



## **Operating Manual**

LX Carillon  
VERSION 4.1

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# *Safety and Environmental Instructions*

## **Warnings**

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

1. Read all instructions before use
2. Do not use this carillon near water - for example, near a bathtub, washbowl, sink, wet basement, or near a swimming pool, or the like.
3. This carillon, 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.
4. This carillon should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
5. Care should be taken so that objects do not fall, and liquids do not spill into the enclosure through openings.
6. The carillon 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 carillon; or
  - c) The carillon has been exposed to rain; or
  - d) The carillon 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.
7. Do not attempt to service this carillon beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

## **Danger of Electric Shock**

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 carillon is properly grounded. Do not modify the plug provided with the carillon - if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

## **Grounding**

This carillon 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. The system may be grounded by connecting a short audio cable to the input of an amplifier having a three-prong grounded power cord plugged in to a properly grounded AC receptacle. Alternately, the carillon can be grounded by wiring the ground terminal of one of the audio outputs to a known good ground.

## Lightning

The Chime Master Carillon 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.

As with any valuable equipment purchase, you should review your insurance policy to be sure that your Carillon 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by any combination of the following measures:

- Relocate or reorient the receiving antenna
- Increase the separation between the equipment and the receiver
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.

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 his own expense.

**WARNING:** changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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



## Disposal

### Disposal of Old Electrical & Electronic Equipment (Applicable in European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

Please contact Chime Master for returning this equipment for credit if it is no longer used.

# *About this Manual*

This manual has been written to help you install and use the Chime Master carillon. Every precaution has been taken to ensure that it 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:

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## *Typography used in this Manual*

Front panel keypad buttons are shown as [0]-[9], [CANCEL] and [ENTER].

Front panel cursor up, down, left, right as [cursor▲], [cursor▼], [cursor◀] and [cursor▶]. The left and right buttons are used to select fields that flash on the display, while the up and down buttons generally are used to scroll through selections or make changes to a flashing field.

Remote control push buttons are shown as [F1], [F2], [F3], [F4], [STOP] and [PLAY].

Segments of the display that are flashing will be shown in bold type. The display below shows a flashing quarter hour.

MO 3: <b>15</b> P FIND L6 OFF
1225 1354 1313 0000



# Reference Tables

## Operational Menus

Displayed is 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	Play Selections	Allows pre-recorded and user-recorded selections to be performed manually. Instructions on page 49, and step-by-step on page 21.
1	View/Edit Schedule	Viewer/Editor for the program schedule. Allows searches for selections programmed to play, and modifications to the automatic schedule. Instructions on page 39, and step-by-step on pages 23-25.
2	System Setup Menu	Additional sub-menu with options described in the Setup Table below.
Item	Setup Menu Item	Description
0	Time Strike/Auto Level	Programs time periods for time striking style and volume level. Instructions on page 45, and step-by-step on page 27.
1	Set System Clock	Allows adjustments to the clock/calendar. Step-by-step instructions on page 26.
2	Edit Remote Button	Editor for four programmable function buttons and remote control. Instructions on page 51.
3	Seasonal Options	Enables or disables Daylight Saving Time adjustment, and allows customization of the seasonal almanac. Options to select or disable factory recorded musical styles. Options to provide inside/outside muting. Table of options on the following page and instructions on page 29.
4	Power off Save State	If schedules and settings are made immediately prior to powering off, your changes may not automatically back up to permanent memory. Use this option to ensure all changes are properly saved. Wait for the prompt saying <b>Completed</b> before you remove power. Removing and restoring power is the only way to exit this mode.
5	Security Options	Set keypad lock password and auto-lock options.

## 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 30 for further instructions.

Seasonal Option	Yes Results	No Results
Auto Daylight Saving Change	The carillon will automatically adjust the clock between Daylight Saving and Standard Time.	The carillon will never adjust the clock.
Use US Patriotic	Independence Day (July 4) and Memorial Day (Last Monday of May).	Continues to play non-seasonal selections.
Play Lenten	From Ash Wednesday until Good Friday.	Continues to play non-seasonal selections.
OFF Good Friday/Saturday	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.
Play Easter	From Easter Sunday until End of April if Marian also selected. Otherwise plays for one week.	Continues to play non-seasonal selections.
Play Marian	August 15 and 22, December 8, and the entire month of May	Continues to play non-seasonal selections
Play Thanksgiving	Thanksgiving Day and the previous Sunday	Continues to play non-seasonal selections
Play 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.	
Front Speaker	<b>Yes</b> , indicates that the front speaker will play as the inside zone. If you use another amplified speaker system connected to the <b>P</b> (PA) output, change this option to <b>No</b> to disable the small speaker on the front panel.	
Speakers On Automatic	Automatically scheduled programs will play: <b>Inside/Outside/Both</b> . Inside zone amplifier connects to the <b>P</b> (PA) output, Outside zone amplifier connects to the <b>T</b> (tower) output.	
Speakers On Manual	Remote control, front panel function and Play Selections programs (manual modes) will play: <b>Inside/Outside/Both</b> .	



## Random Music Group Codes

Press the [cursor▲] button followed by [1] through [8] to program a single random music selection when the selection number is flashing in the programming menu pages.

<b>Grp1</b>	Sacred hymns mixed with non-sacred music, follows the almanac seasons (Sacred non-seasonal music is disabled when Easter season is disabled)
<b>Grp2</b>	Sacred hymns mixed with non-sacred music, always non-seasonal
<b>Grp3</b>	Sacred hymns only, follows the almanac seasons
<b>Grp4</b>	Sacred hymns only, always non-seasonal
<b>Grp5</b>	Non-sacred music only, will play patriotic and Christmas in season (Sacred Patriotic and Christmas music will not play)
<b>Grp6</b>	Non-sacred music only, always non-seasonal
<b>Grp7</b>	Patriotic music independent of season
<b>Grp8</b>	Marian hymns independent of season

Enter 70xy (with x and y from the table below) to play multiple random music selections with a single code. Since they determine the ending time of the block of music, these codes cannot be followed by any other selections at the same time slot. Any following selection codes will be ignored.

### 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

## Ringling Functions

Swinging bells are available in two pitches. The lower bell is typically swung as a Call to Worship and the smaller bell can be used to call to classes or Sunday School.

Swing	30 sec	1 min	2 min	5 min	10 min
Bell F3	1022	1024*	1025	1028	1029
Bell A3	1052	1054	1055	1058	1059

A Peal consists of three or four bells ringing together in a chord. Peals are used during celebrations such as Easter, Christmas Eve and Weddings. Four traditional peals are included.

Peal	1 min	2 min	5 min	10 min
American 3	1074	1075	1078	1079
American 4	1064	1065	1068*	1069
Diatonic 3	1094	1095	1098	1099
Minor 3	0610	0611	0614	0615

American 3: F3 - A3 - C4

Diatonic 3: F3 - G3 - A3

American 4: F3 - A3 - C4 - F4

Minor 3: F3 - A $\flat$ 3 - C4

Tolls are solemn rings of a single low bell. They are used for funerals and other solemn occasions. The Slow tempo rings once every 12 seconds, Medium rings once every 9 seconds and Fast rings once every 5 seconds. The automatic schedule can be programmed to let the bell toll continuously for one, five or ten minutes. In addition to timed tolls, the Play Selections menu from the Functions Buttons can be used to program a specific number of strikes. To do this, enter 0130 and set the repeat value from 1 to 199. If NONSTOP is chosen, they will play straight through until all have finished (or you cancel play). If STOP is chosen, one toll will play each time the play button is pressed, for as many times as specified. The pitch of the tolling bell is F3.

