MIDI Guide

For Organists

MIDI GUIDE FOR ORGANISTS

WHAT IS MIDI?

The term MIDI is an acronym for Musical Instrument Digital Interface and is nothing more than a communications system. MIDI has been adopted by the music industry as a standard means of communication between musical devices. MIDI enables devices of different types and manufacturers to easily communicate with each other. It is not necessary to understand all of the technical aspects of MIDI in order to take advantage of its benefits. It is important to explore the potential MIDI holds for musicians, as well as the various MIDI applications available today.

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. This means that an organ equipped with MIDI can send information to other MIDI devices, e.g., electronic pianos, keyboard synthesizers or sequencers, and can play those devices simultaneously or record information to be played back later.

Allen organs incorporate an expanded MIDI system, Smart MIDI™ allowing the transmission of volume changes, registrations, and more. It is even possible to control several devices from one manual simultaneously, or separately control different devices 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, freeing the director from the role of accompanist, and allowing him to concentrate on directing the choir. The sequencer may even 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 increased 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 and to become aware of, from the earliest stage of learning a composition, 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 acoustics of a room, or positioning of the console, the sound of the instrument may be different when listened to from a congregation or

audience's vantage point. MIDI allows the organist to check registrations by recording his playing and registration to a sequencer and then listening from different locations in the room during the music's playback.
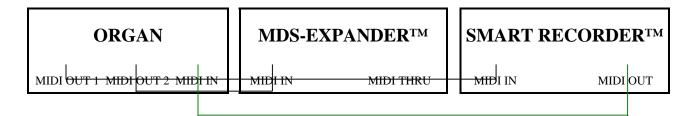
OTHER USES FOR MIDI

An organist's ability to control external keyboards or sound modules puts an ever increasing array of non-traditional sounds at the organist's fingertips, with a degree of control only possible through the flexibility of an organ console. The ability to record MIDI data with the use of a sequencer opens a variety of new possibilities, both in practice and performance situations. Computer programs are 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 Smart™ MIDI instruments will be compatible with tomorrow's MIDI innovations.

CONNECTING THE ALLEN ORGAN TO OTHER MIDI DEVICES

The MIDI-capable Allen Organ consoles may be connected to a variety of MIDI devices. The drawing below illustrates the proper procedure for connecting the Allen MDS-Expander II™ and Allen Smart Recorder™ to the Allen Protégé™ Chamber Series™ organ.

If you are connecting to external MIDI devices not made by Allen Organ Company and more specific information is required, please consult the owner's manuals of the external devices being connected. Contacting the local Allen Organ representative also will be helpful.

ORGAN	MDS-EXPANDER™	SMART RECORDER™
MIDI OUT 1 MIDI OUT 2 MIDI IN	MIDI IN MIDI THRU	MIDI IN MIDI OUT

SmartMIDI™

Your Allen Protégé™ Chamber Series™ organ features SmartMIDI™ an expanded MIDI system with increased flexibility yet, simple operation. Allen's SmartMIDI™ provides a comprehensive interface between MIDI sound modules such as the Allen MDS-Expander II™, and digital sequencers such as the Allen Smart Recorder™. Two MIDI Out ports, one switched and one un-switched, 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 un-switched MIDI port labeled MIDI OUT 1, eliminating the necessity of having to draw the MIDI stop controls before recording a digital sequence.

MIDI TRANSMISSION CHANNELS

MIDI information may be broadcast on several different channels simultaneously. This allows many channels of information to be sent through one cable and used independently of one another similar to the way several 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 devise 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.

 For example, the C-8c and C-14c transmit MIDI information on the following channels:

    Swell Manual   =   Channel 1 (Swell Divisional Pistons on C-14c are included)
    Great Manual   =   Channel 2 (Great/Pedal Divisional Pistons on C-14c are included)
    Pedal Manual   =   Channel 3
    General Pistons =   Channel 8

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 setting 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 note information, *MIDI Volume Change Information* is sent on MIDI channels 1, 2, and 3 by the C-8c's single expression pedal. On C-14c organs, the Swell volume change information is sent on MIDI channel 1 by changing the position of the organ's Swell Expression shoe. Great and Pedal volume change information is sent on MIDI channels 2 and 3 by changing the position of the organ's Great/Pedal expression pedal. In this manner, the volume level of connected sound producing MIDI devices may be controlled. Please consult your MIDI device's owner's manual for information on how MIDI volume information is handled by them.

