



Gulbransen Digital Hymnal

OWNER'S MANUAL

Item # DH-200

Manual # OMDH200

Manual Revision 167_1

Software Version 167

Boot Loader 1.13



QRS Music Technologies, Inc.

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Introduction to the Gulbransen DH-200 Digital Hymnal

With thousands of hymns and choruses stored in its memory, the Gulbransen DH-200 Digital Hymnal is the most comprehensive self-contained electronic accompanist on the market. Its main features are:

Versatility	The perfect solution for all your music accompaniment needs. Plays customized orchestrations for thousands of traditional hymns, choruses, contemporary praise and worship music, gospel favorites, wedding music, patriotic and military selections as well as songs for graduation and memorial services.
Portability	The Gulbransen Digital Hymnal is completely self contained and lightweight at only 3 pounds with full remote capabilities making it perfect for off-site events, outdoor meetings or any gathering where inspirational music is desired. Operates from the internal rechargeable metal hydride battery or from the wall power adapter. Transport the DH200 in the optional carrying case.
Integrity	Everything needed is integral to the Hymnal. The music, sound, and speakers are self-contained.
Easy to Use	No specialized knowledge is needed to operate the Hymnal. The musical selections are organized and conveniently indexed both by song title and the popular hymnals they are taken from. The DH200 remembers the page, key and number of verses so you can simply select your favorite hymn by page number.
Flexibility	Use with headphones or external sound systems. Plays Standard MIDI files and MP3 files from a CompactFlash card.
Upgradeable	New features added from a CompactFlash card.
Convenience	The Hymnal comes with a remote control.
Dependability	The solid-state chassis is housed in a rugged plastic case.
Fidelity	CD-quality audio / stereo sounds.

The Hymnal is set to play from its master list of Hymns as it comes from the factory, but a new Hymnal owner may choose one of the many available hymnbooks by entering the proper code. A hymn can then be chosen from that book by entering the appropriate hymn number. The key, tempo, and number of verses will be taken from the hymnbook. At this point, the hymn can be played using the factory default volume, sound, and style settings. Any of these parameters can be changed before or during playback. Of course, playback can also be paused or stopped at any time. *Tap-A-Tempo* [⊕] synchronizes the playback tempo with the beat "tapped" into the front panel. To have the Hymnal lead into a hymn with an appropriate short introduction, use the **INTRO** command. Likewise, an Amen may be appended to any hymn with the *AMEN* function.

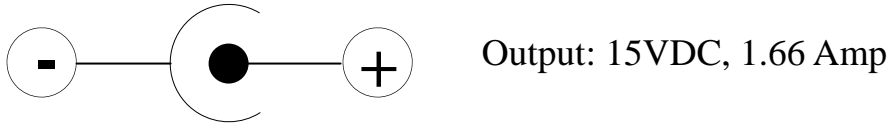
The DH-200 can also memorize a series of hymns — a feature that comes in very handy when making advance preparations for the service music. During the service, the pre-defined series of hymns can be played at the appropriate times. It can remember the performance preferences for selected hymns, such as the orchestration, style, number of verses, Amen, and transposition. Individual parts (soprano, alto, tenor, and bass) can be soloed or played in various combinations. For example, the ability to solo any of the four parts (*Soprano, Alto, Tenor, Bass*) may come in handy during choir rehearsal when hearing one line alone would clarify any musical confusion. The built-in metronome is another useful rehearsal tool. Hymns can be orchestrated in many different ways using the wide variety of sounds available in the DH-200, thereby allowing the creation of new performance ensembles.

The DH-200 can provide its own power and sound from its internal metal hydride battery and two 3-inch speakers. When attached to its AC power adapter, the internal battery is automatically recharged. To conserve battery power, the Hymnal also features a shut-down function that automatically turns the unit off when it is running on battery power but not in use. If a public address system is available, the stereo audio outputs can be connected to the PA and the internal speakers can be switched off. Finally, the full-function remote control, in conjunction with the Hymnal's back-lit LCD (Liquid Crystal Display) and the adjustable built-in stand, makes the DH-200 easy to set up and use in almost any environment.

◆ 1 Safety Precautions

When an AC outlet is available, use the wall power adapter to power the Hymnal. If using an adapter other than a Gulbransen, make sure to provide the proper power and polarity.

The symbol on the adapter containing this information should look like this:



Do not connect an external audio amplifier when the volume is turned up. It is always best to make connections to external devices with all the equipment turned off.

Turn ON the Hymnal first, and then the external audio amplifier.

Extremes of temperature may cause damage. Leaving the Hymnal close to a heater or on a car dashboard may cause it to melt.

Also avoid using the unit in dusty environments.

Do not drop the Hymnal. It will break!

Use a soft, clean cloth to wipe dirt from the main unit and the remote. Never use wet or abrasive cleaners on the Hymnal.

Do not open the Hymnal's case and poke around. There are no user-serviceable parts inside.

◆ 2 Digital Hymnal Quick-Start Tutorial

Front Panel Controls

POWER ON — Plug the DH200 power adapter into a AC wall outlet and tap the power button.

Note: If the Hymnal does not power on, press and hold the ⊕ button and then tap the power button.

New batteries should be charged for at least 4 hours before use. Once the internal battery is fully charged the Hymnal will operate remotely from its on-board nickel metal hydride rechargeable battery.

DEMO — To play the Gulbransen demonstration series of hymns, push the remote control's DEMO button. Or, from the front panel, press and hold the © button and press STOP/INTRO. Push the Hymn up (↑) button on the remote control to skip to the next demo song.

PLAY — Select hymn 413 from the master hymn list by pushing ④, ①, ③, and PLAY.

or

INTRO — Play the hymn with an introduction by pressing INTRO instead of PLAY.

TRANSPOSE — Change the “key” of the hymn up or down in half-steps using the TRANSPOSE buttons.

TEMPO — Change the playback tempo with the TEMPO controls. Try the Tap-A-Tempo function by tapping the ⊕ button on the front panel (not on the remote control) at the tempo you desire. This will prompt the Hymnal to follow along at the rate you dictate. The Tap-A-Tempo function usually needs about 3 or 4 taps to accurately estimate the tap input.

VOLUME — Adjust the volume up or down with the VOLUME controls.

PAUSE — Temporarily stop the playback of a hymn by pushing PAUSE. The hymn will be "on hold" until the PAUSE button is pushed again.

STOP — Bring the hymn to a complete stop and return to the main menu by pressing STOP.

POWER OFF — Press and hold the POWER button until the unit turns off.

Tutorial - Remote Control

VERSES — Select the number of verses. For example, set the number of verses to two by pushing **VERSES**, **2**, and **⊕** (Enter).

SOUNDS — Change the performance sound by pushing the **CHOIR/CHOIR2** button once. This selects the first choir sound. Push it again and a different choir will sing. Try **PIANO/HARPSICHORD** and other sounds from the blue-shaded area on the remote.

STYLE — Listen to a different performance style. Select Style 42 by pushing **STYLE**, **Ⓞ**, **Ⓜ**, and **⊕** (Enter). This means that Sound Preset code 2 (the "2" in "42") will play the parts with the flute, choir, string, and pipe organ sounds. Arrangement Preset code 4 (the "4" in "42") tells the Hymnal to play the melody up an octave in **MELODY**, all four parts combined at pitch in **ACC. 1** and **ACC. 2**, and the bass line down an octave in **CONTRA**. Many styles are available in the Digital Hymnal. See the section on Performance Styles.

AMEN — Add an Amen by pushing the **AMEN** button either before pressing Play/Intro or after the hymn begins to play. An Amen will play at the end of the last verse.

Tutorial - OPTIONS Menu and NAV Control Basics - Setting the Date and Time

Most of the Digital Hymnal features can be accessed using the front panel **OPTIONS** and **NAV** controls. Follow the steps below to maneuver through the menu structure to set the Date and Time.

Options Menu	
CompactFlash Card NAV	
Home	
Playlist Builder	
Playlist Selector	
Play Parameters	
Utilities	
NAV Function Menu	

The NAV control is both a dial used to move the “cursor” (highlighted area) and a button that you can press to “ENTER” the menu option that is highlighted.

*Sometimes pressing the enter button will allow you to change the highlighted value. Press the front panel **OPTIONS** button to access the Options Menu.*

Rotate the NAV dial to move the cursor over the “Utilities” option.

Utilities Menu	
Home Screen	
Hymnbook	MST
Set Clock	
Show Clock	
View Version Info	
Select remote	2
Font Selection	1

Note: there may be more options available in the selected menu that are not seen in the current view. Rotate the NAV dial clockwise, past the last option in the list, to view any hidden selections.

Rotate the NAV dial to highlight “Set Clock”

Press the NAV button, or **⊕** on the keypad, to ENTER the set clock menu.

Set The Clock Here	
Seconds	19
Minutes	0
Hours	17
Date	20
Month	9
Year	2011

To change any of the parameters on the left side of the display, rotate the NAV dial so that the area is highlighted.

Rotate the NAV dial to highlight the Month.

Set The Clock Here	
Seconds	19
Minutes	0
Hours	17
Date	20
Month	10
Year	2011

Press the NAV dial, or **⊕** on the keypad, so that the right side of the display, next to the “Month” is highlighted and flashing.

This will flashing “cursor” will allow you to change the value. You can either rotate the dial or press the front panel number buttons to enter the new value.

Rotate the NAV dial so that the number 10 appears under the flashing highlight.

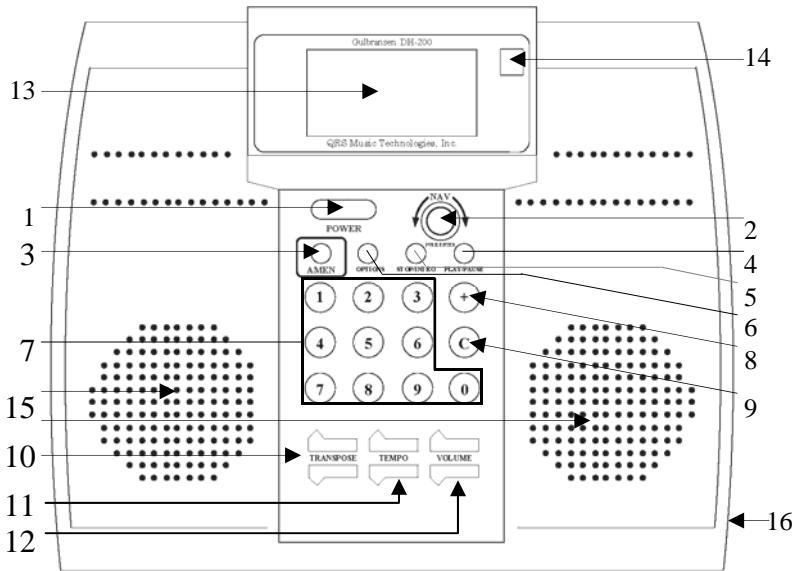
Set The Clock Here	
Seconds	19
Minutes	0
Hours	17
Date	20
Month	10
Year	2011

Press the NAV button, or **⊕** on the keypad, to “ENTER” the new value.