Toll	1 min	5 min	10 min
Slow	0134	0138	0139
Medium	0144	0148	0149
Fast	0154	0158	0159

Angelus bells call the community to prayer traditionally at morning, noon and evening times. Three different tempos are available to allow the appropriate amount of time between rings for each prayer. You can choose to end the prayer with 9 tolls or with a one-minute swinging bell.

Angelus Style	Slow ( 5 second tempo)	Medium (4.5 second tempo)	Fast ( 4 second tempo)
3-3-3 only	1105	1103	1101
3-3-3 - 9 tolls	1111	1109	1107
3-3-3 - swing	1117	1115	1113

## Other Available Functions

De Profundis Toll.....	0063
Orthodox "Call to Church" .....	1119
Taps on Bugle .....	0165
Amazing Grace on Bagpipes .....	0040
Single Toll.....	0130

## Special Function Macro Codes

### Scheduling Function Button Programs

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 different times during the week 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. Program function F8 to repeat selection 0100 33 times. Placing **7908** anywhere in the program schedule will program a 33-stroke toll.

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 your schedule everywhere it is used as a macro function.

### Scheduling Pauses

Sometimes you will not want the bells to ring exactly on the quarter hour. To delay ringing until later in the quarter, insert a pause in the program ahead of the ringing. Selection 0071 represents a one-minute pause. 0072 is a two-minute pause through 0080, which schedules a ten-minute pause. Page 20 explains how to use these pauses in your schedule.

### ZoneAutoMute™ Speaker Switching

Inside/Outside speaker switching can be accomplished on the schedule to override the settings made in the Setup-Seasonal Options screen. The following macros switch the speakers to play inside, outside or both for manual or automatic operation:

- 7920** Manual Outside/Automatic Outside
- 7921** Manual Outside/Automatic Inside
- 7922** Manual Outside/Automatic Inside and Outside
- 7923** Manual Inside/Automatic Outside
- 7924** Manual Inside/Automatic Inside
- 7925** Manual Inside/Automatic Inside and Outside
- 7926** Manual Inside and Outside/Automatic Outside
- 7927** Manual Inside and Outside/Automatic Inside
- 7928** Manual Inside and Outside/Automatic Inside and Outside



## Schedule Input Sheet

### Weekly Schedule 1

Circle all days that apply	Sel 1	Sel 2	Sel 3	Sel 4	Level	TS	Remarks
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/Level (Set-Up)

FROM		TO		Time Strike Mode or Level Setting
Day	Time	Day	Time	

**Weekly Schedule 2**

Circle all days that apply	Sel 1	Sel 2	Sel 3	Sel 4	Level	TS	Remarks
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/Level (Set-Up)**

FROM		TO		Time Strike Mode or Level Setting
Day	Time	Day	Time	

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## *Quick Reference Guide*

This section of the Operating Manual is organized as several step-by-step procedures that you may refer to after the carillon has been installed. Hookup instructions are found in Section 2, and your initial familiarization of the carillon should begin with Section 3 on Page 33.

### **Trying Out the System for the First Time**

If you have just installed your system, you are probably eager to hear how it sounds. While it is ringing, you may need to adjust the volume level. To locate the master level control, check the installation sheet supplied with the amplifier.

Simply press [1], then [ENTER]. This will ring a call-to-worship swinging bell. 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 29.

You have just used two of the eight re-programmable functions. These functions are explained on page 28.

### **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**

Look the title up in the selections catalog to find the four-digit number for the selection. You can enter specific selection numbers directly using the numeric buttons. When a four-digit selection is flashing, you may also look up the number using the online catalog (see the next page).

#### **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 9, and in more detail on page 42.

#### **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 9 and explained on page 42.

### To Program a Pause (Automatic Schedule Only)

Use a pause in the schedule to play selections a specific number of minutes beyond the even quarter hour. Enter the Pause code (0071-0080) to indicate the number of minutes to delay. Use multiple pauses to increase the delay time.

MO 3:15P FIND L6 OFF  
0075 1225 Grp2 7023

This view shows a five-minute pause, which allows Amazing Grace (selection 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 starting on page 11.

### Access Online Music Titles

To enter a specific music selection, you may do it by title rather than number. This procedure works from the **View/Edit Schedule** page (as shown below), the manual **Play Selections** page and the **Setup – Edit Remote Buttons** page. You may use this procedure whenever a four-digit selection number is flashing.

Step

1

MO 3:15P FIND 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

Music Title Index  
ABCDEFGHIJLMNOPRST

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

3

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 2.

4

MO 3:15P FIND 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.

## Play Selection(s) Using the Manual Mode

Detailed instructions can also be found on page 49.

- |                         |  |  |
|-------------------------|--|--|
| <i>Step</i><br><b>1</b> | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn   | Here, the standby home screen is displayed.  |
| <b>2</b>                | Main Menu<br><b>Play Selections</b>  | Press [0] to select “Play Selections,” then [ENTER].   |
|                         | <b>Edit</b> Play NONSTOP<br>1225 001 Time(s)   | The display will show the last program played in the Manual mode.  |
| <b>3</b>                | Edit <b>Play</b> NONSTOP<br>1225 001 Time(s)   | <b>To Play a previously created program:</b><br>Press [cursor▶] to get to play. Go to step 6 to continue using this program.   |
|                         | Edit Play NONSTOP<br><b>1225</b> 001 Time(s)   | <b>To Edit/Create a program to play:</b><br>Select <b>Edit</b> by pressing [ENTER].  |
| <b>5</b>                | Edit Play NONSTOP<br>1174 <b>0000</b> 0000 0000  | Enter the new selection number (see <b>Entering Selections</b> 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 times <sup>1</sup> . |  |
| <b>6</b>                | Edit <b>Play</b> NONSTOP<br>1225 001 Time(s)   | Press [ENTER] to select <b>Play</b> . Press [ENTER] to cue the program.  |
|                         | ENT: Play CAN: Quit<br>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].   |

<sup>1</sup> 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 display will remain on the **Manual** page 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 39.

- |                         |   |  |
|-------------------------|---|--|
| <i>Step</i><br><b>1</b> | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn  | Here, the standby home screen is displayed.  |
| <b>2</b>                | Main Menu<br>View/Edit Schedule             | Press [1] for the “View/Edit Schedule,” then [ENTER].  |
| <b>3</b>                | SU 9:30A FIND L6 OFF<br>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.  |
| <b>4</b>                | SU 9:30A FIND L6 OFF<br>1225 1344 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 to be entered. See page 19 for selection entry instructions. |
| <b>5</b>                | SU 9:30A FIND L6 OFF<br>1225 1344 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.  |
| <b>6</b>                | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn  | Press [CANCEL] to return to the standby home screen.   |

While a selection is flashing:

[cursor▲]= Grp (Random Music Group)

[cursor▼]= Online Title Catalog

## Review the Automatic Play Schedule

Detailed instructions may be found on page 39.

*Step*

**1**

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

Here, the standby home screen is displayed.

**2**

Main Menu  
View/Edit Schedule

Press [1] for the “View/Edit Schedule” page, then [ENTER].

