

Operating Manual

Model Six-SS Carillon VERSION 3.1

Doc# 11577



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. This carillon is equipped with a cord having an equipment-grounding conductor and a grounding plug. Do not remove or alter the grounding prong in any manner. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local rules and ordinances.

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:

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

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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:**15**P SRCH L6 OFF 1225 1464 1313 0000

Reference Tables

Operational Menus

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

Item	Main Menu Item	Description
0	Play Selections	Allows pre-recorded and user-recorded selections to be performed manually. Instructions on page 47, and step-by-step on page 17.
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 37, and step-by-step on pages 19-21.
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 43, and step-by-step on page 23.
1	Set System Clock	Allows adjustments to the clock/calendar. Step-by-step instructions on page 22.
2	Edit Remote Button	Editor for four programmable function buttons and remote control. Instructions on page 49.
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 26.
4	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 27 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 selecte from 12/1 to 12/24. If Advent is enabled, Christmas music will contin play until January 5. If Advent is disabled, then Christmas ends on 12/2					
Speakers On Automatic	Automatically scheduled programs will play: Inside/Outside/Both.				
Speakers On Manual	Remote control, front panel function and Play Selections programs (manual modes) will play: Inside/Outside/Both.				

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.

Grp1	Sacred hymns mixed with non-sacred music, follows the almanac seasons (Sacred non-seasonal music is disabled when Easter season is disabled)
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 (Sacred Patriotic and Christmas music will not play)
Grp6	Non-sacred music only, always non-seasonal
Grp7	Patriotic music independent of season
Grp8	Marian hymns independent of season
Grp9	User Defined Playlist - requires optional <i>Millennium Suite</i> to set up

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

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

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 all of the scheduled macro functions.

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

Load Weekly Schedules

The optional Millennium Suite scheduler application can now store up to ten weekly schedules in the carillon's FLASH memory. Then you can use the annual or one-time event schedules to let the system know when to make each schedule active. You may also 'play' the macros manually in the Play Selections mode to activate a schedule at any time.

The macro functions used to activate the schedules are *7930* through *7939* (for schedules 0 through 9). Schedules are made active by copying the schedule data from FLASH memory to editable RAM.

Changes made to the current schedule (using the View/Edit Schedule menu) will be lost unless this schedule is retrieved and then stored in FLASH memory using the Millennium Suite. The active weekly schedule will repeat every week until another schedule is activated.

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							

Time Strike/Level (Set-Up)

FROM		ТО		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							

Time Strike/Level (Set-Up)

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

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Section 1

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 31.

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 26.

You have just used two of the four re-programmable functions. These functions are explained on page 17.

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 SmartAlmanacTM 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 7, and in more detail on page 40.

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 7 and explained on page 40.

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. Press the [cursor] button twice to display Pau_ followed by [1] to [8] which indicate the number of minutes to delay. Use multiple pauses to increase the delay time.

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

This view shows a five-minute pause, which allows Amazing Grace (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 on page 8.

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 SRCH L6 OFF 0000 0000 0000	Press [cursor▼] to open the title index. Select between user selections, chime, carillon or bell ringing libraries then press [ENTER].
	Select Series: Chime Library	
2	Music Title Index ABCDEFGHIJLMN O PRS	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 SRCH L6 OFF 1174 0000 0000 0000	Press [ENTER] to use the displayed title. The four-digit selection number will be automatically entered into the flashing selection field. The next selection field will flash.

Play Selection(s) Using the Manual Mode

Detailed instructions can also be found on page 47.

