

PRO/200
VER3
EXTENDED EFFECTS PROCESSOR

INTRODUCTION

CONGRATULATIONS! You have purchased one of the finest sounding effects processors on the market today. The ProVerb 200 contains two hundred custom tailored digital programs covering nearly every audio effect in existence. Among these presets are the finest studio-combination effects. All of these sounds are available at the touch of a button!

The ProVerb 200 is a dramatic leap forward in digital processing technology. The reverb architecture has been crafted to provide reverb that is naturally warm and brilliant without the harshness and brittleness of competitive units. The ART ProVerb 200 induces no artificial sound coloration whatsoever.

Thank you for choosing ART. Please take the time to listen to the entire bank of presets. You will be amazed at the range of creative control available.

INSTALLATION

The ProVerb 200 may be used in a variety of setups including: mixing consoles with reverb send and return facilities, directly in line between a musical instrument and amplifier, in the effects loop of an amplifier, and in the tape loop of a home receiver. Self contained in an all steel single high 19" rack mount case, the ProVerb 200 is designed for continuous professional use. For touring rack applications, care should be taken to support the units rear if the rack might be subjected to mechanical shock. NOTE: The front panel may bend if no rear support is provided. Mounting location is not critical, but for greater reliability we recommend that you not place the unit on top of power amps, tube equipment, or other sources of heat.

CONNECTIONS

All audio connections to the ProVerb 200 are made at the rear of the unit via professional 1/4" phone jacks. The MIDI connection is accomplished via a five pin "DIN" jack on the rear panel.

The LEFT and RIGHT inputs are single ended with an impedance of 47K ohms. True stereo processing is accomplished by using both inputs in a left/right application. If only one input is used, the signal is automatically routed to both channels.

The LEFT and RIGHT outputs are single ended with a source impedance of 1.5K ohms, and can provide a stereo or mono output. When a true stereo signal is applied to the inputs, the resulting output is true stereo. If both outputs are used with a mono input signal, a stereo image is produced. Using one output with a mono or stereo source provides a mono signal combining the reverberant information from both outputs. If you do not want both output signals combined (such as only one delay time required), plug a dummy plug into the unused output.

A variety of input/output combinations may be used with the ProVerb 200. One in one out (mono), one in two out (stereo image), two in one out (summed mono), and two in two out (true stereo) may be achieved. NOTE: When using the ProVerb 200 in the true stereo mode, only the dry signal will remain totally left and right orientated at the outputs. The processed reverberant signal will be a mix of the inputs with its own individual stereo image dictated by the algorithm used. This mimics the way natural reverberation occurs in a normal room.

CONTROLS AND OPERATION

INPUT LEVEL

Front panel LED indicators show the input signal level at all times. For maximum dynamic range the -12 LED should be on most of the time with the 0dB LED briefly flashing on transients only. A LINE/INSTRUMENT level switch is located on the rear panel to help maximize proper input/output gain structures. When using mixing boards, tape decks, or higher level musical instruments, make sure this switch is in the LINE position (switch down). The operating level in this position is approximately (-)10dBV. With normal guitars or other low output devices, the switch should be used in the INSTRUMENT position (switch up). This position provides for operating levels of less than (-)10dBV. The proper use of this switch will assure you of the best signal to noise ratio in your particular application.

CONTROL BUTTONS

The UP and DOWN buttons on the front panel are used to select PRESETs. Holding either button in will step you through all 200 PRESETs at a moderate rate. You can step at a much quicker rate by using the RAPID ACCESS mode. To access RAPID ACCESS mode, first press and hold the button that is in the direction that you want to go, then simultaneously press the other button. As long as both are pressed the display will increment by a value of ten rather than one at a time.

Pressing the BYPASS button kills the effects signal in the mix and shows [- -] in the display. Pressing BYPASS again returns the unit to the previous PRESET. Another means of bypass is attained by programming the REMOTE jack on the rear panel for the bypass function.

The ProVerb 200 is shipped from the factory in OMNI mode, allowing it to receive MIDI PROGRAM numbers on any MIDI channel. To select a specific MIDI channel, momentarily press the MIDI CHAN button and use the up/down buttons to change the selected channel. The right decimal point will be on whenever the display is showing MIDI CHAN. If you have changed the channel number at any time, the next time the unit is powered up, it will come up in the last channel chosen.

MIX CONTROL

The MIX control varies the amount of effect signal in the output from dry only to effect only. When the control is fully towards the left, only the dry signal is apparent at the output(s). As the slider is moved towards the right, more processed signal is heard at the output(s). A fifty/fifty mix is achieved when the slider is in the center detent position. When the slider is fully towards the right, only processed signal is heard at the output.