**3**

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

Press [cursor▶][cursor▶][cursor▶] to select FIND.

**4**

SU 9:30A FIND L6 OFF  
1225 1344 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 the standby home screen or [ENTER] to edit the displayed time slot (see pg. 25)



## Make Changes to the Automatic Play Schedule

Detailed instructions may be found on page 39.

- |                         |   |   |
|-------------------------|---|---|
| <i>Step</i><br><b>1</b> | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn                | Here, the standby home screen is displayed.   |
| <b>2</b>                | Main Menu<br><b>View/Edit Schedule</b>                    | Press [1] for the <b>View/Edit Schedule</b> , then [ENTER].   |
| <b>3</b>                | MO 3:15P <b>FIND</b> L6 OFF<br>0000 0000 0000 0000        | Press [cursor▶][cursor▶][cursor▶] to select <b>FIND</b> .   |
| <b>4</b>                | SU 9:30A <b>FIND</b> L6 OFF<br>1225 1344 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▲].  |
| <b>5</b>                | SU 9:30A <b>FIND</b> L6 OFF<br><b>1225</b> 1344 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 to be entered.   |
| <b>6</b>                | SU 9:30A <b>FIND</b> L6 <b>CHM</b><br>1225 1344 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. |
| <b>7</b>                |   | Press [ENTER] to save the changes in memory. Go back to step 4 to make further changes.   |
| <b>8</b>                |   | Press [CANCEL] to return to the standby home screen.  |

## 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><br><b>1</b> | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn       | Here, the standby home screen is displayed.   |
| <b>2</b>                | Main Menu<br><b>System Setup Menu</b>            | Press [2] to select "System Setup Menu," then [ENTER].  |
| <b>3</b>                | Setup Menu<br><b>Set System Clock</b>            | Press [1] to select "Set System Clock," then [ENTER].   |
| <b>4</b>                | 3:10 PM MON 07-25<br>Year = 2025 <b>Set Time</b> | Use [cursor◀] and [cursor▶] to select hour, minutes, month, day and year, then use [cursor▲] and [cursor▼] to change settings.                  |
| <b>5</b>                | Setting Real Time<br>Clock...                    | Use [cursor▶] to select <b>Set Time</b> , double check settings (especially AM/PM) and press [ENTER] to start the clock from the selected time. |

If the carillon system is also used to control tower clock dials, the following display will appear to let you synchronize the tower clocks with the system time. Enter the time to which the tower dial hands point.

- |          |   |   |
|----------|---|---|
| <b>6</b> | Tower clock dial<br>Hands indicate: <b>3:08</b> | Press [cursor▲] and [cursor▼] to change settings to match the tower dials. Tower dial movement is sed while the time setting menu pages are active. |
|----------|---|---|

## Set Clock Chiming and Volume Levels (Globally)

Detailed instructions may be found on page 45.

- |                  |   |   |
|------------------|---|---|
| Step<br><b>1</b> | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn  | Here, the standby home screen is displayed.   |
| <b>2</b>         | Main Menu<br>System Setup Menu              | Press [2] to select “System Setup Menu,” then [ENTER].  |
| <b>3</b>         | System Setup Menu<br>TimeStrike/AutoLevel   | Press [0], then [ENTER] to select and display the TimeStrike/AutoLevel programming page.  |
| <b>4</b>         | 12A to 12A LEVEL: 6<br>SUN . . SAT SET PROG | Use the [cursor▼] and [cursor▲] buttons to change the beginning time.   |
| <b>5</b>         | 12A to 12A LEVEL: 6<br>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. |
| <b>6</b>         | 12A to 12A LEVEL: 6<br>SUN . . SAT SET PROG | Similarly, select and change the beginning day and ending day. Scroll through the levels and time strike programs until your desired setting is shown. All of the programming options are shown in the table below.                     |
| <b>7</b>         | 12A to 12A LEVEL: 6<br>SUN . . SAT SET PROG | Select “Set Program” and then press [ENTER] to put the selected program into schedule memory.   |
| <b>8</b>         | Modifying<br>Program Memory                 | When finished, press [CANCEL]. You should verify all changes using the View/Edit Schedule programming page.   |

Volume Level 1 is softest, 6 is default and 8 is loudest.

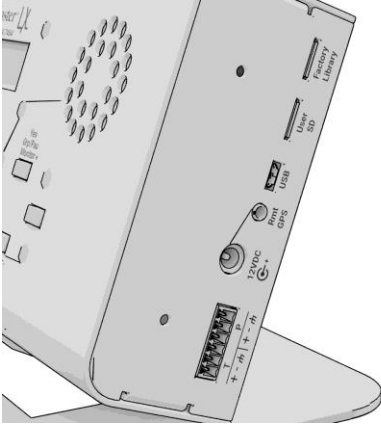
TS OFF	(Time Strike OFF)
Full Chm	(Chime clock all quarters)
Half Chm	(Chime clock on hour and 1/2 hour)
Top Chm	(Chime clock only on the hour)
Chm Stk	(Chime clock on the hour, 1-strike quarters)
Full Stk	(Strike the hour, 1-Strike on all other quarters)
Half Stk	(Strike the hour, 1-Strike on the 1/2 hour)
Top Stk	(Strike only at the top of the hour)

## Reprogram the Remote Function Buttons

Follow these steps to reprogram the eight programmable buttons on the front panel keypad. Detailed instructions may be found on page 51.

- |                         |   |   |
|-------------------------|---|---|
| <i>Step</i><br><b>1</b> | N 3:07 PM MON 07-25<br>Swng Peal Toll Hymn      | Here, the standby home screen is displayed.   |
| <b>2</b>                | Main Menu<br><b>System Setup Menu</b>           | Press [2] to select “System Setup Menu,” then [ENTER].  |
| <b>3</b>                | System Setup Menu<br><b>Edit Remote Button</b>  | Press [2] to select “Edit Remote Button” then press [ENTER].  |
| <b>4</b>                | <b>F1 Swng Wait Nonstop</b><br>1028 001 Time(s) | Use [cursor▼] or the number of the function to select the button (F1-F8) to reprogram then press [ENTER].   |
| <b>5</b>                | F1 Swng Wait Nonstop<br>1028 001 Time(s)        | Input the new selection number (see <b>To Enter Selections</b> 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. |
| <b>6</b>                | F1 <b>Swng Wait Nonstop</b><br>1028 001 Time(s) | Press [cursor▶] to select the button label. You may select each letter and change it using the [cursor▲] and [cursor▼] buttons.   |
| <b>7</b>                | F1 Swng Wait <b>Nonstop</b><br>1028 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.  |
| <b>8</b>                | <b>F1 Swng Wait Nonstop</b><br>1028 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 to a single selection for repeating, zero out the last three selections and press [ENTER]

**Power**

Use the supplied AC adapter to supply well-regulated 12VDC to the power input jack on the side of the carillon.

Power supplied to the Chime Master System, which includes both the head unit and the amplifier, 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 hardware stores sell simple test plugs that can verify that the receptacle is wired properly.

Surge suppression components are built-in to the carillon. For additional protection, you may add a surge suppressor to the receptacle that the carillon plugs into. You may also consider having an electrician install a lightning/surge suppressor to the circuit breaker panel supplying any of your electronic equipment.

**Amplifier Connections****Outputs and Inputs**

The two balanced outputs are labeled **T** and **P**. **T** refers to the tower amplifier and sends equalized **Outside Zone** audio for horn protection to the amplifier. **P** sends full range **Inside Zone** for connection to PA (public announcement) or other amplified speaker system inside the building.

