]** button when checking the clock striking periods.

Sometimes it is useful to turn the clock striking on or off for a particular time slot. Using the method described above (Selecting the time to play), position the **View/Edit Schedule** screen to the time you wish to enable or disable clock striking. Press **[ENTER]** **[cursor◀]** and the clock striking field will flash.

TU 4:30P SEARCH CHM
0000 0000 0000 0000

The clock striking field is found in the upper right corner of the View/Edit Schedule screen.

While the clock striking field is flashing you may program its status using the **[cursor▲]** (to turn on and select ringing type) and **[cursor▼]** (to turn off) buttons. Alternate presses of **[cursor▲]** select between **CHM** (Westminster melody), and **STK** (strike only). When **CHM** is selected, the appropriate Westminster melody plays on each quarter hour and is followed at the top of the hour with a toll of the hour. When **STK** is selected, the top of each hour is marked with a toll of the hour, and all other quarters are marked by a single strike.

Time Strike Scheduling

The Time Strike Setup screen allows you to program the manner in which the system announces the time of day. In the previous section we described how the clock striking could be viewed and changed for a particular time slot. Changing these settings for several days, or even several hours in one day would be a tedious task without the capability of Global scheduling.

Note that this screen is an input only menu. You can only see the time strike schedule in the View/Edit Schedule screen.

There are eight options for the time strike feature over a selected time period:

TS Off (Time Strike Off)	Full Chm (Full Chime melody)
:00 - Off	:00 - Chime
:15 - Off	:15 - Chime
:30 - Off	:30 - Chime
:45 - Off	:45 - Chime
Half Chm (1/2 Chime melody)	Top Chm (Top Chime melody)
:00 - Chime	:00 - Chime
:15 - Off	:15 - Off
:30 - Chime	:30 - Off
:45 - Off	:45 - Off
Chm Stk (Chime melody half strike)	Full Stk (Full Strike)
:00 - Chime	:00 - Strike
:15 - Off	:15 - Strike
:30 - Strike	:30 - Strike
:45 - Off	:45 - Strike
Half Stk (Half Strike)	Top Stk (Top Strike)
:00 - Strike	:00 - Strike
:15 - Off	:15 - Off
:30 - Strike	:30 - Off
:45 - Off	:45 - Off



Important! Setting TS OFF turns off all time strike functions in the selected time period. You can select and program this option when first entering the menu to clear the entire time strike memory.

There are three basic modes for the time strike at each time slot: Off, Strike “Stk”, and Chiming Melody “Chm”. These modes will act differently, depending on the quarter of the hour being chimed. When **Off** is selected the system will not strike the time for any time slots in the period. A **Strike** at the top of the hour will toll the number of the hour. A **Strike** on the other three quarters will toll only once. When **Chime** is selected on the top of the hour, the full chosen melody shall play, followed by striking of the hour, and on all other quarters the appropriate melody for that quarter shall play.

These modes are displayed in the **View mode** for each quarter hour as **OFF, STK and CHM**. The eight options in this menu take the three modes and apply them to each quarter hour in the selected period.

Schedule Clock Striking

Once you have decided which mode to use, determine the block of time, and during which days of the week you wish to do it. For example, you may wish to strike the time from seven o'clock in the morning until 11 o'clock in the evening Monday through Friday.

Press **[ENTER]**, **[3]**, **[ENTER]**, **[0]** from Standby mode to enter the Time Strike Scheduling mode.

The left half of the display shows the block of time, during the days that can be changed. When you select the Time Strike menu, the time period will default to "24-7" as shown in the example below. '12A to 12A' shows that all 15-minute intervals of the 24-hour day are selected. 'SUN .. SAT' shows that all seven of the days of the week are selected. Therefore, the initial display covers all periods in the program schedule.

12A to 12A FULL CHM
SUN .. SAT SET PROG

Use the **[←cursor]** and **[cursor▶]** buttons to select starting and ending times, and starting and ending days. When you have made the selection, it will flash. Use the **[cursor▲]** **[cursor▼]** to scroll to change or select times and days.



Note: If 10A to 09P is displayed, 10:00 A.M. to 8:45 P.M. is selected (up to but not including 9:00 P.M.). MON .. WED shows that the block of time is selected for Monday, Tuesday and Wednesday (This includes the days between and including the days shown).

To set a single day, set it in both positions (SUN..SUN would be only Sunday).

While the top right field of the screen is flashing, use the **[cursor▲]** or **[cursor▼]** button to sequence through the **Time Strike** option settings (see the table on the previous page). Continue pressing **[cursor▲]** or **[cursor▼]** button until you have selected the desired time strike .

Any programs displayed in the upper right corner of the display will be written into the program schedule when **SET PROG** is selected and the **[ENTER]** button is pressed for the times and days shown on the left side of the display.

Select **SET PROG** and press **[ENTER]** for each change you wish to make.

07A to 11P Full Chm
MON .. FRI SET PROG

This display shows that when SET PROG is selected and ENTER pressed, the Full Chime function will be programmed from 7:00 A.M. until 10:45 P.M. on Monday through Friday.

The program modifications available in the Time Strike menu are global in nature. To change the clock striking program for specific times on the program schedule, refer to page 47.

The following is the sequence that will set blocks of time in the **TIME STRIKE** mode.