Press the **OPTIONS** button twice to save and return to the home screen.

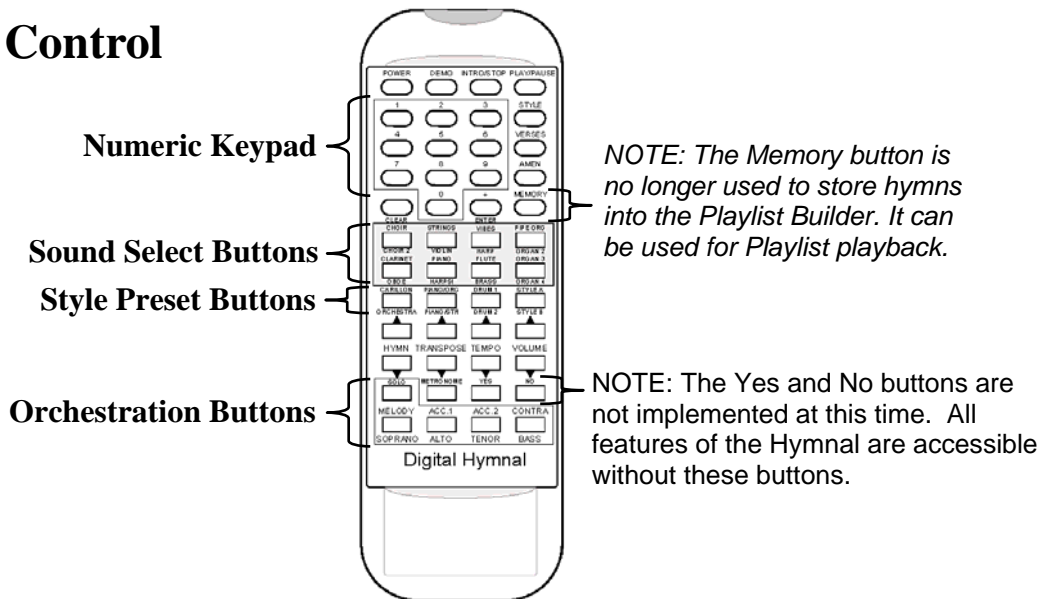
◆ 3 Control Locations

Front Panel

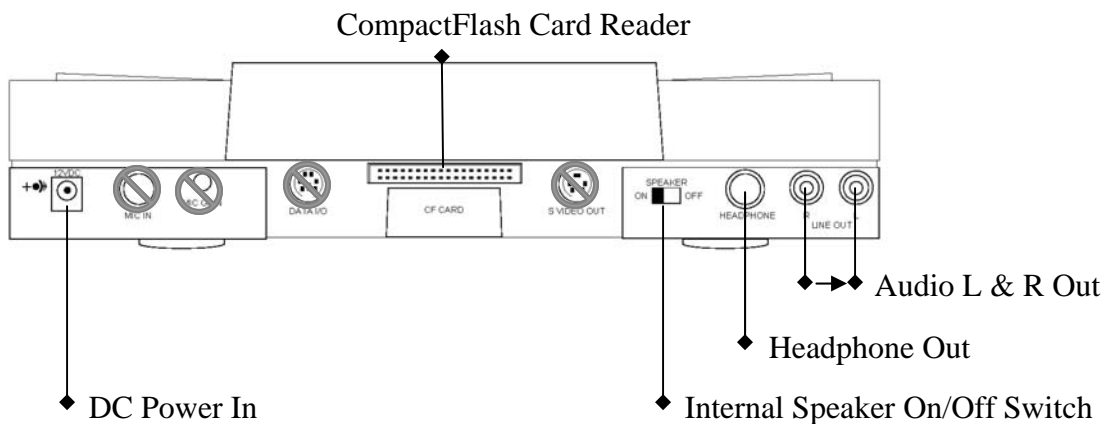


1. POWER On/Off
Tap to power ON. Press & Hold to Power OFF
2. NAV (Navigation) Dial (Push Enter)
* If the NAV dial does not respond correctly:
1] Press & Hold both "C" and "+" and [1]
If there's no change in the NAV operation:
2] Press & Hold both "C" and "+" and [2]
3. AMEN
4. PLAY/PAUSE
5. INTRO/STOP
6. OPTIONS
7. Numeric keypad
8. Enter (Shift +) & (Tap-A-Tempo)
9. Clear (Shift C)
10. TRANPOSE
11. TEMPO
12. VOLUME
13. LCD (liquid crystal display)
14. IR Sensor for Remote Control
15. Internal Speakers
16. Battery Cover

Remote Control



Top Panel



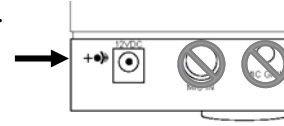
◆ 4 Hymnal Setup

1. Connecting the Power Adapter.

Always use the DC power adapter when wall current is available.

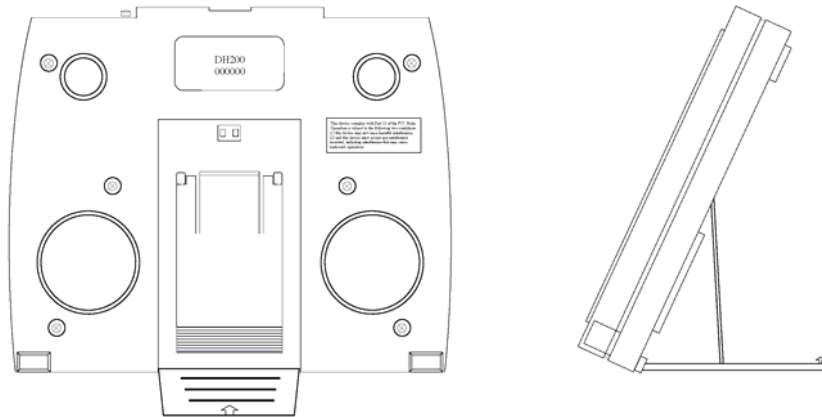
To operate the Hymnal for extended periods of time or to charge the battery, the 15V wall power adapter should be used. To guard against overheating, the wall adaptor should be unplugged when the Hymnal will not be used for several days. The battery will be fully charged in four hours.

Connect one end to the wall, the other to the hymnal.



2. Three-Position Stand

The stand is located on the back of the Hymnal between the speakers. It can be released by quickly pushing and releasing the area covered with raised dots on the hinged rectangular rest plate. The rest plate will swing down and the support bracket will swing out. Place the bottom edge of the support bracket in one of the slots provided in the rest plate. The different slots provide multiple support angles for the Hymnal.

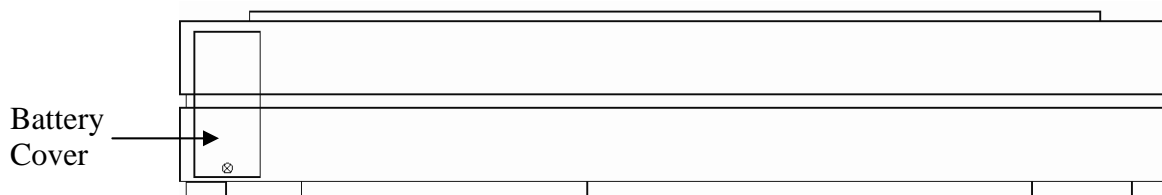


3. Battery Replacement

The battery should be charged for **4 hours** before using.

Follow these procedures whenever the battery needs to be inserted, inspected or replaced.

- | | |
|----------------------------|---|
| Remove the battery cover. | The battery cover is located on the lower right-hand corner of the Hymnal. Remove the Phillips-head screw and remove the cover. |
| Insert the battery. | With its power connector on the right, slide the metal hydride rechargeable battery into its slot. |
| Connect the battery. | Attach the battery to the Hymnal's polarized power connector. |
| Replace the battery cover. | Put the battery cover in place and secure with the screw. |



◆ 5 Playing the Hymnal - Basic Operations

1. Power ON

Tap the POWER button on the front panel. The Hymnal display will show a series of messages. **If a new battery has just been installed or if the Hymnal has just been taken out of the box for the first time, now would be a good time to charge the battery by leaving the unit attached to the DC power adapter for 4 hours. Turn the Hymnal off while charging.**

Note: You cannot power the hymnal on using the remote control when running only from the battery.

```

Loading file from Onboard
Flash Memory

Revision 1.13
Date 2011-02-04
####
press 0 to bail out
    
```

Initially, a messages will zip by. This screen will last for only about six seconds. Don't worry if the numbers and dates on your screen don't match what is printed on the left.

```

MST001 Style 20
3/4 88 BPM: FM
I Will Sing the Wondrous
Story
HYFRYDOL

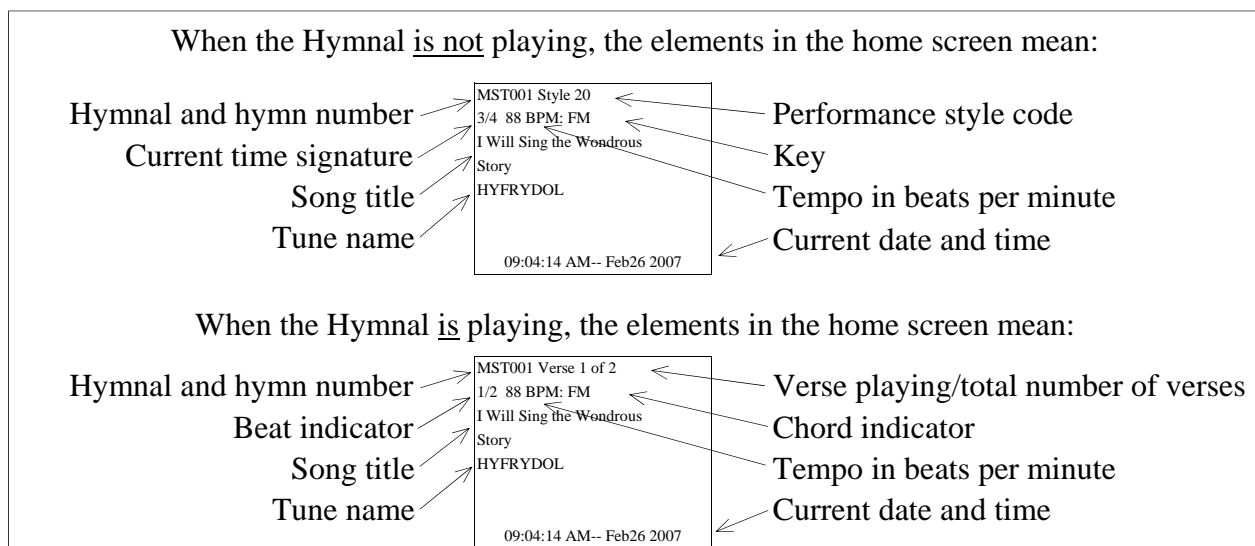
09:04:14 AM-- Oct 2, 2010
    
```

The home screen will appear.

