

Front and Rear Panels

I. Mixer Section

1. **PEAK Indicators**

Use these indicators to confirm the correct recording level as set with the INPUT knobs. The indicators are set at the factory to illuminate when the input audio reaches 0 dB. You can change the peak level indicator setting so the indicators illuminate when audio reaches -3 or -6 dB. (p. xx).

2. **INPUT Knobs**

These knobs adjust the sensitivity of the input jacks 1 through 8. Turn the knob fully to the right for mic level (-50dBu) and fully to the left for line level (+4dBu.)

3. **SELECT buttons**

Use these buttons to change settings for the analog inputs, Digital input, Stereo input and Effect Returns. The currently selected channel's indicator will light.

1 - 8:	Input Channels (1 - 8)
DIGITAL:	Digital Input
ST IN:	Stereo Input
EFFECT 1/3 RTN:	Effect 1 and Effect 3 Returns
EFFECT 2/4 RTN:	Effect 2 and Effect 4 Returns

You can assign an Input to be recorded to a Track by holding down the Track's STATUS button, then pressing the desired SELECT button for the input or source you wish to record. The SELECT buttons also allow you to enter alphabetical characters when NUMERICS/ASCII entry is used. (For example, during Song Name, etc.)

4. **TRACK SELECT Buttons**

Use these buttons to change Track mixer settings and to change track channels. The currently selected Track channel's indicator will light. You can assign a Track to be recorded to another Track by holding down the recording track's STATUS button, then pressing the desired SELECT button for the source track you wish to record. (Use this procedure for Track Bouncing). The SELECT buttons also allow you to enter alphabetical characters when NUMERICS/ASCII entry is used. (For example during Song Name, etc.).

5. **STATUS buttons**

Use these buttons to change the status of each track. The color of the button indicates the current status:

Orange:	SOURCE. The input source assigned to the channel is heard.
Blinking Red:	RECORD READY. The track is ready to be recorded. When blinking red, previously recorded material on the track will be heard.
Blinking Red / Orange:	RECORD READY
Solid Red:	RECORDING. Signal is being recorded on that track.
Green:	PLAY. The track will playback.
Off (unlit):	MUTE. The track is muted.
Blinking Red / Green:	PLAY and RECORD. Indicates playback from and record to the same track simultaneously.

You can press and hold a track's STATUS button, and then press a SELECT button, to assign the source chosen by the SELECT button to be recorded to the track.

6. **Channel Faders**

Use these faders to adjust the playback level of each channel.

7. MONITOR Knob

This adjusts the volume level output from the MONITOR jacks.

8. PHONES Knob

This knob adjusts the volume of the headphones jack.

9. AUTOMIX Button

This button turns the AutoMix function on and off. The button lights when AutoMix is on.

10. EZ Routing Button

Press this button to enter the EZ Routing functions.

11. EDIT/SOLO Button

Press this button to display the settings for the master section of the mixer. Press and hold this button and press a SELECT button to use the Solo function.

12. FADER/MUTE Button

Press this button to assign the physical faders to either the Track Mixer (TR) or Input Mixer (IN). The indicator below the button shows the current status of the faders.

13. Master Fader

Use this fader to adjust the stereo mix output level.

II. Recorder Section

1. Graphic Display

This shows various information relating to the VS-1680 during recording, playback, track editing, mixer settings, etc.

2. Function Buttons

These buttons correspond to different mixer commands, editing, and almost all VS-1680 operations. Each function's label appears in the display directly above the button.

3. PAGE(JUMP) Button

This button switches pages for screens which have multiple pages.

When [SHIFT] is held and [PAGE(JUMP)] is pressed, the Locator Jump screen is displayed.

4. PREVIEW Buttons

Use these buttons to hear a preview of audio just before or just after the current time line location.

5. LOCATOR / SCENE Section

This section allows you to store or recall Locators and Markers, and to store and recall mixer Scenes.

PREVIOUS:	Recalls the previous start or end point of a phrase. If pressed with [SHIFT], this button recalls the previous Marker.
NEXT:	Recalls the next start or end point of a phrase. If pressed with [SHIFT], this button recalls the next Marker.
TAP:	Press this button to place a Marker.
BANK:	Press this, then select a Locator button (1-8) to select a Locator Bank.
SCENE:	Press this to store, recall or clear a mixer Scene.
CLEAR:	Press this button to clear Locators, Markers and Scenes.

- NUMERIC/ASCII:** Press this when you want to use the SELECT, STATUS and LOCATOR buttons for text and numeric entry.
- LOCATORS [1] - [8]:** These select a Locator or a Scene (when [SCENE] is lit).

6. Transport Controls

These are used to control the recorder.

- ZERO:** This returns the time line to 00h00m00s00f (Zero Return)
- REW:** The time line is moved back only while this button is held down. Press once to rewind one second.
- FF:** The time line is moved forward only while this button is held down. Press once to fast forward one second
- STOP:** Stops recording or playback of a song.
- PLAY:** Starts recording or playback from the current position
- REC:** Activates track recording.