REMOTE JACK

The REMOTE jack may be programmed to be used either to bypass the ProVerb 200 or access the Increment Preset Mode. A footswitch is the intended device to be used with this jack. Either a momentary (normally open), or an on/off switch may be used. If the jack is programmed for the bypass feature, each time the footswitch is activated (hot connected to ground) the BYPASS function is accessed. This jack may also be programmed to allow for incrementing through a set of presets. This feature is covered later in the manual. Example four and five show how to program the REMOTE jack.

PRESETS

90 Presets are devoted to natural reverberation, covering a wide range from extremely short .2 second decays to larger than life 25 second decays. A variety of algorithms each with its own unique characteristic are used to simulate a wide range of environments. Within the other 110 Presets are 20 Gated Reverb effects, 10 Reverse Reverb effects, 20 Flanging effects, 10 Chorus effects, 10 Echo effects, 20 delay based effects with combinations of reverb and delay, and 10 special effects including the only percussive flange available in a digital reverb. Within each section are a variety of related effects, not just bigger or smaller versions of the same. Some of these effects would normally require multiple pieces of equipment to create. A chart describing the presets can be found in the back of this manual. Also, a quick reference table is screened on the ProVerb 200's front panel.

MIDI

PRESETS may be accessed at the front panel or remotely via MIDI. When the ProVerb 200 receives a MIDI PROGRAM number, it recalls a PRESET. If the ProVerb 200 was in BYPASS, it will become active. The PRESET it recalls is determined by a table that equates MIDI PROGRAM numbers to PRESET numbers. This table is called the MIDI PROGRAM TABLE (MPT). ProVerb 200's are shipped from the factory so that the MIDI PROGRAM numbers equal the PRESET numbers. You can reassign any MIDI PROGRAM number to any PRESET number. The ability to reassign MIDI PROGRAM numbers makes the ProVerb much more practical when using MIDI in both simple and complex setups. We will refer to the MIDI PROGRAM number as the MIDI number in the following. Any changes made to the MPT will be retained during power down by battery backup.

MPT EDIT MODE

The MPT may be edited from the front panel either alone or with a keyboard or controller that can send MIDI numbers. To enter MPT edit mode, momentarily press the MIDI CHAN and BYPASS buttons simultaneously (Pressing MIDI CHAN first then BYPASS will have no effect on the current BYPASS state, pressing BYPASS first toggles the current BYPASS state). Press MIDI CHAN and BYPASS again to stop editing the MPT and return to normal front panel operation.

When MPT edit mode is entered, the LEFT decimal point will be blinking indicating that the display is showing a MIDI number. If BYPASS is then pressed, the RIGHT decimal point will blink and the display will be showing a PRESET. If MIDI CHAN is pressed the left decimal point will blink again indicating the return to the MIDI number in the display. Use the UP/DOWN buttons are to change the numbers in the display. When a MIDI number message is received, the corresponding PRESET number in the table will be recalled. Multiple MIDI numbers may have the same PRESET number. When the MIDI number is changed with the UP/DOWN buttons, the PRESET number will change to reflect the corresponding PRESET. The following examples illustrate editing of the MPT from the ProVerb alone (Example 1) and with a keyboard or external controller (Example 2).

EXAMPLE 1:

Editing the MPT with the ProVerb 200 front panel controls.

In this example, we will edit the MPT so that when MIDI numbers 1 and 2 are received, ProVerb PRESETS 64 and U2 will be recalled. It is assumed that the ProVerb 200's MPT has not been edited.

Press and hold MIDI CHAN, then BYPASS buttons, release both. The display will show [0.0] with the decimal point blinking indicating that you are in MPT edit mode, this left decimal point means that the MIDI PROGRAM number is in the display.

- *-Press and release UP. The display shows [0.1] indicating we are at MIDI number 1 in the table.
- *-Press and release BYPASS. The display shows [01.] indicating that MIDI number 1 recalls PRESET 1.
- *-Press and hold UP until [64.] appears in the display. Now MIDI number 1 will recall PRESET 64.
- *-Press and release MIDI CHAN. The display shows [0.1]
- *-Press and release UP. The display shows [0.2]
- *-Press and release BYPASS. The display shows [02.] indicating that MIDI number 2 recalls PRESET 2.
- *-Press and hold UP until [U2.] appears in the display. Now MIDI number 2 will recall PRESET U2.
- *-Press MIDI CHAN and BYPASS to exit MPT edit mode. The display shows [U2] indicating the last PRESET referenced is the current PRESET selected.

During the above example, anytime a MIDI number is changed or PRESET number is changed, the ProVerb 200 recalls the corresponding PRESET. This allows you to listen to the PRESETS change as the MPT is edited.