To connect either audio output to an unbalanced input, use the positive output terminal for the hot connection and jumper the negative output terminal to the ground terminal.

Whenever the system is at the Home Screen or in 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 **P** output.

To disable the front panel speaker when connecting other amplification equipment to the **P** output, refer to the Setup-Seasonal options below.

**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 change or set the password, press [ENTER] [2] [ENTER] [4] [ENTER]. If a pass code has already been set, you will be prompted to enter it. Next enter a new four-digit pass code. You will be prompted to verify it before it is 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] [2] [ENTER] [4] [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 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.

## SmartAlmanac™ Seasonal Setup

One of your carillon's primary strengths is its 'set it/forget it' ease of programming. The 100-year SmartAlmanac 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.

From the Main Menu, [2] will select the setup menu, then [ENTER] will go to the Setup Menu, [3] will select Seasonal Options, then [ENTER]. The lower line displays the current seasonal option on the left and its current setting on the right.

Available seasonal options are described in the following table.

Seasonal Option	Yes Results	No Results
Daylight Time	The carillon will automatically adjust the clock between Daylight Saving and Standard Time.	The carillon 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.
OFF Good Friday/Saturday	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	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.	
Front Speaker	<b>Yes</b> , indicates that the front speaker will play as the inside zone. If you use another amplified speaker system connected to the P (PA) output, change this option to <b>No</b> to disable the small speaker on the front panel.	

Speakers On Automatic	Automatically scheduled programs will play: <b>Inside/Outside/Both.</b>
Speakers On Manual	Remote control, front panel function and Play Selections programs (manual modes) will play: <b>Inside/Outside/Both.</b>

The [◀cursor] and [cursor▶] buttons select between the left and right sides of the display. When the left side of the display is flashing, the [cursor▼] and [cursor▲] buttons move forward and back through the list of options. When the right side of the display 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 blinking a date on the right side of the display, [cursor▼] and [cursor▲] move forward and back through the list of dates in December Christmas can begin.

When the right side of the display is flashing, [ENTER] advances through the list of options. You may find that 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 will be saved. Pressing [CANCEL] at any time exits without saving your changes.

### 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 (Continue to hold [1] until the screen below is displayed).

<b>Start: 2nd Su Mo:Mar</b> <b>End: 1st Su Mo:Nov</b>
--

The [◀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 the Daylight Time menu without saving your changes.

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

<b>N 3:07 PM. MON*07-25</b> <b>Swng Peal Toll Hymn</b>
---

### 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 choose selections at random from seasonal or non-seasonal play lists. There are several reasons why may want to disable one or more of these seasons. 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.

### Inside/Outside Zone Auto-Mute™

The Chime Master carillon can automatically mute the inside or outside speakers depending on how you wish to use the system. At the end of the Seasonal Options menu are two options that allow you to customize this feature. These settings can be modified by macro codes in the program schedule see page 11 for selection codes.

Both automatic play (any music or bell ringing activated by the automatic schedule) and manual play (music or bell ringing activated by the remote control or *Play Selections* menu) can be set so that the speakers will operate inside only, 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 front panel lights, glowing in the speaker, will indicate which speaker zones are active.

- Gold - Both inside and outside zones are enabled
- Red - Only the inside zone is enabled
- Green - Only the outside zone is enabled
- Blue - indicates that the system is in the Standby Mode



# Section 3

## Overview of Features

### Front Panel

#### Push Buttons

Security options can be set so that the keypad can be locked. A four-digit pass code is required to unlock the keypad after it has been locked. For help configuring the keypad security, see *Security Options* on page 29.

The [ENTER] button will execute selected menus. In programming screens, it confirms changes made to the program.

The [CANCEL] button will escape out of certain system operations and modes. It will reject the currently playing selection. Press it twice to reject an entire performance.

Ten black buttons have alphabetical characters printed on them, and numbers printed to the left of them. They are generally used for entering numeric information such as selection numbers into the programming schedule (which can also be done by title).

When assigning titles to selections, the black buttons will allow you to easily enter alphabetical characters. The system will type the first character printed on the button the first time you press it. Subsequent presses will rotate through the remaining characters and finally through the number. The system automatically capitalizes the first letter of each word in the title.

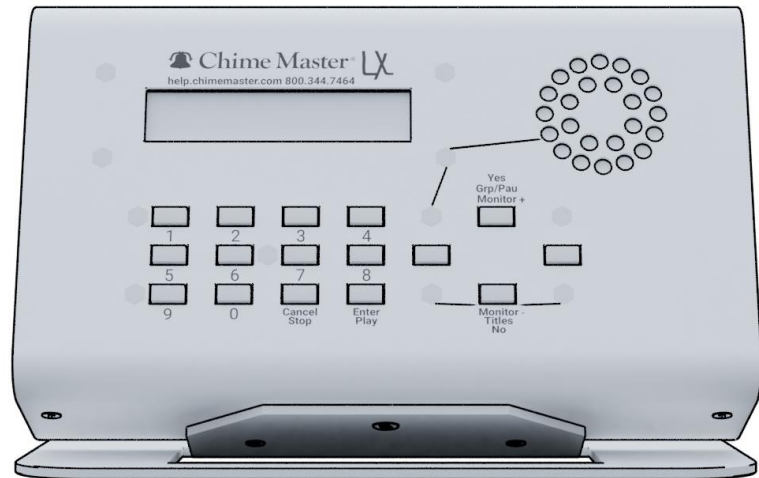
The top row of black buttons ([1] through [4]) represents the four functions displayed on the lower line of the Standby Menu screen. 5 through 8 can also be programmed as additional function buttons, not displayed on the screen.

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 scroll-up and down buttons are needed to answer 'Yes' and 'No' to questions appearing on the display, they will be shown in this manual as [YES] and [NO].

Whenever the system is prompting for a selection (by flashing 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 (in the View/Edit Schedule screen) may be entered by alternately pressing the [YES] button.

#### Inside Monitor Speaker Volume Level

Whenever the system is at the standby home screen or in Play modes, the inside monitoring speaker level can be adjusted using the [cursor▲] and [cursor▼] (*scroll up and down*) buttons.



### Inside/Outside Speaker Status Indicators

Lights behind the speaker indicate which zones are active while the system is playing.

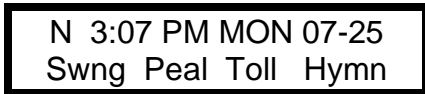
- Booting - WHITE
- Standby - BLUE
- Initializing -no light
- Outside active - GREEN
- Inside and Outside - AMBER - carillon only
- Inside only - RED - carillon only

### Card Slots

The purpose of the top data card slot is for Chime Master use ONLY. Do not remove the top SD card. The bottom data card slot is optional for user audio files. See the **Options** section on page 53 for usage.

### Display

Programmed selections and bell functions will not play automatically, unless this standby home screen is displayed.

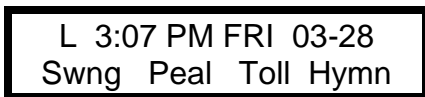


The 'N' denotes a non-seasonal time of year. This changes with the seasons as described below. This is followed on the top line by the current time and date. The lower line labels the four function buttons

### 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 displayed at the top left corner of the standby screen shows which seasonal play list is currently in use. A disabled season (see Seasonal Setup on page 29) will result in an 'N' displayed during that time. The display always indicates the current season music list in use.



