

# **Renaissance-25 Series Organs Console Controller™ Guide**

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# CONSOLE CONTROLLER™ GUIDE

**Note:** This Guide is designed to serve various Console Controller™ software versions. As a result, there may be variations in the way a particular Console Controller™ operates.

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## INTRODUCTION

The Console Controller™ is an interface that controls many organ functions and a variety of MIDI functions. The Console Controller is pictured below and includes a window that displays functions, one at a time, as well as an integrated Rotary Dial with push buttons used to make selections. Each window function is described in detail.

### A. BASIC OPERATION

#### 1. Start-Up Sequence

Open the Console Controller drawer before turning the organ on. Turn on the organ's main power switch. The LCD window in the drawer will display, in sequence:

```
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```



```
SMAP: XXXXXXXXXXXX  
CODE: X.XX
```

**Note:** The LCD will display the current stopmap level (SMAP) and operating software base code level (CODE) currently installed in the organ.

Then finally the *Main Window* function is displayed:

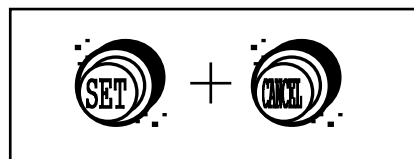
```
MEM - 1
```

**Important:** The Allen Organ includes several self-testing features. If a warning is displayed in this sequence, you should contact your Allen authorized representative immediately!

## 2. Advancing Through the Windows

The Allen Organ operating software contains many settings that are user-programmable. Each setting can be programmed via the Console Controller's™ display. These settings are divided up into many window functions. To advance the Console Controller's™ display to the next window function, press the **CURSOR** button until the blinking **CURSOR** is over the abbreviation **MEM** in the display. Once the cursor is positioned, slowly turn the **ROTARY DIAL** clockwise, the display will advance to the next window function. When the second window function is displayed, rotate the **ROTARY DIAL** counter-clockwise, the window will return to the Main window display function. Turn the **ROTARY DIAL** counter-clockwise again and the last window function will display. The window functions “wrap around” for ease of accessing parameters quickly.

**Remember:** You may return to the *Main Window* function at any time by pressing and holding the **SET** piston. Then, while holding **SET**, press the **CANCEL** piston, then release both pistons. This procedure will always return the Console Controller's display to the Main Window function.



Repeat this procedure to advance through all of the windows. The last window function will display:

UNLOCK ALL  
CAPTURE MEMORIES

## 3. Selecting the Capture Memories

Locate the **CURSOR** button on the face of the Console Controller™. Press this button to move the cursor to the first number to the right of the abbreviation “**MEM**” on the display. Once the cursor is positioned on the memory number, turn the **ROTARY DIAL** clockwise to select the memories sequentially from **MEM 1**, to **MEM 2**, to **MEM 3**. Or, turn the **ROTARY DIAL** counter-clockwise to select the memories sequentially from **MEM 1**, to **MEM 8** (*see Note 2 below*), to **MEM 7**.

The capture memories allow you to save different registrations on each piston/toe piston. This means **General Piston 1** on **MEM-1** may be totally different from **General Piston 1** on **MEM-2**, **MEM-3**, etc.

**Note 1:** Standard model Allen Organs include a factory set of registration examples stored on each piston of the last available capture memory. You may re-program factory registrations to your own registrations. To restore the factory registrations to the original settings, please see **RESTORING FACTORY SETTINGS** referenced later in this manual.

**Note 2:** The number of available memories is dependent on the Allen Organ model you have. There may be 8 or less memories in a REN-25 equipped organ.

#### 4. Saving Registrations Using Pistons and Toe Studs

A **registration** is any combination of stop tabs and/or drawknobs. These registrations can be stored (remembered) by the organ's capture memory system. The pistons and toe studs/toe pistons provide a way to make changes quickly from one registration to another.

**General Pistons** are those that affect all stops and drawknobs on the organ. These are located on the left side, underneath the keyboards on the piston rails.

**Divisional Pistons** affect only those stops associated with the particular manual above them. They are located in the center of the piston rails below the keyboards.

Located just above the pedalboard are **Toe Studs**. Toe Studs to the left of the expression shoes duplicate the General Pistons (GEN-10, GEN-9, GEN-8, etc.). Those to the right of the shoes are Pedal Divisional Pistons (PED-1, PED-2, PED-3, etc.).

##### To Save a Registration to a General Piston:

The *Main Window* function in the Console Controller™ drawer must be displayed (See *Section A-2*). Select any memory number (MEM-1, MEM-2 ... MEM-8, etc.)(see *section A-3 and Note 2 above regarding capture memory levels*); however, for this example use MEM-1. Next, select the desired stops/drawknobs you want General Piston 1 to remember. Once the stops/drawknobs are drawn, press and hold the **SET** piston, the press and release General Piston 1. Finally, release the **SET** piston. General Piston 1 will now store in memory the stops/drawknobs you selected.

**Note:** *General Pistons are often set gradually from soft to loud with General 1 the softest and General 10 the loudest.*

##### To Save a Registration to a Divisional Piston:

The *Main Window* function must be displayed, (See *Section A-2*). Select a memory (MEM-1, MEM-2, etc.)(see *section A-3 and Note 2 above regarding capture memory levels*). Select the division stops/drawknobs you want the associated Divisional piston to remember. While holding the **SET** piston, press and release a **Divisional Piston** you want to save to. Finally, release the **SET** piston. The Divisional Piston pressed will now store the stops and/or drawknobs selected.

##### Saving Intermanual Couplers/Reversibles

The intermanual coupler's, (e.g., Swell to Great, Great to Pedal, etc.) settings can be remembered only by the General pistons, not Divisional pistons unless Divisional pistons are reconfigured. (see *Section B-2*).

Reversible pistons may also control Intermanual couplers. These pistons reverse the condition or "toggle" the associated stop. If a stop is ON when the associated Reversible piston is pressed, that stop will turn OFF. If the stop is OFF when pressed, it will turn ON.

##### To Save Registrations using Toe Studs/Toe Pistons

Toe Studs/Toe Pistons can store registrations similar to General and Divisional pistons. Toe Studs allow stored registrations to be addressed using feet instead of hands.

**Note:** Setting a General Toe Stud/Piston will change the registration for BOTH the toe stud and the corresponding hand piston, i.e. General Piston 10 is identical to General Toe Stud 10, while General Piston 6 is identical to General Toe Stud 6.

## 5. Locking Capture Memories

All memories, except Memory 1, may be locked or unlocked individually to prevent unintentional or unauthorized changes to that memory's contents. Memory 1 remains unlocked as a convenience to visiting or substitute organists. The Console Controller must display the *Main Window* function in the drawer (*See Section A-2*). Select a capture memory to lock. After registrations are stored to pistons, (*See Section A-4*) choose three digits you can easily remember (e.g., 1-2-3, 0-0-7, etc.). Use General Piston 1 for the 1 digit and General Piston 10 for the zero digits. In the Console Controller™ locate the **MEMORY** button. Press and hold the **MEMORY** button. While holding **MEMORY**, press the General Pistons that correspond to your three-digit code. Release the **MEMORY** button and an "L" will appear next to the MEM number in the display, indicating this memory is now locked.



As long as the memory remains locked, the piston registrations on that memory cannot be changed. Other organists will still be able to use the locked registrations; however they cannot be changed. Remember; choose an easy to remember three-digit code.

## 6. Unlocking Memories Using Your Code

The *Main Window* function must be displayed (*See Section A-2*). To unlock a memory, select the capture memory to be unlocked. Remember, locked capture memories will have an "L" behind the number. Once a capture memory is selected, press and hold the **MEMORY** button in the Console Controller™. While pressing **MEMORY**, enter the same three-digit code that was used to lock this memory (*See Section A-5*), using General Pistons 1 through 10 (Piston 10 = zero). Release the **MEMORY** button. The "L" will disappear, indicating that this memory is now unlocked.



## 7. Unlocking All Memories If You Forget Your Code

Advance to the 'UNLOCK ALL CAPTURE MEMORIES' window function (*see section A-2*).



Press and hold the **MEMORY** button on the Console Controller™ and press General Pistons 2-5-5. Release the **MEMORY** button. The display will automatically return to the *Main Window* function. All capture memories are now unlocked, including those memories other organists may have locked. Registrations remain unchanged.

## 8. Stop Action and Capture Self Check

This feature self-checks the capture system. It tests to insure each stop is functioning properly and controllable by the capture system. Advance to the 'SELF CHECK' window function (*see Section A-2*).

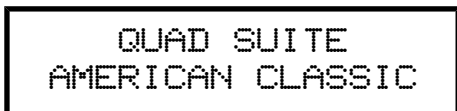


```
SELF CHECK
OFF
```

To start the self-check, press the **CURSOR** button on the Console Controller to position the flashing cursor on the word "OFF". Turn the **ROTARY DIAL** to start the Self Check function. The display will indicate that the Self Check function is now "ON". The stop tablets will move down and up consecutively (drawknobs out and in). *If any stop does not move, notify your Allen service technician.* During the testing process you can interrupt and return to the *Main Window* function at any time by turning the **ROTARY DIAL** until "OFF" appears in the display or by using the **SET** and **CANCEL** pistons to return to the *Main Window* function (*see Section A-2*).

## 9. Quad Suite™

Most Quantum classical organs include four complete voicing specifications. A new voicing specification can be selected from the Console Controller™ at any time. To change a voicing specification, advance to the 'QUAD SUITE™' window function (*see Section A-2*).