EXAMPLE 2:

Editing the MPT with a keyboard or external controller.

When used with a keyboard or other device that will send MIDI PROGRAM CHANGE messages, MPT editing may be simplified. We will edit the MPT so that when MIDI numbers 3 and 4, are received, PRESETS 55 and Y4 will be recalled. It is assumed that the ProVerb 200 has not had its MPT edited.

The keyboard MIDI OUT must be connected to the ProVerb 200 MIDI IN jack. The MIDI CHAN on the ProVerb 200 must be set to the same channel that the keyboard will be sending messages on, or the ProVerb 200 MIDI CHAN must be set to [AL.] for OMNI mode.

Press and hold MIDI CHAN, then press BYPASS. The display will show [0.0] with the decimal point blinking indicating that you are in MPT edit mode, this left decimal point means that the MIDI PROGRAM number is in the display.

Select a patch on the keyboard so that a [0.3] appears in the display. This may not be sound 3 or patch 3 on the keyboard. Manufacturers number their presets in a variety of ways. The patch that causes [0.3] to appear in the display is usually the second or third patch of the lowest numbered bank if the keyboard has banks of patches.

*-Press and release BYPASS. The display shows [03.] to indicating that MIDI number 3 recalls PRESET 3.

*-Press and hold UP until [55.] appears in the display. Now MIDI number 3 will recall PRESET 55.

To program the rest of the entries, you do not need to switch back to the MIDI number. You can let the unit remain showing the PRESET number. (When you select your keyboard preset you automatically recall the existing ProVerb 200 preset.)

*-Select the next patch on the keyboard. The display will show [04.] to indicate that it recalls PRESET 4.

*-Press and hold the UP button until [Y4.] appears in the display. Now the last patch number activated will recall PRESET Y4.

Using this method of editing, you select the desired patch on the keyboard, and then select the desired PRESET on the ProVerb 200 for that sound. You can do this while you are listening to the ProVerb 200. Exit MPT mode as in the previous example.

In the previous examples four of the MPT entries were edited, however, you may edit the entire MPT if desired. If you do not have access to a MIDI controller and you wish to change between PRESETS easily, you may want to edit the MPT for incrementing through a sequence of PRESETS. Example three illustrates how this is done.

EXAMPLE 3

Setting up a preset sequence including the BYPASS (Y9) preset.

If you need to change between presets quickly without scanning, this procedure will be to your advantage. As in the other examples, editing the MPT is the key. In this example we will edit the MPT to sequence through ten PRESETS. These PRESETS are in the order: 26,J4,F2,69,E2,U2,69,Y9,82,26. Notice that we repeated some presets and included the BYPASS preset. Remember that you can assign any preset to a MIDI number including using a preset at multiple locations. Using the BYPASS preset enables you to select no effect without having to bypass the unit from the front panel and then continuing on with an effect preset next in the chain. NOTE: If your mix control is fully to the right (all wet), no signal will pass through the ProVerb 200.

- *-Enter the MPT edit mode.
- *-With the left decimal point blinking, use the up/down buttons to get a display of [1.0].
- *-Press the BYPASS button, the decimal point now blinks on the right side.
- *-Use the up button to select PRESET 26. The display will be [26.].
- *-Press the MIDI CHAN button and set the display for [1.1].
- *-Press the BYPASS button and set the display for [J4.].
- *-Continue this way until all the PRESETS are entered the last being 26.
- *-DO NOT LEAVE THE MPT EDIT MODE
- *-Press the MIDI CHAN button and go to [1.0]. As you increment up, you will recall the sequence of presets just entered.

INCREMENT PRESET

Increment Preset Mode (IP) allows you to program the REMOTE jack on the rear panel so that you may use a footswitch to increment through a desired set of presets. IP also allows you to program the jack to operate as a normal bypass jack. Example four describes how to set IP to sequence through five presets. Example five shows how to program the REMOTE jack for normal bypass operation.

IP is accessed through the MIDI Program Table. To enter the MPT edit mode, press and hold the MIDI CHAN, then BYPASS buttons, release both. The display will show some number with the left decimal point blinking. Increment up (use the RAPID ACCESS mode!) until the display reads [1.P]. This indicates Increment Preset. You are now ready to program. Press the BYPASS button, the decimal point is now blinking on the right. Set this number for the last entry number desired. Set the number to [04.] if a sequence of FIVE presets is desired. If you set the number to [00.], you will have programmed the jack for use as a bypass jack. Now press the MIDI CHAN button and increment down to the desired MIDI Program Number. Note that when you pass [9.9] a letter and a number appear. [A.0] is equal to 100, [C.0] is equal to 110, [E.0] is equal to 120. [E.7] is the last "number" and is equal to 127. Press the BYPASS button and set the display for the desired PRESET number. After programming is completed press and hold the MIDI CHAN button then the BYPASS button to exit.

