

**MAAS-ROWE MODEL DCB3 V1.20 DIGITAL CHRONOBELL
USED WITH MPR2 MEMORY PLAYER/RECORDER
OPERATING INSTRUCTIONS**

WARNING: This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class "A" computing device pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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INTRODUCTION

In order to get the greatest benefit from the DIGITAL CHRONOBELL III system, read through this manual to learn all of the possible functions. This system offers a greater number of choices than ever before available.

To become familiar with the system, try out the following first. Practice entries can easily be erased later and the permanent schedule entered.

1. Practice setting the **TIME**.
2. Try entering an event in the schedule using the procedure **TO ENTER AN EVENT**.
3. Use the procedures **TO REVIEW EVENTS** and **TO REVIEW DAYS** to check the **EVENT** you entered two different ways.
4. Use the **TO DELETE AN EVENT** procedure to delete the event you entered.
5. Use the procedure **TO START EVENTS MANUALLY** to actually start an event. (If you don't want the event to sound outside, turn the **TOWER** speaker switch **OFF** first). Try an event like the **ANGELUS** (which has a fixed length), then the **LOW SWINGING BELL** (which has a variable length), to see the difference in operation.
6. Use the procedure **TO ENTER A RANGE OF CLOCK STRIKES**. This allows you to enter **CLOCK STRIKES** for an entire day, group of days, or week in a few steps. You can also enter them one at a time using the regular **ENTER** procedure. The **RANGE** procedure is more efficient when there are a lot to enter.
7. The other procedures in this manual are used for various special purposes which are self explanatory.

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ENTERING THE ACTUAL SCHEDULE

After you are familiar with most of the procedures for setting the time and entering schedules, use the **COMPLETE SYSTEM CLEAR** procedure to erase your practice schedules. After that, the actual schedule can be entered.

1. Determine when you want the **CLOCK STRIKES** to ring and enter these using the **RANGE** feature. If, for example, you want the **CLOCK STRIKES** to ring from 8:00 AM to 10:00 PM on certain days, but will want the **ANGELUS** at 12:00 Noon and 6:00 PM you can enter the range of clock strikes **FROM 8:00 AM TO 10:00 PM**, then use the **ENTER** procedure to schedule the **ANGELUS** at 12:00 and 6:00. The Angelus will replace the Clock Strikes at those particular times.

If you prefer to have both the **CLOCK STRIKE** and the **ANGELUS** at noon you could enter the **ANGELUS** at 12:01 PM. It would then ring after the noon hour strike.

2. Use **ENTER** to enter all the other events you wish to schedule.
3. Use **EVENT REVIEW** and/or **DAY REVIEW** to check your schedule. **BE SURE THAT THE TIMES SCHEDULED INCLUDE THE CORRECT AM or PM.**
4. Enter the **DATE** and **TIME**. **WARNING: BE SURE TO USE CORRECT AM/PM.**

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TO SET DATE AND TIME

ACTION	RESULT
1. Press TIME button.	the <i>Year</i> blinks in the display.
2. Use BACK/FWD until correct <i>Year</i> is displayed, then press SET .	The DATE light is on and a number between 1 and 12 blinks, representing the <i>Month of the Year</i> .
3. Use BACK/FWD buttons to select <i>Month</i> , then press SET .	<i>Month</i> is selected. The DATE light is on. A number for the <i>Day of the Month</i> blinks.
4. Use BACK/FWD buttons to select the <i>Day of Month</i> , then press SET .	<i>Day of the Month</i> has been set. A time is displayed with the <i>Hour</i> blinking.
5. Use BACK/FWD buttons to select <i>Hour, with correct AM/ PM</i> , then press SET .	<i>Hour</i> is set. <i>Minutes</i> blink.
6. Use BACK/FWD buttons to select <i>Minutes</i> , then press SET .	<i>Minutes</i> are set. The system returns to AUTO or MANUAL mode.

TO SET TIME TO NEAREST SECOND:

In Step 6, use **BACK/FWD** to select *next minute coming up*, but do not push **SET** button until the exact second when the minute should change.

DAYLIGHT SAVINGS AND STANDARD TIME CHANGES:

These will take place automatically on the *First Sunday of April* and the *Last Sunday of October* every year. If your area does not have DAYLIGHT SAVINGS/STANDARD time changes, DIP SWITCH #4 on the back of the clock must be set to OFF.

The position of the DIP SWITCHES can be checked using DIAG Mode explained elsewhere in this Manual.