```
QUAD SUITE
AMERICAN CLASSIC
```

The display will indicate the current voicing specification loaded. To change to a different voicing specification, press the **CURSOR** button on the Console Controller to position the flashing cursor on the voicing specification name. Turn the **ROTARY DIAL** to select a different voicing specification. When the desired voicing specification is displayed, press and hold the **SET** piston. Then press the **MEMORY** button on the Console Controller. Release both. If the organ contains a Voicing Display Unit (VDU), it will flash indicating the new voice specification is loading.

Once the new specification is loaded the VDU will stop flashing and the capture system will automatically cancel all stops when the new voicing specification is loaded. The organ is now ready to play. To return to the *Main Window* function, press and hold the **SET** piston then press the **CANCEL** piston. Release both.

**Important:** The organ will not be able to be played while a new voicing specification is loading.

**Note:** It is a normal condition for the organ's power indicator to flash when turning the organ on. This action indicates the start-up voicing specification is loading. When the power indicator stops flashing the capture system will automatically cancel all stops indicating that the voicing specification is loaded and the organ is ready to play.

## VOICING DISPLAY UNIT (VDU)

Many Quad Suite™ organs contain a Voicing Display Unit or VDU to indicate which voicing specification is loaded. If the organ is equipped with Quad Suite™ and it does not contain a VDU, to view which voicing specification is currently loaded, advance to the Quad Suite window function (*See Section A-2*). The Console Controller's LCD display will indicate which voicing specification is loaded.

There are two types of Quad Suite™ voicing specifications. One that includes an English Cathedral voice specification and one that includes an Orchestral voice specification. The organ's power indicator is the Quad Suite™ legend located at the top of the VDU. The Quad Suite™ legend will emit a white glow when the organ is turned on. All other legends will be glow blue to indicate which voicing specification is currently active.



(English Cathedral Suite)

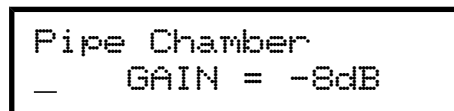


(Orchestral Suite)

## 10. Acoustic Portrait™ Settings

There are 10 available Acoustic Portrait™ pallets to select from. The rocker switch labeled ACOUSTIC PORTRAIT™ in the Console Controller™ drawer must be ON to hear the Acoustic Portrait™ selection. The Acoustic Portrait™ gain (volume) can be adjusted. The gain is indicated in dB (decibels). The Acoustic Portrait™ gain range is adjustable from +6dB to minus 35dB. Minus 35dB is the least amount of gain while +6dB is the most available.

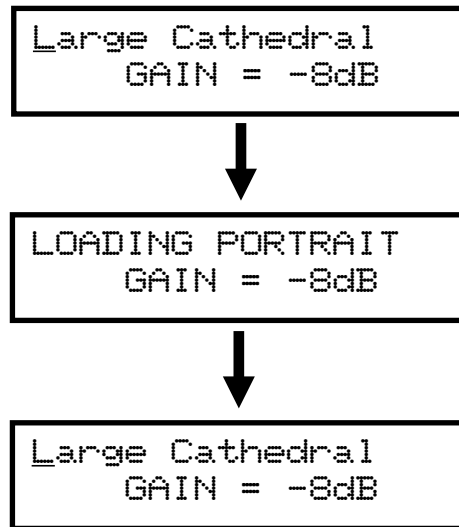
To change the active Acoustic Portrait™ or adjust the Acoustic Portrait™ gain, advance to the 'ACOUSTIC PORTRAIT' window function (*see Section A-2*). The window will display the name of the currently selected Acoustic Portrait™ pallet on line 1 with the Gain setting on line 2.



To change the Acoustic Portrait pallet, press the **CURSOR** button on the Console Controller until the flashing cursor is positioned on the Acoustic Portrait pallet name. Turn the **ROTARY DIAL** on the Console Controller to select a different pallet name.



**Note:** The change will not be immediate. You must wait 3 seconds for the newly selected Acoustic Portrait pallet to load. The display will indicate that the newly selected pallet is loading:



If the organ is equipped with a VDU, the VDU will also flash while the new pallet is loading. Once the newly selected pallet is loaded the display will change back to the Acoustic Portrait™ pallet name and the VDU will stop flashing.

**Acoustic Portrait Gain (Volume) Adjustment:**

To change the Acoustic Portrait Gain setting, press the **CURSOR** button on the Console Controller until the flashing cursor is positioned on the Acoustic Portrait gain setting. Turn the **ROTARY DIAL** on the Console Controller to change the gain setting. Gain adjustment range is from -35dB to +6 db. -35db is the least amount of gain while +6 dB is the maximum amount of gain.

Large Cathedral  
GAIN = -8dB

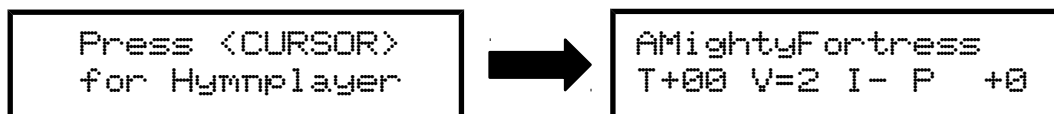
Large Cathedral  
GAIN = -3dB

## 11. Hymn Player

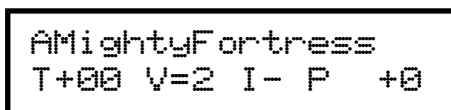
An integrated Hymn Player feature which plays pre-recorded Hymns is incorporated within the Console Controller.

**Note:** All Hymns are pre-loaded within the organ's operating software. Additional Hymns cannot be added nor can existing Hymns be deleted.

To access the Hymn Player feature, advance to the Hymn Play window function. Once in the Hymn Player function, press the **CURSOR** button. Use the Rotary Dial to select the desired Hymn title (Hymns are arranged in alphabetical order). See the next page for the Hymn Player Song List.



The following controls are available and accessed by using the **CURSOR** button to position the cursor on the particular control character:



To change the Hymn selection, use the **CURSOR** button to position the cursor on the Hymn title. Then turn the Rotary Dial to select a desired Hymn.

**Note:** Hymns are arranged in alphabetical order. Reference the next page for the Hymn Player Song List.

**T**empo: Increase or decrease tempo. Use the Rotary Dial to increase or decrease the tempo/speed value by increments of 10.

**V**erses: Change the number of verses. Use the Rotary Dial to change the number of verses. (Min verses = 1 and max verses = 9)

**I**ntroduction: Use the Rotary Dial to select (+) plus or (-) minus. Plus (+) = Introduction and Minus (-) = No Introduction

**P**itch: Raise or lower the pitch. Use the Rotary Dial to increase or decrease the pitch in half-steps increments. (Max pitch = +5 and min pitch = -7)

To start Hymn playback, press the **MEM** button on the Console Controller.

To stop Hymn Playback, press the CANCEL piston at any time.

To return to the *Main Window* function, press and hold "SET" and then press "CANCEL" piston.

**Note:** Many of the control functions cannot be changed while a Hymn is playing. To change any of the control functions, press the CANCEL piston to stop Hymn playback.

**Note:** Organ registrations may be changed at any time during playback, either manually or by using pistons. However, the registration will return to the Hymn player default at the beginning of each verse.

## Hymn Player Song List

Console Controller	Full Title	Console Controller	Full Title
AMightyFortress	A Mighty Fortress	GodofGraceGlory	God of Grace and God of Glory
AbidewithMe	Abide with Me	GodoftheAgesHand	God of the Ages, Whose Almighty Hand
AhHolyJesus	Ah! Holy Jesus	GodRestYouMerry	God Rest You Merry, Gentlemen
DidMySaviorBleed	Alas! And Did My Savior Bleed	GodTakeCareofYou	God Will Take Care of You
AllCreatures	All Creatures of Our God and King	GodHiddenMajesty	God with Hidden Majesty
GloryLaudHonor	All Glory, Laud, and Honor	GoodChristianMen	Good Christian Men, Rejoice
AllHailPower-A	All Hail the Power of Jesus' Name - A	GreatThyFaithful	Great Is Thy Faithfulness
AllHailPower-B	All Hail the Power of Jesus' Name - B	GuideGatJehovah	Guide Me, O Thou Great Jehovah
AllPeopleEarthDo	All People That on Earth Do Dwell	HarkHeraldAngels	Hark! The Herald Angels Sing
AllPraiseTheeGod	All Praise to Thee, My God, This Night	HereIamLord	Here I Am Lord
AllThingsBright	All Things Bright and Beautiful	HolyGodPraiseNam	Holy God, We Praise Your Name
AlleluiaSing	Alleluia! Sing to Jesus!	HolySpiritTruth	Holy Spirit, Truth Divine
AmazingGrace	Amazing Grace	HolyHolyHoly	Holy, Holy, Holy
America	America	HowBrightlyBeams	How Brightly Beams the Morning Star
AngelsRealmsGly	Angels from the Realms of Glory	HowFrmFoundation	How Firm A Foundation
AngelsHeardHigh	Angels We Have Heard on High	HowGreatThouArt	How Great Thou Art
AsWithGladness	As with Gladness Men of Old	IamBreadofLife	I Am the Bread of Life
AtCrossStation	At the Cross Her Station Keeping	MyRedeemerLives	I Know That My Redeemer Lives
AtLambHighFeast	At the Lamb's High Feast We Sing	LoveKingdomLord	I Love Thy Kingdom, Lord
AwayinAManger-A	Away in a Manger - A	INeedEveryHour	I Need Thee Every Hour
AwayinAManger-B	Away in a Manger - B	ISingASongSaints	I Sing A Song of the Saints of God
BeJoyfulMary	Be Joyful, Mary	ISingMightyPower	I Sing the Mighty Power of God