Step 1	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	If the Standby page (shown here) is not displayed, press [CANCEL] to return to Standby mode. Press [ENTER] for the "Main Menu."
2	Main Menu Play Selections	Press [0] to select "Play Selections," then [ENTER].
	Edit Play NONSTOP 1225 001 Time(s)	The display will show the last program played in the Manual mode.
3	Edit Play NONSTOP 1225 001 Time(s)	To Play a previously created program: Press [cursor▶] to get to play. Go to step 6 to continue using this program.
	Edit Play NONSTOP 1225 001 Time(s)	To Edit/Create a program to play: Select Edit by pressing [ENTER].
5	Edit Play NONSTOP 1174 0000 0000 0000 The lower line holds up to four selections,	Enter the new selection number (see Entering Selections on Page 15) and then number of times to repeat. Enter zero then [ENTER] for repeat if you wish to play more than one selection.
6	or one selection repeated from 1 to 199 times ¹ . Edit Play NONSTOP 1225 001 Time(s)	Press [ENTER] to select Play. Press [ENTER] to cue the program.
	ENT: Play CAN: Quit Ready to Play	The selection remains ready to play for up to one hour. To play, press [ENTER] again. To cancel the performance, press [CANCEL] .

¹ 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.

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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 37.

Step 1	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [ENTER] for the Main Menu.
2	Main Menu View/Edit Schedule	Press [1] for the "View/Edit Schedule," then [ENTER].
3	SU 9: 30 A SRCH L6 OFF 0000 0000 0000 0000	This is the time slot navigational mode. Press [cursor▼] or [cursor▲] to set the day. Press [cursor▶] to move to the time fields, then [cursor▼] and [cursor▲] to set the hour and minute of the time slot you wish to program.
4	SU 9:30A SRCH L6 OFF 1225 1464 1313 0000	Press [ENTER] and the first selection will flash (this is the programming mode. Four digit selections may be directly entered from the Selections Catalog. Four zeros will clear a selection. Pressing [cursor▲] will allow random selections and pauses to be entered. See page 15 for selection entry instructions.
<i>5</i>	SU 9: 30 A SRCH L6 OFF 1225 1464 1313 0000	Press [ENTER] to save the program in memory. Go back to step 3 to set additional times to play. The selections will carry forward to subsequent time slots.
6	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [CANCEL] to return to Standby mode.

While a selection is flashing:

[cursor▲]= Grp (Random Music Group)

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

[cursor▼]= Online Title Catalog

Review the Automatic Play Schedule

Detailed instructions may be found on page 37.

Step 1	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [ENTER] for the "Main Menu."
2	Main Menu View/Edit Schedule	Press [1] for the "View/Edit Schedule" page, then [ENTER].
3	SU 9:30A SRCH L6 OFF 0000 0000 0000	Press [cursor▶][cursor▶][cursor▶] to select SRCH (search).
4	SU 9:30A SRCH L6 OFF 1225 1464 1313 0000	Press [cursor▼] and [cursor▲] to step forward and backward through the schedule. Only time slots with selections scheduled to play (on the lower line) will be displayed. To check time strike and level settings (top right line), select the day, hour or minute using [cursor◀] and [cursor▶], then step through the schedule.
5	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [CANCEL] to return to Standby mode or [ENTER] to edit the displayed time slot (see pg. 21)

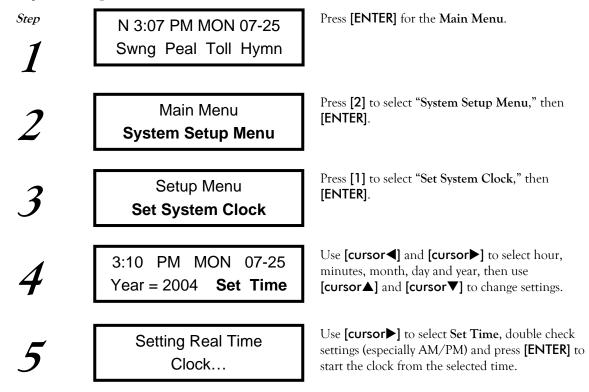
Make Changes to the Automatic Play Schedule

Detailed instructions may be found on page 37.

