SAFETY PRECAUTIONS

In this manual, symbols are used to highlight warnings and cautions for you to read so that accidents can be prevented. The meanings of these symbols are as follows:

⚠️ **Warning**
This symbol indicates explanations about extremely dangerous matters. If users ignore this symbol and handle the device the wrong way, serious injury or death could result.

⚠️ **Caution**
This symbol indicates explanations about dangerous matters. If users ignore this symbol and handle the device the wrong way, bodily injury and damage to the equipment could result.

Please observe the following safety tips and precautions to ensure hazard-free use of the G2.1u.

### Power requirements
Since power consumption of this unit is fairly high, we recommend the use of an AC adapter whenever possible. When powering the unit from batteries, use only alkaline types.

**AC adapter operation**
- Be sure to use only an AC adapter which supplies 9 V DC, 300 mA and is equipped with a “center minus” plug (Zoom AD-0086). The use of an adapter other than the specified type may damage the unit and pose a safety hazard.
- Connect the AC adapter only to an AC outlet that supplies the rated voltage required by the adapter.
- When disconnecting the AC adapter from the AC outlet, always grasp the adapter itself and do not pull at the cable.
- During lightning or when not using the unit for an extended period, disconnect the AC adapter from the AC outlet.

**Battery operation**
- Use four conventional IEC R6 (size AA) batteries (alkaline).
- The G2.1u cannot be used for recharging.
- Pay close attention to the labelling of the battery to make sure you choose the correct type.
- When not using the unit for an extended period, remove the batteries from the unit.
- If battery leakage has occurred, wipe the battery compartment and the battery terminals carefully to remove all remnants of battery fluid.
- While using the unit, the battery compartment cover should be closed.

### Environmental
To prevent the risk of fire, electric shock or malfunction, avoid using your G2.1u in environments where it will be exposed to:
- Extreme temperatures
- Heat sources such as radiators or stoves

#### Handling
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock

**Warning**
- Never place objects filled with liquids, such as vases, on the G2.1u since this can cause electric shock.
- Do not place naked flame sources, such as lighted candles, on the G2.1u since this can cause fire.
- The G2.1u is a precision instrument. Do not exert undue pressure on the keys and other controls. Also take care not to drop the unit, and do not subject it to shock or excessive pressure.
- Take care that no foreign objects (coins or pins etc.) or liquids can enter the unit.

### Connecting cables and input and output jacks
You should always turn off the power to the G2.1u and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all connection cables and the power cord before moving the G2.1u.

### Alterations
Never open the case of the G2.1u or attempt to modify the product in any way since this can result in damage to the unit.

### Volume
Do not use the G2.1u at a loud volume for a long time since this can cause hearing impairment.

### Electrical interference
For safety considerations, the G2.1u has been designed to provide maximum protection against the emission of electromagnetic radiation from inside the device, and protection from external interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves should not be placed near the G2.1u, as the possibility of interference cannot be ruled out entirely.

With any type of digital control device, the G2.1u included, electromagnetic interference can cause malfunctioning and can corrupt or destroy data. Care should be taken to minimize the risk of damage.

### Cleaning
Use a soft, dry cloth to clean the G2.1u. If necessary, slightly moisten the cloth. Do not use abrasive cleansers, wax, or solvents (such as paint thinner or cleaning alcohol), since these may dull the finish or damage the surface.

Please keep this manual in a convenient place for future reference.

---

**Contents**

1. SAFETY PRECAUTIONS Usage Precautions
2. SAFETY PRECAUTIONS
3. Usage Precautions
4. Features
5. Terms Used in This Manual
6. Controls and Functions / Connections
7. Selecting a Patch
8. Using the Tuner
9. Using the Rhythm Function
10. Editing a Patch
11. Storing/Copying Patches
12. Using the Built-in Expression Pedal
13. Using a foot switch (FS01)
14. Using the G2.1u as audio interface for a computer
15. Restoring Factory Defaults
16. Linking Effects
17. Switching between live sound and direct recording sound
18. How to read the parameter table
19. How to read the parameter table
20. Effect Types and Parameters
21. How to read the parameter table
22. How to read the parameter table
23. How to read the parameter table
24. How to read the parameter table
25. How to read the parameter table
26. How to read the parameter table
27. How to read the parameter table
28. How to read the parameter table
29. How to read the parameter table
30. How to read the parameter table
31. How to read the parameter table
32. How to read the parameter table
33. How to read the parameter table
34. How to read the parameter table
35. G2.1u Preset Pattern

---

**The FCC regulation warning (for U.S.A.)**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
Thank you for selecting the ZOOM G2.1u (hereafter simply called the “G2.1u”). The G2.1u is a multi effect processor with the following features and functions.

- **Latest processing technology for outstanding performance**
  96 kHz / 24 bit sampling (with 32 bit internal processing) assures excellent sound quality. Frequency response remains flat up to 40 kHz, and input-converted signal-to-noise ratio is an amazing 120 dB, demonstrating the high level of performance achieved by the G2.1u. The G2.1u also has a USB connection and can be used as a direct guitar/computer interface.

- **Versatile palette of effects including new creations**
  Out of a total of 54 effects, up to nine (including ZNR) can be used simultaneously. The high-quality choices provided by the G2.1u include distortion effects that simulate the tones of famous amps and effects pedals, 6-band guitar EQ and delay effects with “hold” control operated by foot switch.

- **Great for live performances and direct recording**
  The distortion effect module provides two different algorithms for each of its 17 effect types, one for live performance and one for direct recording. Depending on the on/off setting of the CABINET & MIC effect which simulates amp cabinet sound and mic characteristics, the most suitable algorithm is automatically selected, giving you the best sound for any application.

- **Integrated rhythm functions and auto-chromatic tuner**
  A number of rhythm patterns using realistic PCM drum sounds are provided. This is convenient for use as a metronome during individual practice or to provide a simple rhythm part for a quick session. An auto-chromatic tuner for guitar is also built right into the unit, allowing you to easily tune your instrument also at home or on stage.

- **Sophisticated user interface**
  The combination of a rotary type selector and three parameter knobs make the effect editing process intuitive and quick. The mute interval when switching patches has been reduced to less than 5 milliseconds. Seamless patch changing is now a reality.

- **Dual power supply principle allows use anywhere**
  The G2.1u can be powered from four IEC R6 (size AA) batteries or an AC adapter. Continuous operating time on batteries is approximately 7.5 hours with alkaline batteries.

- **Easy operation with expression pedal and foot switch**
  The expression pedal on the top panel lets you adjust the tonal quality of an effect or the volume in real time.

  An optional expression pedal (FP01/FP02) or foot switch (FS01) can be connected to the CONTROL IN jack. The external expression pedal is used for controlling the volume. The foot switch is convenient for quickly toggling effect programs or for setting the tempo of the rhythm function.

Please take the time to read this manual carefully so as to get the most out of the unit and to ensure optimum performance and reliability.

---

This section explains some important terms that are used throughout the G2.1u documentation.

**Effect module**
As shown in the illustration above, the G2.1u can be thought of as a combination of several single effects. Each such effect is referred to as an effect module. In addition to modules comprising compressor effects (COMP), amp simulator/distortion effects (DRIVE), and modulation/special effects (MOD/SFX), the G2.1u also provides a module for ZNR (ZOOM Noise Reduction). Parameters such as effect intensity can be adjusted for each module individually, and modules can be switched on and off as desired.

**Effect type**
Within some effect modules, there are several different effects which are referred to as effect types. For example, the modulation/SFX effect module (MOD/SFX) comprises chorus, flanger, pitch shifter, delay, and other effect types. Only one of these can be selected at a time.