BeStillMySoul	Be Still My Soul	TrustGodGuidThee	If Thou but Trust in God to Guide Thee
BeThouMyVision	Be Thou My Vision	ImmortalInvisible	Immortal, Invisible, God Only Wise
BecauseHeLives	Because He Lives	ChristEastWest-A	In Christ There Is No East or West - A
BeneathCrosJesus	Beneath the Cross of Jesus	ChristEastWest-B	In Christ There Is No East or West - B
BeyondtheSunset	Beyond the Sunset	CrossChristGlory	In the Cross of Christ I Glory
BlessedAssurance	Blessed Assurance, Jesus is Mine!	IntheGarden	In the Garden
BlessedJesusWord	Blessed Jesus, at Your Word	InSweetByandBy	In the Sweet By and By
BlessingandHonor	Blessing and Honor	MidnightClear	It Came upon a Midnight Clear
BlestbetheTie	Blest Be the Tie That Binds	ItsWellMySoul	It Is Well with My Soul
BreakThouBread	Break Thou the Bread of Life	JesusChristRisen	Jesus Christ Is Risen Today
BreatheonMeGod	Breathe on Me, Breath of God	JesusLovesMe	Jesus Loves Me!
ChristLordRisen-A	Christ the Lord Is Risen Today - A	JesusReignSun	Jesus Shall Reign Where'er the Sun
ChristLordRisen-B	Christ the Lord Is Risen Today - B	JesusLoverSoul-A	Jesus, Lover of My Soul - A
ComeChristians	Come, Christians, Join to Sing	JesusLoverSoul-B	Jesus, Lover of My Soul - B
ComeHolySpirit	Come, Holy Spirit, Heavenly Dove	JesusLordGodAll	Jesus, My Lord, My God, My All
ComeAlmityKing-A	Come, Thou Almighty King - A	JesusPriceTreas	Jesus, Priceless Treasure
ComeAlmityKing-B	Come, Thou Almighty King - B	JesusSaviorPilot	Jesus, Savior, Pilot Me
ComeFountBlessng	Come, Thou Fount of Every Blessing	JesusVeryThought	Jesus, The Very Thought of Thee
ComeExpectJesus-A	Come, Thou Long-Expected Jesus - A	JesusLovingHeart	Jesus, Thou Joy of Loving Hearts
ComeExpectJesus-B	Come, Thou Long-Expected Jesus - B	JoytotheWorld	Joy to the World
ComeYeFaithful-A	Come, Ye Faithful, Raise the Strain - A	JoyfulAdoreThee	Joyful, Joyful We Adore Thee
ComeYeFaithful-B	Come, Ye Faithful, Raise the Strain - B	JustAsIam	Just As I Am, without One Plea
YeThankfulPeople	Come, Ye Thankful People, Come	LeadMetoCalvary	Lead Me to Calvary
CreatorStars	Creator of the Stars of Night	LeadKingEternal	Lead on O King Eternal
CrownHimMany	Crown Him with Many Crowns	LetMortalFlesh	Let All Mortal Flesh Keep Silence
Doxology	Doxology	LiftUpYourHeads	Lift Up Your Heads, Ye Mighty Gates
EternalFatherSav	Eternal Father, Strong to Save	LoHowARose	Lo, How a Rose E're Blooming
FairestLordJesus	Fairest Lord Jesus	LordSpeaktoMe	Lord, Speak to Me That I May Speak
FaithOurFathers	Faith of Our Fathers	LordFortyDays	Lord, Who Throughout These Forty Days
FightGoodFight	Fight the Good Fight	LoveDivine-A	Love Divine, All Loves Excelling - A
ForAllSaints	For All the Saints	LoveDivine-B	Love Divine, All Loves Excelling - B
ForBeautyofEarth	For the Beauty of the Earth	MoreLovetoThee	More Love to Thee, O Christ
GloriousThings	Glorious Things of Thee Are Spoken	MorningHasBroken	Morning Has Broken
GloryBetoFather	Glory Be to the Father	MyCountryIsThee	My Country, 'Tis of Thee
GoDarkGethsemane	Go to Dark Gethsemane	MyFaithLooksUp	My Faith Looks up to Thee
MyHopesBuilt	My Hope Is Built on Nothing Less	SongsThankPraise	Songs of Thankfulness and Praise
NeartoHeartofGod	Near to the Heart of God	SpiritDivinePray	Spirit Divine, Accept Our Prayers
NowThankWeAllGod	Now Thank We All Our God	SpiritGodDescend	Spirit of God, Descend Upon My Heart
NowtheDayIsOver	Now The Day Is Over	StandUpBlessLord	Stand Up and Bless the Lord
BeautifulSpacSky	O Beautiful for Spacious Skies	SweetHourPrayer	Sweet Hour of Prayer
ComeSingUntoLord	O Come and Sing Unto the Lord	TakeMyLife	Take My Life
OComeAllYeFaith	O Come, All ye Faithful	ChurchFoundation	The Church Is One Foundation
OComeEmmanuel	O Come, O Come Emmanuel	DayResurrection	The Day of Resurrection!
OGodHelpAgesPast	O God, Our Help in Ages Past	TheFirstNowell	The First Nowell
OJesusIPromised	O Jesus, I Have Promised	TheGodAbrahamAbr	The God of Abraham Praise
OTownofBethlehem	O Little Town of Bethlehem	KingLoveShepherd	The King of Love My Shepherd Is
OLoveNotLetMeGo	O Love That Wilt Not Let Me Go	LordIsMyShepherd	The Lord Is My Shepherd, I'll Not Want
OMasterLetMeWalk	O Master, Let Me Walk with Thee	OldRuggedCross	The Old Rugged Cross
OPerfectLove	O Perfect Love	TheStrifelsOver	The Strife Is O'er
OSacredHeadNow	O Sacred Head Now Wounded	ThineIsTheGlory	Thine Is the Glory
WordGodIncarnate	O Word of God Incarnate	MyFathersWorld	This Is My Father's World
OWorshiptheKing	O Worship the King	ToGodBethelGlory	To God Be the Glory
CloserWalkGod-A	O, for a Closer Walk with God - A	OurSovereignKing	To Jesus Christ Our Sovereign King
CloserWalkGod-B	O, for a Closer Walk with God - B	WakeSleepNoLong	Wake, O Wake, and Sleep No Longer
ThousandTongues	O, for a Thousand Tongues to Sing	WeGatherTogether	We Gather Together
OnJordanBankCry	On Jordan's Bank the Baptist's Cry	WeGiveTheeThine	We Give Thee but Thine Own
OpenMyEyesMaySee	Open My Eyes That I May See	ThreeKingsOrient	We Three Kings of Orient Are
OpenNowThyGates	Open Now Thy Gates of Beauty	WhatFriendJesus	What A Friend We Have in Jesus
PraiseMySoulKing	Praise My Soul, the King of Heaven	WhatChildIsThis	What Child Is This
PraisetotheLord	Praise to the Lord, the Almighty	WhatWondrousLove	What Wondrous Love Is This
RejoiceLordKing	Rejoice, the Lord Is King	SurveyWonCross-A	When I Survey the Wondrous Cross - A
RejoiceYePure	Rejoice, Ye Pure In Heart	SurveyWonCross-B	When I Survey the Wondrous Cross - B
RideOnInMajesty	Ride On! Ride On in Majesty	MusyGodGlorified	When in Our Music God Is Glorified
RockofAges	Rock of Ages	MornGuildsSkies	When Morning Guilds the Skies
SaviorShepherd	Savior, Like a Shepherd Lead Us	CrossCrowdedWays	Where Cross the Crowded Ways of Life
AmidWinterSnow	See Amid the Winter's Snow	SheprdsWatched-A	While the Shepherds Watched Their Flocks - A
WeGatherRiver	Shall We Gather at the River	SheprdsWatched-B	While the Shepherds Watched Their Flocks - B
SilentNight	Silent Night, Holy Night	MasterProclaim	Ye Servants of God, Your Master Proclaim
SingPraisetoGod	Sing Praise to God Who Reigns Above	YeWatcherHolyOne	Ye Watchers and Ye Holy Ones
SoftlyTenderly	Softly and Tenderly		

## B. ADVANCED OPERATION

### 1. Selecting an Alternate Tuning

Advance to the 'ALTERNATE TUNING' window function (*see section A-2*).



*(The current Alternate Tuning will appear on line 2 of the display)*

Allen Organs offer seven *Alternate Tunings*, plus one standard tuning. These tunings are accessible from the Console Controller™. To select an *Alternate Tuning*, press the **CURSOR** button on the Console Controller until the flashing cursor is positioned on the Alternate Tuning name (*line 2*). Turn the **ROTARY DIAL** to select one of the seven available tunings. The organ's overall tuning will be changed to the selected *Alternate Tuning*, by actuating the drawknob, or stop tablet engraved ALTERNATE TUNING.

The selected tuning will remain the *Alternate Tuning* until:

- Either another *Alternate Tuning* in the Console Controller is selected,
- Or, the stop/drawknob is turned off.

Any time the ALTERNATE TUNING stop is off, the organ is tuned to a standard general purpose tuning. **Note:** *The remaining tunings are of historical interest, but are limited in application to modern music. When selected, it is normal for some intervals to sound out of tune.*

### 2. Configuring Divisional Pistons and General Pistons

This procedure enables pistons to control stops/drawknobs that are normally not controlled by those pistons.

**Note:** The Piston Configuration is common to all capture memories.

For example:

- (1) Divisional Pistons can be configured to respond like General Pistons.
- (2) Divisional Pistons normally *will not remember* the settings (on/off) of the Intermanual Couplers, (i. e., Swell to Great, Great to Pedal). Divisional Pistons can be configured such that the Divisional Pistons will control the Intermanual Couplers' settings.
- (3) A Divisional Piston can be configured so that it will only affect the Tremulant stops in all divisions.
- (4) A General Piston can be configured to respond like a Divisional Piston.

**Note 1:** Changing the configuration of a piston *will not affect the registrations* previously remembered by that piston prior to its reconfiguration.

**Note 2:** Reconfiguring a piston does not change its MIDI channel assignment.

### Configuring Divisional Pistons to become General Pistons:

Advance to the 'CONFIGURE PISTONS' window function (*see section A-2*).