Step 1	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [ENTER] for the Main Menu.
2	Main Menu View/Edit Schedule	Press [1] for the View/Edit Schedule, then [ENTER].
3	MO 3:15P SRCH L6 OFF 0000 0000 0000	Press [cursor▶][cursor▶][cursor▶] to select SRCH (search).
4	SU 9:30A SRCH L6 OFF 1225 1464 1313 0000	Press [cursor▼] and [cursor▲] to step forward and backward through the programmed schedule. To go to a time slot without a program, select the day, hour or minute using [cursor◀] and [cursor▶], then step through the schedule by time or day using [cursor▼] and [cursor▲].
<i>5</i>	SU 9:30A SRCH L6 OFF 1225 1464 1313 0000	Press [ENTER] and the first selection will flash. Four digit selections may be directly entered over existing ones. Four zeros will clear a selection. Pressing [cursor 4] will allow random selections and pauses to be entered.
6	SU 9:30A SRCH L6 CHM 1225 1464 1313 0000	To change volume level and time strike settings, use the [cursor▶] and [cursor◆] to cause them to flash. Numeric buttons 1 through 8 may be used to enter new volume levels. Press [cursor▲] when Time Strike status is flashing to select between Chiming and Strike modes. Press [cursor▼] to disable clock striking.
7		Press [ENTER] to save the changes in memory. Go back to step 4 to make further changes.
8		Press [CANCEL] to return to Standby mode.

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.



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.



Set Clock Chiming and Volume Levels (Globally)

Detailed instructions may be found on page 43.

Step	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [ENTER] for the Main Menu.
1	Swilg Feat Toll Hyllin	
2	Main Menu System Setup Menu	Press [2] to select "System Setup Menu," then [ENTER].
3	System Setup Menu TimeStrike/AutoLevel	Press [0], then [ENTER] to select and display the TimeStrike/AutoLevel programming page.
4	12A to 12A LEVEL: 6 SUNSAT SET PROG	Use the [cursor▼] and [cursor▲] buttons to change the beginning time.
5	12A to 12A LEVEL: 6 SUN SAT SET PROG	Press [cursor▶] to select ending time, then change with [cursor▼] and [cursor▲]. The program will be set from the beginning time up to, but not including, the ending time. For example: 8A to 10P will program from 8:00 AM to 9:59PM.
6	12A to 12A LEVEL: 6 SUNSAT 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.
7	12A to 12A LEVEL: 6 SUNSAT SET PROG	Select "Set Program" and then press [ENTER] to put the selected program into schedule memory.
8	Modifying Program Memory	When finished, press [CANCEL]. You should verify all changes using the View/Edit Schedule programming page.
Level:1 (Softest) Level:2 Level:3 Level:4 Level:5 Level:6 (Normal) Level:7 Level:8 (Loudest) TS OFF (Time Strike OFF) (Chime clock all quarters) (Chime clock on hour and 1/2 hour) (Chime clock only on the hour) (Chime clock only on the hour, 1-strike quarters) (Strike the hour, 1-Strike on all other quarters) (Strike the hour, 1-Strike on the 1/2 hour) Top Stk (Strike only at the top of the hour)		

Reprogram the Remote Control Function Buttons

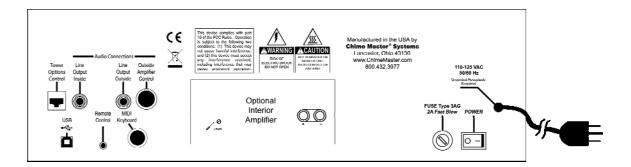
Follow these steps to reprogram the four remote control buttons (or the eight programmable buttons on the front panel keypad). Detailed instructions may be found on page 49.

Step 1	N 3:07 PM MON 07-25 Swng Peal Toll Hymn	Press [ENTER] for the Main Menu.
2	Main Menu System Setup Menu	Press [2] to select "System Setup Menu," then [ENTER].
3	System Setup Menu Edit Remote Button	Press [2] to select "Edit Remote Button" then press [ENTER].
4	F1 Swng Wait Nonstop 1123 001 Time(s)	Use [cursor▼] or the number of the function to select the button (F1-F8) to reprogram then press [ENTER] .
<i>5</i>	F1 Swng Wait Nonstop 1123 001 Time(s)	Input the new selection number (see To Enter Selections on the next page) and number of times to repeat. Press [0] then [ENTER] in the repeat field if you wish to play more than one selection.
6	F1 S wng Wait Nonstop 1123 001 Time(s)	Press [cursor▶] to select the button label. You may select each letter and change it using the [cursor▲] and [cursor▼] buttons.
7	F1 Swng Wait Nonstop 1123 001 Time(s)	Select and change WAIT/NOW! and STOP/NONSTOP flags by pressing [cursor▶] to select the desired field and then [cursor▲] to change the options.
8	F1 Swng Wait Nonstop 1123 001 Time(s)	Press [ENTER] to save your changes then [CANCEL] to exit when the function number is flashing.