**Effect parameter**
All effect modules have various parameters that can be adjusted. These are called effect parameters. In the G2.1u, effect parameters are adjusted with the parameter knobs 1 – 3. Similar to the knobs on a compact effect, these change aspects such as tonal character and effect intensity. Which parameter is assigned to each knob depends on the currently selected effect module and effect type.

**Patch**
In the G2.1u, effect module combinations are stored and called up in units referred to as patches. A patch comprises information about the on/off status of each effect module, about the effect type used in each module, and about effect parameter settings. The internal memory of the G2.1u holds up to 80 patches (including 40 patches which allow read/write).

**Bank and area**
A group of ten patches is called a bank. The memory of the G2.1u comprises a total of eight banks, labelled A to d and 0 to 3. Banks A – d form the user area which allows read/write. Banks 0 to 3 are the preset area containing read-only patches. The patches within each bank are numbered 0 through 9. To specify a patch of the G2.1u, you use the format “A1” (patch number 1 from bank A), “06” (patch number 6 from bank 0), etc.

**Play mode/edit mode**
The internal status of the G2.1u is referred to as the operation mode. The two major modes are “play mode” in which you can select patches and use them for playing your instrument, and “edit mode” in which you can modify the effects. The module selector serves for switching between the play mode and edit mode.

---

**Operating the G2.1u on batteries**

1. Turn the G2.1u over and open the cover of the battery compartment on the bottom.
2. Insert four fresh IEC R6 (size AA) batteries.
3. Close the cover of the battery compartment. Push the cover in until the latch audibly snaps into place.

When the batteries are getting low, the indication “bt” appears on the display.
Controls and Functions / Connections

**Module selector**
Switches between play mode and edit mode. In edit mode, the knob selects the module for operation.

**BANK [-]/[+] keys**
In play mode, the keys serve for directly switching to the next lower or higher bank. In edit mode, the keys switch the effect type for the currently selected module.

**[STORE] key**
Serves for storing edited patches in memory.

**[▼]/[▲] foot switches**
These switches are used for selecting patches, switching effect modules on and off, controlling the tuner, and other functions.

**[USB] connector**
Allows you to connect the G2.1u. to a computer, for exchanging audio data. When you plug a cable from this connector into the USB port of the computer, you can use the G2.1u. as an audio interface for the computer.

**[OUTPUT/PHONES] jack**
This stereo phone jack serves for connection to a guitar amplifier or recorder. It is also possible to use a Y cable for sending the output to two amplifiers, or to plug a pair of stereo headphones into this jack.

**Parameter knobs 1 - 3**
These knobs allow changing the level of effect parameters or of the overall patch. During rhythm playback, the knobs let you select a pattern, set the tempo, and adjust the rhythm volume.

**[PEDAL ASSIGN] key**
This key lets you select the function of the built-in expression pedal. The currently selected function is shown by a lit LED.

**[TAP] key**
Allows manual input of time related effect parameter values such as delay time, and rhythm pattern tempo.

**RHYTHM [►]/[■] key**
Serves to start/stop rhythm playback.

**Display**
Shows patch numbers, setting values, and other information about operating the G2.1u.

**Expression pedal**
Lets you adjust the volume or various effect parameters in real time during play.

**[INPUT] jack**
Serves for connecting the guitar.

**[DC IN] jack**
An AC adapter (ZOOM AD-0006) with a rated output of 9 volts DC, 300 mA (center minus plug) can be plugged into this jack.

**[POWER] switch**
Turns the unit on and off.

**[CONTROL IN] jack**
Serves for connection of the optional foot switch (FS01) or expression pedal (FP01/FP02).
Selecting a Patch

To try out the various effects of the G2.1u, we recommend that you simply play your instrument while switching patches.

1 Turn power on
- Use a monaural shielded cable to connect the guitar to the [INPUT] jack of the G2.1u.
- When using the G2.1u with the AC adapter, plug the adapter into the outlet and plug the cable from the adapter into the [DC IN] jack on the G2.1u.
- Set the [POWER] switch on the rear panel of the G2.1u to ON.
- Turn the guitar amplifier on and adjust the volume to a suitable position.

2 Set the G2.1u to play mode
- If the Module selector is set to a position other than "PLAY", set it to "PLAY".
  The bank and patch that were selected when the power was last turned off will appear on the display.

3 Select a patch
- To switch the patch, press one of the [▼]/[▲] foot switches.
  Pressing the [▼] foot switch calls up the next lower patch, and pressing the [▲] foot switch calls up the next higher patch.
  Repeatedly pressing one foot switch cycles through patches in the order A0 – A9 ... d0 – d9 → 00 – 09 ... 30 – 39 → A0, or the reverse order.

4 Directly selecting a bank
- To select the banks A – d, 0 – 3 directly, use the BANK [-]/[+] keys.
  Pressing the BANK [-] key calls up the next lower bank, and pressing the BANK [+] key calls up the next higher bank.

5 Adjust tone and volume
- To adjust the effect sound and volume levels in play mode, the Parameter knobs 1 – 3 can be used. Each knob controls a specific parameter.
  Parameter knob 1
  Adjusts the GAIN parameter of the DRIVE module (mainly distortion depth).
  Parameter knob 2
  Adjusts the PATCH LEVEL parameter (output level of the entire patch).
  Parameter knob 3
  Adjusts the TONE parameter of the DRIVE module (mainly distortion sound character).

When you turn a Parameter knob, the corresponding LED lights up and the display briefly shows the current value of the respective parameter.

NOTE
- If the DRIVE module is set to OFF for the currently selected module (display shows "oF"), Parameter knobs 1 and 2 have no effect.
- Changes made here are temporary and will be lost when you select another patch. To retain the changes, store the patch in the user area.
- The master level in common to all patches is set in edit mode (→ p. 34).
Using the Tuner

The G2.1u incorporates an auto-chromatic tuner. To use the tuner function, the built-in effects must be bypassed (temporarily turned off) or muted (original sound and effect sound turned off).

1 Switch to bypass or mute

- **Setting the G2.1u to the bypass**
  In play mode, press both [▼]/[▲] foot switches together briefly and release.

- **Setting the G2.1u to the mute state**
  In play mode, press both [▼]/[▲] foot switches together and hold for at least 1 second.

**Patch change at bypass/mute**

When you press both [▼]/[▲] foot switches together while playing your instrument, the bypass/mute condition is activated. However, the sound may change momentarily just before the condition is activated. This is because the G2.1u switches to the next higher or lower patch when one of the foot switches is pressed slightly earlier. (When you cancel the bypass/mute condition, the original patch number will be active again.)

This kind of behavior is not a defect. It is due to the very high speed at which the G2.1u responds to patch switching. To prevent the sound change caused by the above condition, do not produce sound with your instrument until the bypass/mute condition is fully established.

2 Play the string to tune

- **Play the open string to tune, and adjust the pitch.**

  A = A  D = D  G = G
  A♯ = A♯  D♯ = D♯  G♯ = G♯
  B = B  E = E
  C = C  F = F
  C♯ = C♯  F♯ = F♯.

  The left side of the display shows the note which is closest to the current pitch.

  The right side of the display shows a symbol that indicates by how much the tuning is off.

3 Adjusting the reference pitch of the tuner

If required, you can fine-adjust the reference pitch of the G2.1u tuner.

- **Turn Parameter knob 1.**
  The current reference pitch is shown. The adjustment range is 35 – 45 (center A = 435 to 445 Hz).

- **While the reference pitch value is shown, turn Parameter knob 1 to adjust it.**

  When you release the Parameter knob, the display indication will return to the previous condition after a while.

4 Return to play mode

- Press one of the [▼]/[▲] foot switches.

   Pitch is high  Pitch is correct  Pitch is low

   Indication turns faster the more the pitch is off

   Tune other strings in the same way.
Using the Rhythm Function

The G2.1u has a built-in rhythm function that plays realistic drum sounds in various patterns. The rhythm function is available in play mode or in the bypass/mute condition.