```
CONFIGURE  
PISTONS
```

Select *all* of the stops and drawknobs. Any stops/drawknobs not engaged, will not be able to be registered later. While holding in the **SET** piston, press the Divisional piston that you want to respond like a General Piston. Return to the *Main Window* to store General registrations to the Divisional pistons you pressed (*See Section A-4*).

### To add the SWELL TO GREAT Intermanual Coupler to the Great Divisional Pistons:

Advance to the 'CONFIGURE PISTONS' window function (*see section A-2*).

```
CONFIGURE  
PISTONS
```

Select *all* of the Great Division stops/drawknobs and the SWELL TO GREAT intermanual coupler. Press and hold the **SET** piston. While holding **SET**, press the Divisional Piston(s) you wish to have the Swell to Great coupler register on. Return to the *Main Window* and save registrations to these Divisional Pistons, using combinations of stops/drawknobs and the SWELL TO GREAT coupler.

### To reconfigure a Divisional Piston so it controls only the Tremulant stops/drawknobs:

Advance to the 'CONFIGURE PISTONS' window function (*see section A-2*).

```
CONFIGURE  
PISTONS
```

Select *all* of the organ's Tremulant Stops/Drawknobs. Next press and hold **SET**. While holding **SET**, press a Divisional piston. Return to the *Main Window*. You can use this reconfigured divisional piston to control just the Tremulant Stops without affecting any other stops.

The use of the CONFIGURE PISTONS function is only limited by one's creative imagination.

**Remember:** The above examples only determine which stops/drawknobs will become accessible by the reconfigured pistons; *they will not change previously saved registrations.*

### To Restore Original Factory Piston Configuration Settings:

See Section B-4 for the window function that displays:

```
RE-INITIALIZE  
PISTON CONFIG.
```

### 3. Modifying the Crescendo and Tuttis

The original factory settings include a second set of Tuttis and a second set of Crescendo settings that can be altered to suit the organist's needs.

Advance to the 'CRESC/TUTTI B' window function (*see section A-2*). There are two modes available in this window function, "SET" and "SHOW".

**SET Mode:** Set mode allows the organist to create or edit a Crescendo B sequence.

**SHOW Mode:** Show mode allows the organist to view the Crescendo B sequence using the **ROTARY DIAL** on the Console Controller or by using the Crescendo Shoe.

To toggle between modes press the **CURSOR** button on the Console Controller until the flashing cursor is positioned on the mode name (*Set or Show*). Turn the **ROTARY DIAL** to change modes. The display will indicate which mode is activated.

```
CRESC/TUTTI B
SET          step --
```

```
CRESC/TUTTI B
SHOW        step --
```

To view the stops/drawknobs registered on the second (B) TUTTI I or TUTTI II, press either TUTTI. This will cause all associated stops/drawknobs programmed on the TUTTI selected to turn on.

#### Setting a Crescendo B Sequence:

The Crescendo includes 22 positions evenly dispersed along the Crescendo shoe's range of travel. To set a Crescendo B sequence, advance to the 'CRESC/TUTTI B' window function (*see Section A-2*). Press the **CURSOR** button until the flashing cursor is positioned on the word "step" on line two. Turn the **ROTARY DIAL** to change the step positions.

```
CRESC/TUTTI B
SET          step --
```

The word "step xx" indicates that you are now editing or viewing (*dependant if SET or SHOW mode is active*) the Crescendo B sequence. The "step xx" indicator will display either "step --" to indicate position 0 (*Crescendo shoe off*) or any step between 1 and 22. As in previous software versions, any stops/controls associated with a particular Crescendo step will move to indicate their status **when using the Crescendo Shoe only**. While in 'SET' mode, turning the **ROTARY DIAL** will not cause the stops/controls to indicate their status.

To set a Crescendo B sequence, turn the **ROTARY DIAL** to select step 1. Adjust the stops to a suitable registration for step 1. (*Note: You can play the organ at any time to hear your selected registration*) Press and hold the **SET** piston, then while holding **SET** press the **MEMORY** button in the Console Controller. "DONE!!" will briefly flash on the first line of the display to indicate the step has been programmed. Release both the **SET** piston and **MEMORY** button. Step 1 is now programmed. Repeat the above procedure to set all available crescendo step positions.

**Important!** DO NOT USE THE CRESCENDO SHOE TO MOVE BETWEEN STEPS WHILE PROGRAMMING CRESCENDO B STEP POSITIONS. Crescendo B data in other step positions will cause the current stop registration on the stopboard to change, i.e. a blank step position would turn all stops off or another subsequent step position with data (*not yet re-programmed*) will change the current stop registration on the stopboard. When programming Crescendo steps always use the **ROTARY DIAL** to move between steps.

To copy the current Crescendo step's stop registration to another step, use the **ROTARY DIAL** on the Console Controller to select a different step. Press and hold the **SET** piston, then while holding **SET** press the **MEMORY** button on the Console Controller. The display will briefly flash the word "DONE!!" on the first line. Release both the **SET** piston and **MEMORY** button. The previous step has now been copied to the step position indicated in the display.

### **Editing A Crescendo B Sequence**

Advance to the 'CRESC/TUTTI B' window function (*see section A-2*). To enter the "SHOW" mode, press the **CURSOR** button until the flashing cursor is positioned on the mode name in the Console Controller. Turn the **ROTARY DIAL** until the word "SHOW" appears in the display. Press the **CURSOR** button until the flashing cursor is positioned on the word "step" in the display. As before, the display will indicate which step is currently activated. Use the **ROTARY DIAL** to move through the step positions one by one while observing the stops/controls. The stops/controls will change accordingly as to which step position is currently active.

To make a change to a step position you must re-enter the "SET" mode by pressing the **CURSOR** button until the flashing cursor is positioned on the mode name "SHOW". Turn the **ROTARY DIAL** until the word "SET" appears in the display.

**Note:** The step position indicator will remain at the current step position that was selected in "SHOW mode. Adjust the stop registration for that step.

**Important:** DO NOT MOVE THE CRESCENDO SHOE AT THIS TIME.

Once changes to the registration are complete, save the step by pressing and holding the **SET** piston. Then, while holding **SET** press the **MEMORY** button in the Console Controller. The display will briefly flash the word "DONE!!" on the first line. Release both the **SET** piston and **MEMORY** button. The step is now saved to the step position indicated in the display. To continue viewing steps you must return to "SHOW" mode by pressing the **CURSOR** button until the flashing cursor is positioned on the word "step" in the display. Turn the **ROTARY DIAL** to view additional crescendo steps.

**Shortcut:** While in "SET" mode you can view the Crescendo B sequence without having to enter the "SHOW" mode by using the Crescendo shoe. However, it is important that all Crescendo step positions be programmed before doing this. By depressing the Crescendo shoe, the stops/controls will move accordingly as to the step displayed. You may play the organ while moving the crescendo shoe to hear the Crescendo sequence.

### Manually disabling Celestes and Tremulants:

To manually disable the celestes and/or tremulants at any of the available Crescendo B steps positions, advance to the 'CRESC B CUTOUT' window function (*see section A-2*).

```
CRESC B CUTOUT
LEVEL: DISABLED
```

Press the **CURSOR** button until the flashing cursor is positioned on the 'LEVEL' setting located on line two of the display. If the LEVEL setting is set to DISABLED, turn the **ROTARY DIAL** counter-clockwise to select a specific step position on which the cutout is to occur. Otherwise, turning the **ROTARY DIAL** either direction will raise or lower the step position number. To disable the Crescendo B cutout, turn the **ROTARY DIAL** clockwise until the word "DISABLED" appears.

**Note:** Registrations and/or the memory settings for the PISTONS are not affected by resetting the Crescendo B.

### Play Organ Using Secondary Crescendo B

The *Main Window* function must be displayed (*see Section A-2*). Press the **CRES. B** piston. On the bar-graph display, the green CRESC-B indicator will illuminate. Push open the Crescendo shoe and play.

### Editing Tutti B Registrations

Advance to the 'CRESC/TUTTI B' window function (*see Section A-2*). The display will automatically revert to "SET" mode when pressing either Tutti piston if in the "SHOW" mode.

To view a Tutti registration, press either Tutti piston. The display will indicate which Tutti was selected.