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

Section 2

Connections and Setup



AC Power

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

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

Standard Tower Amplifier Connections

Typically, the carillon power amplifier is stacked under the carillon module. The rear panel of the carillon module has an unbalanced ¼-inch phone jack labeled *Line Output, Outside*. A cable with a ¼-inch phone plug is attached to the Chime Master Carillon Amplifier, and should be plugged into this jack. The power cord from the amplifier plugs into the receptacle on the rear panel of the carillon module labeled *Amplifier Power*. If the carillon is not equipped with this option, plug the amplifier power cord into a live wall receptacle. The amplifier will draw a small amount of current when the system is in standby mode.

Premium Amplifier Option

Balanced audio and amplifier power On/Off control are available on the *Amplifier Control* jack. We will supply an audio/data cable with our premium amplifiers. Plug the round end of the cable into the *Amplifier Control* jack. Plug the 15-pin D-shaped connector into the amplifier's *Data Port* jack. Plug the amplifier's power cord into a live wall receptacle.

Tower Speaker Connections

Follow the instructions for connecting the tower speakers that were included with the tower amplifier.

Inside Monitoring Systems

Optional Organ Chamber Speaker Connections

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

Sanctuary PA-System Connections

The rear panel of the carillon has a ¼-inch phone jack labeled *Line Output, Inside*. This output carries an unbalanced line level signal suitable for connecting to the Line Input of a nearby PA or instrument amplifier.

Plugging a cable into this jack will mute the carillon's built-in speaker. If you should wish to mute the speaker without making a connection to the PA system (because you're using monitor speakers described in the preceding section), you may insert a ¼-inch plug without a cable, such as an RCA to ¼-inc adapter.

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

Remote Control Connections

The remote control receiver plugs into the *Remote Control* jack located on the rear panel. If the supplied cable is not sufficiently long enough for proper positioning of the receiver, a 1/8" stereo headphone extension cable may be used.

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 control function buttons continue to operate the system when the front panel buttons are locked. Store the remote control in a secure location when it is not being used.

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.

To enter the seasonal options setup menu from Standby mode, press [ENTER] to bring up the Main Menu, [2] to select the setup menu, [ENTER] to go to the Setup Menu, [3] to select Seasonal Options, then [ENTER]. The lower line displays the current seasonal option on the left and its current setting on the right.

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

The [**dcursor**] 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**Δ] 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).

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

The [**dcursor**] 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.

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

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-MuteTM

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 8 for selection codes.

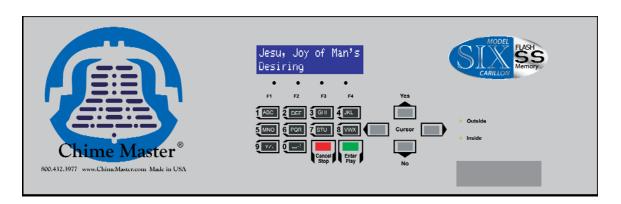
Both automatic play (any music or bell ringing activated by the automatic schedule) and manual play (music or bell ringing activated by the remote control or *Play Selections* menu) can be set so that the speakers will operate inside only, outside only or both (inside and outside). These options are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

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

When the system is playing, the green front panel lights will indicate which speakers are active.

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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 26.

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.

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 and Pauses (in the View/Edit Schedule screen) may be entered by alternately pressing the [YES] button.

Inside Monitor Speaker Volume Level

Whenever the system is in Standby or Play modes, the 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).

Inside/Outside Speaker Status Indicators

To the right of the push buttons are two indicator lights for the ZoneAutoMute[™] feature. When the system is playing or ready to play, the top light will light if the program will play through the outside speakers; the bottom light will light if the program will play through the inside monitor or organ chamber speakers.