EXAMPLE 4

Setting up five presets for Increment Preset Mode. Use preset numbers 26, J4, F2, 69, and E2.

- *-Enter the MPT edit mode
 - *-With the left decimal point blinking, increment up (use RAPID ACCESS mode) until the display reads [1.P].
 - *-Press the BYPASS button
 - *-Adjust the display to read [04.].
 - *-Press the MIDI CHAN button
 - *-Increment down (use FAST mode) until the display reads [0.0].
 - *-Press the BYPASS button and set the display to read [26.].
 - *-Press the MIDI CHAN button and set the display for [0.1].
 - *-Press the BYPASS button and set the display to read [J4.].
 - *-Continue this until you reach and program [0.4] to be [E2.].
 - *-Exit MPT edit mode
- You have just programmed the ProVerb 200 to sequence through five PRESETS when the REMOTE jack is activated.

EXAMPLE 5

Programming the REMOTE jack for the BYPASS function.

- *-Enter MPT edit mode.
- *-Increment up until the display reads [1.P].
- *-Press the BYPASS button.
- *-Set the display to read [00.].
- *-Exit MPT edit mode.

The FOOTSWITCH jack can now be used as an external BYPASS jack.

MISCELLANEOUS

MIDI technical information as well as the MIDI IMPLEMENTATION CHART is located at the end of the manual. If you have questions or require additional information, contact Customer Service at (716) 436-2720. **OUR NEW AREA CODE IS 585**

When power is terminated to the ProVerb 200, the edited MPT is retained via battery backed up memory. This as well as the last PRESET and the MIDI channel will be active when the unit is next powered up. Memory retention is expected to last four years. If you encounter memory loss, contact our service department.

PRESET Y9 is a non-sound preset. It is used as a MIDI bypass preset. Use Y9 when you don't want any effect to be in the signal chain for a particular keyboard preset. The MIDI PROGRAM NUMBER assigned to Y9 is (127) or [E.7] as it appears in the display.

On power up, the ProVerb 200 indicates its software revision level in the display (eg. 2.2). The ProVerb 200's software is contained in a socketed EPROM and is field replaceable. This software controls the ProVerb 200's functions as well as its sounds.

Be sure to fill out the USER REGISTRATION CARD at the back of the manual and send it in to our Customer Service department. This will ensure you of being notified of future updates and other information. Please don't forget to write in your serial number.

If you find that you need to perform a factory reset for the MPT, you may do this by interrupting the battery backup when no power is applied to the ProVerb 200. To do this you must remove the top cover and remove the lithium battery from its holder for a few minutes. When the battery is replaced and power is applied to the unit, the MPT will be automatically reset.

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SPECIFICATIONS

Presets	200 total (00-99, C0-C9, E0-E9, F0-F9, H0-H9, J0-J9, L0-L9, P0-P9, U0-U9, Y0-Y9)
MIDI Receive Chan	1-16, OMNI (All)
MIDI Programs	0-127, may be assigned to any PRESET #
Connections	stereo in/out 1/4" phone, MIDI IN
Operating Level	-10 dBV LINE, -20dBV INST, nominal, 0 dBV max.
Input Impedance	47K ohms single ended
Output Impedance	1.5K ohms single ended
Bandwidth	30 kHz dry , 10 kHz effect
Processor	16 bit internal processing
Dynamic Range	80 dB typical
Mechanical	1.75" high, 19" wide, 10" deep, steel case
Power Requirement	117 Volts AC, 60 Hz, 16 VA, internal fuse Export unit configured for destination country