```
CRESC/TUTTI B
SET          step --
```

You may now view/edit the Tutti registration. To save any changes press and hold the **SET** piston. Then, while holding **SET**, press the **MEMORY** button in the Console Controller. The display will briefly flash the word "DONE!!" on the first line. Release both the **SET** piston and **MEMORY** button. The new Tutti registration is now stored as the Tutti number indicated in the display.

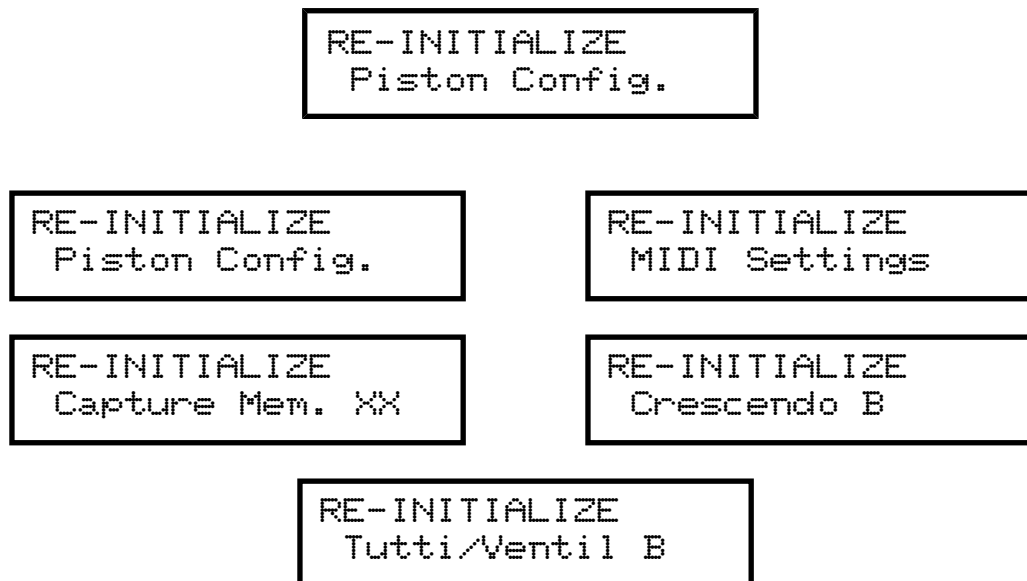
### Playing the organ Using Secondary Tuttis

The *Main Window* function must be displayed (*see Section A-2*). Press the **CRES. B** piston. On the bar-graph display, the green CRESC-B indicator will illuminate. Press the **Tutti** piston of your choice. The bar-graph's red Tutti indicators will light to indicate which Tutti is active. The Tutti pistons function like General Pistons and customarily have large registrations. However, the registered stops/drawknobs will not move to their ON positions when a Tutti piston is selected.



#### 4. Restoring Original Factory Settings

Advance to the 'RE-INITIALIZE' window function (*see Section A-2*). The window will display...



Certain functions can be restored to the original factory settings. They are:

The Piston Configuration re-initialization includes all the Configure Piston settings. The MIDI Settings re-initialization includes all MIDI program change mapping. The Capture Memory re-initialization will reset the last available capture memory to factory default registrations. The Crescendo B and Tutti/Ventil B re-initialization will reset those functions back to factory default settings.

Each of these functions can be restored individually. To select the factory settings you wish to restore press the **CURSOR** button until the flashing cursor is positioned on the command function which is location on the 2<sup>nd</sup> line of the display. Press and hold the **MEMORY** button on the Console Controller. Then, while holding the **MEMORY** button, press General Pistons 2-5-5 in sequence. The display will briefly flash the word "WORKING" on the first line of the display to indicate that the current command function is being re-initialized.

**Notice** the term VENTIL B on the TUTTI/VENTIL B initialize window. This is a function that is used on an Allen custom organ. On most Allen Organs you can disregard the term VENTIL B as it does not apply. If you are playing a custom model, the RE-INITIALIZE procedure described above will return the secondary TUTTI B as well as the VENTIL B settings to the original factory settings.

#### 5. Sostenuito

*Sostenuto* is an Italian word meaning "sustained." Unlike the sustain switch, which sustains any notes played as long as the sustain switch is held on, the *Sostenuto* switch sustains only the notes being held at the very moment it is pressed. *Sostenuto* is actuated by the organ's Sustain switch (which is optional on some organs) located to the left of the Great/Pedal expression shoe. The *Sostenuto* function must first be enabled before using it.

Advance to the 'SOSTENUTO' window function (*see Section A-2*).



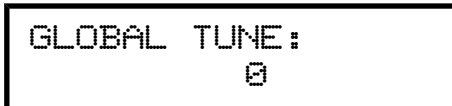
```
SOSTENUTO
GT = ON
```

The LCD will indicate what keyboard Sostenuto is assigned to and show the current on/off status. The keyboard that Sostenuto is assigned to cannot be changed, but the on/off status can. To turn the Sostenuto function on or off, press the **CURSOR** button until the flashing cursor is positioned on the status value (on/off). Turn the **ROTARY DIAL** to enable or disable the Sostenuto feature. Sostenuto will affect the internal voices of the organ as well as an external MIDI sound device connected to the organ's MIDI output. Keep in mind that the Sustain function will operate in tandem with the Sostenuto function.

**Note:** Check your specific MIDI instrument's owner's manual to verify that it will receive and/or respond to MIDI Sostenuto messages.

## 6. Global Tuning

Global Tuning allows the organist to adjust the pitch of the entire organ. This tuning adjustment allows the organ to be tuned to another instrument more easily. Tuning can be adjusted either  $\pm 100$  cents from A-440 pitch. To adjust Global Tuning, advance to the 'GLOBAL TUNING' window function (*see Section A-2*).



```
GLOBAL TUNE:
0
```

Press the **CURSOR** button until the flashing cursor is positioned on the current tuning value. Turn the **ROTARY DIAL** in either direction to raise or lower the pitch of the organ. The Global Tuning adjustment will be retained in memory when the organ is powered off.

## C. MIDI FUNCTIONS

This section explains the MIDI capabilities of your Allen Organ. Knowledge of this section is **not** required for everyday use of the organ, normal service playing, or use of Allen SmartMIDI™ devices. This information's usefulness will ultimately be determined by your needs, along with the type and capabilities of any external MIDI devices you choose to use--e.g., sequencers, voice/sound modules and external MIDI keyboards. The MIDI topics covered by this manual are limited in scope. You need to understand the terms MIDI IN, OUT and THRU and their basic functions. To increase your understanding of MIDI you will need to read books that describe how to use MIDI.

**Note:** You must also consult the owner's manual that covers the external MIDI device(s) you are using for more details of their operation.

## 1. Standard MIDI Channel Assignments

These are the Allen Organs' standard MIDI channels settings:

Classical Organs	
Channel	Organ Division
1	= Swell
2	= Great
3	= Pedal
4	= Choir
5	= Solo
6	= Not Used
7	= G1/G2
8	= General

Theatre Organs	
Channel	Organ Division
1	= Great
2	= Accomp
3	= Pedal
4	= Solo
5	= Acc. 2 <sup>nd</sup> T
6	= Not Used
7	= T1/T2
8	= General

**Note:** The Base Channel always resets to Channel 1 whenever the organ is turned on (*see section C-5*).

## 2. Selecting Program Change Modes, Viewing Program Numbers or General Midi Sound Names

Program change modes establish how MIDI program changes will be sent from the organ when a piston is pressed and what the resulting display will be in the Console Controller window. Once a particular program change mode is selected, the organ will retain this same program change mode (even when the organ is turned off) until a new program change mode is selected. These three mode options determine how the organ sends program change information to MIDI devices.

### Selecting a Program Change Mode

Advance to the 'PROG CHG' window function (*see Section A-2*). It will display:

```
PROG CHG:  USER
DISPLAY:  NUMBERS
```

Press the **CURSOR** button until the flashing cursor is positioned on the Program Change mode value. Turn the **ROTARY DIAL** to change and select either "Preset", "User" or "No" modes. **Note:** You must understand how to operate and when to use each of these modes before you change them!

**“P”** is for PRESET MODE: This mode causes the organ to send a program change number equal to the piston number that is pressed. The General Pistons will send program changes 1-10 on MIDI Channel 8, the organ's General Piston control the channel. The Divisional Pistons (1-6) for each division will send program changes 1-6 on the channels as shown on the previous page. For example, Swell Piston 1 will send Program Change 1 on Channel 1. Great Piston 2 will send Program Change 2 on Channel 2, etc., (*See Section C-6*).

“U” is for USER MODE: In this mode the organ is capable of sending any program change number on any piston that will select voices, change banks, or change program “patch” numbers on another MIDI device. Any MIDI program change number from 1 through 128 can be assigned to any General or Divisional Piston (blank or no digit may also be selected). Any MIDI bank switch number between 0 and 127 can be assigned to any Divisional Piston. As in PRESET mode, General Pistons will send program change information on MIDI Channel 8. Divisional Pistons will send information on their respective MIDI channels. *(See Section C-6)*

“N” is for NO MODE: With this mode selected, NO information is transmitted or received. This mode cancels transmission and reception of all program change information.

### 3. General MIDI Sound Names or Program Numbers

The Console Controller™ window can display MIDI program changes as either MIDI program numbers or as General MIDI sound names. Press the **CURSOR** button until the flashing cursor is positioned on the Display mode value. Turn the **ROTARY DIAL** to change and select one of the two modes.

#### General MIDI Sound Names

With General MIDI mode selected, the 'PROG CHG' window will display:

```
PROG CHG:  USER
DISPLAY:GEN MIDI
```

Make sure the word USER is selected as the mode and that GEN MIDI has been selected following the word DISPLAY. You must advance to the next window function then press a piston to view the sound names for any General MIDI device. The next window will display:

```
MIDI PROG CHANGE
```

As you press a General or Divisional Piston, the Console Controller™ window will now display the General MIDI sound name that corresponds to the MIDI program change selected. For example, press General Piston 1. The Console Controller™ will display the MIDI program change names.