Press and Hold the POWER button to turn off the Digital Hymnal.

The display will go blank.

Turn the unit back on by tapping the POWER button again.



Playing the Hymnal - Basic Operations

2. Play the hymnal's demonstration series of hymns.

Press the DEMO button on the remote or press and hold the © button and press STOP/INTRO on the front panel. Push the Hymn up (↑) button on the remote control to skip to the next demo song. The hymnal will remain in demo mode, even if stopped or paused, until a new hymn is selected and played.

The hymnal will play one verse of these hymns from the Master Index (MST): 024; 1863; 638; 046; 1474; 003; 649; 1511; 406; 1518; 066; 487; 376; 413; 512; 1517; 479; 1884; 1835; 255; 2358; 1888; 1847; 845; 505; 710; 1887; 322; 027; 422; 1512; 1030; 972; 1900; 707; 827; 628; 427; 1387; 1773; 577; 425; 690; 428; 641; 1999; 651; 495; 1883; 631; 178; 415; 429; 988; 416; 531; 632; 681; 2073; 1919; 718; 461.

3. Select a hymnbook.

Enter one of the following hymnbook codes on the numeric keypad. The Hymnal will remember which hymnbook you selected and return to it even if the Hymnal is turned off. The Master Index (Code 9000 ⊕) alphabetically lists every title and tune name available in the Digital Hymnal. The Master Index is a separate booklet shipped with your Hymnal. *Hymnbooks can also be selected from the OPTIONS menu.*

HYMNBOOK NAME	EDITION	CODE	ABBREVIATION	H2 Menu
Master Index (All hymns and tunes in the Digital Hymnal)		9000	MST	Master Index
Baptist Hymnal, The	1991	9001	BAH	Baptist Hymnal
Christian Praise Hymnal, The	1992	9001	BAH	
Hymnal, The (Episcopal)	1982	9002	ECH	Episcopalian Church Hymnal
Hymns for the Family of God	1976	9003	HFG	Hymns - Family of God
Hymnal for Worship & Celebration, The (Word, Inc.)	1986	9004	HWC	Hymns - Worshipping Church
Lutheran Book of Worship	1992	9005	LBW	Lutheran Book of Worship
Hymns of The Church of Jesus Christ of Latter-day Saints	1985	9006	LDS	Hymns - Latter-day Saints
New National Baptist Hymnal, The	1977	9007	NBH	New Baptist Hymnal
Worship: A Hymnal and Service Book for Roman Catholics	1986	9008	RCW	Roman Catholic Worship
		9012	SEC	Songs of Epic Creativity
Presbyterian Hymnal, The	1990	9009	TPH	The Presbyterian Hymnal
Worshipping Church: A Hymnal, The	1990	9010	TWC	The Worshipping Church
United Methodist Hymnal, The	1989	9011	UMH	United Methodist Hymnal
United States Forces, Book of Worship for	1974	9013	USF	US Forces, Book of Worship
Worship in Song	1972	9014	WIS	Worship in Song

For example, select *The Presbyterian Hymnal* by pushing ⊙, ⊙, ⊙, and ⊙, followed by ⊕ (Enter). Return to the Master Index by pushing ⊙, ⊙, ⊙, and ⊙, followed by ⊕.

Choir Director's note:

The Digital Hymnal's arrangement of a particular hymn may not exactly match the version contained in your hymnal. This is due to the fact that the Hymnal uses a core of approximately 2400 hymns to cover many others. Therefore, in some cases, hymns whose arrangements differ slightly may be referred to one basic hymn.

Copyright note:

Due to copyright and publisher restrictions, some hymns are not available for performance on the Digital Hymnal.

Playing the Hymnal - Basic Operations

4. Select a hymn.

Press ③ ④ ⑤ ⊕ to select hymn 305.

5. Play a hymn.

Hymns can be played with or without an introduction.

- PLAY will prompt the Hymnal to begin playing the main body of the chosen hymn without an introduction.
- INTRO will tell the Hymnal to play the hymn with a short introduction at the beginning.

6. Temporarily stop the playback of a hymn.

Push PAUSE. The hymn will be “on hold.” Push the PAUSE button again to resume playback

7. Adjust the transposition, tempo, and volume of the performance.

These parameters can be adjusted before or during playback.

8. Completely stop the hymn and return to the home screen.

Press STOP whenever the Hymnal is playing or paused. The Hymnal will play this hymn from the beginning if restarted with PLAY or INTRO.

9. Try the continuous play function. The Hymnal can play one verse of each hymn in the currently-selected book.

The continuous function will play every hymn in the currently selected hymnbook, beginning with the hymn that you are on when you give the command. Enter the number of the hymn that you want to start with on the numeric keypad before giving the continuous play command.

In this example, listen to the hymnal step through the current hymnbook by turning the hymnal on, pressing © (for “continuous”) and holding it down while pushing PLAY. This command will only work from the front panel of the Hymnal — not the remote control.

To stop continuous play, press and hold © and press STOP. Release © and press STOP.

10. Turn the unit off.

Press and Hold the POWER button until the display will go blank. If the Hymnal is plugged into the wall, you will be able to turn it back on again with the remote control. However, if the Hymnal is running on battery power alone, it can be turned on from the front panel only. This is because it shuts off completely when running on the battery to avoid draining it. When running on wall power, the remote sensor always remains active so that the Hymnal can be turned on with the remote control.

◆ 6 Advanced Functions

SOLO PARTS - Parts can be "soloed" or isolated and modified individually. First, choose a simple single-digit style such as **STYLE 2**. Isolate the soprano part by pushing **SOPRANO**, followed by **SOLO**. Bring back the other three parts by pushing **SOLO** again. The other parts can also be added one by one after a part has been soloed. Add the Alto part to the previously soloed soprano by pressing the **ALTO** button.

TEST THE METRONOME - Try the metronome by pushing the **METRONOME** button located in the lower part of the remote. Turn the metronome off by pushing its button again.

BALANCE PARTS - Sounds and their relative volume levels can be changed. Set Hymn 305 to **STYLE 2**. Select the soprano part with the **SOPRANO** button, choose the **BRASS** sound, and then use the **VOLUME** controls to adjust the soprano's relative volume to about 95. Next, use **ALTO**, **CLARINET**, and **VOLUME** controls to have the alto play a clarinet at a volume of 90. Using the same method, assign **STRINGS** to the **TENOR** part at a volume of 80 and assign **PIPE ORG** to the **BASS** at a volume of 99.

You must adjust the volume fairly quickly after pressing the button of the part you want to adjust, **SOPRANO**, **ALTO**, **TENOR**, or **BASS**. Otherwise you will be adjusting the master volume of the entire Hymnal, not just the individual part. You can see on the display which volume is being affected.

Advanced Functions - Changing the way a hymn is performed.

1. Choose the number of verses you want the Hymnal to play.

The factory settings for the number of times that a verse is repeated is taken from the hymnbook and can be changed using the **VERSES** function. Turn the Hymnal on, select hymn 305, from *Master Index*, and tell the Hymnal to play two verses by pushing **VERSES**, **2**, and **⊕** (Enter) on the remote control. Play the hymn.

2. Choose whether or not to play an Amen.

The Hymnal will only play an Amen when it is asked to, and only on the currently selected hymn. When the **AMEN** button is pushed, the top of the display should read **Play Amen**. To disable the Amen function, push the **AMEN** button again. **No Amen** should appear in the display.

3. Begin the hymn with an introduction.

Pushing the **STOP/INTRO** button after the hymn number has been selected will prompt the Hymnal to play a short introduction. Immediately following the introduction, the hymn itself will begin to play. Use this button instead of **PLAY** if you want an introduction.

4. Alter the playback tempo.

This can be accomplished with either the **TEMPO UP/DOWN** buttons or with the Tap-A-Tempo function. To use Tap-A-Tempo, tap the **⊕** button on the front panel (not on the remote control) at the tempo you desire. The Hymnal will then follow along at the tapped rate. The Tap-A-Tempo function usually needs about 3 or 4 taps to accurately estimate the tap input.

Advanced Functions - Changing the way a hymn is performed.

5. Inserting beats—at the end of the INTRO, end of each VERSE, the end of the FINAL VERSE, and the last note of the AMEN.

Some music directors may wish to pause a few beats between verses. To do this, just tell the Hymnal how many beats you want the pause to last. The Hymnal can insert pauses up to nine beats in length. The selected number of beats will be added to the last note of the INTRO, the last note of each verse (including the final verse), and also to the final note of the AMEN when the function is selected.

To accomplish this, simply add 5000 to the number of beats that you desire. For example, if you want to insert four beats, press ⑤,①,①,④, ENTER ⊕. The Hymnal will then play the selected hymn, and insert three extra beats plus one beat of silence—for a total of four beats. There will always be one beat of silence, for easier location of the next downbeat. So be sure to include the built-in one-beat rest in the total number of beats that you desire. This function will continue to affect all hymn selections until the Hymnal is instructed otherwise, even if it is turned off.

To return to zero beats being inserted, simply type ⑤,①,①,①, ENTER ⊕.

6 Change the performance style.

When the Hymnal is first turned on, the hymn/performance style combination it selects is Hymn 1, Style 20. Find the Sound Combination and Arrangement Preset Codes tables in the "Performance Styles" section of this manual. Looking in the Sound Combination Preset Codes table we see that the 0 (in "20") will play all four parts with the Pipe Organ sound. In the Arrangement Preset Codes table the 2 (in "20") tells the Hymnal to play the soprano and alto at pitch in the MELODY/ SOPRANO and ACC. 1/ALTO parts, respectively. The tenor and bass, at pitch, will be combined on the ACC. 2/TENOR part. Finally, the bass will be played an octave lower than written on the CONTRA/BASS part. Since a zero was applied as the default for the highest of the three digits of the Performance Style code (technically "020"), the style will not change with each new verse. See the Multi-Verse and Drums Preset Codes table for a list of options for the "hundredths" digit of the code. Try other styles with other hymns (e. g. Style 135 on Hymn 305).

See the "Performance Styles" section of this manual for an explanation of the numbering system and a comprehensive list of the available styles.

7. Change the instrumentation.

Sixteen preset sounds can be directly accessed from the eight sound buttons in the BLUE section of the remote or from the eight shift-key combinations on the front panel. For example, the PIANO/ HARPSICHORD button, pushed once, selects the piano sound. Push it again and the harpsichord will play. *These instrument changes will only apply for the hymn currently playing and will be reset to the default settings when the hymn is replayed.*

If you want to change the instrumentation, do so after you select the style. This is necessary because the style selects its own instrumentation.