If any external MIDI device is used to transmit information to the organ, the same assignment of MIDI channels must be used as outlined above.

MIDI SETTINGS FOR ALLEN'S MIDI DIVISION™ or MDS-EXPANDER II™

Your Allen Organ comes pre-programmed with organ registration and MIDI preset selection information for an Allen MIDI Division™ or MDS Expander II™ sound module. The pre-programmed settings allow organists to access various presets from pistons of each of the organ's capture memory levels when connected to one of these. **Note: *This information is <u>not</u> permanent in the memory of the organ, so please make a copy of the current capture in the organ if you wish to save those registrations.*** To

review the copy process, see the information in the publication "Console Controller Guide for the Chamber Series™".

GENERAL PISTON PRE-PROGRAMMED MIDI SETTINGS for C-8c models

Memory 1
Pistons 1 through 7 access Preset 1 through 7 of the MIDI Division™/MDS-Expander II™.

Memory 2
Pistons 1 through 7 access Preset 8 through 14 of the MIDI Division™/MDS-Expander II™.

Memory 3
Pistons 1 through 7 access Preset 15 through 21 of the MIDI Division™/MDS-Expander II™.

Memory 4
Pistons 1 through 7 access Preset 22 through 28 of the MIDI Division™/MDS-Expander II™.

The following example demonstrates how to program General Piston 5 on Memory 3 with a corresponding set of preset Voices from the MIDI Division™/MDS-Expander II™:

1. First, access Memory Level 3 in the Console Controller.
2. Next, program the MIDI Division (or MDS-Expander II™). Consult the Owner's Manual for the MIDI Division™/MDS-Expander II™ for detailed information on this process.
3. Once you have selected the combination you want, press the Set button <u>on the MIDI Division™ (or Expander II™)</u>. The window now displays *Please Set Capture… .*
4. Press General Piston 5 on the Organ. The MIDI Division™ (or MDS-Expander™) now displays ***Preset 19*** with the voices you have chosen.

GENERAL PISTON PRE-PROGRAMMED MIDI SETTINGS for C-14c models

Memory 1
Pistons 1 through 5 access Preset 1 through 5 of the MIDI Division™/MDS-Expander II™.

Memory 2
Pistons 1 through 5 access Preset 6 through 10 of the MIDI Division™/MDS-Expander II™.

Memory 3
Pistons 1 through 5 access Preset 11 through 15 of the MIDI Division™/MDS-Expander II™.

Memory 4
Pistons 1 through 5 access Preset 16 through 20 of the MIDI Division™/MDS-Expander II™.

DIVISIONAL PISTONS PRE-PROGRAMMED MIDI SETTINGS for C-14c models

Divisional Pistons are programmed for the four memories of the organ. Here is how it works:

There are four divisional pistons for the Swell, and four for the Great/Pedal divisions. You can choose one MIDI voice per piston and set them to Pistons 1 through 4.

This example programs the Oboe with Trem on Swell piston 3 of Memory 4:

1. Access Memory 4 in the Console Controller

2. Next, on the MIDI Division™/MDS-Expander II™, press the Division button until the arrow is blinking at Swell (SW).

3. Next, press the Voice button, then use the Up/Down buttons to scroll to the Oboe. Once the word "Oboe" appears in the window press the Trem button and an asterisk (*) appears.

4. Next, press the Set button which is directly below the Trem button… the window now displays "Please set capture…". Press Swell Divisional 3 piston and you have now locked the Oboe with Trem onto this piston.

Note: The organ must be in "User" Mode for all of this to work properly. Check the first window of the Console Controller to see if there is a "U" in the bottom right corner. If not, scroll to Window 2 and set it to User. In Window 6 the Controller must be set to "Low Bank".