1. If the system is not in standby mode, press the red **[CANCEL]** button until the time is displayed and the colon is flashing.
2. Bring up the Setup Time Strike menu by pressing **[ENTER], [3], [ENTER], [0]**.
3. Set time to start with **[cursor▲]** or **[cursor▼]** button.
4. Press the **[cursor▶]** button to select the Stop time and set it with **[cursor▲]** or **[cursor▼]** button.
5. Select beginning day by pressing the **[cursor▶]** button and set it with **[cursor▲]** or **[cursor▼]** button.
6. Select ending day by pressing the **[cursor▶]** button and set it with **[cursor▲]** or **[cursor▼]** button. If Beginning day and ending day are the same, the setting only changes that day.
7. Select time strike type with the **[cursor▶]** button.
8. Set desired Time Strike option with **[cursor▲]** or **[cursor▼]** button.
9. Select **"SET PROG"** with **[cursor▶]** button.
10. Press **[ENTER]** to program the time period selected.
11. **If you have another period to program press the [cursor▶] button and go to step 3.**
12. If you are finished, press **[CANCEL]** to return to Standby mode.

Verify Global Settings

The **Time Strike** screen always comes up showing **TS OFF** for every 24 hour period during the whole week. In order to see what has been programmed, the schedule must be scanned by hour or quarter hour in the **View/Edit Schedule** screen. Remember also that the **Search** function in the **View/Edit Schedule** screen will not find time strike events, only bottom line selections.

Selecting Chime Melody

Several time strike chime melodies are included with the Millennium Carillon™. To change the melody, follow the instructions on page 37.

(blank page)

Section 7

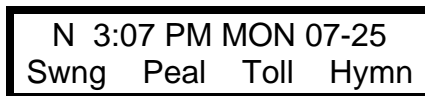
Play Selections (Manually)

It's nice to know that your Millennium™ Automatic Chime faithfully plays according to your schedule, but there will be times when you want to take control during services or special occasions. Remember, the remote control is always ready to play your function button programs, as well as step through the program entered in the **Play Selections** screen. The **[PLAY]** button on the remote corresponds to **[ENTER]** on the front panel when used to control manual playing. Likewise, the **[STOP]** button on the remote corresponds to the **[CANCEL]** button on the front panel.

If for any reason you wish to suspend the regularly scheduled automatic performances of the Automatic Chime, cueing a selection and not playing it will inhibit automatic operation for an hour. For durations longer than one hour, the power switch may be turned off.

Function Buttons

This is **Standby** mode displaying the season, time, day and date, along with a choice of bell functions.

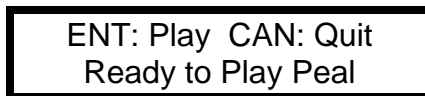


This is **Standby mode** displaying the season, time, day and date. The bottom line holds the labels for the **function buttons** which are the top four alphanumeric buttons.



Pressing the button corresponding to a label causes the system to cue the programmed selection.

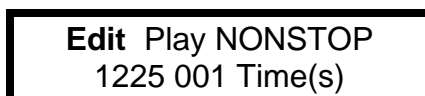
You may select a swinging, pealing, tolling bell or play a song by making your selection with the function buttons, ([1], [2], [3] or [4]) directly below the label on the screen. After making your selection, the screen will prompt you to press **[ENTER]** to play or **[CANCEL]** to reject the selection and return to **Standby mode**.



The selection will remain cued and ready to play for one hour after the function button is pressed. This display and the need for **[ENTER]** will be skipped if the function is programmed to play **NOW!**

Play Selections Menu

Any selection on the Automatic Chime may be played at any time using the Play Selections menu. From the Standby mode, Play Selections is accessed by pressing **[ENTER]** [1] **[ENTER]**. The selection(s) played the last time the menu was used will be displayed. You may edit the selections or play the same performance again.



Press **[ENTER]** to edit the performance program or **[cursor▶]** **[ENTER]** to play the same performance again.

Edit Play NONSTOP
1225 001 Time(s)

After pressing **[ENTER]** to edit the performance program, the first selection will flash. You can either enter a new four digit selection number or press **[cursor▼]** for the title lookup.

To Change Selections

New selections may be entered over the existing program. Entering all zeros for a selection will clear it and move subsequent selections back. If only one selection is entered, **001 Time(s)** will be displayed allowing you to repeat the selection up to 199 times.

To Enter More Than One Selection

When only one selection is currently programmed, press the **[cursor▶]** button to select the number of times to play the single selection. Pressing **[0]** then **[ENTER]** will clear this field and allow up to three more selections to be programmed.

Edit Play NONSTOP
1225 1140 1152 1317

This screen demonstrates what a multiple selection program looks like. The four selections will be queued to play when either the **[ENTER]** button is pressed.

To Repeat a Single Selection

If a single selection is entered into a performance which had multiple selections previously programmed, enter zeros into the second selection location until the second, third and fourth selections are cleared. Press **[ENTER]** to make **001 Time(s)** display. The number of times to repeat (one to 199) may now be entered (if less than three digits follow with **[ENTER]**).

Programmable Toll

The selection repeat feature may be used to cause a tolling bell to ring a specific number of times. A single strike on the large bell, which is selection number 6100, is typically used for funeral tolls. The number of repeats may be set to the age of the deceased. You may also use the single strike to strike for a specific length of time.

STOP or NONSTOP

When **STOP** is displayed and multiple selections are programmed, or a single selection is programmed to repeat, the system will pause between selections until **[ENTER]** or **[PLAY]** is pressed, before playing the next selection. When **STOP** mode is selected for repeated selections, the unit does not count how often the selection is played. The selection will be ready to play each time **[ENTER]** or **[PLAY]** is pressed until **[CANCEL]** or **[STOP]** is pressed.

When **NONSTOP** is displayed, the system will play without stopping until the entire performance, including repeats, are completed.