Any of the Hymnal's available sounds may be assigned to any of the four parts (Soprano, Alto, Tenor, and Bass) of a hymn. See step #9 "Change sounds and relative volume levels". See also the "Remote Controls" section for more details.

Advanced Functions - Changing the way a hymn is performed.

8. Solo a part.

This can be done most easily from the remote control, but can also be accessed through the front panel. *See the “Font Panel Controls” section for details.* Before soloing a part, it is a good idea to check and see what performance style has been selected by pressing the Style button once on the remote. Style 5 (005) is a good choice (see step #6), because it has a different sound for each part. Knowing what style is in use will give you an idea of what to expect from the sound of the soloed part. To hear one of the parts by itself (e. g. alto), push ACC1/ALTO on the remote, followed by SOLO. The soprano, tenor, and bass parts will be muted, leaving the alto as the only part sounding. To bring back the other three parts, push SOLO on the remote. For more details, see SOLO in the “Performance Styles” section of this manual.

Other parts can be added one by one after a part has been soloed. For example, to add the soprano part to the previously soloed alto, press the SOPRANO button.

9. Change sounds and relative volume levels.

For example, set Hymn 500 to Style 4 (this will allow the changes to be heard clearly). Push MELODY/SOPRANO and choose the String Ensemble 1 sound with the STRINGS/VIOLIN button.

To quickly check the sound of a part, use the SOLO function. Press the SOLO button again to return to normal operation.

You have a **maximum of four seconds** to push STRINGS/VIOLIN after pushing MELODY/SOPRANO. Otherwise the Hymnal will assume that nothing else is going to happen and return to the main menu.

To quickly check the sound of a part, use the SOLO function. Press the SOLO button again to return to normal operation.

◆ 7 Control Description Table

This is a listing of the control functions and where they can be found. The operation of the shift-key combinations are explained under “Front Panel Controls”.

Function Name	Front Panel Access	Remote Control
Amen	Yes	Yes
Continuous music	Hold © and Press PLAY/PAUSE	No
Juke Box Mode	Power ON and press ⊕	No
Demo	Hold © and Press STOP/INTRO	Yes
Hymn Up / Down	NAV Dial & Options Menu	Yes
Playlists	Options Menu	no
Metronome	Options Menu	Yes
Play/Pause	Yes	Yes
Power Off	Yes	Yes
Power On	Yes	Yes if running on the AC adapter. No if running on battery power.
Range Mode	Hold © and Press AMEN (See manual)	No
Solo	Hold ⊕ and Press: [0=Solo OFF; 10=Soprano; 20=Alto; 30=Tenor; 40=Bass]	Yes
Solo Add	Hold ⊕ and Press: [1=Soprano; 2=Alto; 3=Tenor; 4=Bass]	Yes
Style	Options Menu	Yes
Stop/Intro	Yes	Yes
Sound selection	Hold © and Press: [1-8 for voices 1-8 respectively]	Yes
Transpose	Yes	Yes
Tempo	Yes	Yes
Volume	Yes	Yes
Verses	Options Menu	Yes

Control Descriptions - Front Panel Controls

POWER	Turns the unit on and off. If the Hymnal is running on battery power alone, the front panel POWER switch will be the only way to turn it on. The remote's POWER switch cannot turn on a Hymnal that is running on the battery. If the unit is running on battery power and sits unused for 10 minutes, it will automatically shut off.
NAV	The NAV (Navigation) dial is both a rotary dial and a button. This programmable encoder has many functions that are determined by settings chosen from the OPTIONS menu.
AMEN	Turns the Amen function on and off. It only affects the performance of the currently selected hymn.
OPTIONS	Opens the menu of Hymnal functions. The NAV dial/button is then used to navigate through the menu structure and select the desired parameter.
STOP/INTRO	Ends a hymn performance OR plays an introduction (if used to begin a hymn).
PLAY/PAUSE	Begins playing a hymn (without an introduction) OR pauses a hymn that is playing. To resume playing a paused hymn, press this button again.
①, ②, ③, ..., ⑩ (Numeric keypad)	Allows hymn, style select, and verse numbers to be entered directly.
⊕ (ENTER) or Tap-a-Tempo	Either enters the displayed value or serves as the Tap-a-Tempo input button. You can call up a hymn using the numeric keypad, followed by ⊕ ENTER button. The hymn will wait to start until you press PLAY .
© (CLEAR)	Clears the current keypad entry from memory.
TRANSPOSE ↑ & ↓	Changes the key up or down in half-step increments. The range of transposition is up six half-steps and down five half-steps.
TEMPO ↑ & ↓	Increases or decreases the playback tempo.
VOLUME ↑ & ↓	Increases or decreases volume levels.

Control Descriptions - Front Panel Controls with Shift-Key Functions

The following are "shift-key" controls. This means that one button — the shift key — should be pushed and held down while another button is pushed in combination with it.

DEMO

Press & Hold © Then Press STOP/INTRO

Plays a factory-chosen set of hymns and styles to demonstrate the Digital Hymnal's capabilities. Push down and hold the © button then push the STOP/INTRO button.

SOUND SELECT BUTTONS

Press & hold © then:

- ① = Choir AAHS/Voice OOHS
- ② = String Ensemble/Violin
- ③ = Vibraphone/Orchestral Harp
- ④ = Pipe Organ/Reed Organ
- ⑤ = Clarinet/Oboe
- ⑥ = Piano 1/Harpsichord
- ⑦ = Flute/Trumpet
- ⑧ = Jazz Organ/Rock Organ

Allows one of the 16 sounds listed at left to be selected from the front panel as shown. Each of the eight number buttons accesses two sounds. Push once and the first sound is selected. The name of the sound will appear in the display. Push again and you'll get the second sound associated with that button.

Sounds other than those listed here can also be accessed. See the Performance Styles/Orchestration section of this manual for details. The available sounds are listed in the General MIDI Sound List table.

SOLO

Press & Hold ⊕ then:

- ①⊕ = Soprano/Melody
- ②⊕ = Alto/Acc.1
- ③⊕ = Tenor/Acc.2
- ④⊕ = Bass/Contra
- ⊕ = Solo OFF

ADD

Press & Hold ⊕ then:

- ① = Soprano/Melody
- ② = Alto/Acc.1
- ③ = Tenor/Acc.2
- ④ = Bass/Contra

SOLO is used to select one of the parts — SOPRANO, ALTO, TENOR or BASS — to either isolate a part or to bring in parts one at a time. Once a part is "soloed" you can ADD the other parts as shown at left.

CONTINUOUS MUSIC

Plays one verse of each of the hymns in the selected hymnbook in numerical sequence.

JUKE BOX MODE

Turn on the Digital Hymnal Press ⊕ before pressing any other key.

Plays one verse of each of the hymns in the selected hymnbook in numerical sequence starting with hymn 1. This feature is useful for playing background music.

RANGE MODE

Press & hold © then press AMEN, starting hymn number, ⊕, ending hymn number then PLAY/PAUSE

Plays one verse of each of the hymns in the selected hymnbook in numerical sequence. This feature is useful for playing background music. At Christmas time, use the Range Mode for playing the Christmas hymns (hymns 1 through 115 in the master list).

For example, to play hymns 2 through 6 in a given hymnbook, hold down the © button and then press the AMEN button to get into Range mode. Then push 2, ⊕, 6 and PLAY. The Hymnal will play the available hymns between 2 and 6. When one verse of the last available hymn has been played, the Hymnal will then stop.

RANGE REPEAT MODE

Press & hold © then press AMEN, starting hymn number, ⊕, AMEN, the number of repeats, ⊕, ending hymn number then PLAY/PAUSE

Allows you to repeat the range of hymns selected with the RANGE MODE as many times as desired. You cannot repeat a single hymn using this mode. To repeat a single hymn just increase the number of verses.

General MIDI Sound List					
0	Acoustic Grand Piano (<i>Piano 1</i>)	43	Contrabass	86	SL7 5TH Saw Wave
1	Bright Acoustic Piano (<i>Piano 2</i>)	44	Tremolo Strings	87	Bass & Lead
2	Electric Grand Piano (<i>Piano 3</i>)	45	Pizzicato Strings	88	New Age Pad
3	Honky-tonk Piano	46	Orchestral Harp	89	Warm Pad
4	Electric Piano 1	47	Timpani	90	Polysynth
5	Electric Piano 2	48	String Ensemble	91	Space Voices Pad
6	Harpsichord	49	Slow Strings	92	Bowed Glass
7	Clavinet	50	Synth Strings 1	93	Metal Pad
8	Celesta	51	Synth Strings 2	94	Halo Pad
9	Glockenspiel	52	Choir Aahs	95	Sweep Pad
10	Music Box	53	Voice Oohs	96	Ice Rain
11	Vibraphone	54	Synth Voice	97	Soundtrack
12	Marimba	55	Orchestra Hit	98	Crystal
13	Xylophone	56	Trumpet	99	Atmosphere
14	Tubular Bells	57	Trombone	100	Brightness
15	Dulcimer	58	Tuba	101	Goblin
16	Jazz Organ	59	Muted Trumpet	102	Echo Drops
17	Percussive Organ	60	French Horn	103	Star Theme
18	Rock Organ	61	Brass Section	104	Sitar
19	Pipe Organ	62	Synth Brass 1	105	Banjo
20	Reed Organ	63	Synth Brass 2	106	Shamisen
21	Accordion	64	Soprano Sax	107	Koto
22	Harmonica	65	Alto Sax	108	Kalimba
23	Tango Accordion	66	Tenor Sax	109	Bagpipe
24	Classical Guitar	67	Baritone Sax	110	Fiddle
25	Folk Guitar	68	Oboe	111	Shannai
26	Jazz Guitar	69	English Horn	112	Tinkle Bell
27	Clean Electric Guitar	70	Bassoon	113	Agogo
28	Muted Electric Guitar	71	Clarinet	114	Steel Drums
29	Overdriven Electric Guitar	72	Piccolo	115	Woodblock
30	Distortion Electric Guitar	73	Flute	116	Taiko Drum
31	Electric Guitar Harmonics	74	Recorder	117	Melodic Toms
32	String Bass	75	Pan Flute	118	Synth Drum
33	Electric Bass - Finger	76	Bottle Blow	119	Reverse Cymbal
34	Electric Bass - Picked	77	Shakuhachi	120	Guitar Fret Noise
35	Fretless Bass	78	Whistle	121	Breath Noise
36	Slap Bass 1	79	Ocarina	122	Seashore
37	Slap Bass 2	80	SL1 Square Wave	123	Bird Tweet
38	Synth Bass 1	81	SL2 Sawtooth	124	Telephone Ring
39	Synth Bass 2	82	Synth Calliope	125	Helicopter
40	Violin	83	Chiffer Lead	126	Applause
41	Viola	84	Charang	127	Gunshot
42	Cello	85	Solo Vox		

See the Orchestration section on the previous page for an explanation of how to use these sounds.