1. Set the G2.1u to play mode
   - If the Module selector is set to a position other than "PLAY", set it to "PLAY".

2. Start the rhythm function
   - To start the rhythm function, press the RHYTHM [▶/■] key.
   - During rhythm playback, the REVERB module is OFF.

3. Select a rhythm pattern
   The G2.1u has 40 built-in rhythm patterns. For more information on the pattern contents, see the back cover of this manual.
   - To continuously switch rhythm patterns, turn Parameter knob 1.
   - To select the next higher or next lower rhythm pattern, press one of the BANK [-]/[+] keys.

   When the above steps are carried out, the current rhythm pattern number (01 – 40) is briefly shown on the display.

4. Adjust the rhythm volume
   - To adjust the rhythm volume, turn Parameter knob 3.
   - When you turn the Parameter knob, the current setting (0 – 30) is shown on the display.

5. Adjust the tempo
   The rhythm pattern tempo can be adjusted in the range of 40 – 250 BPM (beats per minute).
   - To continuously change the rhythm tempo, turn Parameter knob 2.
   - To manually specify the rhythm tempo, hit the [TAP] key at least three times in the desired interval.

   At the first push of the [TAP] key, the current tempo value is shown on the display. The G2.1u then automatically detects the interval for the second and subsequent keypresses and sets the tempo accordingly.

   While the above steps are carried out, the current tempo value (40 – 250) is shown on the display. For values in the range from 100 to 199, a dot is shown after the first digit. For values of 200 and above, dots are shown after the first and second digits.

6. Stop the rhythm
   - To stop the rhythm, press the RHYTHM [▶/■] key.

   The G2.1u returns to the previous condition.
# Editing a Patch

The patches of the G2.1u can be freely edited by changing the effect parameter settings. Try editing the currently selected patch to create your own sound.

## 1 Select the effect module

- Turn the Module selector to select the effect module to edit. The following settings are available.

1. COMP module
2. WAH/EFX module
3. ZNR module
4. DRIVE module
5. EQ module
6. EXTRA EQ/CABI&MIC module
7. MOD/SFX module
8. DELAY module
9. REVERB module
10. Pedal/foot switch related parameters

When you switch to a different module, the effect type currently selected for that module is shown on the display. While the G2.1u is in edit mode, a dot appears in the bottom right of the display.

![Effect module selection](image)

## 2 To switch an effect module on and off

- To switch the selected module between ON and OFF, press one of the [▼]/[▲] foot switches.

The indication "oF" appears on the display. When you press one of the foot switches again, the indication returns to the previous condition.

![Effect module on/off](image)

## 3 Select the effect type

- To switch the effect type of the selected module, use the BANK [-]/[+] keys.

**NOTE** If you press the BANK [-]/[+] keys for a module that is set to OFF, the module will be turned ON. For modules that have only one effect type, pressing the BANK [-]/[+] keys has no effect.

## 4 Change the parameter value

- To change the setting value of effect parameters, use the Parameter knobs 1 – 3.

Which parameter is assigned to a knob depends on which effect module/effect type is selected. For information on parameters for effect modules/effect types, see page 27 – 34.

When you turn a Parameter knob, the corresponding LED lights up and the display briefly shows the current value of the respective parameter.

![Parameter value change](image)

## 5 Terminate the edit mode

- To terminate the edit mode and return to the play mode, set the Module selector to the "PLAY" position.

**NOTE** When you return to play mode and select another patch, the changes you have made in edit mode will be lost unless you store the patch first. To retain the changes, store the patch as described on page 16.

![Edit mode termination](image)
**Storing/Copying Patches**

An edited patch can be stored in a bank of the user area (A – d). It is also possible to store an existing patch in another location to create a copy.

1. **In play mode or edit mode, press the [STORE] key.**
   - The bank and patch number are shown on the display as a flashing indication.
   - **NOTE** Patches of banks in the preset area (0 – 3) are read-only. No patches can be stored or copied into these locations. If you press the [STORE] key while a patch from the preset area is selected, the patch "A0" (bank A, patch number 0) will be selected automatically as default store/copy target.

2. **Select the store/copy target bank**
   - To select the store/copy target bank, use the BANK [-]/[+] keys.
   - **NOTE** Only a bank of the user area (A – d) can be selected as store/copy target bank.

3. **Specify the store/copy target patch number**
   - To specify the store/copy target patch number, use the [▼]/[▲] foot switches.

4. **Press the [STORE] key once more**
   - When the store/copy process is completed, the G2.1u returns to the previous mode, with the target patch being selected.

5. **To cancel the store process**
   - To cancel the store process, operate the Module selector before pressing the [STORE] key again (3).

---

**To cancel the store process**

To cancel the store process, operate the Module selector before pressing the [STORE] key again (3).

**Press the [STORE] key once more**

When the store/copy process is completed, the G2.1u returns to the previous mode, with the target patch being selected.

**Specify the store/copy target patch number**

To specify the store/copy target patch number, use the [▼]/[▲] foot switches.
Using the Built-in Expression Pedal

The expression pedal on the top panel of the G2.1u lets you adjust the effect sound or the volume in real time during play. Which element is controlled by the pedal can be selected for each patch individually.

1. **Select the patch for which the expression pedal is to be used**

2. **Select the element to be controlled by the expression pedal**
   - Press the [PEDAL ASSIGN] key to select the element to be controlled by the expression pedal. The row of LEDs above the key shows which element is currently selected.
     - **VOLUME**
     - **WAH/EFX**
     - **DRIVE**
     - **MOD/SFX**
     - **DELAY**
     - **REVERB**

The respective selection is indicated as follows.

   - **All LEDs are out**
     The expression pedal has no effect.
   - **VOLUME**
     The expression pedal controls the volume for the entire patch.
   - **WAH/EFX, DRIVE, MOD/SFX, DELAY, REVERB**
     The expression pedal controls a parameter from the respective module.

**HINT**
- Which parameter will be changed by the expression pedal depends on the effect type selected for the respective module. For details, see pages 27 - 33.
- The pattern in which the parameter changes when the expression pedal is operated can be selected in edit mode from four choices. For details, see page 34.
- If the module to which the expression pedal was assigned is set to OFF in the patch, the LED flashes. In this case, operating the expression pedal has no effect.

3. **Operate the pedal**
   - While playing your instrument, move the expression pedal up or down.

4. **To switch a module on or off**
   - When you push the expression pedal fully down, the module selected with the [PEDAL ASSIGN] key is switched on or off.

5. **Store the patch as necessary**
   - The expression pedal setting can be stored for each patch individually.

**NOTE**
If you select another patch in play mode without storing the patch, any changes that you have made to the settings will be lost.
Use of Expression Pedal/Foot Switch

The G2.1u lets you use the built-in expression pedal or an external expression pedal (FP01/FP02) connected to the [CONTROL IN] jack to adjust the effect sound or the volume in real time during play. Connecting an optional foot switch (FS01) to the [CONTROL IN] jack allows changing patches or setting the tempo for the rhythm function.

Using the built-in expression pedal

The built-in expression pedal on the top panel of the G2.1u can function as a volume pedal or it can be used to control an effect parameter in real time. Which function is selected for the expression pedal is stored for each patch individually. For details on parameters that can be modified with the expression pedal, see pages 27 – 33.

