

USERS MANUAL - COMBINATION ACTION

DEFINITION

The organ controller incorporates a fully featured combination action providing complete integration and programmability of all general and divisional pistons, special function pistons, reversibles, and crescendo pedal. The '**SET**' piston is used which defines this as a 'capture' type combination action. Nine memory levels are contained on board in the system, allowing the general pistons, divisional pistons, organist programable reversibles, fortissimo, and crescendo pedal to be set or captured independently for each memory level. An additional feature is the use of an RS232 data link to a personal computer to store the nine levels of memory, incorporating the concept of infinite levels of memory, rather than a large but finite number. The LCD display provides analog and digital communication with the organist for a complete and exact status check of the options selected.

OVERVIEW OF OPERATION

To enable the operation of any of these capabilities, simply select the desired piston, toe stud or crescendo pedal.

OPTIONS

Set: To 'capture' in memory a desired group of stops and couplers, simply turn on the stops and couplers desired, then hold the SET piston in while selecting the correct piston or toe stud.

Cancel: This physically turns off all stops and couplers that are on. It also turns off the Fortissimo, Pd/Gt, Transposer, and French manual interchange.

General Pistons: These have control of all stops and couplers. By selecting a piston or toe stud, the stops and/or couplers captured in memory will be so turned on and off, and will move on or off for visual indication of their position.

Divisional Pistons: These control the stops and intra-manual couplers of the particular division. When selected the stops and/or couplers captured in memory will be so turned on and off, and will move on or off to visually indicate their position.

Reversible Pistons: These can control any stop or coupler by the means of reversing their position, that is if a stop is on, then it will be turned off, or if it is on then it will be turned off. The stops and/or couplers will physically move indicating their position.

Fortissimo: This piston turns on stops and couplers without moving them. Acting as a reversible, this piston will exchange it's state: if on, then off and if off, then on. If turned on, the function is indicated by the word FORTISSIMO on the top line of the LCD. The general cancel will also turn this function off. This piston can be set as a general on all memory levels: hand register stops/couplers, then hold in the set piston and hit this Fortissimo piston.

Crescendo Pedal: Sixteen stages, each stage being a virtual general piston, whereby stops are turned on (without actually moving them) by pushing the pedal toward the open position. Indication is both digital and analog as displayed on the LCD. To set or capture in memory stops and/or couplers (unique sequence on all memory levels): move the pedal to the desired stage as indicated on the LCD, hold in the 'SET' piston followed by pushing the 'IND' piston.

Indicate: Gives a physical readout of the stops and/or couplers set or captured in memory by the fortissimo or the crescendo pedal stages. Activate either the Fortissimo piston or Crescendo stage, then push this piston and the stops/couplers in memory will move for a visual check.

Memory Level UP and DOWN: These increment or decrement the memory level from one to nine. They must be hit once for each change. Indication of the current memory level is in the lower left hand corner of the LCD.

Transpose UP and DOWN: These transpose the keyboards through a loop of half steps, 7 up wrapping to 7 down and back to 0. Indication is on the LCD in the lower right-hand corner. The general cancel piston returns this loop to zero or no transposition.

Pedal to Great: When playing on the Great keyboard, the lowest note being held will be played by the pedal division. This applies to the lowest 32 notes of the great keyboard. When selected the LCD will indicate PD/GT on the fourth line. This piston acts as a reversible, and the general cancel will turn off this option.

French: This interchanges the Great keyboard with the Choir keyboard. The divisional pistons (up to 5 maximum) will be exchanged as well. The cancel turns this option off.

Player: This piston accesses a menu for record and playback, save and load of files to a personal computer via a RS232 data link, and MIDI. It is a reversible piston, allowing the console to return to normal operation when it is selected again.

Piston Sequencer: A sequence of 12 pistons is storable in memory. This allows the use of 12 pistons in order without hitting any specific piston. When turned on, all general, divisional, reversible, and PS UP pistons will increment this stored sequence of pistons. The PS DN will decrement the sequence.

To set this sequence of pistons:

1. Turn ON the Piston Sequencer On/Off.
2. Increment with the PS UP to the desired stage.

3. Hold in the Set Piston and select the piston to be in the sequence at this stage. The sequence number will automatically increment to the next stage.
4. You may do this for any or all of the 12 stages. Stage 0 is not settable.

To use this sequence of pistons:

1. Turn ON the Piston Sequencer On/Off.
2. Set up a beginning registration by manually selecting stops or increment to stage 1 using any piston, reversible, fortissimo or PS UP.
3. When the next piston is needed simply select any piston, reversible, fortissimo or PS UP.
4. To turn OFF the Piston Sequencer, hit the Piston Sequencer On/Off or hit the Cancel Piston.

SAVE and LOAD of ALL MEMORY LEVELS to a PERSONAL COMPUTER

ACCESS

Selecting the player piston will change the LCD to read:

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Line 1:    PLAYER
Line 2:   Scroll: G7 & G8
Line 3:   Enter: G1
Line 4:   Exit: Player
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General piston 7 and general piston 8 are used to scroll up and down thru the loop of options which are displayed on line four of the LCD.

General piston 1 is used to enter or start the selected option. Player piston is used to return the console to normal mode if no option is desired, or to cancel any option in progress.

OPTIONS

SAVE: Combination Action
LOAD: Combination Action

OPERATION

SAVE: Combination Action Save all memory levels

1. Connect console to PC with null modem cable.
2. Access directory with player.exe file.
3. Type player and 'enter'. Follow the directions from the PC screen to correctly save a file. The directions are restated as follows.
4. Type s and 'enter'.
5. Type file name to be saved and 'enter'.
6. Select player piston.
7. Scroll with 'G7' or 'G8' to **SAVE** on the 4th line of the LCD.
8. Select 'G1' to enter. The 4th line of the LCD will now read:
SAVE: Player.
9. Scroll with 'G7 or 'G8' to **SAVE: C. Action** on the 4th line of the LCD.
10. Select 'G1' to enter and start transmitting data to PC. The LCD will read **Transmitting** on line 1 and **Abort: Player** on the 4th line. When transmitting is complete, **Complete** will appear on line 1 and **Exit: Player** on the 4th line.

11. Select player piston to return the LCD and organ console to normal operation.
12. PC will calculate a check sum and then state save of file complete and list the number of bytes saved.

LOAD: Combination Action Load all memory levels

1. Connect console to PC with null modem cable.
2. Access directory with player.exe file.
3. Type player and 'enter'. Follow the directions from the PC screen to correctly load a file. The directions are restated as follows.
4. Type l and 'enter'.
5. Type file name to be loaded and 'enter'.
6. Select player piston.
7. Scroll with 'G7' or 'G8' to **LOAD** on the 4th line of the LCD.
8. Select 'G1' to enter. The 4th line of the LCD will now read: **LOAD: Player.**
9. Scroll with 'G7' or 'G8' to **LOAD: C. Action** on the 4th line of the LCD.
10. Select 'G1' to enable reception from PC. The LCD will read **Ready to Load** on line 1 and **Abort: Player** on the 4th line.
11. Type the letter s on the PC to start the transmission to organ console. Type the letter a to abort the transmission from the PC or hit the player piston on the organ console to abort the reception from the PC.
12. When the transmission is complete and correct, **Complete** will appear on line 1 and **Exit: Player** on the 4th line.
13. Select player piston to return the LCD and organ console to normal operation.