Reprogramming Remote/Function Buttons

The four remote control buttons are duplicated on the top row of the front panel as buttons F1 through F4. Front panel keypad buttons 5 through 8 are also programmable as function buttons, but only function from the carillon panel when the system is in standby mode. These buttons may be reprogrammed in a very similar way that you would program a manual performance in the **Play Selections** menu above. To access the function button editing screen from Standby mode, press **[ENTER] [3] [ENTER] [3] [ENTER]**.

F1 Swng WAIT NONSTOP
1034 001 Time(s)

F1 is flashing to indicate that you may select the function button you wish to edit. Use **[cursor▲]** and **[cursor▼]** or press the button you wish to edit then **[ENTER]**.

In addition to the function button number, a four character label and a **WAIT/NOW** field appear where **Edit** and **Play** were on the **Play Selections** screen. The four character label appears above the function button on the standby display (unless the screen saver is active).

Editing the Function's Selection(s)

Please consult *To Change Selections* on page 54 for instructions to change the performance selections and *STOP or NONSTOP* on page 54 for a description of that option.

Editing the Function's Label

Once the selections are programmed, press **[cursor▶]** until the first letter of the label is flashing. Title your new function using the **[cursor▲]** and **[cursor▼]** buttons on the front panel, pressing **[cursor▶]** for each character position.

WAIT or NOW!

When **WAIT** is displayed, the system will not go ahead and play the first program selection after pressing the function button. It will cue the selection for immediate play when the **[ENTER]** button on the front panel or the **[PLAY]** button is pressed on the remote.

When **NOW!** is displayed, the system will play the first selection as soon as it is ready after the function button is pressed. Cueing usually takes less than three seconds.

When **WAIT** or **NOW!** is flashing, the **[cursor▲]** button will alternately select between the two functions.

Saving the Changes

When all of the changes you want to make to the function buttons have been completed, press **[ENTER]**. If you wish to revert to the performance that was previously programmed on the button, press **[CANCEL]**.

Restoring the Factory Defaults

If you wish to restore the factory default for a button (1-Swinging Bell, 2-Pealing Bells, 3-Tolling Bell, 4-Hymn), just enter zeros for all of the selections and press **[ENTER]**.

(blank page)

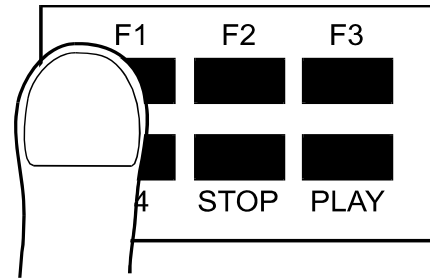
Section
8

Playing the Carillon Keyboard

Tower Performance

To activate the keyboard to play the carillon through the tower, simply press **[ENTER]** **[ENTER]** (from **Standby** mode). Since **Tower Performance** is the first option on the main menu, it is instantly available. You may also select the **Tower Performance** mode by simultaneously pressing the **[F1]** and **[F4]** buttons on the remote control.

As you can see on the lower line of the display, the pre-programmed function buttons **[1]** to **[3]** (and corresponding **[F1]** to **[F3]** on the remote control) are available for immediate performance.



Inside Only (Record Menu)

To enter the Record Menu from **Standby** mode, press **[ENTER]** then **[5]**.

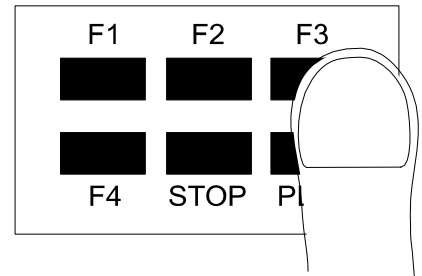
The remote control provides immediate access to the inside performance mode. Just simultaneously press **[F3]** and **[PLAY]** on the remote control and you are ready to play.

The remote function buttons **[F1]** to **[F3]** control the record/rehearsal mode. These functions are detailed in the following section.

- 1 - Swing button on mini remote - Start Recording
- 2 - Peel button on mini remote - Playback last recording
- 3 - Toll button on mini remote - Save last recording

After you have used the recording functions, press button **[F4]** to return to rehearsal mode (to hear the bells again).

Rehearsal mode will only play inside with simple bell controls with the audio option. Augmented tower bells and other advanced systems may not provide private rehearsals.



Section 9

Recording from the Keyboard

The Chime Master Millennium Automatic Chime allows you to build a custom library of your own musical selections. This section describes the process of recording performances and optionally saving them to permanent memory.

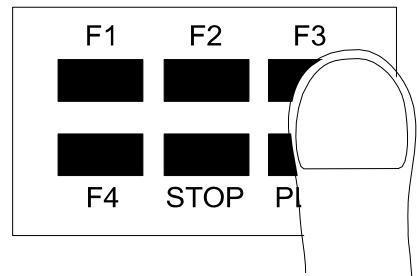
Entering the *Record a Performance* Menu

You may scroll through the Main Menu until reaching ‘Record a Performance’ or go there directly from Standby mode by pressing **[ENTER] [5] [ENTER]**.

**Record Menu
Recd Play Save Rehrs**

The record menu has four items displayed on the lower line. Use the **[◀cursor]**, **[cursor▶]** buttons to select and **[ENTER]**, or just press the button below the item **[1]** through **[4]** to select it.

Note that the keyboard is not active (cannot be heard) when *Record Menu* is displayed. This happens after finishing with other functions of the menu. To re-activate the keyboard press either the **Record** button **[1]** to begin recording or the **Rehearse** button **[4]** to enable the keyboard.