1. Select the patch for which you want to use the expression pedal.
2. Set the Module selector to the “CONTROL” position.
3. Turn Parameter knob 1 to select one of the following modulation targets for the expression pedal (→ p. 34).
   - GU, Gd, GH, GL
     DRIVE module
   - MU, Md, MH, ML
     MOD/SFX module
   - dU, dd, dH, dL
     DELAY module
   - rU, rd, rH, rL
     REVERB module

   HINT
   • The modulation target can also be selected by using the [PEDAL ASSIGN] key (→ p. 18). This method is available both in edit mode and in play mode.
   • Which parameter changes when the expression pedal is operated depends on the effect type selected for the module. For details, see pages 27 – 33.
   • The pattern in which the parameter changes when the expression pedal is operated can be selected in edit mode from four choices. For details, see page 34.
4. If necessary, store the patch. The expression pedal setting is stored as part of the patch.
5. Select the patch in play mode and operate the expression pedal. The selected function will be activated. When the G2.1u is in the bypass condition, the expression pedal always functions as a volume pedal, regardless of the setting made in step 3.

Adjusting the sensitivity of the built-in expression pedal

The expression pedal of the G2.1u is adjusted for optimum operation at the factory, but sometimes, readjustment may be necessary. If the sound does not change when the pedal is fully pushed down, or if it changes excessively even if the pedal is only lightly pushed, adjust the pedal as follows.

1. Turn power to the G2.1u on while keeping the [PEDAL ASSGN] key depressed. The indication “dn” appears on the display.
2. With the expression pedal fully raised, press the [STORE] key. The display indication changes to “UP”.
3. Push the expression pedal fully down and then lift your foot off the pedal.
4. Press the [STORE] key once more. The expression pedal adjustment is completed, and the unit returns to the play mode.

HINT
• The point where the module is switched on or off when the pedal is depressed is always the same, regardless of the action taken in step 3.
• If “Er” appears on the display, repeat the procedure from step 2.

Using an external expression pedal (FP01/FP02)

When you connect an optional expression pedal (FP01/FP02) to the [CONTROL IN] jack of the G2.1u, you can use that pedal as a volume pedal, separately from the built-in expression pedal.

1. Plug the cable from the external expression pedal into the [CONTROL IN] jack, and then turn the G2.1u on.
2. Operate the external expression pedal in play mode or edit mode. The volume changes.

HINT
The external expression pedal always functions as a volume pedal.

Using a foot switch (FS01)

Connecting an optional foot switch (FS01) to the [CONTROL IN] jack of the G2.1u allows bank switching in play mode. It is also possible to switch bypass/mute on and off, control the tap tempo function, or perform other functions with the foot switch.

1. Plug the cable from the FS01 into the [CONTROL IN] jack, and then turn the G2.1u on.
2. Set the Module selector to the "CONTROL" position.

The G2.1u goes into edit mode. You can now make settings for the expression pedal or foot switch.

3. Turn Parameter knob 2 to select one of the following functions for the foot switch.

- **bP (bypass/mute)**
  The foot switch controls bypass on/off. This has the same effect as pressing both [▼] or [▲] foot switches at the same time in play mode.

- **tP (tap tempo)**
  Pressing the foot switch repeatedly can be used to set the interval for the rhythm function or to make settings for effect parameters supporting the tap function. This has the same effect as pressing the [TAP] key.

- **bU (bank up)**
  Each push of the foot switch switches to the next higher bank. This has the same effect as pressing the BANK [+ ] key.

- **rH (rhythm on/off)**
  The foot switch controls start/stop of the rhythm function. This has the same effect as pressing the RHYTHM [▶■ ] key.

- **dH (delay hold)**
  The foot switch controls on/off of the delay hold function. When a patch using the hold function is selected, pressing the foot switch will activate hold, causing the current delay sound to be repeated (see illustration at the bottom of this page). Pressing the foot switch once more cancels the hold condition, and the delay sound will decay normally.

- **dM (delay input mute)**
  The foot switch controls muting on/off for the delay module input signal.

**HINT**

- For information on effect parameters supporting the tap function, see pages 27 – 33.
- To use the hold function, an effect type that supports the hold function must be selected in the patch. For details, see page 34.
- While the delay module is set to hold or mute, the dot in the center of the display flashes.

4. Select the patch in play mode and operate the foot switch.

The selected function will be activated. This function applies to all patches.

**Using the G2.1u as audio interface for a computer**

By connecting the [USB] connector of the G2.1u to a computer, the G2.1u can be used as an audio interface with integrated AD/DA converter and effects. The operating environment conditions for this type of use are as follows.

- **Compatible operating system**
  - Windows XP
  - MacOS X (10.2 or later)

- **Quantization**
  16-bit quantization

- **Sampling frequency**
  32 kHz / 44.1 kHz / 48 kHz

**HINT**

With each of the operating systems listed above, the G2.1u will function as an audio interface simply by connecting the USB cable. There is no need to install any special driver software.

To use the G2.1u as an audio interface for the computer, connect the [USB] connector of the G2.1u to a USB port on the computer. The G2.1u will be recognized as an audio interface.

**HINT**

- If the [POWER] switch of the G2.1u is set to OFF, power will be supplied via the USB connection.
- If the [POWER] switch of the G2.1u is set to ON, power will be supplied from the batteries in the G2.1u or the AC adapter. Care should be taken especially when running on battery power, because setting the switch to ON may result in faster depletion of the batteries.

**NOTE**

- Also when using the G2.1u as an audio interface, the signal after effect processing is always available directly at the [OUTPUT] jack.
- If the DAW application has an echo back function (input signal during recording is supplied directly to an output), this must be disabled when using the G2.1u. If recording is carried out with this function enabled, the output signal will sound as if processed by a flanger effect.
- Use a high-quality USB cable and keep the connection as short as possible. If power is supplied to the G2.1u via a USB cable that is more than 3 meters in length, the low voltage warning indication may appear.

![Diagram showing use as audio interface](image)
Restoring Factory Defaults

In the factory default condition, the patches of the user area (A0 – d9) contain the same settings as the patches of the preset area (00 – 39). Even after overwriting the user patches, their original content can be restored in a single operation ("All Initialize" function).

1. Turn the G2.1u on while holding down the [STORE] key.
The indication "AL" appears on the display.

2. To carry out the All Initialize function, press the [STORE] key once more.
All patch settings are returned to the factory default condition, and the unit switches to play mode. To cancel All Initialize, press the RHYTHM [►/■] key instead of the [STORE] key.

NOTE
When you carry out All Initialize, any newly created patches that were stored in the user area will be deleted (overwritten). Perform this operation with care to prevent losing any patches that you want to keep.

Linking Effects

The patches of the G2.1u consist of nine serially linked effect modules, as shown in the illustration below. You can use all effect modules together or selectively use certain modules by setting them to on or off.

Switching between live sound and direct recording sound

In the above illustration, the DRIVE module is shown as having 17 effect types. But each effect type has two algorithms (one for live performance and one for direct recording) for each of its 17 effect types, so that there are actually 34 effect types that can be used.
The two algorithms are switched according to the effect type selected for the EXTRA EQ/CABINET & MIC module, as follows.

- EXTRA EQ is selected
  The algorithm for live performance is selected at the DRIVE module. This is recommended when using the G2.1u for playing via a guitar amplifier.

- CABINET & MIC is selected
  The algorithm for direct recording is selected at the DRIVE module. This is recommended when the G2.1u is directly connected to a recorder, or to a hi-fi system or other audio device.

* Manufacturer names and product names mentioned in this table are trademarks or registered trademarks of their respective owners. The names are used only to illustrate sonic characteristics and do not indicate any affiliation with ZOOM CORPORATION.
Effect Types and Parameters

Effect Types and Parameters

Effect Types and Parameters

How to read the parameter table

Effect parameters 1 – 3
These are the parameters that can be adjusted with Parameter knobs 1 – 3 when the effect type is selected. The setting range for each parameter is shown.

Example: 1 – 98, 1.0 = 1 – 98, 100

Module selector
The Module selector symbol shows the position of the knob at which this module/parameter is called up.