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TO ENTER A RANGE OF CLOCK STRIKES:

ACTION	RESULT
1. Press RANGE .	" ALL " is appears in the display.
2. Press RANGE again.	" Hr " will appear in the display.
3. Press RANGE again.	" Hr 30 " will appear in the display.
4. Select ALL , Hr , or Hr 30 depending on whether you want to enter All Quarters, Hours only, or Hours and Half Hours.	Whichever you select appears in the display. (RANGE can be pressed again as many times as needed to select the desired display)
5. Press SET .	The DAY lights will blink, reminding you to select the day or days when you want the clock strikes to ring.
6. Press DAYS desired.	The DAYS you select will light. Pressing a day twice will cancel that day selection.
7. Press SET .	The FROM light will come on and the Hour from which the clock strikes will start is displayed.
8. Use BACK/FWD to select time and AM/PM you want clock strikes to start ringing, then press SET .	The FROM time is set, The TO light will come on. The Hour " TO " which the clock strikes will sound is displayed.
9. Use BACK/FWD buttons to select the last time and AM/PM you want clock strikes ring at, then press SET .	You have set the clock strikes for the indicated range and selected days. System returns to AUTO . If you want to check the schedule you have entered use REVIEW DAYS or REVIEW EVENTS .

NOTE: If the **FROM** time is later than the **TO** time, the times are automatically interchanged. The system will not allow entry of a **TO** time for the same time as the preceding **FROM** time.

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TO ENTER FIXED-DURATION BELL-RINGS INTO THE SCHEDULE:

Bell-rings that do not have a variable duration include the *Angelus and Clock Strikes*. These can be entered into the schedule using the following procedure. The general idea is to select an "event" to enter, decide on what day or days you want it to occur and at what time. If it is to occur more than one time on particular days, each time must be entered separately by repeating this procedure.

ACTION:	RESULT:
1. Press ENTER .	EVENT lights blink
2. Press desired EVENT .	EVENT selected lights and DAY lights blink.
3. Press DAYS desired, except Holidays. See separate section to enter an event on a Holiday.	The DAYS selected will light. You can press a particular day twice to cancel it.
4. Press SET .	The DAYS are selected and the HOURS section of the display blinks.
5. Use BACK/FWD buttons to select hour with correct AM/PM , then press SET .	HOUR is set. MINUTES section of the display blinks.
7. Use BACK/FWD buttons to select minutes, then press SET .	EVENT has been entered. EVENT lights will blink again in case you want to enter additional events. If you do, start with <i>Step 2</i> again. If you don't, press AUTO .

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TO ENTER *VARIABLE-DURATION* BELL-RINGS INTO THE SCHEDULE:

Bell-rings that have a *variable duration* include the *Swinging Bells, Pealing Bells and Toll*. Any of these can be entered into the schedule using the following procedure. The general idea is to select an "event" to enter, select its duration, select the day or days and the time at which it should occur. If it is to occur more than one time on the same day(s), each time must be entered separately by repeating this procedure.

ACTION:	RESULT:
1. Press ENTER .	EVENT lights blink
2. Press desired EVENT .	EVENT selected lights. " d " followed by the <u>duration</u> (in minutes and seconds) is displayed with the "minutes" blinking.
3. Use BACK/FWD to select the duration <i>Minutes</i> , then press SET .	The "Minutes" of duration has been selected, now the " d " is still displayed, and the "seconds" are blinking.
4. Use BACK/FWD to select the duration <i>Seconds</i> , then press SET .	The "Seconds" of duration have been selected. The DAYS are blinking.
5. Press DAYS desired.	The DAYS you select will light. You can press a particular day twice to cancel it.
6. Press SET .	HOURS section of the display blinks.
7. Use BACK/FWD buttons to select <u>hour</u> with correct AM/PM , then press SET .	HOUR is set. MINUTES section of the display blinks.
8. Use BACK/FWD buttons to select minutes, then press SET .	EVENT has been entered. EVENT lights will blink again in case you want to enter additional events. If you do, start with <i>Step 2</i> again. If you don't, press AUTO .

The *maximum duration* for variable duration events is 9 minutes and 59 seconds (9' 59").

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TO SCHEDULE ONE MPR-2 SONG TO PLAY AT CERTAIN TIMES AND DAYS:

ACTION:	RESULT:
1. Press ENTER on the DCB3 Panel .	All the EVENT lights blink
2. Press MPR on the DCB3 Panel .	MPR lights. A four-digit number is displayed in the DCB3 display, indicating the song number to be played.
3. Use BACK/FWD to select each digit of the SONG NUMBER desired, then press SET .	The SONG NUMBER is selected. The DAYS are blinking, prompting you to select the day(s) for which you want this song to play at the scheduled time.
4. Press DAYS desired.	The DAYS you select will light. You can press a particular day twice to cancel it.
5. Press SET .	DAYS are selected. HOURS section of the display blinks.
6. Use BACK/FWD buttons to select hour with correct AM/PM , then press SET .	HOURL is set. MINUTES section of the display blinks.
8. Use BACK/FWD buttons to select minutes, then press SET .	SONG has been scheduled. EVENT lights will blink again in case you want to enter additional events. If you do, start with <u>Step 2</u> again. If you don't, press AUTO .