Example: During the Lenten Season, the display will show that Lenten (L) selections will be substituted when seasonal random selections are programmed.

### 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* on page 55 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.**

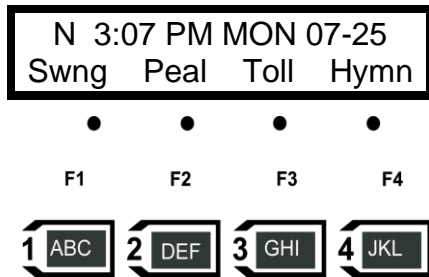
Countdown warning screen appears after a period of inactivity in the setup screens. To return to the previous operation press any button.

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.

## Pushbutton Manual Operation

### 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. Buttons 5 through 8 may also be programmed but their labels will not be displayed.

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**.

**ENT: Play CAN: Quit  
Ready to Play Peal**

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!**

## Selecting Menus

Whenever the system is 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.

<b>Main Menu</b> <b>Tower Performance</b>
--

Press the [cursor▲] or [cursor▼] button 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	Play Selections	Allows pre-recorded and user-recorded selections to be performed manually. Instructions on page 49, and step-by-step on page 21.
1	View/Edit Schedule	Viewer/Editor for the program schedule. Allows searches for selections programmed to play, and modifications to the automatic schedule. Instructions on page 39, and step-by-step on pages 23-25.
2	System Setup Menu	Additional sub-menu with options described in the Setup Table below.

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	Time Strike/Auto Level	Programs time periods for time striking style and volume level. Instructions on page 45, and step-by-step on page 27.
1	Set System Clock	Allows adjustments to the clock/calendar. Step-by-step instructions on page 26.
2	Edit Remote Button	Editor for four programmable function buttons and remote control. Instructions on page 51.
3	Seasonal Options	Enables or disables Daylight Saving Time adjustment, and allows customization of the seasonal almanac. Options to select or disable factory recorded musical styles. Options to provide inside/outside muting. Table of options on the following page and instructions on page 29.
4	Power off Save State	If schedules and settings are made immediately prior to powering off, your changes may not automatically back up to permanent memory. Use this option to ensure all changes are properly saved. Wait for the prompt saying <b>Completed</b> before you remove power. Removing and restoring power is the only way to exit this mode.
5	Security Options	Set keypad lock password and auto-lock options.

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 is shown on the lower line.

You may adjust the inside volume level by pressing either the [cursor▲] or [cursor▼] button to raise or lower the volume level. This does not affect the level heard from the outside speakers.

You can also reject the selection or all selections that are queued to play.

9:31 AM Tue 11 - 11 Playing 1344
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[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 that is subdivided into two groups:

Chime Library	Titles Musical selections.
Bell Ringing/Special	Titles of special use bells, random selections, 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 the standby home screen. 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 the standby home screen by itself so that automatic operation may resume.

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# Section 4

## *Scheduling Automatic Performances*

The schedule editing features of the carillon allow you to easily schedule it to do just about anything you can think of 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, a time strike option and a volume level setting.

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/Auto Level** screen appears in the **Setup Menu**. Time strike options and volume level changes over larger periods of time are set on this screen.

For the purposes of explaining the process, let's set up a typical ringing schedule:

Two random music selections at noon, and again at 6 P.M. every day.

One-minute Call to Worship swinging bell at 8:00 A.M. and 10:30 A.M. on Sunday morning.

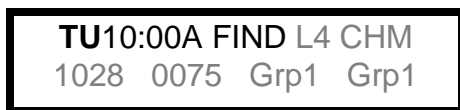
Thirty-second swinging bell at 6:55 P.M. on Wednesday.

Westminster time striking from 8 A.M. until 9 P.M. Monday through Saturday.

Westminster time striking from 1 P.M. until 8 P.M. on Sunday.

### **Navigating the View/Edit Schedule Screen**

If the system is in standby mode, bring up the **View/Edit Schedule** screen by pressing [ENTER] [1] [ENTER]. If the system is in another menu or playing, press [CANCEL] until the current time is on the top line of the display, and the function button labels are on the bottom.



TU10:00A FIND L4 CHM  
1028 0075 Grp1 Grp1

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 portion of the display are the program fields. The [ENTER] button toggles activity 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 program fields are accessed after the time slot is selected by pressing [ENTER]. When the program field is flashing, the [◀cursor] and [cursor▶] buttons select the program fields, allowing them to be edited. To store the changes press [ENTER], to reject the changes and revert to the previous program press [CANCEL]. The time positioning field last selected will flash.

The four fields on the lower line represent events programmed at the current time slot. 0186 represents a one-minute swinging bell. This is followed by a five-minute pause (0075) and two

hymns from random group 1 (**Grp1**). The **L4** on the upper line indicates that the system will play at volume level four at this time, and the **CHM** shows that the scheduled program will be preceded by a time strike using the Westminster 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.

When the hour field is flashing, the [cursor▲] button will scroll backwards to the previous hour and the [cursor▼] button will scroll forward to the next hour.

When the minute field is flashing, the [cursor▲] button will scroll backward to the previous quarter hour time slot and the [cursor▼] button will scroll forward to the next quarter hour time slot.

## Viewing the Current Schedule

When the search field (**FIND**) is flashing, the [cursor▲] button will search backward and the [cursor▼] button will search forward to the next time slot that 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 **FIND** is flashing.

## Selecting the Time to Play

Our example schedule calls for a swinging bell at 8 A.M. and again at 10:30 A.M. on Sunday morning. From the standby mode press [ENTER] [1] [ENTER] and the current day will flash. Use the [cursor▼] button to set the day to **SU** and press [cursor▶] to make the hour flash and press [cursor▲] to go backward or [cursor▼] to go forward to 8 A.M. Note that if you go past midnight, the day field will change. Press [cursor▶] to make the minute flash and press [cursor▲] to go backward to **:00** if another minute is flashing.

SU 8:00A FIND L6 OFF
0000 0000 0000 0000

8:00 A.M. Sunday morning is selected. No selections are programmed to play. The volume level is set to the default value of 6. The clock striking function is OFF.

## Specific Selections

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.

## Onscreen Titles

If you don't remember the number of the selection you wish to use, just say 'NO.' An easy 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:
Chime Library	Musical Selections
Bell Ringing/Special	Swinging Bells, Pealing Bells, Tolling Bells, Angelus Prayer Bells, Random selection blocks and Taps (on Bugle).

Press the [◀cursor] or [cursor▶] button until Bell Ringing/Special is displayed then press [ENTER]

**Music Title Index  
ABCDEFGHIJLMNOPRSTWY**

Select the index letter you would like to begin your search at and press [ENTER]

Press [cursor▶] until S flashes and press [ENTER]

**Swing F3 3 min**

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

Press [cursor▼] until a “a swinging selection” is displayed then press [ENTER].

**SU 8:00A FIND L6 OFF  
1026 0000 0000 0000**

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

Press [ENTER] to store the program for 8:00 A.M. The minute field will flash. Press [cursor▼] twice to select :30 then press [◀cursor] to select the hour and advance it to 10.

**SU10:30A FIND L6 OFF  
0000 0000 0000 0000**

Our example calls for a second call to worship bell for the 10:30 A.M. service.