Effect module
Effect type

DELAY module
This is a delay module which allows long delay times and use of the hold function.

dL

DELAY

PINGPONG DELAY
This is a ping-pong type delay where the delay sound alternates between left and right.

EC

ECHO

These three effect types have the same parameters.

TIME
1 – 99,
1.0 – 5.0

FEEDBACK
0 – 98, 1.0

MIX
0 – 98, 1.0

Adjusts the delay time. In the range from 10 – 990 ms, the adjustment is made in 10-ms steps (1 – 99). For 1 second and above, the adjustment is made in 100-ms steps (1.0 – 2.0).

Adjusts the feedback amount. Adjusts the mixing ratio of original sound and effect sound.

HOLD

TAP

DL

PD

EC

Expression pedal
A pedal icon (            ) in the listing indicates a parameter that can be controlled with the expression pedal (FP01/FP02).
Specify the respective module as modulation target for the expression pedal (→ p. 20), and then select the respective effect type of the module. The parameter can then be controlled in real time with a connected expression pedal.

Tap
A [TAP] key icon (            ) in the listing indicates a parameter that can be set by hitting the [TAP] key.
In edit mode, when the respective module/effect type is selected, repeatedly hitting the [TAP] key will set the parameter according to the key press interval (modulation cycle, delay time, etc.).

In play mode, if the DELAY module is ON for the currently selected patch, repeatedly hitting the [TAP] key will temporarily change the parameter.

Hold
A foot switch icon (            ) in the listing indicates an effect type for which hold can be turned on and off with the foot switch (FS01).
Set the foot switch function to “dH” (delay hold) (→ p. 22) for the respective patch. When this patch is then selected in play mode, the hold function can be switched on and off by pressing the foot switch.

COMP

COMP (Compressor) module
Attenuates high-level signal components and boosts low-level signal components, thereby keeping the overall signal level within a certain range.

SENSE
0 – 10

ATTACK
FS, SL

LEVEL
2 – 98, 1.0

Adjusts the compressor sensitivity. Higher setting values result in higher sensitivity.

Selects compressor attack speed in two levels. Available settings are “FS” (fast) and “SL” (slow).

Adjusts the signal level after passing the module.

WAH/EFX

WAH/EFX (Wah/Effects) module
Comprises wah and filter effects as well as VCA type effects.

AW

AUTO WAH
This effect varies wah in accordance with playing intensity.

Ar

AUTO RESONANCE
This effect varies the frequency band of the resonance filter according to the picking intensity.

The two effect types above have the same parameters.

POSITION
bF, AF

SENSE
-10 – -1, 1 – 10

RESONANCE
0 – 10

Selects the connection position of the WAH/EFX module. Available settings are “bF” (before DRIVE module) and “AF” (after EQ/EXTRA EQ module).

Adjusts the effect sensitivity. Adjusts the resonance of the sound.

bS

BOOSTER
Raises signal gain and creates a dynamic sound.

RANGE
1 – 5

TONE
0 – 10

LEVEL
2 – 98, 1.0

Selects the frequency band that is boosted. Adjusts the sound quality. Adjusts the signal level after passing the module.

tr

TREMOLO
This effect periodically varies the volume.

DEPTH
0 – 98, 1.0

RATE
0 – 50

WAVE
u0 – u9, d0 – d9, t0 – t9

Adjusts the modulation depth. Adjusts the effect rate.

Allows selection of the modulation waveform. Available settings are “u” (rising sawtooth), “d” (falling sawtooth), and “t” (triangular). Higher setting values result in more clipping of wave peaks, which reinforces the effect.

PH

PHASER
This effect produces sound with a pulsating character.

POSITION
bF, AF

RATE
0 – 50

COLOR
1 – 4

Selects the connection position of the WAH/EFX module. Available settings are “bF” (before DRIVE module) and “AF” (after EQ/EXTRA EQ module).

Adjusts the modulation rate. Adjusts the type of sound.
Effect Types and Parameters

DRIVE

This effect produces a metallic ringing sound. Adjusting the FREQUENCY parameter results in a drastic change of sound character.

- DRIVE module
  - The rich, clean sound of a classic 1965 Fender Twin Reverb
  - Clean sound of the Vox AC-30 combo amp, operating in Class-A

RING MODULATOR

This module provides 16 types of distortion and an acoustic simulator. Each effect type of the module has two modeling algorithms (for live performance and direct recording).

- US BLUES
  - Crunch sound of a Fender Tweed Deluxe '53
  - Fat sound of the Mesa Boogie MkIII combo amp

- MS DRIVE
  - The High gain sound of a Marshall JCM2000-driven stack
  - High gain sound of Mesa Boogie Dual Rectifier amp channel 2 (vintage mode).

- PV DRIVE
  - The high gain sound of the classic Peavey 5150
  - Simulation of the classic Boss OD-1 overdrive pedal

- OVERDRIVE
  - Simulation of the original classic British fuzz pedal
  - Simulation of the classic Boss Metal Zone pedal famous for long sustain and midrange

- AC
  - This effect makes an electric guitar sound like an acoustic guitar.

- PEDAL VX
  - Simulates a vintage pedal wah sound.

- PEDAL BABY
  - Simulates a vintage pedal wah sound.

- PEDAL GATE
  - This is a noise gate which cuts off the sound during playing pauses.

- ZNR (ZOOM Noise Reduction) module
  - This module serves for reducing noise during playing pauses. It offers a choice between noise reduction (reduction of noise components) and noise gate (muting during pauses).

- ZOOM original noise reduction which reduces noise in playing pauses without affecting the overall tone.

- CLEAR GATE
  - This is a noise gate which cuts off the sound during playing pauses.

- DIRTY GATE
  - This is a vintage type gate with special closing characteristics.

All above effect types have the same parameters.
### Effect Types and Parameters

#### EQ (Equalizer) module

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASS</td>
<td>Adjusts the low frequency range.</td>
<td>±12 160Hz</td>
</tr>
<tr>
<td>MIDDLE</td>
<td>Adjusts the mid frequency range.</td>
<td>±12 800Hz</td>
</tr>
<tr>
<td>TREBLE</td>
<td>Adjusts the high frequency range.</td>
<td>±12 3.2kHz</td>
</tr>
<tr>
<td>EQ</td>
<td>Allows adjusting the three main bands (BASS, MIDDLE, TREBLE) of the six-band equalizer.</td>
<td></td>
</tr>
</tbody>
</table>

#### FL FLANGER

- **DEPTH**: 0 – 98, 1.0
- **RATE**: 0 – 50
- **RESONANCE**: -10 – -1, 0, 1 – 10

This effect produces a resonating and strongly undulating sound.

#### Pt PITCH SHIFTER

- **SHIFT**: -12 – -1, 0, 1 – 12, 24
- **TONE**: 0 – 10
- **MIX**: 0 – 98, 1.0

This effect shifts the pitch of the original sound up or down.

#### PP PEDAL PITCH

- **COLOR**: See Table 1
- **MODE**: UP, dn
- **TONE**: 0 – 10

This effect allows using a pedal to shift the pitch in real time.

#### Table 1

<table>
<thead>
<tr>
<th>COLOR MODE</th>
<th>Pedal minimum value</th>
<th>Pedal maximum value</th>
<th>COLOR MODE</th>
<th>Pedal minimum value</th>
<th>Pedal maximum value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>dy</td>
<td>Co</td>
<td>UP</td>
<td>dy</td>
<td>Co</td>
</tr>
<tr>
<td>dn</td>
<td>0 cent</td>
<td>- ∞</td>
<td>dn</td>
<td>0 cent</td>
<td>- ∞</td>
</tr>
</tbody>
</table>

Selects the type pitch change type effected by the pedal.