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TO SCHEDULE MPR2 SONGS IN RANDOM MODE:

ACTION:	RESULT:
1. Press ENTER on the DCB3 Panel .	EVENT lights blink
2. Press MPR Button twice on the DCB3 Panel .	MPR lights. " r-1 " is displayed, indicating "Play one random song".
3. Use BACK/FWD to select the number of RANDOM SONGS you want to schedule, then press SET .	The number of RANDOM SONGS is selected. " Lb1 " is displayed, and the blinking " 1 " prompts you to select the LIBRARY from which the random songs should be played.
4. Use BACK/FWD to select the LIBRARY desired, then press SET .	The LIBRARY is selected. The DAYS are blinking, prompting you to select the days you want the songs scheduled for.
5. Press DAYS desired.	The DAYS you select will light. You can press a particular day twice to cancel it.
6. Press SET .	DAYS are selected. HOURS section of the display blinks.
7. Use BACK/FWD buttons to select <i>Hour</i> with correct AM/PM , then press SET .	HOURL is set. MINUTES section of the display blinks.
8. Use BACK/FWD buttons to select <i>Minute</i> , then press SET .	RANDOM SONGS have been scheduled. EVENT lights will blink again in case you want to enter additional events. If you do, start with <u>Step 2</u> again. If you don't, press AUTO .

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TO SCHEDULE MPR2 SONGS TO PLAY IN "NEXT MODE"

ACTION:	RESULT:
1. Press ENTER .	EVENT lights blink
2. Press MPR <i>Three times</i> , on the DCB3 Control Panel.	MPR is lighted, and " n-1 " is displayed, indicating "Play one song in next mode".
3. Use BACK/FWD to select the number of " NEXT " SONGS you want to schedule, then press SET .	The number of " NEXT " SONGS is selected. " Lb1 " is displayed, and the "1" is blinking, prompting you to select the LIBRARY the songs should play from.
4. Use BACK/FWD to select the LIBRARY desired, then press SET .	The LIBRARY is selected. The DAYS are blinking, prompting you to select the day or day on which you want the songs to play.
5. Press DAYS desired.	The DAYS you select will light. You can press a particular day twice to cancel it.
6. Press SET .	DAYS are selected. HOURS section of the display blinks.
7. Use BACK/FWD buttons to select <i>Hour with correct AM/PM</i> , then press SET .	HOUR is set. MINUTES section of the display blinks.
8. Use BACK/FWD buttons to select <i>Minutes</i> , then press SET .	" NEXT " SONGS have been scheduled. EVENT lights will blink again in case you want to enter additional events. If you do, go right to <u>Step 2</u> again. If you don't, press AUTO .

NOTES:

1. "**NEXT**" songs are played in numerical sequence based on which songs were last played in "NEXT" mode. Intervening song plays using "Random Play", "Specific Song", or "List of Songs" modes do not affect which songs play in "next" mode.

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TO SCHEDULE "LISTS OF MPR2 SONGS" TO PLAY

ACTION:	RESULT:
1. Press ENTER on the DCB3 Panel .	EVENT lights blink
2. Press MPR <i>Four times</i> on the DCB3 Control Panel.	MPR lights. " L-1 " is displayed, indicating "List Number One".
3. Use BACK/FWD to select the number of the <i>Song List</i> you want to schedule, then press SET .	The <i>Song List</i> is selected. The DAYS are blinking, prompting you to select the day or day on which you want the list to play.
4. Press DAYS desired.	The <i>Days</i> you select will light. You can press a particular day twice to cancel it.
5. Press SET .	<i>Days</i> are selected. <i>Hours</i> section of the display blinks.
6. Use BACK/FWD buttons to select <i>Hour with correct AM/PM</i> , then press SET .	<i>Hour</i> is set. <i>Minutes</i> section of the display blinks.
7. Use BACK/FWD buttons to select <i>Minute</i> , then press SET .	The "List of Songs" has been scheduled. EVENT lights will blink again in case you want to enter additional events. If you do, go to <i>Step 2</i> again. If you don't, press AUTO .

If you schedule a list of songs to play, be sure that the list has been defined at the **MPR-2** control panel as described in the *Operating Instructions for the MPR-2*. If the list is not defined, it can still be scheduled, but no songs will play. If the list is *re-defined* at the **MPR-2**, the *revised list* is what will be played at the scheduled times. The list can not be defined or edited from the *DCB3 Control Panel*.