### **Selection Carry Forward**

When you press [ENTER] to enter the bell at 10:30, it automatically carries forward from the previous timeslot.

**SU10:30A FIND L6 OFF  
1026 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 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.

## Random Selections

Our example calls for 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 may be entered signifying which random group the selection will play from. For our example we'll use group three, press [3]. Press [cursor▲] [3] again for the second random hymn, then [ENTER] to exit the programming mode.

- 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

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 select the day 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.

## Random Selection Blocks

Random selections may also be programmed as blocks of multiple selections. You will find them listed in the onscreen title index under **R** in the **Bell Ringing/Special** index. To program them by number, enter 70xy where **x** signifies the ending time and **y** signifies the random group to use. Since they determine the ending time of the block of music, these codes cannot be followed by any other selections at the same time slot. Any following selection codes will be ignored.

## 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

### Clock Striking (for Specific Time)

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 **FIND** 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 FIND L6 **CHM**  
0000 0000 0000 0000

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

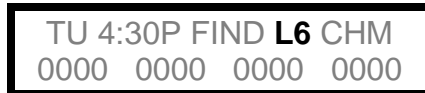
While the clock striking field is flashing you may program its status using the [cursor▲] (to turn on and select ringing type) and [cursor▼] (to turn off) buttons. Alternate presses of [cursor▲] select between **CHM** (chime) and **STK** (strike only). When **CHM** is selected, the clock chime melody (Westminster Chime) plays on the selected quarter hour and will be 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. When **OFF** is selected, no time announcement shall be made for the current quarter-hour.

Press [◀cursor] or [cursor▶] to select other fields to program or [ENTER] to accept the changes you have made.

## Automatic Volume Level (for Specific Time)

Generally, the volume level 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 volume level is programmed correctly. The **FIND** function does not check for volume level, so you must select either the hour or minute fields and hold the [cursor▼] button when checking the volume level periods.

Sometimes it is useful to set the volume level for a particular time. Using the method described above (Selecting the time to play), position the **View/Edit Schedule** screen to the time you wish to set the volume level. Press [ENTER] [cursor◀] [cursor◀] and the volume level field will flash.



The screenshot shows a screen with two lines of text. The top line is 'TU 4:30P FIND L6 CHM' and the bottom line is '0000 0000 0000 0000'. The 'L6' in the top line is highlighted with a thick black border, indicating it is the volume level field.

The volume level field is found on the upper line of the **View/Edit Schedule** screen between the **FIND** and clock striking fields.

While the volume level field is flashing you may raise or lower it using the [cursor▲] and [cursor▼] buttons. You may also directly enter the level (1 to 8) using the alphanumeric buttons. Level 8 is the loudest setting, level 1 is the softest setting, and level 6 is the default setting.

Press [◀cursor] or [cursor▶] to select other fields to program or [ENTER] to accept changes you have made.

Press [CANCEL] to return to Standby Mode.

# Section 5

## Global Scheduling

In the previous section, we described how the clock striking and volume level settings could be changed for a particular time. Changing these settings for several days, or even several hours in one day would be a tedious task without the capability of global scheduling.

The step-by-step procedure reference for this mode is found on page 27.

### Schedule Clock Striking

The Time Strike Setup menu allows you to program the manner in which the system chimes the time on quarter hours.

12A to 12A LEVEL:6  
SUN .. SAT SET PROG

Press [Enter], [2], [Enter], [0], to reach the Time Strike/Auto-level programming screen from the Standby mode.

The default times when entering this screen are all 24-hour segments of all seven days of the week. The default program is to set the level to 6. Use the [◀cursor] and [cursor▶] buttons to move around the screen and the [cursor▲] and [cursor▼] buttons to modify each field. When the start and end times and days are set and the time strike mode or level setting for those times is selected, move the cursor to **Set Prog** and press [ENTER] to program the settings for those times.

#### Select the Starting and Ending Times

The left half of the **Time Strike/Auto Level** screen displays the region of the schedule that will be modified. The top portion shows the starting hour and ending hour. When first entering this screen it will display '12A to 12A' and 'SUN .. SAT' indicating that all 24 hours of each day, and every day of the week are selected for programming.

Set the starting time field (to the left of 'to') to the time that you want to start the time strike mode. From 12A you will use [cursor▼] to select another starting time. Next, press [cursor▶] to get to the ending time field. From 12A you will use [cursor▲] to select another ending time.



**Note:** Each hour specified in this screen represents only four quarter-hours. So, '01PM to 02PM' specifies the range including 1:00 P.M., 1:15 P.M., 1:30 P.M. and 1:45 P.M. 2:00 P.M. is not included in the range and will not be programmed. If '10A to 09P' is displayed, 10:00 A.M. to 8:45 P.M. is selected (to but not including 9:00 P.M.).

The system will not allow you to reverse the starting and ending times. Once the ending time is set to the hour following the starting time it will go no earlier. Attempting to set the starting time past the ending time will push the ending time ahead so that it is always at least an hour after the starting time.

Press [cursor▶] to select the starting day. Pressing either [cursor▲] or [cursor▼] will allow you to set the starting day to any day of the week. Press [cursor▶] to select the ending day. Pressing either [cursor▲] or [cursor▼] will allow you to set the ending day to any day of the week. When

the starting day and ending day are the same, only that day will be programmed. If 'SUN .. SUN' are set, only Sunday will be programmed. If 'FRI .. MON' are set, Friday, Saturday, Sunday and Monday will be programmed. 'SUN .. SAT' will program every day of the week.

It is helpful to set the program for largest blocks of time first. Also, since the block of time does not change after setting the program for the time strike, you may also set the volume level for that time period as well (see *Programming Loudness* on page 47) for the same block of time.

### Select the Time Strike Mode

Press [cursor▶] to select the upper right program mode field that reads 'Level:6' on entry.

When the upper right program mode field is flashing, you may use the [cursor▲] and [cursor▼] buttons to scroll through the list of available volume level settings *and* time strike modes. Each mode is described below.

LEVEL: 1 (softest volume)	LEVEL: 5
LEVEL: 2	LEVEL: 6 (default volume)
LEVEL: 3	LEVEL: 7
LEVEL: 4	LEVEL: 8 (loudest volume)

#### TS OFF (Time Strike OFF)

:00 - OFF  
:15 - OFF  
:30 - OFF  
:45 - OFF

#### FULL CHM (Full Chimes)

:00 - CHM  
:15 - CHM  
:30 - CHM  
:45 - CHM

#### HALF CHM (½ Hour Chimes)

:00 - CHM  
:15 - OFF  
:30 - CHM  
:45 - OFF

#### TOP CHM (Top Chime)

:00 - CHM  
:15 - OFF  
:30 - OFF  
:45 - OFF

#### CHM STK (Chime with ½ Hour Strike)

:00 - CHM  
:15 - OFF  
:30 - STK  
:45 - OFF

#### FULL STK (Full Strike)

:00 - STK  
:15 - STK  
:30 - STK  
:45 - STK

#### HALF STK (½ Hour Strike)

:00 - STK  
:15 - OFF  
:30 - STK  
:45 - OFF

#### TOP STK (Top Strike)

:00 - STK  
:15 - OFF  
:30 - OFF  
:45 - OFF



**Important!** Setting **TS OFF** turns all **TIME STRIKE** functions **OFF** for the times selected. Select this then *SET PROG* when first entering the menu to clear time strike memory for all times, before entering a new clock striking schedule.