The record menu may also be activated by simultaneously pressing **[F3]** and **[PLAY]** on the large remote control

Practice Mode

From the record menu press the **Rehrs** button **[4]** to select the rehearse mode. The record menu remains on the bottom.

**Rehearsal Mode
Recd Play Save Rehrs**

The record menu remains on the bottom.

If a Chime Master Keyboard is used, the active light on the rightmost key will light.

Recording a Selection

From the record menu, press **Record** (*Recd*), front panel button **[1]** (or **[F1]** (**Swing**) on the remote), to put the system into record. If the record buffer does not contain any unsaved music, you will see the following display.

**Record Performance
Ready to Begin...**

The system will wait for fifteen seconds for you to begin playing.

If you have previously recorded a selection without saving it, the system will remind you that proceeding will result in the previous take’s erasure.

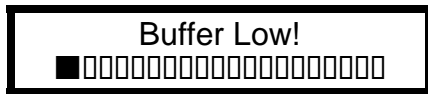
**Replace Last Take?
Yes/F1 No/CANCEL**

To proceed with the recording press **[1]** or **[F1]** again. To abort the recording so you may play the previous recording press **[CANCEL]** or **[STOP]**.



Once you begin to play, the lower line will display a bar graph of the remaining record buffer (memory space) available.

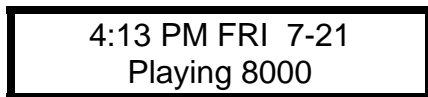
The recording will automatically stop if you pause for more than fifteen seconds. You may also stop the recording by pressing **[CANCEL]** (or **[STOP]** on the remote) or any other record menu button, including **[2]** (Peal on the remote) for playback.



The record buffer will hold over 1200 notes. You will receive a warning if memory reserve is low.

Playback the Recording

From the record menu, press **Play** (front panel button **[2]** or **[F2]** on the remote), to listen to your recording.

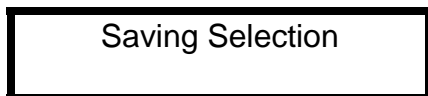


Playback will automatically stop and return to the record menu at the end of the selection, or you may stop at any time by pressing **[CANCEL]** (or **[STOP]** on the remote).

Selection **8000** is displayed because that is the number of the temporary record buffer. When you save recordings, they are numbered from 8001 and up, in the order that they are saved.

Save Selection

Press **Save** (front panel button **[3]** or **[F3]** on the remote) to permanently archive the performance. If a particular tune is used for several hymns belonging in more than one season, you may save it multiple times so that each entry may be categorized appropriately.



Saving the selection into permanent memory will take a few seconds.



The program double checks that all of the notes have been properly saved and then displays the selection number for your future reference.

Generally, the selections will be numbered sequentially. Occasionally you may see the system skip one or two numbers. This might happen if you save a particularly long selection which will not fit at the end of a 'cell' in the memory bank. If the system decides that it might fit one or more shorter selections in that space later, it will reserve sequential selection numbers for the shorter selections.

You will want to put titles on your selections before you save too many to remember. They won't play randomly either unless you add them to seasonal or non-seasonal play list categories. The *Recording Librarian* allows you to manage your recordings, and is the subject of the next section.

Section 10

Adding Recordings to the Library

Librarian Overview

Once you have recorded a few selections as described in the preceding section, you'll be anxious to put them to use. You could schedule or select them by number, but after you accumulate more than about five selections it will be difficult to remember their numbers.

The librarian not only allows you to assign titles to your selections, but also to categorize them into a seasonal grouping so that they will be played from the random play list at appropriate times. Supported categories are listed in the table on the following page.

The Recording Librarian is an optional feature. It can be installed with appropriate upgrade software. If the display says 'Option not installed,' when you attempt to activate the librarian, call (800)-432-3977 for upgrade details.

Activating the Librarian

From the **Standby** mode press **[ENTER] [4] [ENTER]**.



Important: Titles and seasonal groupings assigned to user recordings are stored in permanent memory when you press SAVE. Any misspellings will be permanently stored. Once a selection is coded to a random season, it cannot be coded to a different season.

**Warning! Can't Undo
Permanent Changes**

This is just a reminder. Press **[ENTER]** to continue.

**Recording Librarian
New/Edit Selections**

This screen allows you to select between new selections that are untitled/categorized and previously edited selections that you may wish to remove.

The word "New" will be flashing on the display. Press **[ENTER]** to continue to the editing screen for newly recorded selections.

Edit may be selected by pressing **[cursor▶]** then **[ENTER]**. **Edit** allows you to remove selections from the random play lists and permanently disable access to them (the memory space they occupy will not be reclaimed).

**Untitled 8127
8127 Play Not Random**

The selection number on the lower left indicates the current selection. Use **[cursor▲]** or **[cursor▼]** to select another selection.

The first untitled selection will be displayed. Pressing **[cursor▲]** will display the last selection you recorded. Pressing **[cursor▼]** will advance through the recordings in the order that they were recorded.

Processing New Recordings

Play the Selection

When the selection you wish to catalog is selected, press **[ENTER]** or **[cursor▶]**. Play will flash indicating that pressing **[ENTER]** again will allow you to audition the selection. If you didn't write down the title when you recorded the selection, perhaps hearing it will help you remember what it was.

Categorize for Random Play

After auditioning the selection, the category field will flash. The default category is **Not Random**, which means that the selection is not in any of the random music groups, and therefore will never play randomly. This is the proper category for selections like *Pomp and Circumstance* or wedding music which will only be played on special occasions, and will be selected specifically.