Control Descriptions - Remote Control

POWER If the Hymnal is plugged into the wall power adapter, this turns the unit on and off. However, if the Hymnal is running on battery power alone, the remote's **POWER** switch will only turn the Hymnal off, not on. This is due to the fact that a Hymnal running on battery power exclusively is turned completely off when its power is switched off. On the other hand, when the Hymnal is receiving power from the wall power DC adapter, it continues to run (at a reduced level) when switched off. In other words, its power function operates very much like the "Instant On" option found on many television sets.

If the Hymnal is operating on battery power and sits unused for 10 minutes, it will automatically shut off.

This section of the remote is identical to and operates the same as the front panel. ↗

PLAY/PAUSE Begins playing a hymn (without an introduction) OR pauses a hymn that is playing. To resume playing a paused hymn, press this button again.

STOP/INTRO Ends a hymn performance OR plays an introduction

①, ②, ③, ... , ⑩
(Numeric keypad) Allows hymn, style select and verse numbers to be entered directly.

⊕ (Enter) Enters the displayed value. Since most changes are automatically registered after five seconds, pressing ⊕ is only required when the change needs to be registered right away.

⊙ (Clear) Clears the current keypad entry from the display.

TRANSPOSE Changes the key up or down in half-step increments. The range of transposition is up six half-steps and down five half-steps.
↑ & ↓

TEMPO Increases or decreases the playback tempo.
↑ & ↓

VOLUME Increases or decreases volume levels. Normally it is used to control master volume, but the volumes of individual parts can be adjusted as well. This enables you to change the balance between the various parts. For more details, see the explanation under "SOLO" in section 8.
↑ & ↓

Sound Select Buttons Allows one of the 16 front-panel sounds to be applied to any combination of the four parts. Each of the eight buttons accesses two sounds. Push once and the sound listed above the button is selected. Push again and you'll get the sound listed below the button.

Sounds other than those listed here can also be accessed. See the Performance Styles/Orchestration section of this manual for details. The available sounds are listed in the General MIDI Sound List table.

Control Descriptions - Remote Control

VERSES	<p>Changes the number of hymn verses played.</p> <p>For example, to have the selected hymn play 2 verses, push VERSES and then 2 on the numeric keypad.</p>
MEMORY	Used to play stored Playlists.
METRONOME	Turns the metronome on and off. Change the metronome's volume by using the volume controls immediately after pushing METRONOME .
AMEN	<p>Adds an Amen to the end of the last verse of the selected hymn.</p> <p>Unless the Hymnal is asked to, it will not play an Amen. When the AMEN button is pushed, the display indicates that the Amen function is on and an Amen is added to the end of the hymn. Press the AMEN button again for “No AMEM” at the end of a song.</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center; margin: 0;">Play Amen</p> <p style="margin: 0;">I Will Sing the Wondrous Story HYFRYDOL</p> <p style="font-size: small; margin: 0;">09:04:14 AM-- Feb26 2007</p> </div>	
HYMN ↑ & ↓	Steps up through the hymns one at a time in the order of the selected hymnbook.
DEMO	Plays a factory-chosen set of hymns to demonstrate the Digital Hymnal's capabilities.
STYLE	<p>Allows a new accompaniment style to be applied to a hymn.</p> <p>For example, to apply Style 142 to the currently selected hymn, push STYLE and then 1, 4, and 2 on the numeric keypad.</p>
SOLO	The SOLO and Orchestration buttons are explained in Performance Styles Section of this manual.

◆ 8 Performance Styles

A number of built-in performance style options can be applied to hymn performances using a one-, two- or three-digit style code. The position of each digit in the style code controls one aspect of the hymn's performance.

By "position" we mean the location of the digit within the number as it is written. For example, the number "743" has a "7" in the "hundreds place", a "4" in the "tens place", and a "3" in the "ones place". The significance of each digit is explained in the tables that follow. The last digit of the style to be entered into the Hymnal (in this case the "3" in the ones-place of the number 743) selects the sound combination. If there are two digits then the next-to-last digit (the "4" in the tens place) controls the choice of arrangement. If there are three digits then the first digit (the "7" in the hundreds place) selects the multi-verse choice. This numbering system was devised to make it easy to explore and recall related style groups. Exceptions in the 80_ and 90_ series are noted in the Multi-verse and Drums table. If you press **STYLE**, **Ⓢ**, **ENTER** the Hymnal assumes you want Style 002.

The chosen option or options are applied when the **STYLE** button is pushed and the codes are entered on the numeric keypad or remote control. Please take a look at the **SOUND** Preset code and **ARRANGEMENT** Preset code tables listed on the next two pages to become familiar with the options that are available.

Call up hymn MST 1711 and try the following three examples:

1. Enter "0" to have the pipe organ play all four parts at pitch. This example uses **SOUND** Preset code 0. Choose styles ending with "0" (i.e. 10, 100, 220) if you want to play hymns using only the pipe organ sound.
2. Entering the two-digit style "32" has two effects. The "3" in the tens place selects the arrangement, with the melody up an octave, the soprano and alto playing the **ACC. 1** (Accompaniment 1) part, the tenor and bass playing **ACC. 2**, and the **BASS** down an octave. The "2" in the ones place sets the tone of the sounds the voices use: flute for the melody, choir on **ACC. 1**, strings on **ACC. 2**, and organ for the **BASS**. Other styles can be related in different ways, depending on which digit they have in common. For example, Style 30 uses the same transpositions (because it has a "3" in the "tens place", the same as style 32) but plays the parts using the organ sound (because it has a "0" in the "ones place"). Style 22 plays the parts with different transpositions (because it has a "2" in the tens place instead of a "3") but uses the same flute/choir/strings/organ sounds (because it has a "2" in the "ones place", the same as style 32).
3. Three-digit styles select combinations of tone settings, background styles, ritards, and transpositions. Enter "642" to have the flute play the melody, accompanied by choir, drums, and pipe organ. The performance will gradually slow down ("ritard") in the final measures of the last verse. Looking at each digit one by one in style 642 tells us that **MULTI-VERSE** Preset code 6, **ARRANGEMENT** Preset code 4, and **SOUND** Preset code 2 have been selected.

The performance styles are summarized in the three Preset Code tables.

Performance Styles - Changing the Default Style:

Options Menu	Play Parameters Menu
CompactFlash Card NAV	Default Volume 48
Home	Default Style 20
Playlist Builder	Beats Between Verses 0
Playlist Selector	Metronome ON/OFF OFF
Play Parameters	Set Transpose
Utilities	Options Menu
NAV Function Menu	Home Screen

To change the default style (the style that comes whenever you power up the Digital Hymnal), press the front panel Options button, select “Play Parameters and then Default Style. Change to the desired Style number and press ENTER [⊕]. The selected style will be the new default style after turning the Digital Hymnal off and on.

SOLO

Allows the values associated with the four parts to be modified. SOLO is used to select one of the parts — SOPRANO, ALTO, TENOR, or BASS — to either isolate a part or to bring in parts one at a time.

Orchestration Buttons

Blue area of remote

MELODY/SOPRANO

ACC. 1/ALTO

ACC. 2/TENOR

CONTRA/BASS

The sounds available in the Hymnal are listed in the General MIDI Sound List section of this manual. These sounds can be assigned to any of the four parts in any hymn, allowing the user the freedom to create new orchestrations. To assign a sound to a part, select the part by pushing one of the part buttons — SOPRANO, ALTO, TENOR, or BASS, push any one of the sound buttons located in the BLUE area of the remote. You may also pick a sound from the General MIDI Sound List and enter its number. For example, to assign the Pipe Organ (Sound # 19) to the Alto part, press ALTO, then press any sound button, ①, ②, and ⊕ (Enter).

Changing the volume of one of the four parts

Change the relative volume of the melody by pushing MELODY and then using the VOLUME ↑ & ↓ buttons to change the melody's relative loudness in the "mix" among the four parts. (If more than five seconds elapse between pushing MELODY and using the volume controls, the Hymnal will cancel the MELODY command and apply the volume changes to the master volume.)

Performance Styles - Using the Performance Style Presets

The four Style Preset Buttons (*see the Remote Control illustration at the beginning of this manual*) allow quick access to some of the most commonly used performance styles. Each of these buttons toggle between the two styles shown above and below the button. For example, pressing the button marked “Carillon” will automatically select a Carillon style without making the user go through the process of entering the appropriate code. Pressing this same button again will then switch to the Orchestra style.

As the style is selected, the corresponding preset code for that style is displayed on the screen. These are the same preset codes which we discussed in the last section. If you are interested in finding out which style is being used by the Preset Buttons, you can simply look up the code which appears on your screen in the tables on the previous pages.

SOUND COMBINATION PRESET CODES - select the sound that each of the four parts plays.				
Last or only digit entered “ones place”	Melody/Soprano	Acc. 1/Alto	Acc. 2/Tenor	Contra/Bass
0	pipe organ	pipe organ	pipe organ	pipe organ
1	tubular bells	glockenspiel	vibes	electric piano 2
2	flute	choir aahs	string ensemble	pipe organ 3
3	violin	harpsichord	clarinet	flute
4	oboe	flute	clarinet	bassoon
5	electric piano 1	choir aahs	string ensemble	pipe organ
6	flute	slow B3 organ	piano 1	tuba
7	piano 1	piano 1	piano 1	piano 1
8	electric piano 2	warm pad	elect piano 1	string bass
9	guitar	harp	folk guitar	string bass

ARRANGEMENT PRESET CODES - define the way that the four parts are performed.				
Next-to-last digit entered “tens place”	Soprano/Melody	Alto/Acc. 1	Tenor/Acc. 2	Contra/Bass
0 _	Four-part hymn style: Soprano	Alto	Tenor	Bass
1 _	Melody up an octave	Soprano and Alto	Tenor	Bass
2 _	Soprano	Alto	Tenor and Bass	Bass down an octave
3 _	Melody up an octave	Soprano and alto	Tenor and Bass	Bass down an octave
4 _	Melody up an octave	All four parts	All four parts	Bass down an octave
5 _	Melody up an octave	All four parts	Arpeggiated chords	Bass down an octave
6 _	Melody in octaves	All four parts	Arpeggiated chords	Bass in octaves
7 _	Melody in octaves	All four parts	All four parts	Bass in octaves
8 _	Melody at pitch	All four parts	All four parts	Bass down an octave
9 _	Four-part hymn style: Soprano Organs-only mode. In this mode, the last digit selects one of ten different organs that range from very bright to sedate. Use with an upper digit of 2 (the 2 in style 294) to change the organ sound with each verse of the hymn. Start with a soft organ, and end the last verse with a full organ. For example, if you want 4 verses	Alto with an intro, then start with Style 294, which will play four verses ending with style 290, which has a very bright pipe	Tenor organ. If you do not want the ending to be so full sounding, you can start higher, with Style 297, in which case the Hymnal will end up with Style	Bass 293. The 3 in Style 293 specifies a more sedate organ than the 0 in Style 290.