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TO REVIEW EVENTS

In order to see what is programmed to take place you can use this procedure.

ACTION	RESULT
1. Press REVIEW EVENTS .	EVENT lights will blink.
2. Press desired EVENT .	Earliest time the event is scheduled will be displayed. The days it will take place at that time light. If the event being reviewed is not scheduled at any time, a "-- --" will be displayed.
3. Press same EVENT .	The next time the event is scheduled will be displayed (and the days lighted). You can keep pressing the same event button until you have seen all the times for which it is scheduled.
4. Press any other EVENT .	You can now review the schedule of this event in the same manner.
5. Press AUTO .	System returns to AUTO mode.

TO FIND OUT MORE INFORMATION ABOUT AN EVENT

While checking at what times and days an **EVENT** is scheduled, you may also want to know the *duration of the event*, or the *mode of play*. To do this, just press any of the **DAYS** on which the **EVENT** is scheduled while reviewing Events in **EVENT REVIEW**.

If applicable, the **DISPLAY** will change to show additional information such as the "**duration**" or "mode of play" of the event at that time and day. If there is no applicable additional information, the display will just show dashes momentarily.

You can continue to review events and information about the event.

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TO REVIEW BY DAYS

To see what events are scheduled to take place on each day.

ACTION	RESULT
1. Press REVIEW DAYS .	DAY lights blink.
2. Press desired DAY .	Earliest time an event is scheduled on that DAY is displayed. The event that will take place at that time is lighted. If there are no events scheduled on the day being reviewed, "-- --" will be displayed.
3. Press same DAY , or use BACK/FWD .	The next time an event is scheduled will be displayed (and the event lighted). Continue until the entire schedule for that day is reviewed if desired.
4. Press any other DAY .	You can now review the schedule of this day in the same manner.
5. Press AUTO .	System returns to AUTO mode.

TO FIND OUT MORE INFORMATION WHILE REVIEWING BY DAYS

You may want to find out more about what is scheduled as you review, for example, you might want to know the *Duration* or *Mode of Play* of what is scheduled. To do this, press the **EVENT** displayed during your **REVIEW BY DAYS** and any applicable information will be displayed. If there is no additional information available, the display will show "-- --".

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TO SET UP EVENT LISTS

Up to 35 "Event Lists" can be set up, then played manually or scheduled to play automatically. "Event Lists" can include any of the "Events" possible to start from the DCB3 including Bell Rings and the MPR2 Memory Player/Recorder in any play mode (specific songs, random songs, next songs, or song lists).

ACTION:	RESULT:
1. Press the SP button on the DCB3 Control Panel.	SP light comes on, and LIST light blinks.
2. Press LIST	SP and LIST lights stay on. EL 1 (event list 1) is displayed.
3. Use BACK/FWD , SET to select the EVENT LIST (1 to 35).	The number of the Event List selected is displayed in the form 1.--
4. Press ENTER .	All the possible EVENTS will blink and n. 1 is displayed, indicating "position one of event list n". E.g., if this is Event List #1, the display will be "1.1"
5. Press the button for the EVENT desired for the first item in the EVENT LIST .	If an EVENT was selected that does not require more information, the Display will now show EL-nn where "nn" is the place in the EVENT LIST . If a Bell ring with variable duration was selected, the Display will prompt entry of the duration as for manual operation. If an MPR2 Play is selected, the operator will be prompted for the mode of play as for manual operation.

To add additional **EVENTS** to the **EVENT LIST**, repeat the procedure above as required.

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TO MANUALLY PLAY AN EVENT LIST

ACTION:	RESULT:
1. Press MANUAL on the DCB3.	MANUAL lights.
2. Press LIST	LIST lights, EL 1 is displayed, and the 1 blinks.
3. Use BACK/FWD to choose the desired EVENT LIST . Press SET	The number and position of the EVENT LIST selected is displayed. For example 3. 1 indicates "Event List 3, position 1".
4. Use BACK/FWD to select the position in the list where it should start playing and press SET	The LIST Light blinks, indicating it is ready to be started.
5. Press LIST again when you want to start playing the list. If you have a wireless Remote Control, you can activate the list by pushing its button instead.	The first EVENT in the list will play. The entire EVENT LIST will play unless you have it in PAUSE mode indicated by the fact the LIST Light is blinking. When started by a wireless remote control, the system is automatically placed in PAUSE mode.

When the event finishes, the next event will begin playing (with a pause between). This sequence will continue until all events in the **EVENT LIST** have played.

TO PAUSE THE PLAYING OF THE EVENT LIST:

While an event is playing press **LIST** and the **LIST** light will blink. In this mode, the next event in the **EVENT LIST** will not play until **LIST** is pressed again to release it.