Use Setup – Seasonal Options menu (see page 26) to set the scheduled programs to play Inside/Outside or Both. Set the remote control functions to play Inside/Outside or Both. You can have special events in the church without being interrupted by clock striking. The front panel indicates at a glance which speakers are active.

Card Slot

The metal cover over the bottom right area of the front panel covers a data card slot. The standard purpose of this slot is for Chime Master library expansion cards. An optional use is for user audio files. See the **Options** section on page 52 for usage.

Display

If the system has been in Standby mode for more than a few minutes, the display will be dimmed and the current time will scroll. The life of the display is greatly increased by operating it this way. The display intensifies and shows the Standby Menu when you push any of the gray cursor buttons.

N 3:07 PM MON

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

Press a gray cursor button to exit the screen saver, or [ENTER] for the Main Menu.

3:07 PM MON 07-25 Swng Peal Toll Hymn Standby screen after the screen saver has cancelled. Pressing **[ENTER]** bring up the Main Menu.

If the keypad auto-lock security option is set, the keypad will automatically lock when the display dims and the screen saver is activated.

Standby Mode

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

Please note that it is normal for the display to enter a screen saver mode after several minutes of keypad inactivity. This extends the life of the display. Pressing any gray button will restore the Standby mode display.

N 3:07 PM MON 07-25 Swng Peal Toll Hymn The 'N' denotes a non-seasonal time of year. This changes with the seasons as described 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 26) will result in an 'N' displayed during that time. The display always indicates the current season music list in use.

L 3:07 PM FRI 03-28 Swng Peal Toll Hymn 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.

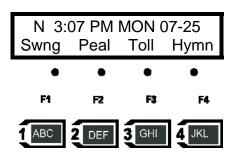
Countdown warning screen appears after a period of inactivity in the setup screens. To return to the previous operation press any button.

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.

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!**

Remote Control

The four function selection buttons duplicate the buttons [1] through [4] on the front panel of the Chime Master System Unit. When the system is in the Standby mode, these four buttons allow special functions to be played.

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

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

To send a command from the remote transmitter to the Chime Master, simply press the appropriate button. Each time a button is pressed, it should be held for about one second. If the battery condition allows proper transmission, the green battery condition light will illuminate.



Operational Tips

The remote transmitter operates in the UHF frequency band. This provides a line of sight transmission of at least 100 feet. Any mass of metal between the transmitter and receiver will inhibit proper operation. You may also discover a few dead spots where the unit may not

operate, even though you are closer than 100 feet. Reorient the receiving antenna for best results.

If the transmitter is operated next to microphones or microphone cables, it is possible that the PA system will pick up a noise, similar to a telephone ring tone. Avoid operation in close proximity to PA equipment and wiring.

For information about re-programming the Function buttons on the remote control, see Reprogramming Remote Buttons on page 49.

Selecting Menus

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

Main Menu
Tower Performance

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 47, and step-by-step on page 17.
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 37, and step-by-step on pages 19-21.
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 43, and step-by-step on page 23.
1	Set System Clock	Allows adjustments to the clock/calendar. Step-by-step instructions on page 22.
2	Edit Remote Button	Editor for four programmable function buttons and remote control. Instructions on page 49.
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 26.
4	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 4266 **[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 **Standby Mode**. For funerals, the **Toll** function can be cued so that when you are ready for it, you can press [PLAY] on the remote control.

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



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.



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 [**dcursor**] 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 (Pau5) 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 (SRCH) 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 **SRCH** 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:**00**A SRCH 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: User Recordings

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
ABCDEFGHJLMNOPRSTWY

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

Swinging 580-lb 15 seconds Press [cursor▶] until S flashes and press [ENTER]

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

Press [cursor▼] until a "Swinging Bell (G) One Minute" is displayed then press [ENTER].

SU 8:00A SRCH L6 OFF 0186 **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.

SU**10**:30A SRCH 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 SRCH L6 OFF **0186** 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 <u>last</u> 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.