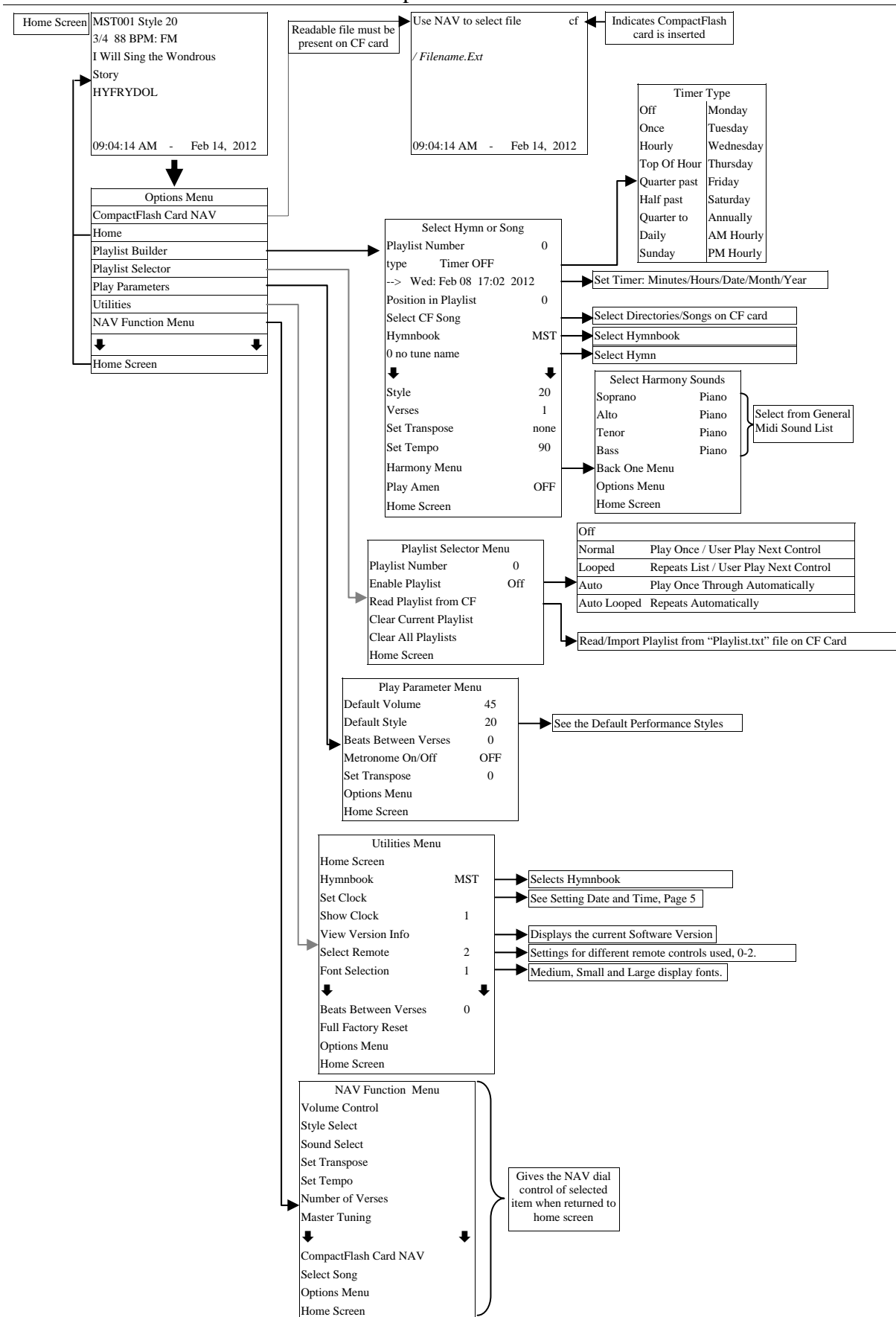
The last digit of the arrangement style (whose place is held by “_”), is chosen from the SOUND preset codes in the first table.

MULTI-VERSE and DRUMS PRESET CODES				
Prompt the Hymnal to change the performance of a hymn from verse to verse and add drums in some cases.				
First of three digits entered. (The last two digits come from the Arrangement Preset Codes table.)	Operations applied to all four parts.			
1__	Adds a ritard at the end of the last verse.			
2__	Begins by playing the style chosen with the last two digits of the code. Then, beginning with the second verse, the last digit of the style number decreases at the beginning of each verse. For example, style 213 becomes style 212 . A ritard is added at the end of the last verse. Note: 210 becomes 219 , not 209 . The first and second digits never change.			
3__	Randomly changes styles from verse to verse. This facilitates an exciting variety of hymn performance.			
4__	Do the same as 1, 2, and 8 combined.			
5__	Do the same as 1, 2, and 9 combined.			
6__	Do the same as 1 and 8 combined.			
7__	Do the same as 1 and 9 combined.			
8__ Drums with the hymn	Melody at pitch	All four parts	Drums	Bass down an octave
9__ Popular styles that use drums in the arrangement.	Melody instrument, played at the original pitch. Uses the melody Sound Preset Code.		Background, Drums, Bass. Unless otherwise indicated, block chords are played with the background sound.	
90_	Melody sound selected by lowest digit		Electric piano background, Electric bass.	
91_	Melody sound selected by lowest digit		Arpeggiated electric piano background, Acoustic bass.	
92_	Melody sound selected by lowest digit		Harp background, Acoustic bass.	
93_	Melody sound selected by lowest digit		Jazz guitar background, Electric bass.	
94_	Melody sound selected by lowest digit		Electric piano background, Electric bass.	
95_	Melody sound selected by lowest digit		Electric piano background, Electric bass.	
96_	Melody sound selected by lowest digit		Jazz guitar background, Electric bass.	
97_	Melody sound selected by lowest digit		Arpeggiated electric piano background, Electric bass.	
98_	Melody sound selected by lowest digit		Electric guitar background, Electric bass.	
99_	Melody sound selected by lowest digit		Arpeggiated electric guitar background, Electric bass.	

Certain styles may not work well with specific hymns. Let your ear be your guide!

◆ 9 Options Menu Functions Table

Options Menu Structure



To review the NAV control operation see the “Tutorial - OPTIONS Menu and NAV Control Basics - Setting the Date and Time” section on page 5 of this manual.

Options Menu - CompactFlash Card NAV

The DH-200 Digital Hymnal will recognize and play MIDI and MP3 files.

The features that will work with the file type played from the CF card are:

MIDI - Play; Pause; Stop; Volume; Tempo; Transpose

MP3 - Play; Pause; Stop; Volume

MST001 Style 20 CF 3/4 88 BPM: FM I Will Sing the Wondrous Story HYFRYDOL 10:43:11AM - Oct 2, 2011	From the DH-200’s Home Screen... Insert your CompactFlash card containing MIDI or MP3 files “CF” will appear in the upper right corner of the display.	
Options Menu CompactFlash Card NAV Home Playlist Builder Playlist Selector Play Parameters Utilities NAV Function Menu	Press the front panel's OPTION button. The Options Menu opens highlighting the CompactFlash Card NAV option. Push the NAV button, or ⊕, to access the CompactFlash card. <i>To exit, press the OPTIONS button repeatedly until the Home Screen appears.</i>	
Use NAV to select file CF 10:43:11AM - Mar 27 2007	“Use NAV dial to select file” appears at the top of the display.	
Use NAV to select file CF \001.MID 10:43:11AM - Mar 27 2007	MIDI File <i>Playing</i> CF Tempo 54 bpm \001.MID Master Volume 36 10:43:11AM - Mar 27 2007	Rotate the NAV dial to view the songs and directories. Song names appear as: \ Filename.MP3 or \ Filename.MID Press the PLAY/PAUSE button to play the song.
Use NAV to select file CF \Hymns\ 10:43:11AM - Mar 27 2007	MP3 File Play Enabled CF (Hymns\ Without Him.MP3 Master Volume 36 10:43:11AM - Mar 27 2007	Directory names appear as: \ Hymns\ To enter a directory push the NAV button. Then, rotate the NAV dial to view the songs. Song names appear as: /Directoryname/ Filename.extension Press the PLAY/PAUSE button to play the song.
Use NAV to select file CF \Hymns \.. 10:43:11AM - Mar 27 2007	Use NAV to select file CF \001.MID 10:43:11AM - Mar 27 2007	To exit the directory, rotate the NAV dial counter-clockwise until two dots appear after the directory name. Push the NAV button to exit to the root of the CF card.
Options Menu - Play Hymns from the Internal Memory.		
MST001 Style 20 CF 3/4 88 BPM: FM I Will Sing the Wondrous Story HYFRYDOL Mstr Vol 16 10:43:11AM - Mar 27 2007	To exit the CompactFlash card and return to the internal hymns, press the OPTIONS button twice.	

You can use the Playlist Builder to play a selection of programmed Hymns using either the Timer “type” OR by Enabling a Playlist.

Options Menu - Playlist Builder

Select Hymn or Song		
Playlist Number	0	Sets the Playlist Number (0-14) to be programmed.
type	Off	See the Timer Type options on page 24.
--> <i>Date & Time</i>		Sets the Timer’s Playlist Start Date and Time
Position in Playlist	0	Sets the Position in Playlist (0-11) for the song below.
Select CF song		Select a song from the CF card for the playlist and position above.
Hymnbook		Select the Hymnbook for the Hymn below.
0 no tune name		Select the song for the playlist and position above.
Style		Sets the Style for the selected Hymn.
Verses		Sets the number of Verses for the selected Hymn.
Set Transpose		Sets the Transpose for the selected Hymn.
Harmony Menu		Sets the four-part harmony sounds; Soprano / Alto / Tenor / Bass
Play Amen	Off	Turns the AMEN feature ON or OFF for the selected Hymn.
Home Screen		Exits to the Home Screen

Options Menu - Playlist Selector

Playlist Selector Menu		
Playlist Number	0	Sets the Playlist number to play when enabled.
Enable Playlist	Off	Off / Normal / Looped / Auto / AutoLoop
Read Playlist from CF		Populates the Playlists from a “Playlist.txt” file copied to a CF card. Call QRS Technical Support for details.
Clear Current Playlist		Clears the Playlist Number selected above.
Clear All Playlists		Clears All of the Playlists.
Home Screen		Exits to the Home Screen

Options Menu - Playlists

A completely new memory structure has been designed for the DH200. With software version 1.68 or greater, the new Playlist builder is available. This new playlist builder replaces the 10 Hymn Memory Play function in earlier DH200 units. *Earlier DH200's can be easily updated.* The Playlist Builder allows up to 15 playlists containing as many 12 hymns each. In addition, hymns stored on the compact flash memory card can also be programmed as part of your playlist. Individual hymn parameters such as tempo, transpose, etc. can also be edited and saved in your playlist.