```
GEN 1  BANK  0
P:Ac Grand Piano
```

**Note:** In some cases, the General MIDI sound name will be abbreviated in the Console Controller window.

## Program Numbers:

With NUMBERS selected as the display mode, the 'MIDI PROG CHANGE' window function will display:

```
GEN 1   BANK   0  
P:XXX
```

With PRESET selected as the program change mode, press a General or Divisional Piston. The Console Controller™ window will display the same MIDI program change number as the associated piston pressed. For example, pressing General Piston 1 will display:

```
GEN 1   BANK   0  
P:  1
```

The MIDI program change number will be displayed in PRESET mode, no matter if NUMBERS or GEN MIDI is displayed. You must select USER mode to view the GENERAL MIDI sound names. You must also select USER mode to assign MIDI program change numbers larger than 10 (the largest number of any piston).

With USER selected as the program change mode, along with NUMBERS as the display mode, you will be able to assign “- - -” (OFF) or any program change number from 1 through 128 to any General or Divisional Piston.

There may be a number or “- - -” following the “P:”. This “P:” represents the Program Change Number and does not stand for PRESET in this window. If there is “- - -” following “P:” this means that the “ZERO” Program Change Number will be sent from the associated piston.

To change the program change numbers, press the **CURSOR** button until the flashing cursor is positioned on the program change number value. Turn the **ROTARY DIAL** to change the program number value.

**Note:** The Allen Organ uses MIDI Program Change Zero as a message for "MIDI OFF."

**Important!** MIDI Program Change 1 corresponds to the General MIDI sound "Acoustic Grand Piano." Some MIDI devices do not use Program Change zero for MIDI OFF. Consequently, Program Change Zero, (“- - -” *in the window*) when sent from the organ, will correspond to Program Change 1 on those MIDI devices. Program Change 1 sent from the Allen will correspond to Program Change 2 on those MIDI devices etc.

## 4. Assigning MIDI Program Changes to Organ Pistons

This function allows the organist to select any voice from an external MIDI device by pressing any General or Divisional piston on the organ. The "USER" program change mode must be selected (*See Section C-2*). Advance to the 'MIDI PROG CHANGE' window function (*see Section A-2*).

```
MIDI PROG CHANGE
```

```
SW 1    BANK  0
P:  1
```

For this example press the Swell Division Piston 1. The display will change to:

The LCD will display the last piston pressed and the MIDI program number being sent by that piston. Press the **CURSOR** button until the flashing cursor is positioned on the program change number value. Turn the **ROTARY DIAL** to change the program number value.

A program number of (1-128) will be transmitted on the channel assigned to the division from which you selected the piston; in this case, the Swell Division on Channel 1. (See Section C1).

```
SW 1    BANK  0
P:128
```

**Note:** Reconfiguring a Divisional Piston to become a General Piston will NOT change the MIDI channel it transmits on. Also, refer to the program number chart in the owner's manual of the external MIDI device you are using. Once you have assigned a MIDI program change number to a piston, that number will remain assigned to that piston even if the organ has been turned off.

**Important!** Once MIDI program change programming is complete the user must exit the piston programming window function, by using the **SET** and **CANCEL** pistons (see Section A-2), for any changes to take effect.

## 5. MIDI Bank Selecting

Many MIDI devices permit access to a variety of sounds in addition to the General MIDI sounds. Normally these additional sounds are stored in groups called BANKS. A BANK in MIDI terminology means a group of voices or sounds. There are two levels of banks. One level offers two choices, High Bank and Low Bank. Each of these, High Bank and Low Bank, has as sub-groups other level of banks, BANK Numbers.

MIDI devices can have as many as 128 sounds/voices per BANK Number. There are also 128 BANK Numbers (Ø through 127). Therefore it is possible that a MIDI device that is only High Bank or Low Bank compatible. With 128 BANK Numbers, each could contain up to 128 voices/sounds, for a total of 16,384 sounds. Think of these BANK Numbers as floors or stories in a tall building. Each floor would contain 128 rooms and each room could then contain 128 voices.

There are MIDI devices that are High Bank and Low Bank compatible. It would be possible for these MIDI devices to have as many as (128 X 128 X 2 = 32,768 voices/sounds) 128 voices/sounds in each of the 128 BANK Numbers, in each of the High and Low Banks. Most MIDI devices do not use all of the locations available. It would be very expensive as well as difficult to remember the address for each sound location. There are also MIDI devices that offer only General MIDI sounds/voices. These General MIDI devices may operate using High Bank or Low Bank, but only the sub-group Ø Bank Number is used to store the 128 General MIDI sound settings. Allen Organs are able to access any of the Banks and therefore can communicate with all MIDI devices. **Note:** You MUST know the capabilities of, and understand how to operate, the MIDI device you intend to use with any organ!

### Selecting High Bank or Low Bank:

Advance to the 'MIDI BASE CHANNEL' window function (*see Section A-2*).

```
MIDI BASE CH: 1
BANK: LOW
```

Press the **CURSOR** button until the flashing cursor is positioned on the BANK select value. Turn the **ROTARY DIAL** to select either HIGH or LOW Bank priority.

### Selecting MIDI Bank Numbers:

Bank Numbers are assignable in the same way that MIDI Program Numbers are (*See Section C-3*); except that you must only use Bank numbers on the Divisional Pistons. You MUST have USER mode selected before assigning Bank numbers! Advance to the 'MIDI PROG CHANGE' window function (*see Section A-2*).

```
MIDI PROG CHANGE
```

For this example press the Great Division Piston 1. The display will change to:

```
GT 1    BANK  0
P:  1
```

The window displays the last piston pressed, the MIDI BANK Number, and the program number being sent by that piston. Press the **CURSOR** button until the flashing cursor is positioned on the MIDI Bank number value. Turn the **ROTARY DIAL** to select or change the MIDI BANK number value. The BANK number (0-127) will be transmitted on the channel assigned to the division from which you selected the piston, in this case, the Great Division on Channel 2 (*See Section C-1*). Also, refer to the Bank selection/program number chart in the owner's manual for the external MIDI device you are using.

Once you have assigned a MIDI BANK Number to a piston, that number will remain assigned to that piston even if the organ has been turned off.

**Important!** Once MIDI Bank change programming is complete the user must exit the piston programming window function, by using the **SET** and **CANCEL** pistons (*see Section A-2*), for any changes to take effect.

## 6. Changing the MIDI Base Channel

This function allows you to change the setting of the MIDI Base Channel. The Base Channel is a reference point to establish the positioning of the other 15 MIDI channels. On Allen Organs, the Base Channel equals the Swell Division's channel of transmission (i.e., if the Base Channel = 1, then the Swell Channel = 1, if the Base Channel = 2, then the Swell Channel = 2, etc.). Moving the Base Channel allows you to shift the organ's range of MIDI channels, this is helpful when reassigning an external MIDI device from one organ division to another.

**Important!** The Base Channel always resets to Channel 1 whenever the organ is turned on.

```
MIDI BASE CH:  1
BANK: Low
```

Advance to the 'MIDI BASE CH' window function (*see Section A-2*).

Press the **CURSOR** button until the flashing cursor is positioned on the MIDI Base Channel value. Turn the **ROTARY DIAL** to change the MIDI Base Channel value. All functions associated with a particular division will transmit and receive on its assigned channel. For example, MIDI Channel 1 is normally assigned to the Swell Division and the Swell Manual. Therefore, keying velocity or on/off messages, and program changes (Swell Divisional Pistons) will be transmitted and received on Channel 1 (*See Section C-1 for Allen MIDI Channel Assignments*).

If the Base Channel is reset to 2, in the display all of the channels will shift higher by one. Now, Swell = 2, Great = 3, Pedal = 4, Choir = 5, and the General Pistons = 9. **Note:** MIDI Channel numbers will wrap, i.e. channel numbers go only to 16 and will then repeat to 1. FOR NORMAL USE, DO NOT USE A BASE CHANNEL LARGER THAN 9.

## 7. MIDI Expression Settings

```
MIDI EXPRESSION
POLY-VOLUME
```

Advance to the 'MIDI EXPRESSION' window function (*see Section A-2*).

There are four modes for transmitting expression data via MIDI. To select an expression mode, press the **CURSOR** button until the flashing cursor is positioned on the expression setting value (line 2) of the display. Turn the **ROTARY DIAL** to select one of the four different expression modes.

**Note:** The default expression mode setting is always POLY-VOLUME.

**POLY-VOLUME** — This is the normal expression mode setting where the expression data is distributed among the appropriate MIDI channels. This is the proper mode to use when recording to, or playing back from, a sequencer.

**POLY-VELOCITY** — This setting should be selected if you are using a percussion-type voice from a sound module or an external MIDI keyboard. For example, if a digital piano sound were played from the organ keyboard through MIDI Channel 1, the piano could be made to sound more realistic. By opening the Swell expression shoe, the piano strings would appear to be struck harder than when the Swell pedal was in the closed position.

**Note:** This mode setting should only be used if your Allen Organ does not contain velocity sensitive keying (OST).

**Note:** In POLY-VELOCITY mode, all expression information is sent in key velocity form. Changes in velocity will occur only when a new key is struck. Consequently, if you change the position of the Swell pedal after a key is struck there will be no change in velocity until a new key is struck. Use this mode only when a velocity-sensitive external MIDI device is connected. If this mode is selected when recording to a sequencer, the expression on the organ will not function when playing back from the sequencer.



**SWELL-VOLUME** — This setting causes MIDI expression data to be sent only on the Swell MIDI channel. Some early sequencers can only interpret one volume message.

**NO EXPRESSION** — No MIDI expression (volume) data sent.

## 8. MIDI Sustain Kick Switch

A lever located to the left of the Great/Pedal expression shoe (optional in many organs) and controlled by the organist's foot, operates MIDI sustain. This function can be assigned to any one of or all of the instrument's manuals. Advance to the 'MIDI SUSTAIN' window function (*see Section A-2*).