LIST OF ProVerb 200 PRESETS

PRESET#	DESCRIPTION	DECAY
MEMORY BANK #1		
<u>REVERB-EARLY REFLECTIONS</u>		
00	EARLY REF. TIGHT PLATE	0.2 sec
01	EARLY REF. TIGHT EXPANDED PLATE	0.2
02	EARLY REF. DEEP PLATE	0.3
03	EARLY REF. DEEP EXPANDED PLATE	0.3
04	EARLY REF. DIFFUSED PLATE	0.4
05	EARLY REF. EXPANSIVE PLATE	0.4
06	EARLY REF. DIFFUSED EXPANSIVE PLATE	0.5
07	EARLY REF. EXPANSIVE BRIGHT	0.5
08	EARLY REF. MEDIUM TIGHT DARK	0.6
09	EARLY REF. LARGE DIFFUSED	0.6
<u>MEMORY BANK #2 REVERB-STUDIO PLATE</u>		
10	STUDIO PLATE, LARGE WIDE #1	0.7 sec
11	STUDIO PLATE, LARGE WIDE #2	0.7
12	STUDIO PLATE, LARGE OPEN #1	0.8
13	STUDIO PLATE, LARGE OPEN #2	0.8
14	STUDIO PLATE, LARGE TIGHT #1	0.9
15	STUDIO PLATE, LARGE TIGHT #2	0.9
16	STUDIO PLATE, LARGE DARK #1	1.0
17	STUDIO PLATE, LARGE DARK #2	1.0
18	STUDIO PLATE, SMALL TIGHT #1	1.1
19	STUDIO PLATE, SMALL TIGHT #2	1.1
<u>MEMORY BANK #3 STUDIO VOCAL</u>		
20	STUDIO VOCAL, SMALL CLOSE ROOM #1	1.2 sec
21	STUDIO VOCAL, SMALL CLOSE ROOM #2	1.2
22	STUDIO VOCAL, SMALL ROOM #1	1.3
23	STUDIO VOCAL, SMALL ROOM #2	1.3
24	STUDIO VOCAL, SMALL DARK ROOM #1	1.4
25	STUDIO VOCAL, SMALL DARK ROOM #2	1.4
26	STUDIO VOCAL, CLOSED ROOM #1	1.5
27	STUDIO VOCAL, CLOSED ROOM #2	1.5
28	STUDIO VOCAL, BRIGHT ROOM #1	1.6
29	STUDIO VOCAL, BRIGHT ROOM #2	1.6
<u>MEMORY BANK #4 LIVE VOCAL</u>		
30	LIVE VOCAL, CLOSE ROOM #1	1.7 sec
31	LIVE VOCAL, CLOSE ROOM #2	1.7
32	LIVE VOCAL, BRIGHT ROOM #1	1.8
33	LIVE VOCAL, BRIGHT ROOM #2	1.8
34	LIVE VOCAL, DARK ROOM #1	1.9
35	LIVE VOCAL, DARK ROOM #2	1.9
36	LIVE VOCAL, CLOSE BRIGHT ROOM #1	2.0
37	LIVE VOCAL, CLOSE BRIGHT ROOM #2	2.0
38	LIVE VOCAL, OPEN BRIGHT ROOM #1	2.1
39	LIVE VOCAL, OPEN BRIGHT ROOM #2	2.1

<u>MEMORY BANK #5</u>		<u>SMALL ROOM</u>	
40	SMALL ROOM, BRIGHT #1	2.2	sec
41	SMALL ROOM, BRIGHT #2	2.2	
42	SMALL ROOM, DIFFUSED #1	2.3	
43	SMALL ROOM, DIFFUSED #2	2.3	
44	MEDIUM ROOM, DARK #1	2.4	
45	MEDIUM ROOM, DARK #2	2.4	
46	MEDIUM ROOM, CLOSE WARM #1	2.5	
47	MEDIUM ROOM, CLOSE WARM #2	2.5	
48	MEDIUM ROOM, OPEN WARM #1	2.6	
49	MEDIUM ROOM, OPEN WARM #2	2.6	
<u>MEMORY BANK #6</u>		<u>LARGE ROOM</u>	
50	LARGE ROOM, BRIGHT #1	2.7	sec
51	LARGE ROOM, BRIGHT #2	2.7	
52	LARGE ROOM, WARM ROOM #1	2.8	
53	LARGE ROOM, WARM ROOM #2	2.8	
54	LARGE ROOM, DARK ROOM #1	2.9	
55	LARGE ROOM, DARK ROOM #2	2.9	
56	LARGE ROOM, OPEN ROOM #1	3.0	
57	LARGE ROOM, OPEN ROOM #2	3.0	
58	LARGE ROOM, CLOSE ROOM #1	3.1	
59	LARGE ROOM, CLOSE ROOM #2	3.1	
<u>MEMORY BANK #7</u>		<u>HALL</u>	
60	HALL, WARM #1	3.2	sec
61	HALL, WARM #2	3.3	
62	HALL, BRIGHT #1	3.4	
63	HALL, BRIGHT #2	3.5	
64	HALL, MEDIUM WARM #1	3.6	
65	HALL, MEDIUM WARM #2	3.7	
66	HALL, EXPANSIVE #1	3.8	
67	HALL, EXPANSIVE #2	3.9	
68	HALL, EXPANSIVE #3	4.0	
69	HALL, EXPANSIVE #4	4.4	
<u>MEMORY BANK #8</u>		<u>MEDIUM HALL</u>	
70	MEDIUM HALL, BRIGHT #1	5.0	sec
71	MEDIUM HALL, BRIGHT #2	5.4	
72	MEDIUM HALL, EXPANSIVE #1	6.0	
73	MEDIUM HALL, EXPANSIVE #2	6.4	
74	MEDIUM HALL, WARM CLOSE #1	7.0	
75	MEDIUM HALL, WARM CLOSE #2	7.4	
76	MEDIUM HALL, WARM OPEN #1	8.0	
77	MEDIUM HALL, WARM OPEN #2	8.4	
78	LARGE HALL, LONG DARK #1	9.0	
79	LARGE HALL, LONG DARK #2	9.4	
<u>MEMORY BANK #9</u>		<u>GREAT HALL</u>	
80	GREAT HALL, LARGE OPEN #1	10.0	sec
81	GREAT HALL, LARGE OPEN #2	11.0	
82	GREAT HALL, BRIGHT #1	12.0	
83	GREAT HALL, BRIGHT #2	13.0	
84	GREAT HALL, WARM #1	15.0	
85	GREAT HALL, WARM #2	18.0	
86	CATHEDRAL, LONG DARK #1	20.0	
87	CATHEDRAL, LONG DARK #2	23.0	
88	CATHEDRAL, LONG WARM #1	25.0	
89	CATHEDRAL, LONG WARM #2	25.0	