#### MOD/SFX(Module/SFX) module

- **MODE**: UP, dn
- **TAP**: Adjusts the modulation depth.
- **MIX**: Adjusts the modulation rate.

This is a stereo chorus with clear sound.

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>0 – 98, 1.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATE</td>
<td>1 – 50</td>
</tr>
<tr>
<td>MIX</td>
<td>Adjusts the level of the effect sound mixed to the original sound.</td>
</tr>
</tbody>
</table>

### ZOOM G2.1u

**FL FLANGER**

- **DEPTH**: 0 – 98, 1.0
- **RATE**: 0 – 50
- **RESONANCE**: -10 – -1, 0, 1 – 10

This effect produces a resonating and strongly undulating sound.

**Pt PITCH SHIFTER**

- **SHIFT**: -12 – -1, 0, 1 – 12, 24
- **TONE**: 0 – 10
- **MIX**: 0 – 98, 1.0

This effect shifts the pitch of the original sound up or down.

**PP PEDAL PITCH**

- **COLOR**: See Table 1
- **MODE**: UP, dn
- **TONE**: 0 – 10

This effect allows using a pedal to shift the pitch in real time.

**Table 1**

<table>
<thead>
<tr>
<th>COLOR MODE</th>
<th>Pedal minimum value</th>
<th>Pedal maximum value</th>
<th>COLOR MODE</th>
<th>Pedal minimum value</th>
<th>Pedal maximum value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>dy</td>
<td>Co</td>
<td>UP</td>
<td>dy</td>
<td>Co</td>
</tr>
<tr>
<td>dn</td>
<td>0 cent</td>
<td>- ∞</td>
<td>dn</td>
<td>0 cent</td>
<td>- ∞</td>
</tr>
</tbody>
</table>

Selects the type pitch change type effected by the pedal.

**MOD/SFX(Module/SFX) module**

- **MODE**: UP, dn
- **TAP**: Adjusts the modulation depth.
- **MIX**: Adjusts the modulation rate.

This effect mixes a variable pitch-shifted component to the original signal, resulting in full-bodied resonating sound.

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>0 – 98, 1.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATE</td>
<td>1 – 50</td>
</tr>
<tr>
<td>MIX</td>
<td>Adjusts the level of the effect sound mixed to the original sound.</td>
</tr>
</tbody>
</table>

**STEREO CHORUS**

- **DEPTH**: 0 – 98, 1.0
- **RATE**: 1 – 50
- **MIX**: Adjusts the level of the effect sound mixed to the original sound.

This is a stereo chorus with clear sound.
<table>
<thead>
<tr>
<th>Effect Types and Parameters</th>
<th>Effect Types and Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TAPE ECHO</strong></td>
<td><strong>TAPE ECHO</strong></td>
</tr>
<tr>
<td>This effect simulates a tape echo.</td>
<td>This effect simulates a tape echo.</td>
</tr>
<tr>
<td><strong>TIME</strong></td>
<td><strong>TIME</strong></td>
</tr>
<tr>
<td>1 – 99, 1.0 – 2.0</td>
<td>1 – 99, 1.0 – 2.0</td>
</tr>
<tr>
<td><strong>FEEDBACK</strong></td>
<td><strong>FEEDBACK</strong></td>
</tr>
<tr>
<td>0 – 98, 1.0</td>
<td>0 – 98, 1.0</td>
</tr>
<tr>
<td><strong>MIX</strong></td>
<td><strong>MIX</strong></td>
</tr>
<tr>
<td>0 – 98, 1.0</td>
<td>0 – 98, 1.0</td>
</tr>
<tr>
<td>Adjusts the delay time. In the range from 10 – 990 ms, the adjustment is made in 10 ms steps (1 – 99). For 1 second and above, the adjustment is made in 100 ms steps (1.0 – 3.0).</td>
<td>Adjusts the delay time. In the range from 10 – 990 ms, the adjustment is made in 10 ms steps (1 – 99). For 1 second and above, the adjustment is made in 100 ms steps (1.0 – 3.0).</td>
</tr>
<tr>
<td>Adjusts the level of the effect sound mixed to the original sound.</td>
<td>Adjusts the level of the effect sound mixed to the original sound.</td>
</tr>
<tr>
<td>Adjusts the feedback amount.</td>
<td>Adjusts the feedback amount.</td>
</tr>
<tr>
<td>This delay module which allows long delay times and use of the hold function.</td>
<td>This delay module which allows long delay times and use of the hold function.</td>
</tr>
<tr>
<td><strong>TIME</strong></td>
<td><strong>TIME</strong></td>
</tr>
<tr>
<td>1 – 99, 1.0 – 5.0</td>
<td>1 – 99, 1.0 – 5.0</td>
</tr>
<tr>
<td><strong>FEEDBACK</strong></td>
<td><strong>FEEDBACK</strong></td>
</tr>
<tr>
<td>0 – 98, 1.0</td>
<td>0 – 98, 1.0</td>
</tr>
<tr>
<td><strong>MIX</strong></td>
<td><strong>MIX</strong></td>
</tr>
<tr>
<td>0 – 98, 1.0</td>
<td>0 – 98, 1.0</td>
</tr>
<tr>
<td>Adjusts the delay time. In the range from 10 – 990 ms, the adjustment is made in 10 ms steps (1 – 99). For 1 second and above, the adjustment is made in 100 ms steps (1.0 – 3.0).</td>
<td>Adjusts the delay time. In the range from 10 – 990 ms, the adjustment is made in 10 ms steps (1 – 99). For 1 second and above, the adjustment is made in 100 ms steps (1.0 – 3.0).</td>
</tr>
<tr>
<td>Adjusts the level of the effect sound mixed to the original sound.</td>
<td>Adjusts the level of the effect sound mixed to the original sound.</td>
</tr>
</tbody>
</table>

### Table 2

<table>
<thead>
<tr>
<th>Setting</th>
<th>Type of scale</th>
<th>Interval</th>
<th>Setting</th>
<th>Type of scale</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>-6</td>
<td>Major scale</td>
<td>Sixth down</td>
<td>3</td>
<td>Major scale</td>
<td>Third up</td>
</tr>
<tr>
<td>-5</td>
<td>Major scale</td>
<td>Fifth down</td>
<td>4</td>
<td>Major scale</td>
<td>Fourth up</td>
</tr>
<tr>
<td>-4</td>
<td>Major scale</td>
<td>Fourth down</td>
<td>5</td>
<td>Major scale</td>
<td>Fifth up</td>
</tr>
<tr>
<td>-3</td>
<td>Major scale</td>
<td>Third down</td>
<td>6</td>
<td>Major scale</td>
<td>Sixth up</td>
</tr>
</tbody>
</table>

### Table 3

<table>
<thead>
<tr>
<th>Setting</th>
<th>Tonic</th>
<th>Setting</th>
<th>Tonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Co</td>
<td>C</td>
<td>F#</td>
</tr>
<tr>
<td>C#</td>
<td>G</td>
<td>G</td>
<td>C</td>
</tr>
<tr>
<td>d</td>
<td>D</td>
<td>Go</td>
<td>Gp</td>
</tr>
<tr>
<td>Co</td>
<td>C#</td>
<td>F</td>
<td>E</td>
</tr>
<tr>
<td>C</td>
<td>Co</td>
<td>F#</td>
<td>E</td>
</tr>
<tr>
<td>F#</td>
<td>F</td>
<td>E</td>
<td>F#</td>
</tr>
<tr>
<td>F</td>
<td>E</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>E</td>
<td>E</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