```
MIDI SUSTAIN
GT = OFF
```

To select an organ keyboard (manual), press the **CURSOR** button until the flashing cursor is positioned on the manual abbreviation. Turn the **ROTARY DIAL** to select an organ keyboard. Then, to turn the MIDI Sustain function on/off on the selected manual, press the **CURSOR** button until the flashing cursor is positioned on the MIDI Sustain value. Turn the **ROTARY DIAL** to turn the selected manual **ON/OFF**. **OFF** will not allow MIDI Sustain messages to be transmitted, **ON** will allow MIDI sustain messages to be transmitted on a given keyboard (manual) or MIDI channel. For example, when a **PIANO** voice in an external MIDI device (voice module) is selected and the MIDI sustain for that given MIDI channel (division) is turned **ON**, and the foot controlled sustain lever is actuated, the piano sound will slowly decay.

## 9. Organ Local Off

Organ Local Off is a function that allows the user to “virtually” disconnect the organ's keyboards, pedalboard and pistons from the organ's tone generation and capture system. In essence, the organ is transformed into a sophisticated multi-manual MIDI controller. To enable/disable the Organ Local Off function, advance to the 'ORGAN LOCAL OFF' window function (*see Section A-2*).

```
ORGAN LOCAL OFF
= DISABLED
```

```
ORGAN LOCAL OFF
= ENABLED
```

To enable/disable the Organ Local Off function, press the **CURSOR** button until the flashing cursor is positioned on the Local Off control value. Turn the **ROTARY DIAL** to change the enable/disable value.

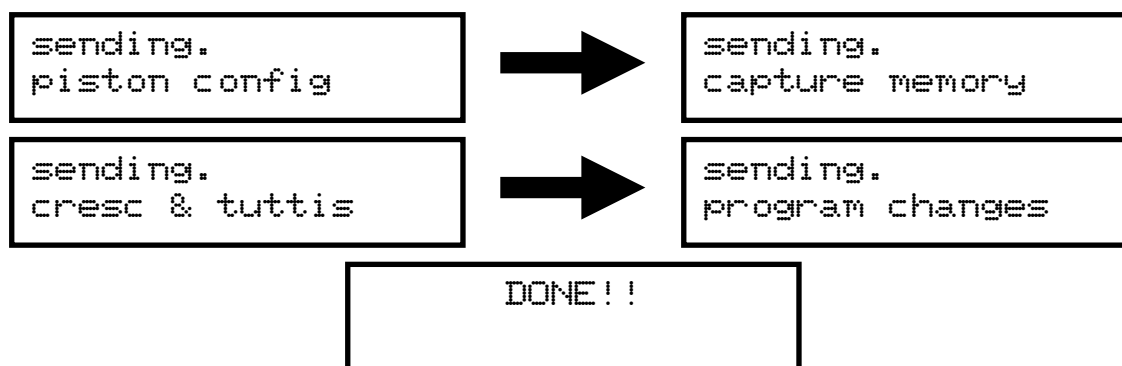
**Note:** When Organ Local Off is enabled, the MIDI stops do not need to be on to play the external MIDI device(s).

## 10. Transferring and Saving Capture Memory Data to a Sequencer

CAPTURE MEMORY refers to all of the piston registrations on all available memories, plus all positional secondary Crescendo “B” settings and the secondary Tutti “B” settings. With this operation, the organist can copy and save all of this stored information to a digital MIDI sequencer. Advance to the 'CAPTURE MEMORY SAVE' window function (see Section A-2).

```
CAPTURE MEMORY
SAVE
```

Set your sequencer to the record mode and begin recording as you normally would. Press and hold the **MEMORY** button in the Console Controller™. While holding **MEMORY**, press General Pistons 2-5-5 in sequence. The Capture Memory information will be transmitted to the sequencer. During the memory data transfer process the window will display:



The 'dot' behind the word 'SENDING' on line one of the display will move as the data is transmitted.

**Note:** Depending on the number of capture memories this procedure can take an extended period of time, please be patient. Once completed, a copy of the Capture Memory information will exist in the sequencer and the original information will be retained in the Console Controller™ memory.

## 11. Return Capture Memory Data from a Sequencer to the Organ

To replace previously recorded Capture Memory information into the organ from your sequencer, simply press "Play" on the sequencer and the recorded capture data will automatically be transmitted to the organ. You must have a MIDI cable connected from the OUT port of the sequencer to the IN port of the Allen Organ. It does not matter what window function the Console Controller displays.

**Note:** The Capture Memories must be unlocked (see section A-6) before you press “Play” on the sequencer, allowing the organ’s available memories to receive capture information. It is a good idea to first save whatever is stored in the organ’s memory because, it will be

```
RECEIVING DATA
..
```

erased by this procedure.

**Note:** The 'dot' on line two of the display will move as data is received.

## 12. Transmission/Reception of Individual Stop Data

This function allows the organist to turn on/off the transmission and reception of individual stop data, known in MIDI terminology as "Non-Registered Parameters". In some cases individual stop data (on/off) from the organ may conflict with data from an external MIDI device. When this occurs, select the "OFF" position.

**Note:** Piston changes will still be transmitted and received, because they are classified as program changes.

Advance to the 'TRANSMIT / RECEIVE STOPS' window function:



```
TRANSMIT/RECEIVE
STOPS ON
```

To change the on/off status of the Transmit/Receive Stops function, press the **CURSOR** button until the flashing cursor is positioned on the status control value. Turn the **ROTARY DIAL** to turn the transmit/receive status on/off.

## D. QUICK REFERENCE GUIDE

### 1. Basic Operations Review

#### a. Advancing Through the Windows:

Use the **ROTARY DIAL** in the Console Controller.

#### b. Return to the Main Window function:

Hold **SET**, press **CANCEL**, release both or use the **ROTARY DIAL** in the Console Controller.

#### c. Setting Pistons:

*Main Window.* Select desired registration. Hold **SET** and press piston to remember registration.

#### d. Select Memory and Lock It:

*Main Window.* Select desired memory using **CURSOR** button and **ROTARY DIAL**. Press and hold **MEMORY** button, enter three-digit code on general pistons, release **MEMORY**, "L" will appear next to capture memory number in display.

#### e. Unlock a Memory:

Repeat d. above. "L" will disappear.

#### f. Unlock All Memories Without Code:

Advance to display "Unlock All Capture Memories". Press and hold **MEMORY**, press General Pistons 2-5-5, release **MEMORY**. Display returns to *Main Window* function.

#### g. Self-Check Capture and Stop Action:

Advance to display: "Self-Check". Turn **ROTARY DIAL** to activate/de-activate Self-Check or to de-activate, press and hold **SET**, press **CANCEL**, and then release both.

### 2. Advanced Operations Review

#### a. Reconfiguring Pistons:

Advance to display: "Configure Pistons". Select the desired stops. Press and hold **SET**, and then press the desired piston. To return to the *Main Window*, (press and hold **SET**, press **CANCEL** and then release both). Set new registrations (*see section E-1, c.*).

#### b. Set Secondary Crescendo "B":

Advance to display: "Set Cresc B and Tutti B". Maneuver/Set step positions using the Console Controller™ controls, **SET** piston.

### c. **Set Secondary Tutts:**

Advance to display: "Set Cresc B and Tutti B". Press Tutti piston you want to program. Select/Adjust Stops. Use **MEMORY** button in conjunction with the **SET** piston to set the Tutti pistons.

### d. **Restore Factory Settings:**

Advance to display: "Re-Initialize Piston Configuration". Use **CURSOR** button and **ROTARY DIAL** to select the settings you want to restore. Press and hold **MEMORY**, press General Pistons 2-5-5.

## **E. MIDI GUIDE**

### **1. MIDI for Organists**

The term MIDI is an acronym for Musical Instrument Digital Interface. MIDI has been adopted by the music industry as a standard means of communication between digital musical devices enabling devices of different types and manufacturers to communicate. MIDI by itself will not make a sound. It is not necessary to understand all of the technical aspects of MIDI in order to take advantage of the benefits it offers. It is important to explore the potential MIDI holds for musicians, as well as the various MIDI applications available today.

#### **Types of MIDI Devices**

MIDI devices fall into two categories.

1. The first category consists of musical instruments such as organs and synthesizers that transmit and receive MIDI data.
2. The second category includes controllers and processors that, as their name implies, can transmit, receive or manipulate MIDI data, but do not necessarily produce sound themselves. Sequencers, which are MIDI recording devices, fall into this category. Although the technical nature of their recording and editing processes differs from those of a tape recorder, many operate in similar fashion. Most are equipped with record, playback, fast forward and reverse controls that function in the same way as their tape recorder counterparts.

#### **Types of MIDI Data**

There are several types of MIDI messages that can be sent from one device to another. The most common is keying information, allowing one device to sense which keys have been played on another device. This means an organ equipped with MIDI can send information to other MIDI devices, e.g., synthesizers or sequencers, and can play those devices simultaneously or record information to be played back later.

Allen Organs incorporate an advanced MIDI system allowing the transmission and reception of all types of MIDI information (velocity keying, volume change, sustain, registrations, Crescendo settings and more). It is even possible to control several devices from one manual simultaneously, or control a different device from each manual of the console.

## **MIDI as a Practice Tool**

For the organist/choir director, the MIDI organ console and sequencer are valuable rehearsal tools for both choral and organ works. Anthem accompaniments may be recorded in advance and played back by the sequencer during choir rehearsal. The director, freed from the role of accompanist, can focus entirely on directing the choir. The sequencer can play the music back at a slower tempo without affecting pitch, or at a lower pitch without affecting tempo, features that are useful in rehearsing difficult choral passages.

If the sequencer allows multi-tracking, each vocal section's part may be recorded on a different track, and then played back individually, or in any combination, for more flexibility. Multi-tracking can also be used in teaching and learning new organ works. The teacher may record each hand or pedal part on a different track, allowing the student to "mute" or turn off any part being practiced while still being able to hear the sequencer play the rest of the composition. The student's ability to hear the piece in its entirety from the earliest stage of learning a composition, and to become aware of the interrelationship of its voices, is especially valuable in learning contrapuntal works.

## **MIDI as a Registration Tool**

In some churches and auditoriums it is difficult to judge the effectiveness of a registration from the organ console. Due to the acoustics of the room, or positioning of the console, the sound of the instrument may be different when listened to from the congregation's or audience's vantage point. MIDI allows the organist to evaluate registrations by recording the music using a sequencer, and then listening from different locations in the room during the music's playback.

## **Other MIDI Uses**

MIDI has created new possibilities for the organist. The ability of the organ console to control external keyboards or sound modules puts an ever-increasing array of non-traditional sounds at the organist's fingertips. A superior degree of control is made possible by the flexibility of an organ console. The ability to record MIDI data using a sequencer opens a variety of new possibilities during practice and performance situations.

Computer software programs are also available that allow musicians to play MIDI devices connected to a computer, and have their performance printed as conventional five-line musical notation. Because MIDI is an industry-wide standard, today's MIDI instruments will be compatible with tomorrow's MIDI innovations.

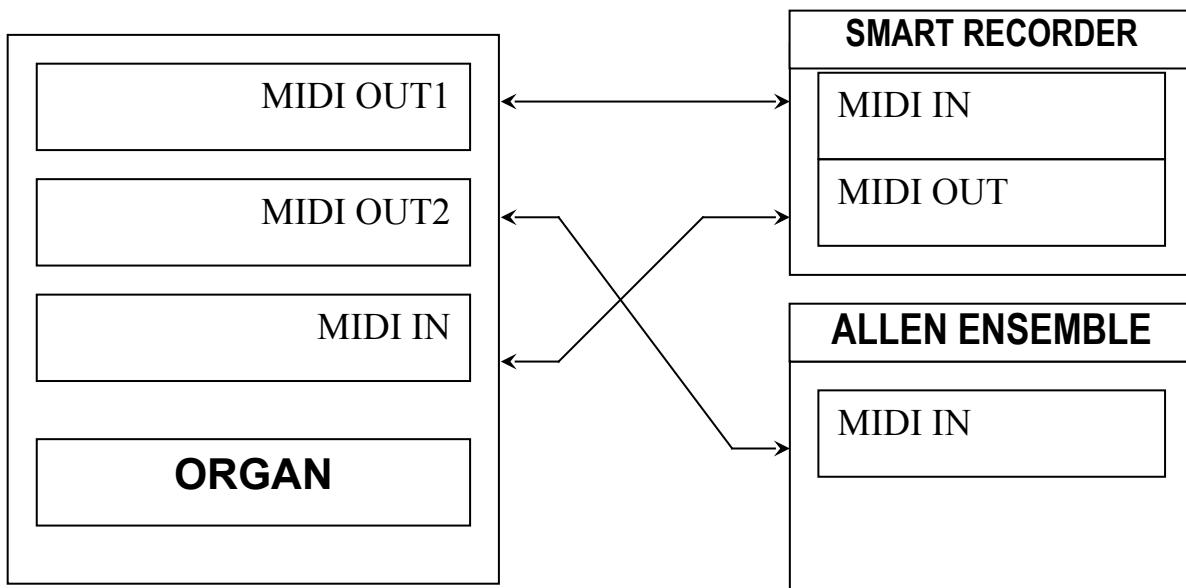
## **2. Connecting Allen Organs to Other MIDI Devices**

Allen Organs can be connected to a variety of MIDI devices. A connecting diagram for a variety of MIDI devices can be found at the end of this section. Although the diagram is not meant to be an exhaustive list of possibilities, it illustrates the most commonly used connections of MIDI devices. If more specific information is required, please consult the owners' manuals of the external devices being connected to the organ.

### 3. Allen's Exclusive MIDI System

Allen Organs feature an advanced MIDI system with increased flexibility. This system provides a comprehensive interface between MIDI sound modules, such as the Allen Ensemble™, and digital sequencers such as the Allen Smart Recorder™. Two MIDI Out ports, one switched and one unswitched, allow unprecedented control over external MIDI devices attached to the organ.

Under normal circumstances, MIDI sound modules should be connected to the switched MIDI port labeled MIDI OUT 2. Doing so allows the organist to disable the sending of MIDI data from the organ to the sound module. Devices such as MIDI sequencers should be connected to the unswitched MIDI port labeled MIDI OUT 1, eliminating the necessity of having to draw the MIDI stop controls before recording a digital sequence. The drawing below illustrates the proper procedure for connecting the Allen Ensemble™ and Allen Smart Recorder™ to an Allen Organ.



### 4. MIDI Transmission Channels

MIDI information may be transmitted on several different channels simultaneously. This allows many channels of information to be sent through one cable and used independently from one another, similar to the way many television broadcasts can be sent through one cable. In order to receive the intended information, a MIDI device must be tuned to the same channel as the device that is sending the information.

Your Allen Organ transmits MIDI information on several channels. When external MIDI devices are connected to the organ, it is important to make sure that the devices' channels of transmission and reception match the MIDI channels of the Allen Organ divisions to which they are assigned.

MIDI Program Change Messages are transmitted from the organ's General Pistons on MIDI Channel 8. These program change messages can be used to change the settings of MIDI sound modules or synthesizers that are connected to the organ. Please consult the owner's manual of your MIDI device(s) for more information on how MIDI Program Change Messages are handled by that particular device.

In addition to keying and divisional registration information, MIDI Volume Messages are sent on the individual MIDI channels for each division of the organ. These volume messages are controlled by the division's expression shoe. In this manner, the volume of connected MIDI devices may be controlled.

Please consult the owner's manual of your MIDI device(s) for more information on how MIDI Volume information is handled by that device. If any external MIDI device is used to transmit information to the Allen organ, the same assignment of MIDI channels must be used as described elsewhere in this manual.



## 5. GENERAL MIDI SOUND SET

1. Acoustic Grand Piano
2. Bright Acoustic Piano
3. Electric Grand Piano
4. Honky-tonk Piano
5. Rhodes Piano
6. Chorused Piano
7. Harpsichord
8. Clavinet
9. Celesta
10. Glockenspiel
11. Music Box
12. Vibraphone
13. Marimba
14. Xylophone
15. Tubular Bells
16. Dulcimer
17. Hammond Organ
18. Percussive Organ
19. Rock Organ
20. Church Organ
21. Reed Organ
22. Accordion
23. Harmonica
24. Tango Accordion
25. Acoustic Guitar (nylon)
26. Acoustic Guitar (steel)
27. Electric Guitar (jazz)
28. Electric Guitar (clean)
29. Electric Guitar (muted)
30. Overdriven Guitar
31. Distortion Guitar
32. Guitar Harmonics
33. Acoustic Bass
34. Electric Bass (finger)
35. Electric Bass (pick)
36. Fretless Bass
37. Slap Bass 1
38. Slap Bass 2
39. Synth Bass 1
40. Synth Bass 2
41. Violin
42. Viola
43. Cello
44. Contrabass
45. Tremolo Strings
46. Pizzicato Strings
47. Orchestral Harp
48. Timpani
49. String Ensemble 1
50. String Ensemble 2
51. SynthStrings 1
52. SynthStrings 2
53. Choir Aahs
54. Voice Oohs
55. Synth Voice
56. Orchestra Hit
57. Trumpet
58. Trombone
59. Tuba
60. Muted Trumpet
61. French Horn
62. Brass Section
63. Synth Brass 1
64. Synth Brass 2
65. Soprano Sax
66. Alto Sax
67. Tenor Sax
68. Baritone Sax
69. Oboe
70. English Horn
71. Bassoon
72. Clarinet
73. Piccolo
74. Flute
75. Recorder
76. Pan Flute
77. Bottle Blow
78. Shakuhachi
79. Whistle
80. Ocarina
81. Lead 1 (square)
82. Lead 2 (sawtooth)
83. Lead 3 (caliope lead)
84. Lead 4 (chiff lead)
85. Lead 5 (charang)
86. Lead 6 (voice)
87. Lead 7 (fifths)
88. Lead 8 (brass + lead)
89. Pad 1 (new age)
90. Pad 2 (warm)
91. Pad 3 (polysynth)
92. Pad 4 (choir)
93. Pad 5 (bowed)
94. Pad 6 (metallic)
95. Pad 7 (halo)
96. Pad 8 (sweep)
97. FX 1 (rain)
98. FX 2 (soundtrack)
99. FX 3 (crystal)
100. FX 4 (atmosphere)
101. FX 5 (brightness)
102. FX 6 (goblins)
103. FX 7 (echoes)
104. FX 8 (sci-fi)
105. Sitar
106. Banjo
107. Shamisen
108. Koto
109. Kalimba
110. Bagpipe
111. Fiddle
112. Shanai
113. Tinkle Bell
114. Agogo
115. Steel Drums
116. Woodblock
117. Taiko Drum
118. Melodic Tom
119. Synth Drum
120. Reverse Cymbal
121. Guitar Fret Noise
122. Breath Noise
123. Seashore
124. Bird Tweet
125. Telephone Ring
126. Helicopter
127. Applause
128. Gunshot