Note: Programming will be done using the controls on the front panel of the DH200, not the remote control as in earlier units. Many commands will use the “NAV” control, which is a continuous rotary dial and also a push button. The push button acts as an “enter” or “select” command which is frequently used when building playlists.

When starting with this new control structure, we suggest that you make a few simple playlists using only a few hymns in each. Once you have learned that, go on to more complex playlists with tempo, transpose, and other variables. You can always go back to a playlist already programmed and edit them by adding or deleting entire hymns, or changing details such as tempo, etc.

Playlist Builder - Building a Playlist

1. Press the OPTIONS button.
 2. Rotate the NAV dial to highlight Playlist Builder and then press the NAV button to enter the “Select Hymn or Song” menu.
 3. Rotate the NAV dial to highlight Playlist Number and then press the NAV button to select.
The number area on the right side of the display will flash to indicate that you can change the value. Playlists are numbered 0 through 14 for a total of 15 playlists.
 4. Press “0” and then the NAV button. *We will use Playlist Number 0 for this example.*
5. Rotate the NAV dial to highlight Position in Playlist and then press the NAV button to select.
The number area on the right side of the display will flash. The position in playlist is the order in which the hymns will play. There are 12 positions for hymns, 0 through 11, position “0” plays first.
 6. Rotate the NAV dial to display the Position in Playlist number and then the NAV button to enter.
 7. Select the Hymn for the Playlist Number and Playlist Position chosen.
The Hymn name is displayed on the line below Hymnbook.
Rotate the NAV dial to highlight the current Hymn and then press the NAV button so that the cursor flashes. Use the keypad to enter your hymn number or rotate the NAV dial to select a hymn from the list. Press the NAV button to enter the new hymn.
See also, “Using Content from the CF Card” on page 16.
8. Repeat steps 5 - 7 above to select the following four Hymns for Playlist Number “0”.
Position 0 = hymn 100 / Position 1 = hymn 101 / Position 2 = hymn 102 / Position 3 = hymn 103
 9. Press the Options button several times to return to the Home Screen.
Go to pages 15 and 16 to select and play this playlist.

Options Menu - Playlist Builder - Selecting a Playlist

This menu allows you to select the playlist that will play when the playlist feature is enabled.

1. Press the OPTIONS button.
2. Rotate the NAV dial to highlight Playlist Selector.
3. Press the NAV dial to enter the Playlist Selector Menu.
4. Rotate the NAV dial to highlight Playlist Number.
This is where you select the Playlist Number. Remember that there are 15 separate Playlists, each holding as many as 12 hymns. For our example we will use the first Playlist, "0".
If the Playlist Number currently on the display is "0", go to step 7 below.
5. Press the NAV dial. *The number area on the right side of the display will flash to indicate that you can change the value.* Rotate the NAV dial so "0" appears.
6. Press the NAV dial to enter.
7. Use the NAV control to select "Home Screen" to exit the Options Menu. *You can also tap the Options button several times until the Home Screen displays.*
Note: You could also go directly to step #2 below to enable the playlist.

Options Menu - Playlist Builder - Playing a Playlist

You are now ready to play the playlist just created.

1. Press the OPTIONS button.
2. Rotate the NAV dial to highlight Enable Playlist.
3. Press the NAV dial so that the cursor is flashing at the right side of the display.
4. Rotate the NAV dial until "Normal" displays.
See the list of Playlist Enable Options on the next page.
5. Press the NAV dial to enter.
6. Use the NAV control to select "Home Screen" to exit the Options Menu.
7. You should see " Playlist 0 Once tune 0" at the bottom of the display to indicate that the playlist mode is on and set to normal, play hymn one at a time and stop after playing the series. The first 0 shown indicates you are in playlist number "0". The second 0 shown indicates that you are starting on the first playlist position 0.
8. Press the PLAY button on the keypad or on the remote to begin playing the first hymn:
Position 0 = hymn 100 / Position 1 = hymn 101 / Position 2 = hymn 102 / Position 3 = hymn 103
When the hymns in the playlist finish playing, the hymnal will advance to the next hymn and then wait for you to press PLAY to play the next hymn in the list.
Pressing stop, and then play should advance to the second hymn.
When the last hymn is played the "Enable Playlist" will reset to OFF.

To exit a Playlist during playback:

Press STOP to halt play and then © on the front panel or the "CLEAR" button on the Remote.

Options Menu - Playlist Builder - Enable Playlist Options:

Off: Playlist function is turned OFF.

Normal: Hymns play one at a time using Play/Pause or Start/Intro.

Looped: Same as Normal but the entire playlist will repeat.

Auto: The playlist will play all Hymns in the list automatically.

AutoLoop: Playlist plays automatically and will repeat when finished.

Playlist Builder - Playing a Playlist from a CF Card

The playlist builder allows you to incorporate content from your CF card into your Playlist. Hymn files used must be in MIDI, or MP3 format. You must first copy your music files to your CF card and then insert your card into the DH200.

1. Press the OPTIONS button and rotate NAV dial to highlight Playlist Builder.
2. Press the NAV dial to enter the “Select Hymn or Song” menu.
3. Set playlist number and position in playlist to settings of your choice.

Rotate the NAV dial to Select CF Song and press the NAV button.

Rotating the NAV dial allows you to view files that are on your CF card.

Please see the “Options Menu - Play music from a CompactFlash card.” section of the manual for details about viewing files on the CF card.

After selecting the file you want, press the NAV dial. This will program the DH200 to play the selected file from the CF card in the playlist position that you selected in step #3 above.

Note: the CF card containing the song just selected must be inserted for the hymn to play.

Options Menu - Playing a Playlist from the Remote

Follow these instructions to play a playlist using the remote control.

The normal mode cycles from one song to the next using STOP/INTRO, PLAY/PAUSE or HYMN \uparrow \downarrow then exits Playlist mode when done.

- | | |
|----------|---|
| | 1 Press the MEMORY button |
| Normal | 2 Press a valid Playlist number (0-14). |
| | 3 Press Enter \oplus |
| <hr/> | |
| Deselect | 1 Memory |
| | 2 Clear |

Options Menu - Play Parameters Menu

Home Screen		Exits the “Play Parameters” menu and returns to the Home Screen
Default Volume	90	Sets the default volume level at power on.
Default Style	20	Sets the default Style at power on.
Beats Between Verses	0	Sets the number of beats between verses.
Metronome On/Off	OFF	Turns the Metronome (audible click-track) on and off.
Set Transpose	0	Sets the default transpose at power on.
Options Menu		Returns to the Options Menu
Home Screen		Exits to the Home Screen

Options Menu - Utilities Menu

Home Screen		Exits the “Utilities” menu and returns to the Home Screen
Hymnbook	MST	Sets the default Hymnbook
Set Clock		Sets: Hour; Minute; Seconds; Date; Month; Year
Show Clock	1	Display Clock? 1=Yes; 0=No
View Version Info		Displays the software version numbers
Select Remote	0	Selects the type of remote used for the hymnal
Font Selection	1	Changes the font size
Beats Between Verses	0	Sets the number of beats between verses.
Full Factory Reset		Returns all settings to factory defaults
Options		Returns to the Options Menu
Home Screen		Exits to the Home Screen

Options Menu - NAV Function Menu

From this screen just rotate the NAV dial to the desired option and then press the NAV button. The hymnal will exit to the home screen where you can rotate the NAV dial to change the parameter values.

Home Screen	Exits the “NAV function” menu and returns to the Home Screen
Volume Control	NAV dial will control the Volume
Style Select	NAV dial will select the Style
Sound Select	NAV dial will select the Sound
Set Transpose	NAV dial will select the Key of the music
Set Tempo	NAV dial will control the Tempo
Number of Verses	NAV dial will control the number of Verses played
Master Tuning	NAV dial will adjust the Fine Tuning
File from Card	NAV dial will select the files from the CompactFlash card
Select Song	NAV dial will select the hymn
Options Menu	Returns to the Options Menu
Home Screen	Exits to the Home Screen

◆ 10 Update the Digital Hymnal

There are two different update files available for the DH200:

Loading file from Onboard Flash Memory Revision 1.13 Date 2011-02-04 ##### press 0 to bail out	1] Boot Loader [boot#v##.ldr] The current version is 1.13 This version number appears in the display for only a few seconds as the unit powers ON.
QRS MUSIC DIGITAL HYMNAL DH-200 Soft ver 1.68 Libr ver 0.40 201/06/29 22:24:28 \$ Play Parameters Menu	2] Software Version [h2_V_###] The current version is 1.68. This version is found by using the OPTIONS / NAV and PUSH ENTER buttons. OPTIONS / Utilities / View Version Info

Download the update files from: <http://www.qrsmusic.com/Gulbransen>. Add a directory named “boot” to a CompactFlash card and copy the update files into this “boot” directory.

Power OFF the Digital Hymnal and unplug the power adapter.

At the same time, insert the CompactFlash card and reinsert the power adapter.

Power ON the Hymnal, the Boot Loader Option screen should appear.

Choose Boot Loader Option add C and + keys to save 0) Boot from onboard flash 1) H2_V_168.LDR 6-29-11 2) BOOT2V13.LDR 2-11-11 3) 4) 5)	To update the Boot Loader [BOOT#V##.LDR] Press and Hold the front panel © and ⊕ buttons. While holding © and ⊕, Press and Release the OPTIONS button. Release © and ⊕. Press and release the number next to the most recent BOOT update. In this example you would press the number 2 on the front panel to update to version 1.13. The update process is very fast. Wait and verify update at next power on.
--	---

Choose Boot Loader Option add C and + keys to save 0) Boot from onboard flash 1) H2_V_168.LDR 6-29-11 2) BOOT2V13.LDR 2-11-11 3) 4) 5)	To update the Software Version [H2_V_###.LDR] Press and Hold the front panel © and ⊕ buttons. While holding © and ⊕, Press and Release the number next to the most recent update. In this example you would press the number 1 on the front panel to update to version 1.63.
--	--

Saving Main Program from Compact Flash card to permanent system memory \BOOT\H2_V_168.LDR this takes about a minute	The update process begins. WAIT until the screen returns to the “Choose Boot Loader Option” screen.
---	---

MST001 Style 20 3/4 88 BPM FM I Will Sing the Wondrous Story HYFRYDOL . Time & Date	CF WAIT until the Hymnal powers back ON. Remove the CompactFlash card.
---	--

Important software notes:

Please note that the DH200 is a software driven device and, unlike the DH100, is upgradable by the customer. Gulbransen/QRS released a major upgrade to the DH200 in March of 2011. This upgrade greatly enhances the memory capability and the compact flash card utility of the DH200. The latest software (version 1.68, February 2012) can be downloaded from our website along with a pdf file of the new manual. This upgrade can be loaded into to any earlier DH200 and will add the newest features mentioned above.