Grp9 User Defined Playlist - requires optional Millennium Suite to set up

Select the hour and change it to 6:00 P.M. then select the day again and press the sequence, **[cursor▼] [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)	У	(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
<u> </u>		4	Sacred hymns only, always non-seasonal
		5	Non-sacred music only, will play patriotic and Christmas in season
		6	Non-sacred music only, always non-seasonal
		7	Patriotic music independent of season
		8	Marian hymns independent of season
		9	User playlist (requires Millennium Suite)

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 SRCH 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 SRCH L6 **CHM** 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 [**\(\left(\text{cursor}\right)\)** or [cursor\(\right)\) 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 SRCH 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.

TU 4:30P SRCH **L6** CHM 0000 0000 0000

The volume level field is found on the upper line of the View/Edit Schedule screen between the SRCH 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 [**dcursor**] 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 23.

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 [**<ursor**] 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 <u>not</u> 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 <u>not including</u> 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 45) 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.

LEVEL: 6 (default) LEVEL: 7 LEVEL: 8 TS OFF FULL CHM HALF CHM TOP CHM CHM STK	FULL STK HALF STK TOP STK LEVEL: 1 LEVEL: 2 LEVEL: 3 LEVEL: 4 LEVEL: 5	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.
TS OFF (Tin	ne Strike OFF)	FULL CHM (Full Chimes)
	- OFF	:00 - CHM
:15 -	- OFF	:15 - CHM
	- OFF	:30 - CHM
:45 -	- OFF	:45 - CHM
HALF CHM (1	/2 hour Chimes)	TOP CHM (Top Chime)
- 00:	CHM	:00 - CHM
:15 -	- OFF	:15 - OFF
:30 - CHM		:30 - OFF
:45 - OFF		:45 - OFF
CHM STK (Chime with ½ hour strike)		FULL STK (Full Strike)
:00 - CHM		:00 - STK
:15 - OFF		:15 - STK
:30 - STK		:30 - STK
:45 -	- OFF	:45 - STK
HALF STK	(Half Strike)	TOP STK (Top Strike)
:00:	- STK	:00 - STK
:15 - OFF		:15 - OFF
:30 -	- STK	:30 - OFF
:45 -	- 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.



Importatant! Check the settings that you have made to see that they are correct <u>before</u> pressing **[ENTER]**.

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

01P to 09P CHM TOP SUN .. SUN **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.

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:

8 - 0 dB (maximum)

5 - 6 dB 4 - 8 dB 2 - 15 dB

7 - 2 dB 6 - 4 dB

3 - 10 dB

1 – 20 dB(minimum)

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 SRCH 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 17.

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.

Edit **Play** NONSTOP 1225 1140 1152 1317

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

To Repeat a Single Selection

If a single selection is entered into a performance 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 <u>repeated</u> selections, the unit <u>does not</u> 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 4266 **[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 1034 001 Time(s)

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

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

Editing the Function's Selection(s)

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 <u>repeated</u> selections, the system <u>does not</u> 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].

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. The GPS receiver also must be plugged into a standard 110 volt wall receptacle.

When the GPS synchronizer updates the clock, it communicates with the carillon using the remote interface. The synchronizer should be able to send the signal up to 100 feet, depending on your building and other interference issues.

Use

When you plug the GPS system in, you should see a few short blinks denoting the software version. Four blinks will indicate version 4.

Two long blinks then two short blinks means it is looking for the satellite signal.

A short blink once per second indicates normal operation. That is, valid satellite signals have been acquired and the system will adjust the time at the next hour.

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

After the initial GPS synchronization of the time on your system, the light will blink steadily on/off each second. This means the time will be synchronized each day. This can be verified by looking for a period after the day of the week on the system display.

The time will be synchronized at the top of the next hour after powering on the GPS.

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

Operation of the remote control has been previously discussed throughout the manual because it is a popular option. With an optional 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 switches monitor 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 card slot normally is configured to accept Chime Master formatted library expansion cards. The User SD card slot option provides additional functionality to the Model Six-SS 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 outside speakers and the right channel plays inside. If the file is to play both inside and outside, create a mono file. 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.