### Table 4

<table>
<thead>
<tr>
<th>Setting</th>
<th>Type of scale</th>
<th>Interval</th>
<th>Setting</th>
<th>Type of scale</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>-6</td>
<td>Minor scale</td>
<td>Sixth down</td>
<td>3</td>
<td>Minor scale</td>
<td>Third up</td>
</tr>
<tr>
<td>-5</td>
<td>Minor scale</td>
<td>Fifth down</td>
<td>4</td>
<td>Minor scale</td>
<td>Fourth up</td>
</tr>
<tr>
<td>-4</td>
<td>Minor scale</td>
<td>Fourth down</td>
<td>5</td>
<td>Minor scale</td>
<td>Fifth up</td>
</tr>
<tr>
<td>-3</td>
<td>Minor scale</td>
<td>Third down</td>
<td>6</td>
<td>Minor scale</td>
<td>Sixth up</td>
</tr>
</tbody>
</table>

### Table 5

<table>
<thead>
<tr>
<th>Setting</th>
<th>Tonic</th>
<th>Setting</th>
<th>Tonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>E</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>F#</td>
<td>F#</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>E</td>
<td>E</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

### Table 6

<table>
<thead>
<tr>
<th>Setting</th>
<th>Type of scale</th>
<th>Interval</th>
<th>Setting</th>
<th>Type of scale</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>-6</td>
<td>Major scale</td>
<td>Sixth down</td>
<td>3</td>
<td>Major scale</td>
<td>Third up</td>
</tr>
<tr>
<td>-5</td>
<td>Major scale</td>
<td>Fifth down</td>
<td>4</td>
<td>Major scale</td>
<td>Fourth up</td>
</tr>
<tr>
<td>-4</td>
<td>Major scale</td>
<td>Fourth down</td>
<td>5</td>
<td>Major scale</td>
<td>Fifth up</td>
</tr>
<tr>
<td>-3</td>
<td>Major scale</td>
<td>Third down</td>
<td>6</td>
<td>Major scale</td>
<td>Sixth up</td>
</tr>
</tbody>
</table>

### Table 7

<table>
<thead>
<tr>
<th>Setting</th>
<th>Tonic</th>
<th>Setting</th>
<th>Tonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>E</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>F#</td>
<td>F#</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>E</td>
<td>E</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
Effect Types and Parameters

### CONTROL module

Serves for making pedal settings and lets you control the foot switch function and master level setting applying to all patches.

#### RTM DESTINATION

See Table 4

When an expression pedal (FP01/FP02) is connected to the [CONTROL IN] jack, this selects the modulation target module for the RTM function (See Table 4).

#### FS

See Table 5

When a foot switch (FS01) is connected to the [CONTROL IN] jack, this selects the function that can be operated with the foot switch (See Table 5). The function selected here applies to all patches.

#### MASTER LEVEL

0 – 99.1.0

Adjusts the master level for all patches.

---

### Table 4

<table>
<thead>
<tr>
<th>Setting</th>
<th>Modulation target</th>
</tr>
</thead>
<tbody>
<tr>
<td>of</td>
<td>OFF</td>
</tr>
<tr>
<td>VL</td>
<td>Volume</td>
</tr>
<tr>
<td>WL, Wd, WH, WL</td>
<td>WAH/EFX module (*)</td>
</tr>
<tr>
<td>GL, Gd, GH, GL</td>
<td>DRIVE module (*)</td>
</tr>
<tr>
<td>MU, Md, MH, ML</td>
<td>MOD/SFX module (*)</td>
</tr>
<tr>
<td>dU, dd, dh, dl</td>
<td>DELAY module (*)</td>
</tr>
<tr>
<td>rU, rd, rh, rl</td>
<td>REVERB module (*)</td>
</tr>
</tbody>
</table>

The operation of modules denoted by (*) changes as follows, according to the letter at right.

#### UP

The parameter is at minimum when the pedal is fully raised and at maximum when the pedal is fully pushed down.

#### DOWN

The parameter is at maximum when the pedal is fully raised and at minimum when the pedal is fully pushed down.

#### HIGH

When the pedal is fully raised, the parameter is at the value set in the patch. When the pedal is fully pushed down, the parameter is at maximum.

#### LOW

When the pedal is fully raised, the parameter is at minimum. When the pedal is fully pushed down, the parameter is at the value set in the patch.

---

### Table 5

<table>
<thead>
<tr>
<th>Setting</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>bP</td>
<td>Bypass/Mute</td>
</tr>
<tr>
<td>tp</td>
<td>Tap tempo</td>
</tr>
<tr>
<td>bU</td>
<td>Bank up</td>
</tr>
<tr>
<td>rH</td>
<td>Rhythm function on/off</td>
</tr>
<tr>
<td>dH</td>
<td>Delay hold</td>
</tr>
<tr>
<td>dM</td>
<td>Delay mute</td>
</tr>
</tbody>
</table>

---

### Specifications

#### Effect types
54

#### Effect modules
Max. 9 simultaneous modules

#### Patches
User area: 10 patches x 4 banks
Preset area: 10 patches x 4 banks

#### Sampling frequency
96 kHz

#### A/D converter
24 bit, 64 times oversampling

#### D/A converter
24 bit, 128 times oversampling

#### Signal processing
32 bit

#### Frequency response
20 Hz – 40 kHz +1 dB -3 dB (with 10 kilohms load)

#### Display
2-digit 7-segment LED

#### Parameter LEDs, Pedal assign LEDs

#### Input

- Rated input level
  - Standard mono phone jack
- Input impedance
  - 20 dBm
- 1 megohm

#### Output

- Maximum output level
  - Line: +5 dBm (output load impedance 10 kilohms or more)
  - Phones: 20 mW + 20 mW (into 32 ohms load)

#### Control input

USB interface
- PC interface:
  - 16-bit (stereo configuration for recording/playback)
- Sampling frequency:
  - 44.1 kHz, 48 kHz

#### Power requirements

- AC adapter
  - 9 V DC, 300 mA (center minus plug) (ZOOM AD-0006)
- Batteries
  - Four IEC R6 (size AA) batteries
  - Approx. 7.5 hours continuous operation (alkaline batteries)
- Dimensions
  - 165 mm (D) x 255 mm (W) x 79mm (H)
- Weight
  - 1100 g (without batteries)
- Options
  - Expression pedal FP02/ Foot switch FS01

#### Troubleshooting

- **No power**
  - Refer to “Turn power on” on page 8.

- **Reverb effect does not operate**
  - While a rhythm pattern is playing, the reverb effect is not available. Stop the rhythm pattern first (→ p. 12).

- **High level of noise**
  - Is ZOOM AC adapter being used? Be sure to use only adapter for 9 V DC, 300 mA with center minus plug (ZOOM AD-0006).

- **Battery life is short**
  - Are manganese batteries being used? The use of alkaline batteries is recommended.
## G2.1u Preset Pattern