◆ 11 Miscellaneous Items

Automatic shut-off.

If left unattended for more than ten minutes on battery power, the Hymnal will automatically shut itself off. To turn it back on, push the POWER switch on the front panel. **The POWER switch on the remote will not turn on the Hymnal when it is running on battery power.** This is because it shuts off completely when running on the batteries to avoid draining them. When running on wall power, the remote sensor always remains active so that the Hymnal can be turned on with the remote control.

Hymn is unavailable

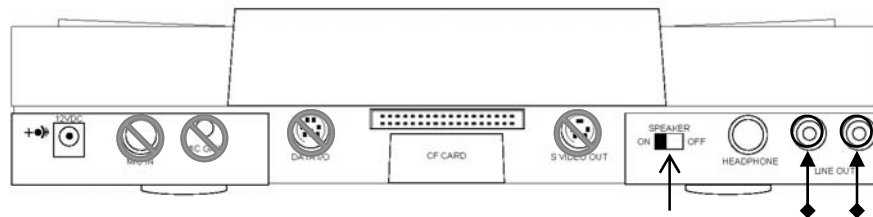
When a hymn number is entered into the Hymnal, there are two possible responses. First, it may say "Hymn __ selected," which means that it's business as usual. Second, it may say "Hymn is not available," which means that the hymn number is not contained in memory. This will happen where a text without music or without harmony (melody only) is listed in a hymnbook. This will also happen when the copyright release was not granted by the publisher or copyright holder. About 5% of the hymns from the hymnbooks that are referenced by the Digital Hymnal have not been given copyright clearance.

◆ 12 Connecting External Devices

The Digital Hymnal is designed principally for use with a stereo amplifier or public address system. The internal speakers are for convenience and portability. To get the highest-quality sound, plug the Hymnal into a large speaker system. A more portable bass boost can be attained by hooking the Gulbransen Wedge Woofer to the Hymnal.

1. Playing the Hymnal through an external amplifier.

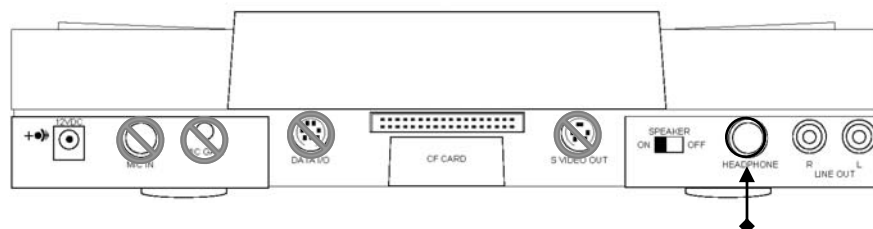
Use a standard RCA stereo cable to attach the Hymnal outputs to the Auxiliary inputs of most stereo amplifiers.



If you have connected the Hymnal to an external amplifier, you may want to switch off the internal speakers with the speaker switch.

2. Listening to the Hymnal through headphones.

Plug headphones into the headphone jack. **Make sure that the Hymnal's main volume is turned down before pushing PLAY.** Once playback has begun, slowly turn up the volume to a reasonable listening level.



◆ 13 Specifications

Number of songs available	Approximately 2400 core reference tunes cover about 5000 texts.
Sounds available	Refer to the General MIDI Sound List table.
Number of sound buttons	8, containing 16 factory presets: Choir 1/Choir 2, Clarinet/Oboe, Strings/Violin, Piano/Harpsichord, Vibes/Harp, Flute/Brass, Pipe Organ/Organ
LCD display size	Large LCD Display
Front Panel Controls	Power, NAV Control, AMEN, Stop/Intro, Play/Pause, Numeric keypad, Enter ⊕, Clear ⊙, Shift-key Access Features, Transpose, Tempo, Volume
Remote control	Power (Off only when running on battery power), Demo, Stop/Intro, Play/Pause, Numeric keypad, Enter/Tap-A-Tempo, Clear, Style, Verses, Amen, Memory, Sound Select (eight buttons), Style Preset (four buttons), Hymn Up/Down, Transpose Up/Down, Tempo Up/Down, Volume Up/Down, Solo, Metronome, Yes & No are not implemented at
Amplifier output	12 W total (6 W per channel)
Built-in speakers	Two 3" full-range
Top panel controls and connections	Audio output (Left & Right), Stereo headphone output, Internal speaker on/off switch, wall power DC adapter jack
Battery	Rechargeable 9.6 Volt Metal Hydride
Standard equipment	Wall power DC adapter, Stereo RCA cable, Remote control
Optional Equipment	Carrying Case

◆ 14 Troubleshooting

Nothing happens.	<ul style="list-style-type: none"> • Make sure the wall power adapter is firmly connected to the Hymnal and plugged into a working AC outlet. • Check the wall power DC adapter and see that it is rated at the proper voltage (110 VAC or 220 VAC) for the AC power available in your community. • If the Hymnal is running on battery power only, it must be turned on with the POWER switch on the front panel. If the Hymnal is running on battery power alone, the remote's POWER switch will only turn the Hymnal off, not on. This is due to the fact that a Hymnal running on battery power exclusively is turned completely off when its power is switched off. On the other hand, when the Hymnal is receiving power from the wall power adapter, it continues to run (at a reduced level) when switched off. In other words, its power function operates very much like the "Instant On" option found on many television sets. • Unplug the Hymnal from the AC outlet and remove the battery cover. Disconnect the battery and plug the unit back into AC power. If it power on try reconnecting the battery and charge for at least 4 hours.
The display lights up but that's it.	<ul style="list-style-type: none"> • Re-check the wall power adapter and turn the unit off and on again. Try unplugging the power cord from the Hymnal and plugging it back in.
The display is OK but there's no sound from the speakers.	<ul style="list-style-type: none"> • Check that the SPEAKER switch on the top of the unit is turned on.
It plays but it sounds bad.	<ul style="list-style-type: none"> • Make sure the wall power adapter is firmly connected and that the wall power voltage is correct for the DC adapter. • Turn the unit off and on.
The remote control won't work.	<ul style="list-style-type: none"> • Make sure that a clear line-of-sight path exists between the remote and the main unit. • Bright fluorescent light or bright daylight will cut the effective range of any device that uses an infra-red remote control. If this is a problem, shield the Hymnal from the source of the bright light. • Press each button completely, pausing slightly between each entry. • Replace the batteries in the remote control. • The POWER switch is being use to turn the Hymnal on while it is running on battery power only. See the explanation under "Nothing happens" above. When running only on battery power, the Hymnal must be turned on with the POWER switch on the front panel.
Hymn doesn't play.	<ul style="list-style-type: none"> • If the display reads "Hymn is not available," it is not included in the hymnal.
The NAV dial is not responding correctly.	<ol style="list-style-type: none"> 1] Press & Hold both "C" and "+" and [1] <p>If there's still no change in the NAV operation:</p> <ol style="list-style-type: none"> 2] Press & Hold both "C" and "+" and [2]
Hymnal won't power ON when the Power button is tapped.	<ul style="list-style-type: none"> • Hold down the "+" Button and then Tap the Power button.

Common Questions and Answers

<p>Q: How long will my Hymnal play on the Metal Hydride battery?</p> <p>A: All Hymnals are tested for 45 minutes on battery before they leave the factory at a volume level of 29. One hour is almost the maximum play time at a low volume level—less at higher volume levels.</p>
<p>Q: Why don't some of the hymn numbers play?</p> <p>A: The Digital Hymnal will not play any hymn number that is a text response or reading (no music), a melody only (no harmony parts), or a hymn for which the owner has not given permission.</p>
<p>Q: If I set the Hymnal for continuous play of one verse of all the hymns in my hymnbook will it (a.) play all of them? (b.) play more than one verse?</p> <p>A: The Hymnal will indeed play exactly one verse each of the hymns in the selected hymnbook. It will skip any hymn number that won't play (see the previous question).</p>
<p>Q: I have selected an orchestration that I really like. It is Soprano-Vibraphone (8), Alto-Flute (92), Tenor-Strings (48) and Bass-Pipe Organ (97). If I use this with style 2 can I set the Hymnal to remember this style after I turn the power off? Can I have it choose this as the default style?</p> <p>A: No. A personalized style cannot be saved. But a style selected with the style button can become the new default style, if desired. To make the current style the default style, press the remote control STYLE button, 1000 and ⊕ on the keypad. The current style will be the new default style after the power is turned off and on. You may also set the default style from the OPTIONS menu.</p>
<p>Q: My church has a CCLI license. Can we purchase some of the locked hymns?</p> <p>A: No. We're sorry. We must get permission from the owner of the song before it can be included.</p>
<p>Q: I used the solo button to listen only to the tenor part, but the Hymnal just stopped playing the soprano and alto. The tenor and bass still played. Did I do something wrong?</p> <p>A: No. But in the default style 20, which is what the Hymnal plays if you don't change styles, the Melody /Soprano part plays the soprano, the ACC1/Alto part plays alto, the Contra/Bass part plays bass down one octave, and the ACC2/Tenor plays tenor AND bass at pitch. To really hear the parts separately, select a single-digit style. These are uncomplicated styles, and when you solo them you will hear an individual part very clearly. For instance, press STYLE 4. Then press SOLO ALTO and you will hear the flute playing the alto part as written. Another way to listen to a part is to select a uniform single digit style such as style 0 and then place the vibraphone on the part you want. Example: Press STYLE, 0, ENTER, then ALTO, VIBES, and the vibes will be easy to hear playing the alto part while all the other parts play pipe organ.</p>
<p>Q: I like using the 200 style series because the sounds change automatically when the verses change. How do I make sure that the last verse is pipe organ on all parts?</p> <p>A: The simplest way is with Style 0, which is all pipe organ. The last digit of the 2__ Style series decreases automatically after the introduction and after each verse. For example, if you want 4 verses to play then enter hymn number, STYLE 224, VERSES 4, and then press INTRO. The style will change after the intro (to 223) and after each verse (221) and end on Style 200. If you do not want an intro then enter hymn number, STYLE 223, VERSES 4, and then press PLAY.</p> <p>You can take advantage of the 9_ arrangement series, which is a group of organs arranged from very bright to sedate. For example, if you want 4 verses with intro then start on Style 294, which will play the 4 verses ending on Style 290, with a very bright organ. If you do not want the ending to be so full sounding you can start higher, on STYLE 297, in which case the Hymnal will end up on Style 293.</p>

QRS Music Technologies, Inc.

Gulbransen Digital Hymnal

269 Quaker Drive

Seneca, PA 16346

814-676-6683

814-676-9340 Fax

800-247-6557 Sales and Service

www.qrsmusic.com