However, if an **EVENT** in the **EVENT LIST** consists of more than one song, there will be no pause between those songs.

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TO SCHEDULE ONE OR MORE "EVENT LISTS" TO PLAY

ACTION:	RESULT:
1. Press ENTER .	EVENT lights blink
2. Press LIST .	LIST lights. " EL 1 " is displayed, indicating "Event List Number One".
3. Use BACK/FWD to select the number of the " EVENT LIST " you want to schedule (from 1 - 35), then press SET .	The Event List is selected. The DAYS are blinking, prompting you to select the day or day on which you want the list to play.
4. Press DAYS desired.	The DAYS you select will light. You can press a particular day twice to cancel it.
5. Press SET .	DAYS are selected. HOURS section of the display blinks.
6. Use BACK/FWD buttons to select <u>hour</u> with correct AM/PM , then press SET .	HOURL is set. MINUTES section of the display blinks.
7. Use BACK/FWD buttons to select minutes, then press SET .	The "List of Songs" has been scheduled. EVENT lights will blink again in case you want to enter additional events. If you do, go right to <i>Step 2</i> again. If you don't, press AUTO .

If you schedule an Event List to play, be sure that the Event List has been defined as described elsewhere in these *Operating Instructions*. If the Event List is not defined, it can still be scheduled, but nothing will play.

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TO CHANGE THE DEFAULT DURATION OF VARIABLE-DURATION EVENTS

For events with adjustable duration, the "default" duration is what is first displayed when you attempt to schedule the event. While you can override this value each time you schedule the event, you can also change the "default value" for the event to reduce the number of times you have to enter a new value. This value is for *scheduled* events and does not affect events started manually. The duration for manually started events can be specified during the procedure for manually starting the event. The duration of manual events can be different than that of scheduled events, which can each be specified individually.

When using this procedure, remember that the **HOURS** part of the display indicates **MINUTES**, and the **MINUTES** part indicates **SECONDS** while you are in this mode.

ACTION	RESULT
1. Press SELECT LENGTH .	EVENT lights that have adjustable length (i.e. duration) blink.
2. Press desired EVENT .	MINUTES section of the display blinks.
3. Use BACK/FWD buttons to select minutes, then press SET .	MINUTES are set. SECONDS section of the display blinks.
4. Use BACK/FWD buttons to select seconds, then press SET .	SECONDS are selected. Length default is set. System returns to AUTO .

The default for each event with an adjustable length can be set independently of the other events. To see what the length default is without changing it you can press **LENGTH**, followed by the **EVENT**. The length default (in minutes and seconds) will be displayed. Press **AUTO** to leave the length default as it is.

The length displayed for some events may be slightly different than what you entered. For example, you may enter one minute and find that only 59 seconds or perhaps one minute and two seconds are displayed. This is because certain events such as the Swinging Bells and Pealing Bells must complete the last stroke of the bell swing. The computer calculates the correct length closest to your request and displays it.

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TO CHANGE THE BELLS IN THE PEAL

Any or all of the Bells in the system can be used in the Peal. You can select what sounds best to you.

ACTION	RESULT
1. Press SELECT PEAL .	All BELL lights will blink.
2. Press desired BELLS .	The Bells you press will stay on. Pressing again will turn them off. Continue until you have the bells you want.
3. Press AUTO .	System returns to normal.

TO CHANGE THE BELLS OF THE HIGH, MED, AND LOW SWINGING BELLS

Any of the Bells in the system can be used for any of the Swinging Bells. If you want to change them from the factory settings you can use the following special procedure:

ACTION	RESULT
1. Press SELECT PEAL , followed by the SWINGING BELL desired (High, Med, or Low).	The BELL light used for that SWINGING BELL will blink.
2. Press desired BELL .	Select whatever bell you want by pressing the bell buttons.
3. Press AUTO .	System returns to AUTO .

You can repeat this procedure for any of the **SWINGING BELLS**. However, it is possible to assign a lower bell to the **HIGH SWINGING BELL** than is assigned to the **LOW SWINGING BELL**, etc. so don't set it up in a way that would be confusing to another operator.

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TO START EVENTS MANUALLY

Any event can be started manually, however, starting **CLOCK STRIKES** manually is not normally used and is explained separately at the bottom of the page.

Events that have an adjustable duration will display the **duration** in the form "**dm:ss**" before starting. You have 15 seconds to use **BACK/FWD** to begin the procedure listed below for changing the duration. Otherwise, the duration displayed will be in effect. Manual length changes do not affect the length of scheduled events which is selected separately at the time the event is entered into the schedule.

ACTION	RESULT
1. Press MANUAL once.	MANUAL light will come on.
2. Wait about 10 seconds (for amplifier warm up), and press EVENT you want to start.	Event will start immediately unless it has an adjustable length (duration). System will return to AUTO .