Untitled 8127 8127 Play Patriotic

While the category field is flashing, you may scroll through the available categories using the **[cursor▲]** and **[cursor▼]** buttons. When the category that suits the selection is flashing, press **[ENTER]**.

Available seasonal categories are described in the following table.

Category	Results
Not-Random	The selection will not be added to any of the random play lists. It may be selected specifically by title.
Non-Season	The selection is added to the general play list which will play when none of the following play lists are active (or enabled).
Lent	The selection is added to the Lenten play list for the period from Ash Wednesday until Good Friday.
Easter	The selection is added to the Easter play list for the period from Easter Sunday until End of April if Marian also selected. Otherwise plays for one week.
Patriotic	Selection is added to the play list for Independence Day (July 4) and Memorial Day (Last Monday of May).
Marian	Selection is added to the play list for the Marian season which encompasses the entire month of May; August 15 and 22; December 8.
Thanksgiving	Selection is added to the Thanksgiving play list for Thanksgiving Day and the previous Sunday.
Advent	The selection added to the Advent play list which plays from the First Sunday in Advent until date selected for 'Christmas from' in the seasonal setup.
Christmas	The Christmas play list will be used from the date selected for 'Christmas from' in the seasonal setup until January 5.

Title the Selection

After you have entered the category for the selection, the cursor will move to the first character of the title field. You may begin to enter the title by pressing the alphanumeric buttons. The first letter of each word will automatically be capitalized.

Each black button is labeled with four characters, three alphabetical characters on the face and one numeric character beside it. Each time the button is pressed, the alphabetical characters cycle through in turn, followed by the number. When the desired character has been selected, move to the next character position using the **[cursor▶]** button. Up to twenty characters may be entered for each title.

All Hail The Power
8127 Play Non-Season

Press **[ENTER]** when the title is complete.

Saving Your Changes

All Hail The Power
8127 **Save** Non-Season

Play will change to **Save** and begin to flash. Press **[ENTER]** if the title and seasonal category are correctly set.

Double check the title and seasonal category when **Save** is flashing before pressing **[ENTER]**. The information showing on the screen will be permanently stored in memory.

You can move around the screen using [**◀cursor**] and [**cursor▶**] to make corrections to the information prior to saving it. When you cursor away from **Save** it will revert to **Play**. To make it say **Save** again, press the [**◀cursor**] or [**cursor▶**] buttons until **Play** is flashing then press **[YES]**. While **Save** is flashing, press **[ENTER]** to save.

The next untitled selection will be displayed.

untitled
8128 Play Not-Random

Refer back to *Play the Selection* on page 62, to repeat the process for each untitled selection.

Editing Previously Processed Selections

To make changes to recordings that have already been processed as new, enter the *Recording Librarian* screen from *Standby* mode by pressing **[ENTER] [4] [ENTER] [ENTER]**. Then press [**cursor▶**] to make **Edit** flash and press **[ENTER]**.

Recording Librarian
New/Edit Selections

Edit allows you to remove selections from the random play lists and permanently disable access to the selection. (the space they occupy will not be reclaimed).

Removing Selections from the Random Play Lists

If a user recorded selection plays during an inappropriate season, it may be removed from that season's random play list. The selection will be available for performance by title or selection number, but will not play randomly.

Happy Birthday
8324 Play Christmas

Use [**cursor▲**] and [**cursor▼**] to find the selection you wish to remove from the random play list.

Happy Birthday
8324 **Play** Christmas

Press [**cursor▶**] to make **Play** flash.

Happy Birthday
8324 **Rmov** Christmas

Press [**cursor▼**] [**cursor▼**] to select **Rmov** (remove). Press [**ENTER**].

Remove Song From Rnd
Permanently? (Y/N)

Press [**YES**] to continue, or [**NO**] to abort.

Happy Birthday
8324 **Play** Removed Rnd

The selection has been removed from the Christmas random play list. **RemovRnd** signifies that it has been removed from random play.

You will still find *Happy Birthday* in the **User Recordings** section of the online title lookup, and 8324 will be a valid selection number for playback.

Deleting User Recordings

User recorded selections can be deleted. This may be desirable if a selection was accidentally saved, or is otherwise unusable.

Away With Our Fears!
8325 **Play** Non-Season

Use [**cursor▲**] and [**cursor▼**] to find the selection you wish to delete.

Away With Our Fears!
8325 **Play** Non-Season

Press [**cursor▶**] to make **Play** flash.

Away With Our Fears!
8325 **Eras** Non-Season

Press [**cursor▼**] to select **Eras** (erase). Press [**ENTER**].

Erase Selection
Permanently? (Y/N)

Press [**YES**] to continue, or [**NO**] to abort.

Abide With Me
8326 **Play** Non-Season

The selection has been deleted. The next recording will be displayed.

The selection will no longer appear in the online title lookup, and, if selected by number, will return a *Selection Not Found* error.

Section 11

Troubleshooting Guide

In Standby mode, the system is continuously performing diagnostics. If it detects something out of the ordinary, it will attempt to correct itself without operator intervention. If that is not possible, it locks up and displays a message. Although this can be an inconvenience, it is better than having to get out of bed in the middle of the night and race to the church to shut the bell system down. In the rare event that a problem is detected, one of the following messages may appear on your display. If this happens, follow the procedure listed below the message.

If your system is doing any other strange things that are not described below, turn the power switch off for about 10 seconds, then back on.

Error in Program Schedule Detected

**Program is corrupted
Yes-Clear No-Salvage**

If a power outage that surges on and off rapidly occurs (which often accompany high winds and storms), program memory may be affected. The corruption is usually minor and so we have provided a way to salvage as much of it as possible.