Adding titles to the online lookup screen and putting audio files in random groups requires the optional Millennium Suite application.

Millennium Suite

The carillon's rear panel USB port will connect to a Windows compatible PC. The Millennium Suite is a collection of utilities and applications that provides additional functionality to the Chime Master carillon.

Included on the Millennium Suite installation CD-ROM are the latest versions of the Carillon firmware. As updates are released, the application can automatically download them and alert you to keep your carillon up to date.

This page provides an overview of the currently available features of the Millennium Suite. New utilities and applications are being developed. Call us or look on our website for the latest specifications for the Millennium Suite.

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Scheduler

Graphical schedule editor simplifies making changes to your ringing schedule. Schedules may be saved to your PC for backup. If your ringing schedule needs to change seasonally, this application makes it easy to program the changes ahead of time, save them to individual files, and then load them into the carillon at the appropriate time.

Jukebox

Use the Jukebox application to create playlists for special occasions or concerts. Drag and drop titles, rearrange the list, and save the playlist to a file for future use.

Play modes include

- Play All
- Play Selected
- Play Random
- Repeat ON/OFF

Backup

Use the backup utility to backup the entire setup memory of your carillon. This provides additional protection from memory loss to the battery backup.

If you record performances and save many of them using the Librarian, the backup utility will allow you to archive the entire user recording memory.

Remote Control

The remote control panel is useful for controlling the carillon system just as if you were in front of the unit. An available USB/UTP extension lets you run the remote software in another room. Windows remote desktop protocol allows any workstation on your campus network to access the carillon.

An Ultra-Mobile-PC such as a Samsung Q1 with a touch screen makes an easy to use graphical remote control for use at the organ. This can be networked via WiFi or connected directly to the USB port of the carillon through a USB extender (using CAT-5 cable).

Enhanced Features

Additional features are being developed for the Six-SS that require the Millennium Suite application software. These include:

- Store up to ten weekly schedules in the carillon to activate on specific dates
- Annual Event Programming
- One-time Event Programming
- Custom SmartAlmanac random music group editor (Grp9)
- Set Carillon to Internet Time

See the *Millennium Suite* manual for an up-to-date list of features and operational instructions.

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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 20) 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 Detected

Program is corrupted Yes-Clear No-Salvage

If a power outage that surges on and off rapidly occurs (which often accompany high winds and storms), program memory may be affected. If the system detects any change in the schedule memory, it will display this message and suspend automatic operation. The corruption is usually minor and so we have provided a way to salvage as much of it as possible.

Should you select [YES] to reinitialize the program, or select [NO] to salvage? The answer depends on how complex your program is to enter, or if you have an adequate record of it at all. The least amount of time and effort will be spent if you press [NO] to salvage what you can. When you elect to salvage, each time slot is checked and will be cleared if any invalid selections are found. Also any quarter-hours programmed between 11:00 P.M. and 6:00 A.M. will be cleared. Be sure to check the schedule with View mode after resetting (see *Review the Automatic Play Schedule* on page 20).

If you press **[YES]**, the system will also clear the seasonal preferences, so you will have to reset those in addition to re-entering your ringing schedule.

Error in Setup Memory Detected

Memory Warning Verify ALL Options

If the system should ever detect that the seasonal preferences memory may have corrupted, the system will display this message and suspend automatic operation.

Press [ENTER] for each option and verify that it is correctly set. Use the [YES] and [NO] buttons to modify the settings.

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. If it does not, check the fuses on the rear panel. Be sure to replace with the same fuse types.

Time Clock Errors



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. Call the factory for service information.

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 actually playing properly. Turn the power off and then back on. Try playing a selection manually or with a function button.

- 1. One or both green speaker status lights on the front of the carillon should come on when the system is playing. If neither light while the display says it is playing, check the muting options in the **Seasonal Setup** (see page 28). 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) Box, 24 by 24 by 12 inches
- (2) Blocks of cushioned foam packing
- (1) Accessory box if returning remote

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. The package should weigh about 40 pounds. 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.

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