If an event has an adjustable length (duration), the event will light, but it will not start yet. Its duration in minutes and seconds (or number of tolls in the case of the toll), will blink in the display.

ACTION	RESULT
3. (If the length shown is O.K.) Press EVENT again.	Event will start immediately.
4. (If you want to change the length) Press BACK/FWD to change the minutes, then press SET .	MINUTES are set. SECONDS blink.
5. Use BACK/FWD to select seconds, then press SET .	Event will start and system returns to AUTO .

If you have changed the manual length by using the preceding procedure it will recall the new length next time you operate the event manually. You can then change it again if desired. The manual length of each event is independent from the other events. The manual length setting does not change the scheduled length for the same event, which is selected as the event is entered into the schedule.

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TO CREATE, CHANGE OR DELETE *ALTERNATE SCHEDULES*

Alternate Schedules can be created for one day, such as a *Holiday*, or for multiple days, such as an entire *Season*. Twenty-three *Alternate Schedules* are possible.

TO CREATE OR CHANGE AN *ALTERNATE SCHEDULE*:

Press **SP** and **ALT SCHED**.

Use **BACK/FWD**, **SET** to scroll and select the **Start Dates** of any existing *Alternate Schedules*, e.g. “**3.6**” = March 6th, or to select “**Add**” to create a new one.

Use **BACK/FWD**, **SET** to select:

Month (FROM) = Month of the Year the Alternate Schedule starts with.

Day (FROM) = Day of the Month the Alternate Schedule starts with.

Month (TO) = Month of the Year the Alternate Schedule ends with.

Day (TO) = Day of the Month the Alternate Schedule ends with.

Year, or **ALL** for all years. You can choose from either the next available year for the Dates selected, or **ALL** for all years.

TO DELETE AN *ALTERNATE SCHEDULE*:

Press **SP**, then **ALT SCHED**.

Use **BACK/FWD** to display start date of *Alternate Schedule*.

Press **DELETE**

When **dEL?** appears, Press **SET** immediately.

If **SET** is not pressed soon enough after **DELETE** is pressed, **FAIL** is displayed to indicate the *Alternate Schedule* was not deleted. In that case, press **STOP** and start over.

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TO ENTER OR REVIEW WHAT IS IN AN *ALTERNATE SCHEDULE*

When an *Alternate Schedule* is created, all the *Events* from the regular schedule are copied into it. For this reason, it is best not to set up any *Alternate Schedules* until the regular schedule used for most of the year is entered. Most *Alternate Schedules* are just variations to the regular schedule so this reduces the number of entries required.

TO ENTER ADDITIONAL EVENTS:

Press **ALT SCHED**.

Select *Alternate Schedule start Date*.

Press **ENTER**

Proceed to enter events as for the regular schedule.

TO REVIEW EVENTS OR DAYS:

Press **ALT SCHED**.

Select *Alternate Schedule start Date*.

Press **REVIEW EVENTS** or **REVIEW DAYS** and proceed as for the *regular schedule*.

Notes:

1. **DEL** can be used *within an Alternate Schedule* to take Events out one-by-one by Event or Day. To delete an *entire Alternate Schedule*, see previous page.
2. Since the *Day of the Week* for a particular *Date* changes from *Year to Year*, enter all the Days of the Week that this Event would be acceptable on. This applies even if you are just entering an Event in a one-day, one-year *Alternate Schedule*.
3. During Review, **ALT SCHED** can be pressed again to see what day(s) of the week are applicable to the *Alternate Schedule* next time it will come around. These Days will typically be different every year.

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MANUAL OPERATION OF CLOCK STRIKES

This is primarily used for demonstration or testing purposes. When you press **CLOCK STRIKE** from **MANUAL** mode, you are prompted to enter a time. The time entered will then sound, even though it is not the time shown on the clock.

TO STOP ANY EVENT IN PROGRESS

ACTION	RESULT
Press STOP .	Any event in progress will immediately stop.

TO PLAY CHRONOBELL BELLS MANUALLY

The Bells of the system can be sounded individually as follows:

ACTION	RESULT
1. Press MANUAL once or twice.	MANUAL light will be steady or blinking.
2. Press BELLS as desired.	Bells played will sound.
3. Press AUTO	System returns to AUTO mode.

NOTE: If **AUTO** is not pressed at the end of the procedure, the system will remain in the **MANUAL** mode and *no scheduled events* will take place. If the system was in *non-blinking manual* it will revert to **AUTO** by itself in 30 minutes and the scheduled bell-rings will resume. However, if the system is left in **BLINKING MANUAL**, the scheduled bell-rings will not resume ringing until **AUTO** is pressed again.