Should you select **YES** to reinitialize the program, or select **NO** to salvage? The answer depends on how complex your program is to key in, or if you have an adequate record of it at all. The least amount of time and effort will be spent if you press **NO** to salvage what you can. When you elect to salvage, each time slot is checked and will be cleared if any invalid selections are found. Also any slots programmed between **11:00 P.M.** and **6:00 A.M.** will be cleared. Be sure to check the schedule with View mode after resetting (refer to *Viewing the Current Schedule*, on page 45).

If you say **YES**, you must answer many questions from the installation menu. You may wish to refer to *Section 2, Connections and Setup* on page 33.

Blank Screen



Due to rare interruptions of program process, the screen may appear blank for a period which should not exceed 15 minutes. If it does exceed this period, turn off the power to the system or unplug it from the wall receptacle for about 10 seconds, then power back on or plug the system back into the wall receptacle. The program should resume after resetting itself to normal.

Time Clock Errors

Clock Error (E)
View Manual Setup

A clock error means that invalid data has been found in the time clock registers. Set the clock from the **Setup, Set Time** menu, then check system operation manually. If you get a Clock Error (S), showing that the clock has stopped, and you can't restart it by setting the time, the clock's battery may be low.

Call the factory for service information. (800) 432-3977

Returning the System for Service or Upgrades

Call for Return Authorization. Do not return equipment without calling (800) 432 - 3977 for return authorization. We probably can help you avoid returning the equipment. The customer service representative will also provide you with the address of the service station.

Follow the steps below to make your system ready for shipment.

Transportation Preparation Procedure.

1. Turn the system power **OFF**. The main power switch is on the rear of the unit.
2. Put the key where it will be safe until your unit is returned to you.
3. Disconnect Cables. Unplug the power cord from the rear of the Chime Master unit. Unplug the audio cables from the rear of the unit. Do not send any of the cables with the unit, unless they are suspect.

Use Only Original Chime Master Systems Packaging

Locate the original packing. Your warranty may be voided if your system arrives with shipping damage due to improper packing. If you cannot find your original boxes with foam packing materials as described below, call us at (800) 432-3977 to order a new box with packing. A \$25.00 charge is made for the shipping package.

Packing Materials

- (1) Box, 24 by 24 by 12 inches
- (2) blocks of green cushion foam packing
- (1) Accessory box if returning remote

Address the unit to be returned for upgrades or service to:

Service Department
Chime Master Systems
6312 Goss Road
Sugar Grove, OH 43155

The green cushion foam packing fits the sides of the unit (large spacer end toward the rear of the system).

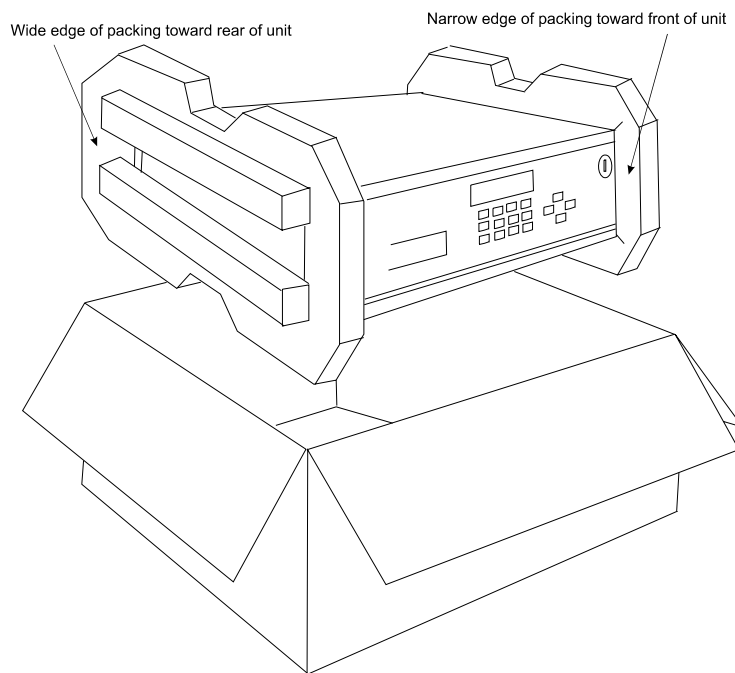
If you are returning accessories, do not place them loosely in the box with the system. A separate accessory box was used to ship them to you. Place it vertically behind the system.

The package should weigh about 35 pounds. Use original packing materials. Chime Master Systems will not be held liable for shipping damages.

Please see the following page for more information on packaging your unit.

Packaging Your Unit

With your unit facing you, attach the green foam packing to each side. This will help prevent damage to your unit during shipping. For any further questions or assistance, please call **1-800-432-3977**.



After Your Carillon has Been Serviced

Before Turning On Power.

To prepare system for operation:

Reconnect the cables to the rear panel of the system.

We make every effort to reprogram your schedule and settings after servicing your carillon. Insert the disc magazines before turning on system to avoid clearing the program schedule. If all of the disc trays do not cycle after the copyright message, go to the **SETUP** and then **CHANGE DISC** menus to eject the disc magazines. All trays should cycle after reinserting the pack.