Three basic time strike functions behave differently, depending on the quarter of the hour being chimed. They can be viewed and changed for any quarter hour in the **View/Edit Schedule** screen. These functions are: **OFF**, where the system does not announce the time; **STRIKE**, where at the top of the hour, a chime shall strike the hour, and on all other quarters

will strike only once; **CHIME**, where at the top of the hour, the selected time strike melody shall play, followed by striking of the hour, and on all other quarters a portion of the selected time strike melody shall play. You can check these modes in the **View/Edit Schedule** screen for each quarter hour, displayed as **OFF, STK and CHM**.

### Set the Program into Schedule Memory

Press [cursor▶] to select the **SET PROG** field and press [ENTER] to write the time strike mode into the selected region of the schedule. If you wish to select a new region or mode you will have to select **SET PROG** and press [ENTER] for each change you wish to make.



**Important!** Check the settings that you have made to see that they are correct before pressing [ENTER].

08A to 11P FULL CHM  
MON .. SAT SET PROG

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

01P to 09P CHM TOP  
SUN .. SUN SET PROG

This example display will play the Chime and time strike at the top of each hour on Sunday from 1:00 PM through 8:45PM. The last strike will be at the top of the 8:00 hour.

What you see is set in memory. Both the Time strike option and Level setting may be made over the same time period. Select **SET PROG** and press [ENTER] each time. Different time strike types and level settings may be entered for different times and days.

After completing all of your settings, Press [CANCEL] to return to Standby mode.

## Schedule Volume Auto Level

### Programming Loudness (Volume Level)

The loudness of your Chime Master® System may be preset to specific levels for various times of the day. This is accomplished using the **Time Strike** menu. Eight preset levels are available, **Level:1** being the softest and **Level:8** the loudest. **Level:6** is pre-programmed at the factory to be the normal play level. Programming the levels do not affect the time strike settings previously programmed.

Refer to the preceding section for information on setting up the ranges of times to be reprogrammed. Then select the desired level by pressing [cursor▲] or [cursor▼] to index through the Time Strike types. The loudness levels follow the time strike types. Select **SET PROG**, press [ENTER] then exit with [CANCEL] button, when finished.

7P to 11P Level:3  
SUN .. SAT SET PROG

Example display showing a reduction in level for the evening hours. Depending on the location of the installation, Time Strikes may be played all night at such reduced levels.

Table of Attenuation Values:

1 □ 15 dB(minimum)	2 □ 10 dB	
3 □ 8 dB	4 □ 6 dB	5 □ 4 dB
6 □ 2.5 dB	7 □ 1 dB	8 □ 0 dB (maximum)

## **Verify Global Settings**

The **Time Strike/Auto Level** screen always comes up showing **Level:6** for every 24-hour period during the whole week. Obviously, this is not what we just programmed. Since multiple programs can overlap as they are added in this menu, there is no reasonable way to display the changes on one screen. 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 **FIND** function in the **View/Edit Schedule** screen will not find time strike events, only bottom line selections.



# Section 6

## *Play Selections (Manually)*

It's nice to know that your carillon 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 carillon, 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.

### **Play Selections Menu**

You may wish to refer to the step-by-step reference on page 21.

Any selection on the carillon may be played at any time using the Play Selections menu. From the Standby mode, access *Play Selections* by pressing [ENTER] [0] [ENTER]. The selection(s) played the last time you used the menu will be displayed. You may edit the selections or play the same performance again.

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

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

Use the [cursor◀] and [cursor▶] buttons to select between **Edit** and **Play**. When **Play** is flashing, pressing [ENTER] will retrieve and cue the first selection. Note that pressing [PLAY] on the remote control while **Play** is flashing will not cause the selection to play. You must see **ENT: Play CAN: Quit** on the display indicating that the selection is cued, for the [PLAY] button to work.