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BLINKING MANUAL

You can lock the system in **BLINKING MANUAL** until you command it to return to **AUTO**. When in **BLINKING MANUAL** no events will start from the clock, but any event can be started manually. To lock the system in **BLINKING MANUAL**, press the **MANUAL** button twice. The **MANUAL** light will blink steadily, indicating that the system is locked in **BLINKING MANUAL** (in normal **MANUAL** the light does not blink). To return to automatic operation press **AUTO**.

Con

The word Con will appear in the DCB2 DISPLAY whenever the TOWER switch at the Carillon Console is turned ON. So long as this condition persists, *scheduled events will not take place*. To resume ringing scheduled events, the **TOWER** switch at the console must be turned **OFF**.

If the **INSIDE** switch at the *Carillon Console* is turned **ON**, the **MPR-2 MEMORY PLAYER** will be prevented from starting as scheduled, but the remaining bell-rings will continue to ring on schedule. No indication of this condition will appear on the DCB3 DISPLAY, except that any attempt to start the MPR-2 Manually from the DCB3 CONTROL PANEL will not have any result but to display the word Con briefly.

TO DELETE AN EVENT

Use **REVIEW DAYS** to display the **EVENT** and **DAY** to be deleted. Then press **DELETE**. The deleted event will no longer be displayed and the next scheduled event for that day will be displayed. Be careful not to press **DELETE** again or that event will also be deleted. Press **AUTO** to return to normal.

(Alternate) You can also use **REVIEW EVENTS** to display the event and time you want to delete. However, the event will be deleted for *all* days on which it occurs at the time displayed when **DELETE** is pressed.

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RULES OF SCHEDULING PRIORITY

1. Any event entered at the same time and day as a previously scheduled event replaces what was there.
2. Any event which is scheduled in such a way that it would **OVERLAP** a following event will have priority. The event being **OVERLAPPED** will not start. Be careful about changing the **LENGTH** of scheduled events. Doing so may cause overlaps. For example, if the High Swinging Bell is scheduled Three Minutes before the Angelus and has a duration of more than three minutes, it will overlap the Angelus and the Angelus will not start at its scheduled time.
3. Be sure that any **EVENT** scheduled prior to an **HOUR STRIKE** will end at least two minutes before the HOUR. **EVENTS** can end within one minute prior to **QUARTERLY** chimes. The **ANGELUS** should not be scheduled less than two minutes prior to an event.
4. The Duration entered for the **PEAL** and **SWINGING BELLS** may not end up exactly as entered. For example, if 1 Minute and 00 seconds is entered, the display may indicate 59 seconds or 1 Minute and 02 seconds. This is because the **PEAL** and **SWINGING BELLS** must complete their last stroke. The display indicates the closest possible time to that requested.
5. When using the **TOLL** the number of tolls that will actually strike is displayed, instead of the duration. This is useful for sounding a specific number of tolls.
6. The **AUX1** and **AUX2** buttons are reserved for custom applications. If it is utilized in this system, special instructions will be provided.
7. If the system is left with a procedure in process, but never completed, it will revert back to **AUTO** after 30 minutes, unless it was in **BLINKING MANUAL**, in which case it will remain in **BLINKING MANUAL** indefinitely and no scheduled events will start until the system is again set to **AUTO**.

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DCB3 COMPLETE SYSTEM CLEAR

This procedure clears the entire DCB3 memory including all Schedules, Libraries and Alternate Schedules.

A **SYSTEM CLEAR** should always be done when the system is first installed, before entering the customer's schedule, to be sure nothing extraneous is in the memory.

If a lightning storm or other electrical disturbance seems to have caused any problems in the system, a **SYSTEM CLEAR** should be performed and the schedules and time re-entered.

If the system is still basically functional, it is a good idea to review all the schedules and write them down before clearing the system.

To perform a **SYSTEM CLEAR** press the following sequence of buttons:

1. **MANUAL**
2. **SUN**
3. **SAT**
4. **MON**
5. **FRI**

The word "**Clr?**" will appear in the display. Press **SET** *within Five Seconds*, or the procedure will not take.

The display will change to **8:00 AM**.

The day will change to **MON**.

No Events will be scheduled at any time.

The Time, Date, Schedule, and Alternate Schedules must be re-entered.

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BATTERY BACKUP

The *Backup Battery* maintains the time during a power outage.

During a power outage, no scheduled events will ring, nor can they be operated manually.

When the power is restored, the system will resume ringing on schedule.

REPLACING THE BATTERY

A small plate marked **SERVICE PANEL** covers the battery compartment on the back of the **DIGITAL CHRONOBELL III CONTROLLER**. A single **LITHIUM BATTERY** (EVEREADY CR 2016 or equal) is required.