7. CONTRAST Knob

Use this to adjust the brightness and contrast of the display.

8. VARI PITCH Button

Press this button to change the playback pitch.

9. MIDI/DISK Indicator

This indicator lights green when MIDI messages are being received, and lights red when data is being written or read from the disk drive. If both of these are occurring, the indicator will light orange.

10. EXT SYNC (External Sync) Button

Press this button to select the VS-1680 as a slave to an external MIDI device.

11. CURSORS

Use these buttons to move the cursor in the display.

12. PLAY (DISPLAY) Button

Press this button to return to the Playlist screen (normal playback status.)

13. TIME / VALUE Dial

In normal playback status, this dial moves the position of the time line, based on the position of the cursor in the top of the display. The dial is also used to change values while making edits and changing settings.

14. LOOP Button

This button turns Loop (repeat) playback on and off. If pressed with two locators, the locators determine the section of audio to be looped.

15. AUTO PUNCH Button

This button turns Auto Punch on and off. If pressed with two locators, the locators set the range of time to be recorded during Auto Punch In Recording.

16. UNDO (REDO) Button

Press this button to cancel a recording or a Track or Phrase Edit. If pressed with [SHIFT], this button will cancel the last performed Undo.

17. SHIFT Button

Press and hold this button along with other buttons to access the secondary function of those buttons.

18. ENTER / YES Button

Press this to execute the current operation or to select the current screen.

19. EXIT / NO Button

Press this to cancel the current operation or exit the current screen.

III. Rear Panel

1. Power Switch

This switch turns power of the VS-1680 on and off.

2. AC IN

Connect the included power cable here.

3. SCSI Connector

This is a DB-25 type SCSI connector for connecting drives such as a external hard drive or a CD-R drive.

4. MIDI Connectors

Connect external MIDI devices (MIDI sequencers, MIDI controllers, etc.) here.

IN: This connector receives MIDI messages. Connect it to the MIDI OUT connector of the external MIDI device.

OUT/THRU: This connector can be used as either a MIDI OUT or MIDI THRU jack. With the factory setting, it will function as a MIDI OUT connector, which means it is set to transmit MIDI messages.

5. PHONES Jack

Connect your headphones (not supplied) here. The PHONES jack outputs the same signal as the MONITOR Jack.

6. MONITOR Jacks

(See 9. MASTER Out Jacks)

7. AUX A Jacks

(See 9. MASTER Out Jacks)

8. AUX B Jacks

(See 9. MASTER Out Jacks)

9. MASTER Out Jacks

These are output jacks for analog audio signals (RCA phono type.) With factory settings, all signals are output from the MASTER OUT jacks, and the output of the MONITOR jacks is the same as the MASTER OUT. The signal at the AUX jacks is determined by the settings of the Master Output section and by the settings of each mixer channel.

10. FOOT SWITCH Jack

An optional foot switch (such as the Roland DP-2 or the BOSS FS-5U) can be connected here to control recorder operations, place markers, and punch in and punch out. With the factory settings, the foot switch will start and stop the recorder.

11. Digital Connectors

The VS-1680 accepts both coaxial and optical digital I/O connectors conforming to S/P DIF.

IN: Inputs a stereo digital audio signal. You can select either the coaxial input or the optical input connection.

OUT: Outputs a stereo digital audio signal. Both the coaxial and the optical connectors can be used simultaneously, and each can carry a different signal.

? S/P DIF (Appendices p. 64)

* To record a digital audio signal, certain system settings must be made first. To record or input a digital signal, refer to "Recording Digital Sources" (p. xx)

12. PHANTOM Power Switch

This turns phantom power (+48 Volts) on and off. At the factory this is set to "Off".

? Phantom Power (Appendices p. 64)

* Supplying phantom power to dynamic microphones or audio playback devices may result in damage to your equipment. Thoroughly read the owner's manual for your microphone, and **make sure the phantom power switch is OFF unless you are using a condenser mic that requires phantom power.**

* Switching the phantom power on or off while the VS-1680 is turned on produces a loud noise that can damage amps and speakers. Turn the phantom power on or off only while the VS-1680 is turned off.

13. GUITAR (Hi-Z) Input Jack

(See 15. XLR Inputs)

14. " Balanced Inputs

(See 15. XLR Inputs)

15. XLR Inputs

These are input jacks for analog audio signals. Inputs 1 and 2 are XLR connectors, and inputs 3 through 8 are " phone jacks. The GUITAR (Hi-Z) jack, a " phone type high-impedance jack can be used instead of, but not at the same time as the regular INPUT 8 jack. If cables are connected to both the GUITAR input and the regular INPUT 8 jack, the GUITAR jack will take priority. Use the INPUT knobs to adjust the input sensitivity of each input.