When **Edit** is flashing, pressing [ENTER] will cause the first selection to flash, allowing changes to be made to the program. Pressing [ENTER] after modifying the selections will retrieve the selections for playing. If you do not wish to play the selections at this time, you can abort the performance by pressing [CANCEL] when the display says **ENT: Play CAN: Quit**. Pressing the [CANCEL] button instead of [ENTER] will abort modifications and retrieves the original settings to the screen from memory.

```
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.

## 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 that is subdivided into two groups:

Chime Library	Titles of factory pre-recorded musical selections.
Bell Ringing/Special	Titles of special use bells, random selections, blocks

## 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 zero then [ENTER] will clear this field and allow up to three more selections to be programmed.



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 that 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]).

## Switching from Single to Multiple Selection Modes

After entering one selection, you want to open up the other three fields for additional selections, press [0] [ENTER] while **001 Times** is flashing.

## Programmable Toll

The selection repeats feature may be used to cause a tolling bell to ring a specific number of times. A single strike on a heavy bell (the *Toll 4700-lb Single, 8.6 sec tempo* is selection number 0110) 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. A repeat value of 35 will ring for five minutes (tempo of 8.6 times 35 divided by 60 = 5).

## 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, is completed.

### While Selection is Playing

9:31 AM Tue 11 - 11  
Playing 1225

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

## Reprogramming Remote Buttons

The four function buttons may be reprogrammed in a very similar way that you would program a manual performance in the **Play Selections** menu above. Access the function-button editing screen from Standby mode by pressing [ENTER] [2] [ENTER] [2] [ENTER].

F1 Swng WAIT NONSTOP  
1028 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.

### Editing the Function's Selection(s)

While the function number 'F1' is flashing press [cursor▼] to select the function you wish to edit then press [ENTER].

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.

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

If a single selection is entered into a performance that 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]).

Press [◀cursor] and [cursor▶] to select the **WAIT/NOW** and **STOP/NONSTOP** fields, then [cursor▲] to change them if needed.

### 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 five seconds.

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

### **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 system 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, is completed.

### **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 ten black alphanumeric buttons on the front panel, pressing [cursor▶] for each character position.

For example, to enter *Wdng* as an abbreviation for *Wedding*, the following button presses would be used.

[VWX] [VWX] [cursor▶] [DEF] [cursor▶] [MNO] [MNO] [cursor▶] [GHI] [cursor▶]

### **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].

# Section 7

## *Options*

### **GPS**

#### **Installation**

The GPS synchronizer consists of a control box that sends the time synchronization information to your unit and the antenna that receives the GPS signal.

The antenna needs to be placed in a window with a clear view of the sky. The signal will NOT go through obstructions such as trees or any building materials other than glass or plastic.

#### **Use**

Allow up to 10 minutes for the GPS receiver to acquire satellite signals.

Verify that the time has synchronized by looking for a period after the day of the week on the system display.

#### **GPS Notes**

- The GPS synchronizer does NOT set the time for you. It will set the minutes on the system to match the GPS signal once per day. This eliminates the need to enter time zone settings.
- To verify that the synchronizer has set the time, look for a period after the AM/PM indication. If there is a period, the time has been recently synchronized.
- The system will not synchronize the system clock while the carillon or bell controller is playing. It will however prevent automatic play during the two minutes before synchronizing your clock.
- To reset the GPS unit, simply unplug it then plug it back in. This will reset the satellite information and synchronize the time on the next hour.

### **Remote Control**

The optional remote may be supplied with an extension kit, the receiver for the remote can be placed in a different location of the building from the system and connected with up to 1000 feet of CAT-5 cable. A concentrator hub can also be optionally supplied to connect two receivers to the system. In addition to jacks for the two receivers is a terminal that can switch inside monitoring speakers between the two areas. This allows a receiver and monitor speaker to be installed in the Chapel as well as the main worship space.

### **SD Card Slot Option**

The top card slot is configured to accept only Chime Master formatted cards. The bottom User SD card slot option provides additional functionality to the LX Carillon. The slot will accept SD cards formatted on a PC (FAT32 format) to which you have copied MP3 files. These files can also be played from the carillon when named as described below.

Format an SD card (not supplied) using a PC with a compatible card slot, or an external SD card adapter (usually connected to the USB port). The card must be formatted using FAT32 (not plain FAT as most cards are pre-formatted out of the package). Copy the desired MP3 files to the card, and then rename the files so that they have numeric filenames from 6000-6499.

Example: original filename is birdsinging.mp3

Rename the file to 6234-birdsinging.mp3

Make sure each 6000 number used is unique on the card. The characters after the hyphen will be ignored by the carillon system. The 6000 number can be used for any four digit selection code in the automatic or manual modes.

The MP3 file's left channel goes to the inside speakers and the right channel plays outside. To prevent music with significant low frequency content (modern pop music) from damaging the outside horns, we recommend that you process full range music files with all of the audio on the right channel so that it plays inside only.

## Section 8

# 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 will prevent the system from falsely ringing at inconvenient times, such as after a storm in the middle of the night. 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 the system appears to be ringing at inappropriate times, search the program schedule (see *Review the Automatic Play Schedule* on page 24) to be sure that it is correct (double check the AM/PM) field and that the time is set correctly on the Standby screen (check AM/PM here also).

If your system seems to be 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 or Settings Detected

Restore backup?  
Yes-Restore No-Clear

If a power outage that surges on and off rapidly occurs (which often accompany high winds and storms), program memory may be affected. If the system detects any change in the schedule memory, it will display this message and suspend automatic operation. User intervention is required to restore the schedule so you may check it before automation resumes.

If you press [No], will prompt you to select settings after clearing memory.

### Blank Screen



Due to rare interruptions of program process, the screen may appear blank for a period that 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)

A clock error means that invalid data has been found in the time clock registers. Set the clock from the **Setup, Set Time** menu, and then check system operation manually. If the system has been powered off for an extended amount of time, it needs to be plugged in for at least an hour to fully recharge the backup supply.

## **No Sound**

If no sound is heard either from the tower or from the monitor speaker when the display shows that a selection is playing, follow this checklist.

Determine that the system is playing properly. Turn the power off and then back on. Try playing a selection manually or with a function button.

1. When the display indicates that the system is playing, the lights behind the speaker should be gold (inside and outside active), green (plays outside only) or red (plays inside only). If this indication is now what you expect, check the muting options in the **Seasonal Setup** (see page 32). Also, you should have a power indication on the amplifier power light.
2. Are connections to the amplifier at fault? Make sure that all cables are plugged in completely.
3. Is the amplifier at fault? Try plugging the amplifier power cable directly into the AC wall socket and remove the audio cable from the back of the main unit. The power light on the front of the amplifier should come on.
4. If sound can be heard from the monitor speaker, but not from the tower follow this checklist:
  - a) Make sure that the tower switch is in the on position and that the green light comes on while the system is playing.
  - b) Check that the tower speaker cable is properly attached to the amplifier output terminals.
  - c) Check the tower speaker cable for shorts between the conductors.

## **Returning the System for Service or Upgrades**

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

The following steps 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. Disconnect Cables. Unplug the power cord from the wall receptacle. 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 to order a new box with packing. A nominal charge is made for the shipping package.



### **Packing Materials**

- (1) LX box
- (2) Blocks of cushioned foam packing
- (1) Accessory box (optional)
- (1) Amplifier box (optional)

The cushioned foam packing fits the ends 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.

Insure the package. Use original packing materials. Chime Master Systems will not be liable for shipping damages.

### **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.

Blank Page

## Ringling Functions

Swinging bells are available in two pitches. The lower bell is typically swung as a Call to Worship and the smaller bell can be used to call to classes or Sunday School.

Swing	30 sec	1 min	2 min	5 min	10 min
Bell F3	1022	1024*	1025	1028	1029
Bell A3	1052	1054	1055	1058	1059

A Peal consists of three or four bells ringing together in a chord. Peals are used during celebrations such as Easter, Christmas Eve and Weddings. Four traditional peals are included.

Peal	1 min	2 min	5 min	10 min
American 3	1074	1075	1078	1079
American 4	1064	1065	1068*	1069
Diatonic 3	1094	1095	1098	1099
Minor 3	0610	0611	0614	0615

American 3: F3 - A3 - C4

Diatonic 3: F3 - G3 - A3

American 4: F3 - A3 - C4 - F4

Minor 3: F3 - A $\flat$ 3 - C4

Tolls are solemn rings of a single low bell. They are used for funerals and other solemn occasions. The Slow tempo rings once every 12 seconds, Medium rings once every 9 seconds and Fast rings once every 5 seconds. The automatic schedule can be programmed to let the bell toll continuously for one, five or ten minutes. In addition to timed tolls, the Play Selections menu from the Functions Buttons can be used to program a specific number of strikes. To do this, enter 0130 and set the repeat value from 1 to 199. If NONSTOP is chosen, they will play straight through until all have finished (or you cancel play). If STOP is chosen, one toll will play each time the play button is pressed, for as many times as specified. The pitch of the tolling bell is F3.

Toll	1 min	5 min	10 min
Slow	0134	0138	0139
Medium	0144	0148	0149
Fast	0154	0158	0159

Angelus bells call the community to prayer traditionally at morning, noon and evening times. Three different tempos are available to allow the appropriate amount of time between rings for each prayer. You can choose to end the prayer with 9 tolls or with a one-minute swinging bell.

Angelus Style	Slow (5 second tempo)	Medium (4.5 second tempo)	Fast (4 second tempo)
3-3-3 only	1105	1103	1101
3-3-3 - 9 tolls	1111	1109	1107
3-3-3 - swing	1117	1115	1113

## Other Available Functions

De Profundis Toll.....	0063
Orthodox "Call to Church" .....	1119
Taps on Bugle .....	0165
Amazing Grace on Bagpipes.....	0040
Single Toll.....	0130

## Special Function Macro Codes

### Scheduling Function Button Programs

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 different times during the week 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. Program function F8 to repeat selection 0100 33 times. Placing 7908 anywhere in the program schedule will program a 33-stroke toll.

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 your schedule everywhere it is used as a macro function.

### ZoneAutoMute™ Speaker Switching

Inside/Outside speaker switching can be accomplished on the schedule to override the settings made in the Setup-Seasonal Options screen. The following macros switch the speakers to play inside, outside or both for manual or automatic operation:

- 7920** Manual Outside/Automatic Outside
- 7921** Manual Outside/Automatic Inside
- 7922** Manual Outside/Automatic Inside and Outside
- 7923** Manual Inside/Automatic Outside
- 7924** Manual Inside/Automatic Inside
- 7925** Manual Inside/Automatic Inside and Outside
- 7926** Manual Inside and Outside/Automatic Outside
- 7927** Manual Inside and Outside/Automatic Inside
- 7928** Manual Inside and Outside/Automatic Inside and Outside

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