Millennium Automatic Chime Warranty

Golden Warranty Five Year Parts and Labor

Chime Master® Systems warrants to the original consumer purchaser (Buyer) that this Chime Master Millennium® shall be free from defects in material and workmanship for a period of five (5) years after the original date of shipment to the Buyer. Bell Strikers and motors, if supplied by Chime Master, shall be warranted for 1 year. This is a limited warranty limited to its terms. This warranty is void if the product has been altered, misused, taken apart or otherwise abused. **ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED ARE EXCLUDED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PURPOSE.**

Buyer's Remedies: Chime Master System's obligations and liabilities under the foregoing warranty are limited to repair or replacement, at the option of Chime Master Systems, of the product without charge, provided it is shipped prepaid to a Chime Master Systems Factory-Authorized Service Center. The product must be accompanied by proof of the date of purchase satisfactory to Chime Master Systems, and by a Return Merchandise Authorization (RMA) number issued by Chime Master Systems. It is the responsibility of the Buyer to properly pack the unit for safe return, using the packing provided with the system. For an RMA number and the location of the nearest authorized service center contact Chime Master Systems, 6312 Goss Rd., Sugar Grove, OH, (800) 344-7464. A charge is made for repairing after the expiration of the warranty. **IN NO EVENT SHALL Chime Master Systems BE LIABLE FOR CLAIMS BASED UPON BREACH OF EXPRESS OF IMPLIED WARRANTY OR NEGLIGENCE OR ANY OTHER DAMAGES WHETHER DIRECT, IMMEDIATE, FORESEEABLE, CONSEQUENTIAL OR SPECIAL OR FOR ANY EXPENSES INCURRED BY REASON OF THE USE OR MISUSE, SALE OR FABRICATIONS OF PRODUCTS WHICH DO NOT CONFORM TO THE TERMS AND CONDITIONS OF THIS CONTRACT.**

The provisions of the foregoing warranty are valid in the United States only.

Excluded from this warranty are defects caused by wear and tear, misuse, neglect, shipping damages, alterations or modifications, or any act of nature. Such determinations will be made by Chime Master Systems.

It is the Buyer's responsibility to program this instrument to play at reasonable sound levels, and at appropriate times. Buyer agrees to hold Chime Master Systems harmless from, defend, and indemnify Chime Master Systems against damages, claims and expenses arising out of subsequent use of this product and based upon personal annoyance, discomfort, injuries, deaths, property damages, lost profits and other matters for which Buyer, its employees and members are or may be to any extent liable.

Every reasonable effort has been made to ensure that Chime Master Systems product manuals and promotional materials accurately describe the product's specifications and capabilities at the time of publication. However, because of ongoing improvements and updating of Chime Master Systems' products, Chime Master Systems cannot guarantee the accuracy of printed materials after the date of publication and disclaims liability for changes, errors or omissions.

IMPORTANT NOTICE: THIS WARRANTY IS IN EFFECT, ONLY IF SYSTEM IS CONNECTED WITH AN APPROVED SURGE PROTECTOR WITH A PROPERLY GROUNDED 120 VOLT 60 CYCLE ALTERNATING CURRENT RECEPTACLE WITH AT LEAST 8 AMPERES DESIGNATED FOR THE CHIME MASTER SYSTEM.

Index

- Adding Recordings
 - Library, 61
- Almanac
 - Seasonal, 41
- Arrangements
 - Disable Factory Music, 36
- Audio Output
 - Inside Monitor, 33
- Auto Level/Time Strike
 - Step-by-Step, 30
- Auto-lock keypad, 34
- Automatic Operation
 - Suspending, 44
- Automatic Reset
 - Cued selections, 41
 - Watchdog, 41
- Battery
 - Time Clock, 66
- Bell Ringing/Special
 - Title Lookup Screen, 44
- Blank Screen
 - Troubleshooting Guide, 65
- Blocks
 - Random Selections, 5
- Buttons
 - Function, 42
 - Function, 53
 - Green, remote control, 42
 - Programming function buttons, 54
 - Red, remote control, 42
- Carillon Keyboard
 - Playing inside and outside, 57
- Carillon Library
 - Title Lookup Screen, 44
- Categorize
 - Selection for Random Play, 62
- Changes
 - Saving, 63
- Chime Library
 - Title Lookup Screen, 44
- Clock Error
 - Troubleshooting guide, 66
- Clock Striking
 - Schedule, 49
 - Select Melody, 51
 - Specific Time Slot, 47
 - Step-by-Step Programming, 30
- Connections
 - AC Power, 34
 - Keyboard, 33
 - Organ Chamber Speakers, 33
 - PA System, 33
 - Remote Receiver, 33
- Cued selections
 - Automatic reset, 41
- Daylight Time Settings, 35
- Deleting
 - Recordings, 64
- Display
 - Set Prog, 50
 - Standby Mode, 40
- Editing
 - Previously processed selections, 63
- Error Messages
 - Seasonal Play List Empty, 37
- Factory selection defaults
 - Saving, 55
- Function
 - Wait or Now, 55
- Function Buttons
 - Programming, 54
 - Remote Control, 42
- Functions
 - Editing Selections, 55
 - Editing the Label, 55
- Functions Buttons
 - Saving Changes, 55
- Global Settings
 - Verify, 51
- Green button
 - Play, 42
- Keyboard
 - Connections, 33
 - Recording from, 59
- Keyboard
 - Turn On with Remote, 26
- Keypad
 - Lock, 34
- Label
 - Editing, 55
- Librarian
 - Activating, 61
 - Overview, 61
 - Step-by-Step, 28
- Library
 - Adding Recordings, 61
- Lights
 - Status Indicators, 40
- Maintenance
 - cleaning, 17
- Manual
 - Play Selections, 53
- Menu
 - Play Selections, 53
 - Record a Performance, 59
- Menu Shortcuts, 9
- Menus
 - selecting, 43
- Nonstop or Stop
 - Programming, 54
- Now or Wait
 - Function, 55
- Operating Mode
 - Standby Mode, 41