Even though this battery is estimated to be capable of maintaining the time during a *continuous power outage of several years*, we recommend replacing this battery once every Five Years as a precaution.

Be sure to keep system power connected while changing the battery or the time will be lost and require resetting.

Remove the battery from the holder and replace it with an identical type, being sure to orient the replacement the same as the old one (+ toward you as you look at the holder).

PANEL LIGHT TEST:

With system in **AUTO**, press the **DELETE** button. This will briefly illuminate all panel lights and all segments of the display. If any lights do not work it would indicate they have burned out or failed and the system requires service. After the lights come on, they will go out and the VERSION NUMBER of the software will appear briefly in the display. For example, **1.15** indicates version 1.15. Next, the number of unused events will be displayed.

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DEFAULT DURATIONS

The duration of some events can be changed by the user. However, if no adjustment is made by the user, the following durations apply (the factory settings):

LOW SWINGING BELL	One Minute
MED SWINGING BELL	One Minute
HIGH SWINGING BELL	One Minute
PEAL	One Minute
TOLL	Ten Tolls

WARNING MESSAGES AND ERROR RECOVERY

There are number of situations which result in warning lights being ON or actual warning messages displayed.

"**Err**" will be displayed if you try to program a time strike or Westminster melody at a time other than the correct quarter.

For example, if you tried to schedule the Clock Strike to ring at 12:02 PM instead of 12:00 the system would not accept the erroneous entry and would display "**Err**". To recover from this situation, press **SET** and re-enter the time, or press **MANUAL** or **AUTO**.

"**Full**" will be displayed so many events are scheduled that the capacity of the system is exceeded. To recover, press **MANUAL** or **AUTO**.

While many procedures in this manual require pressing **AUTO** to leave them, it is not always necessary. You can often change from one mode to another directly, or press **STOP** instead of **AUTO**.

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DCB3 V1.20 ERROR CODES

- EC1** Another Holiday is on this date.
- EC2** Invalid Clock Strike time.
- EC3** Unable to communicate with MPR.
- EC4** MPR1 unable to play requested song(s).
- EC5** Invalid Clock Strike time.
- EC6** Unable to get amplifier switch data from MPR.
- EC7** Unable to get amplifier switch data from MPR.
- EC8** MPR2 unable to play requested song(s).
- EC9** Unable to communicate with MPR.
- EC10** Specified Library is empty.
- EC11** Another event is already in progress.
- EC12** No events in event list.
- EC13** No events in event list.
- EC14** Unable to communicate with MPR.
- EC15** Unable to communicate with MPR.
- EC86-EC99** Internal software errors. Should not occur during normal operation.

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DCB3 DIP SWITCHES

There are two blocks of eight *Dip Switches* located behind the Service Panel on back of the DCB2. These are each marked 1 2 3 4 5 6 7 8, but we consider the second block (the one on the right) as being switches 9 through 16.

Using this scheme, the *settings* for these are as follows:

DIP SWITCH	NORMAL SETTING AND FUNCTION
1	ON = Curfew Enabled
2	ON = For line frequency of 60Hz. (Off = 50 Hz.)
3	ON = Line frequency synchronization enabled
4	ON = Changes for Daylight Savings time automatically. OFF = For areas where Daylight Savings Time not observed.
5	N/A = (used for compact disc system only)
6	N/A = Spare
7	N/A = Spare
8	N/A = Spare
9	ON = Chronobell Bell-Rings enabled
10	OFF Unless used with Maas-Rowe Computer Controlled Tower Clock Drives.
11	ON = MPR1 enabled.
12	N/A = For CD Systems only
13	N/A = Spare
14	N/A = Spare
15	N/A = Spare
16	N/A = Spare

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DCB3 DIAG MODE

This mode can be used for various tests for trouble-shooting and setup purposes.

TO PLACE SYSTEM IN DIAG MODE:

Use the same button sequence as for COMPLETE SYSTEM CLEAR, except hold the DELETE Button in during the entire procedure.

The Word "DIAG" will appear in the display, indicating the system is in "Diag" (diagnostic) mode.

Some of the functions that can be accessed from within this mode are as follows:

DCB3 DIP SWITCH POSITIONS:

Rather than have to remove the back of the equipment cabinet, one can determine the DIP Switch Positions on back of the DCB3 Controller by pressing the MON Button while in DIAG Mode. Each time MON is pressed, it will indicate the position of one of the DIP Switches. For example On 1 means that DIP Switch #1 is On. Refer to the previous Page to see what the DIP Switch settings mean.

TEST AMPLIFIER POWER ON CIRCUITS:

While in DIAG Mode, pressing WED allows one to use the two lighted BELL Buttons to toggle the Amplifier Power Circuits. This is useful to see if they are working properly.