MEMORY BANK #10 GATED REVERB

90 GATED, 200ms sloped
91 GATED, 300ms sloped
92 GATED, 400ms sloped
93 GATED, 500ms sloped
94 GATED, 600ms sloped
95 GATED, 200ms flat
96 GATED, 300ms flat
97 GATED, 400ms flat
98 GATED, 600ms flat
99 GATED, 300ms sparse

MEMORY BANK #11 FULL/COMPANDED GATE

A0 COMPANDED GATE #1
A1 COMPANDED GATE #2
A2 MONO FULL GATE
A3 FULL GATE, LONG DECAY, sloped
A4 FULL GATE, LONG DECAY, flat
A5 COMPANDED GATE, EXTRA SHORT
A6 COMPANDED GATE, SHORT
A7 COMPANDED GATE, MEDIUM
A8 COMPANDED GATE, LONG
A9 COMPANDED GATE, VERY LONG

MEMORY BANK #12 REVERSE REVERB

C0 REVERSE, 200ms strong tail
C1 REVERSE, 300ms strong tail
C2 REVERSE, 400ms strong tail
C3 REVERSE, 500ms strong tail
C4 REVERSE, 600ms strong tail
C5 REVERSE, 200ms normal tail
C6 REVERSE, 400ms normal tail
C7 REVERSE, 600ms normal tail
C8 REVERSE, 300ms swell
C9 REVERSE, 600ms swell

MEMORY BANK #13 FLANGE

E0 STEREO FLANGE, FAST
E1 STEREO FLANGE, MEDIUM
E2 STEREO FLANGE, SLOW
E3 STEREO FLANGE, INVERTED, SLOW
E4 STEREO FLANGE, INVERTED, FAST
E5 STEREO FLANGE, INVERTED, MEDIUM
E6 STEREO FLANGE, INVERTED, NORMAL
E7 WIDE FLANGE, FAST
E8 WIDE FLANGE, SLOW
E9 REVERBERANT FLANGE-STUDIO COMB.

MEMORY BANK #14 STUDIO COMB. FLANGE/REGENERATED

F0 STEREO FLANGE, FAST, REGENERATED
F1 STEREO FLANGE, MEDIUM, REGENERATED
F2 STEREO FLANGE, NORMAL, REGENERATED
F3 STEREO FLANGE, SLOW, REGENERATED
F4 FLANGE, FAST, ASYNC., REGENERATED
F5 FLANGE, MEDIUM-FAST, ASYNC., REGENERATED
F6 FLANGE, MEDIUM, ASYNC., REGENERATED
F7 FLANGE, NORMAL, ASYNC., REGENERATED
F8 FLANGE, SLOW, ASYNC., REGENERATED
F9 FLANGE, REAL SLOW, ASYNC., REGENERATED

MEMORY BANK #15 CHORUS

H0 CHORUS, WIDE, SHORT BASE, MEDIUM
H1 CHORUS, WIDE, SHORT BASE, FAST
H2 CHORUS, WIDE, LONG BASE, SLOW
H3 CHORUS, WIDE, LONG BASE, MEDIUM
H4 CHORUS, WIDE, LONG BASE, FAST
H5 CHORUS, STRETCH #1
H6 CHORUS, STRETCH #2
H7 CHOIR #1
H8 CHOIR #2
H9 REVERBERANT CHORUS-STUDIO COMB.