- Overview
 - Librarian, 61
- Packing the System
 - Troubleshooting guide, 66
- Pass code, 34
- Performance
 - Inside practice, 41
 - Keyboard playing, 57
 - Record Menu, 59
- Play
 - New selection, 62
- Play Selections
 - Cancel Selection(s), 22
 - Manual play, 53
 - Step-by-Step, 21
- Playback
 - Recording, 60
- Playing inside and outside
 - Caillon Keyboard, 57
- Power
 - AC, 34
- Practice Mode
 - Record, 59
- Processing
 - New Recordings, 62
- Program
 - Westminster, 49
- Program Corrupted
 - Troubleshooting guide, 65
- Programming
 - Funeral Toll, 7
 - Stop or Nonstop, 54
 - Swinging/Pealing Bell, 6
- Push Buttons
 - Black, 39
 - Gray, 40
 - No, 40
 - Yes, 40
- Quick Menu Shortcuts, 9
- Random Lists
 - Removing selections from, 63
- Ready to Play
 - Step-by-Step, 21
- Record
 - Practice Mode, 59
- Recording
 - From Keyboard, 59
 - New, 62
 - Playback, 60
 - Playing new selection, 62
 - Selection, 59
 - Step-by-Step, 27
- Recordings
 - Adding to Library, 61
 - Deleting, 64
- Red Button
 - Stop, 42
- Remote Buttons
 - Program (step-by-step), 31
- Remote control
 - placement of, 42
- Remote Control
 - Function Buttons, 42
- Removing selections
 - From Random list, 63
- Reset, Diagnostic, 41
- Restoring
 - Factory Defaults, 55
- Returning for repair
 - packaging information, 66
- Returning the system
 - Troubleshooting Guide, 66
- Save Selection, 60
- Saving
 - Changes, 55, 63
- Schedule
 - Add To (step-by-step), 23
 - Change (step-by-step), 25
 - Clock Striking, 49
 - Review (step-by-step), 24
 - Viewing the Current, 45
- Seasonal
 - Almanac, 41
 - Setup, 35
- Seasonal Categories
 - Advent, 62
 - Christmas, 62
 - Easter, 62
 - Lent, 62
 - Marian, 62
 - Non-Season, 62
 - Not-Random, 62
 - Patriotic, 62
 - Thanksgiving, 62
- Seasons
 - Advent, 10, 36, 41
 - Christmas, 10, 36, 41
 - Daylight, 10, 36
 - Easter, 10, 36
 - Good Friday, 10, 36
 - Lent, 10, 36, 41
 - Marian, 10, 36, 41
 - Non-seasonal, 41
 - Patriotic, 10, 36, 41
 - Pre-recorded 2 Part, 10, 36
 - Pre-recorded Full Carillon, 10
 - Pre-recorded Full Keyboard, 10, 36
 - Random, 36
 - Thanksgiving, 10, 36, 41
- Security
 - Pass code, 34
- Selection
 - Recording, 59
 - Recording & Playback, 60
 - Save, 60
- Selection Categories for Seasons
 - Advent, 62
 - Christmas, 62
 - Easter, 62
 - Lent, 62
 - Marian, 62
 - Non-Season, 62

- Not-Random, 62
- Patriotic, 62
- Thanksgiving, 62
- Selection Entry, 19
- Selections
 - Carry Forward, 47
 - Categorize for Random Play, 62
 - Change, 54
 - Deleting User Recordings, 64
 - Editing, 55
 - Editing previously processed selections, 63
 - Enter more than one, 54
 - Play Menu, 53
 - Playing new recorded selection, 62
 - Programming Toll, 54
 - Random, 47
 - Random Selection Blocks, 5
 - Removing from Random lists, 63
 - Repeat a single selection, 54
 - Specific selection, 46
 - Title the selection, 62
- Set Prog, 50
- Setup
 - Change Keypad Pass code, 34
 - Daylight Time Dates, 35
 - Smart Almanac Seasons, 36
- Shipment
 - preparing the system for return, 66
- Specific Time Slot
 - Clock Striking, 47
- Standby Mode
 - Display, 40
 - Operating Mode, 41
- Status Indicators
 - Lights, 40
- Stop or Nonstop
 - Programming, 54
- Swinging Bell Timing, 38
- Time Clock
 - Battery, 66
 - Seasons, 35
 - Setting, 29, 34
 - System Setup Menu, 29, 34
- Time Strike
 - Select Melody, 51
- Time Strike Tune Setup
 - Programming, 37
- Time Strike/Auto Level
 - Setting (Step-by-Step), 30
- Title
 - Selection, 62
- Title Lookup
 - On Screen, 44
- Title Lookup Screen
 - Access Titles Step-by-Step, 20
 - Bell Ringing/Special, 44
 - Carillon Library, 44
 - Chime Library, 44
 - User Recordings, 44
- Titles
 - Onscreen, 46
- Toll
 - Programming, 54
- Tower Performance
 - Keyboard playing, 57
- Troubleshooting guide
 - Clock error, 66
 - Packing the system, 66
 - Program corrupted, 65
 - Returning the system, 66
- Troubleshooting Guide*, 41
 - Blank Screen, 65
- User Recordings
 - Title Lookup Screen, 44
- View/Edit Schedule Screen
 - Navigating, 45
- Volume Level
 - Inside Monitoring, 34, 40
 - Setting (Step-by-Step), 30
- Wait or Now
 - Function, 55
- Watchdog
 - Automatic Reset, 41
- Westminster
 - Programming, 49