MEMORY BANK #16 ECHO

J0 ECHOREC, SHORT, 80ms, 70ms, 90ms
J1 ECHOREC, MEDIUM, 100ms, 90ms, 110ms
J2 ECHOREC, LONG, 160ms, 140ms, 180ms
J3 ECHO #1, REGENERATED, 160ms, 80ms
J4 ECHO #2, REGENERATED, 240ms, 120ms
J5 ECHO #3, REGENERATED, 300ms, 150ms
J6 ECHO #4, REGENERATED, 400ms, 200ms
J7 ECHO #5, REGENERATED, 500ms, 250ms
J8 ECHO #6, REGENERATED, 600ms, 300ms
J9 ECHO-VERB

MEMORY BANK #17 STEREO IMAGING

L0 IMAGE #1, SMALL
L1 IMAGE #2, MEDIUM
L2 IMAGE #3, MEDIUM LARGE
L3 IMAGE #4, LARGE
L4 STEREO IMAGE #1
L5 STEREO IMAGE #2
L6 STEREO IMAGE #3
L7 STEREO IMAGE #3
L8 STEREO IMAGE #4
L9 STEREO IMAGE #5

MEMORY BANK #18 DELAY EFX 1

P0 SLAP, 20ms, 30ms
P1 SLAP, 40ms, 30ms
P2 SLAP, 40ms, 50ms
P3 SLAP, 70ms, 60ms
P4 SLAP, 80ms, 100ms
P5 SLAP, 120ms, 100ms
P6 SLAP, 120ms, 140ms
P7 SLAP, 160ms, 140ms
P8 SLAP, 160ms, 180ms
P9 SLAP, 220ms, 200ms

MEMORY BANK #19 STUDIO PRESETS

U0 REVERB WITH DELAY, 2.0sec, 75ms
U1 REVERB WITH DELAY, 1.6sec, 96ms
U2 REVERB WITH DELAY, 1.6sec, 150ms
U3 GATED WITH REVERB
U4 DELAYED, GATED
U5 FLANGER WITH DELAY #1
U6 FLANGER WITH DELAY #2
U7 FLANGER WITH DELAY #3
U8 CHOIR #1 WITH ECHO
U9 CHOIR #2 WITH ECHO

MEMORY BANK #20 STUDIO EFFECTS

Y0	STEREO PAN #1
Y1	STEREO PAN #2
Y2	BOUNCING PAN
Y3	STRAIGHT PAN, RIGHT
Y4	STRAIGHT PAN, LEFT
Y5	PERCUSSIVE FLANGE, FAST
Y6	PERCUSSIVE FLANGE, FAST, DOWN ONLY
Y7	PERCUSSIVE FLANGE, SLOW
Y8	PERCUSSIVE FLANGE, DRONE
Y9	MUTE (BYPASS)

NOTES

APPLICATIONS

The presets found in the ProVerb 200 cover a wide range of diversified reverb sounds and special effects. The following notes provide a starting point for you to use these presets to add that special if not essential sound to your own individual sound.

Though it is not mandatory it is strongly suggested you utilize the stereo capabilities of the ProVerb 200. Many of the reverb patches and delay effects rely heavily on stereo image or right left characteristics to achieve the brilliance and realism found in today's and yesterday's sound!

The most important application of all is to EXPERIMENT! Remember, these are only suggestions as to what may be used for some desirable effects. Your own ideas and expressions may be realized with just a few pushes of a button. Go ahead, have some FUN!

VOCAL EXPRESSION

One of the more important aspects of music is the vocal impression. How you hear the vocals determines the mood and expression of the music. Stereo image, depth and presence all play a major role in this.

You may use just about any reverb setting for vocals! The vocal image plays an important role in the actual sound output though. To make a vocal sound wide and spacious, a wide stereo separation is used. When the decay times are short, as in presets 04, 05, and 08, just the presence is apparent. As you start using larger rooms with longer decays like presets 18, 21, 28 or 33, full rich vocals are the result. Smooth overlapping vocals can be useful to fill in the gap, or provide "cover" for thin sounding vocals. Presets 37, 42, 60 and 70 use an "up front" sound with signal present which melds into a full rich decay when signal is gone. To fatten up a vocal revert to the delay based presets. Do you want that "fifties" slap sound? Presets P0-P9 provide varying degrees of slap for that hard reverb sound. Use presets J0-J2 for hard reverb with regeneration. A full, uncluttered reverb sound can be achieved using gated reverb. A vocal will sound tight yet large, and then cease abruptly. Try Preset A4 for this.

Motion. A vocal that pans back and forth may be attained by using preset F3 or F1 with the MIX control fully to the right. Thick rich vocals that move are made by using H9. Also try out preset U9 which is a chorus with delay for an interesting effect.

KEYBOARD ENHANCEMENT

Do your keyboards sound dead? Add life to your piano sounds with presets 09, L4, L9, 18 and 93. These particular presets will add dimension and sharpness to piano sounds. For additional presence try presets 32, 41, 60 or H9. Preset H9 is a chorus setting with reverb. These use a little bit of decay for a touch of character. Thin strings? Dial up preset 36 for a full yet close sound. To add some depth to the sound try preset 59. For percussive sounds found on your keyboards, image them with short, full decay presets like 17, U3, 31 or A5. For an orchestral hall setting near the stage, try preset 69. For a full "choral" setting try preset U2 or U9.

DRUMS AND PERCUSSION

From short sharp sounds to explosive booming decays, your drums will never sound the same again. Character is the key to drums and reverb. You can add general purpose reverb to your kit using a small room as in preset 23. You may want to deaden the whole sound by using preset 29. Short sharp snare sounds may be made by using any of the image or studio plate presets. Of course, a snare sound that is full and then cut off can be had by experimenting with presets A0-A9. Start with preset A3. Don't stop at just the snare, include a sharp kick or toms too. For expansive sounds without the clutter try presets U0-U3. Just for kicks (no pun intended!), explode into space with long open rooms such as those found in presets 63, 73, 80 and 88. Mood and character is found in the depth of these programs and should be used as an effect. For special effects try the Reverse presets on single hits on the snare and high toms. "Rolls" can be achieved using the longer decay times such as 600ms in preset C4 or Y0. To add a tonal drone to a mixed set go to preset Y8. Unrealistic percussive flanging is done using presets Y5,6, and 7.

GUITAR ENRICHMENT

The most common of effects used for guitar is doubling. Delay presets like P2 and P4 along with chorus presets H2, and H6 will allow you to get this effect. Try preset U9 for the combination of the chorus plus echo for a most interesting effect. Short reverb as in presets 09, 11, 14 and 17 will add depth and character to any guitar. There are a multitude of flanging presets to be tried in presets E0-9 and F0-9. For bass guitar use presets E3-E6. These are inverted flange settings. For image characteristics, use some of the vocal suggestions.

MISCELLANEOUS NOTES

The reverb presets come in a variety of ways, shapes and sounds. Emphasis is placed on different room types, image, position of the perceived sound and the brightness or dullness of the sound. The presets reflect a range of reverb effects with different combinations of these characteristics. The above mentioned presets in the applications are a starting point for actual sound enhancement. Don't be afraid to cycle through a number of presets with the mix control fully wet so you can hear the actual image position or character of the preset. Above all don't be afraid to experiment. Bold expressive sounds are at your fingertips!

ProVerb 200 MIDI System Exclusive message information.

Applies to ProVerb 200 version 2.21, February 25, 1988.

One system exclusive message has been defined for the ART ProVerb. The message allows the loading of the MIDI preset table <MPT> from an external device.

The message (in hex) looks like this:

F0h 1Ah 0xh 02h 00h <127 bytes of preset numbers> F7h

F0h = System exclusive data byte.
1Ah = ART manufacturer's ID number.
0xh = Channel number, 00 - 0Fh.
02h = ProVerb 200 product ID number.
00h = Message ID.
F7h = End of exclusive status byte.

When this message is received by the ProVerb 200, the first 5 bytes must be correct or the ProVerb 200 will ignore any additional Midi messages until the next valid status is received. The Channel number byte must be 00h to 0Fh. If the MIDI CHAN that the ProVerb 200 is currently set to is OMNI (AL), then any number from 00h to 0Fh will be accepted. Otherwise the channel number byte + 1 must match the MIDI CHAN set on the front panel. If the ProVerb 200 has its MIDI CHAN set to {0F}, all messages are ignored.

MIDI Implementation Chart

ART ProVerb version 2.21 February 25, 1988

FUNCTION		TRANSMITTED	RECOGNIZED	REMARKS
Basic Channel	Default Channel	X		
		X	1-16	default is OMNI ON all channels
Mode	Default Messages	X	Mode 1	
	Altered	X	X	
Note		X	X	
Number	True voice	X	X	
Velocity	Note ON	X	X	
	Note OFF	X	X	
Pitch Bender		X	X	
		X	X	

Control

Change

Prog Change	True #	X	0-127	Any preset may be assigned to any program
		X		
System Exclusive		X	0	
System	:Song Pos	X	X	
	:Song Sel	X	X	
Common	:Tune	X	X	
System	:Clock	X	X	
Real Time	Commands	X	X	
Aux	:Local ON/OFF	X	X	
Messages	:All Notes Off	X	X	
	:Active Sense	X	X	
	:Reset	X	X	

Notes

Mode 1: OMNI ON, POLY

Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO

Mode 4: OMNI OFF MONO

0: Yes

1: No