<table>
<thead>
<tr>
<th>#</th>
<th>PatternName</th>
<th>TimSig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8beat_1</td>
<td>4/4</td>
</tr>
<tr>
<td>2</td>
<td>8beat_2</td>
<td>4/4</td>
</tr>
<tr>
<td>3</td>
<td>8beat_3</td>
<td>4/4</td>
</tr>
<tr>
<td>4</td>
<td>8shuffle</td>
<td>4/4</td>
</tr>
<tr>
<td>5</td>
<td>16beat_1</td>
<td>4/4</td>
</tr>
<tr>
<td>6</td>
<td>16beat_2</td>
<td>4/4</td>
</tr>
<tr>
<td>7</td>
<td>16shuffle</td>
<td>4/4</td>
</tr>
<tr>
<td>8</td>
<td>ROCK</td>
<td>4/4</td>
</tr>
<tr>
<td>9</td>
<td>HARD</td>
<td>4/4</td>
</tr>
<tr>
<td>10</td>
<td>METAL_1</td>
<td>4/4</td>
</tr>
<tr>
<td>11</td>
<td>METAL_2</td>
<td>4/4</td>
</tr>
<tr>
<td>12</td>
<td>THRASH</td>
<td>4/4</td>
</tr>
<tr>
<td>13</td>
<td>PUNK</td>
<td>4/4</td>
</tr>
<tr>
<td>14</td>
<td>DnB</td>
<td>4/4</td>
</tr>
<tr>
<td>15</td>
<td>FUNK_1</td>
<td>4/4</td>
</tr>
<tr>
<td>16</td>
<td>FUNK_2</td>
<td>4/4</td>
</tr>
<tr>
<td>17</td>
<td>HIPHOP</td>
<td>4/4</td>
</tr>
<tr>
<td>18</td>
<td>R'nR</td>
<td>4/4</td>
</tr>
<tr>
<td>19</td>
<td>POP_1</td>
<td>4/4</td>
</tr>
<tr>
<td>20</td>
<td>POP_2</td>
<td>4/4</td>
</tr>
<tr>
<td>21</td>
<td>POP_3</td>
<td>4/4</td>
</tr>
<tr>
<td>22</td>
<td>DANCE_1</td>
<td>4/4</td>
</tr>
<tr>
<td>23</td>
<td>DANCE_2</td>
<td>4/4</td>
</tr>
<tr>
<td>24</td>
<td>DANCE_3</td>
<td>4/4</td>
</tr>
<tr>
<td>25</td>
<td>DANCE_4</td>
<td>4/4</td>
</tr>
<tr>
<td>26</td>
<td>3per4</td>
<td>3/4</td>
</tr>
<tr>
<td>27</td>
<td>6per8</td>
<td>3/4</td>
</tr>
<tr>
<td>28</td>
<td>5per4_1</td>
<td>5/4</td>
</tr>
<tr>
<td>29</td>
<td>5per4_2</td>
<td>5/4</td>
</tr>
<tr>
<td>30</td>
<td>LATIN</td>
<td>4/4</td>
</tr>
<tr>
<td>31</td>
<td>BALLAD_1</td>
<td>4/4</td>
</tr>
<tr>
<td>32</td>
<td>BALLAD_2</td>
<td>3/4</td>
</tr>
<tr>
<td>33</td>
<td>BLUES_1</td>
<td>4/4</td>
</tr>
<tr>
<td>34</td>
<td>BLUES_2</td>
<td>3/4</td>
</tr>
<tr>
<td>35</td>
<td>JAZZ_1</td>
<td>4/4</td>
</tr>
<tr>
<td>36</td>
<td>JAZZ_2</td>
<td>3/4</td>
</tr>
<tr>
<td>37</td>
<td>METRO_3</td>
<td>3/4</td>
</tr>
<tr>
<td>38</td>
<td>METRO_4</td>
<td>4/4</td>
</tr>
<tr>
<td>39</td>
<td>METRO_5</td>
<td>5/4</td>
</tr>
<tr>
<td>40</td>
<td>METRO</td>
<td></td>
</tr>
<tr>
<td>Name of patches</td>
<td>Description</td>
<td>Key effect</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>VINTAGE</strong></td>
<td>This patch is modeled after the powerful sound which was the audience favorite of their popular amplifier. You may want to play with this sound for all your heavy metal and hard rock needs. <strong>Reference mode</strong></td>
<td>CHORUS</td>
</tr>
<tr>
<td><strong>LEXICON</strong></td>
<td>This patch is modeled after the British sound quality of our G2's signal processing technology with a clean and clear chord and delay patch. Try to see for yourself in popular rock and roll with your favorite guitar player. <strong>Reference mode</strong></td>
<td>MS</td>
</tr>
<tr>
<td><strong>FENDER</strong></td>
<td>This patch is based on the legendary Fender Twin Reverb and is suitable for the hard playing of modern punk rock guitar style. This is the sound of Fender's twin tubes as seen in your favorite guitar player. <strong>Reference mode</strong></td>
<td>FENDER CLEAN</td>
</tr>
<tr>
<td><strong>METAL</strong></td>
<td>A straightforward recording of the sound of the Fender Twin Reverb and is suitable for the hard playing of modern punk rock guitar style. This is the sound of Fender's twin tubes as seen in your favorite guitar player. <strong>Reference mode</strong></td>
<td>METAL</td>
</tr>
<tr>
<td><strong>FENDER CLEAN</strong></td>
<td>This patch is the simulation of the legendary Twin Reverb cabinet used by the band during their early days. The patch can provide high gain and the realism of the monitor. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>FENDER CLEAN</td>
</tr>
<tr>
<td><strong>POWER BY</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>POWER BY</td>
</tr>
<tr>
<td><strong>BREATHE TAKE</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>BREATHE TAKE</td>
</tr>
<tr>
<td><strong>MUTE</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>MUTE</td>
</tr>
<tr>
<td><strong>ORANGE CRUSH</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>ORANGE CRUSH</td>
</tr>
<tr>
<td><strong>ACOUSTIC</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>ACOUSTIC</td>
</tr>
<tr>
<td><strong>BASS</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>BASS</td>
</tr>
<tr>
<td><strong>EVERGREEN</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>EVERGREEN</td>
</tr>
<tr>
<td><strong>CLASS A</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>CLASS A</td>
</tr>
<tr>
<td><strong>BIG MOUTH</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>BIG MOUTH</td>
</tr>
<tr>
<td><strong>WAVE GON</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>WAVE GON</td>
</tr>
<tr>
<td><strong>STAFF</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>STAFF</td>
</tr>
<tr>
<td><strong>HEAVEN</strong></td>
<td>This patch is modeled after the classic Fender Twin Reverb sound of the '60s. It is ideal for the simulation of a clean and warm sound. The addition of the choice effect using the expression pedal will enable the guitar player to adapt to virtually any musical situations. <strong>Reference mode</strong></td>
<td>HEAVEN</td>
</tr>
</tbody>
</table>
The very first Fender amplifier was developed by Leo Fender and his trusty partner, the original Don Kaufman in 1946. Actually, the company's name, Fender, is derived from the full form of “Fender’s bass guitar”. The “Blackface” design was invented in 1954. In 1955, the company introduced a new line of black-finish guitars, which would become known as the “Blackface” series. These guitars were the first to display the iconic Fender logo on the headstock.

The early 1960s were a time of rapid growth for Fender. In 1961, the company introduced the “Twin Reverb” model, which was a major milestone in the history of Fender amplifiers. The “Twin Reverb” had a powerful 100-watt output and was capable of producing a wide range of sounds, from clean and crunchy to thick and wooly. It was also the first Fender amplifier to feature reverb and chorus effects, which were originally developed for use on stage with live bands.

Fender’s success continued to grow throughout the 1960s and 1970s, with the introduction of new models and features that continued to push the boundaries of what could be achieved with an amplifier. The “Marshall JCM2000” was introduced in 1988 and became one of the most popular models in the company’s history. It was designed to be a versatile and powerful amplifier, capable of producing a wide range of sounds and effects.

The 1980s and 1990s saw the introduction of many new models and features, including the “Marshall JVM” series, which became one of the company’s most popular models. The JVM series was known for its powerful output and its ability to produce a wide range of sounds, from clean and crisp to thick and wooly.

In the 2000s, Fender continued to innovate, with the introduction of new models like the “Marshall JCM900” and the “Marshall JTM45”. These models continued to push the boundaries of what could be achieved with an amplifier, and they remain some of the most popular models in the company’s history today.

In conclusion, Fender has been a leader in the world of amplifiers for over 70 years, and its success is a testament to the company’s commitment to innovation and quality. From its early days with the “Blackface” series to its modern-day models like the “Marshall JCM2000”, Fender has continued to push the boundaries of what can be achieved with an amplifier, and its success is a testament to the company’s commitment to quality and innovation.
To connect the G2.1u to a computer running Windows XP and to enable audio input/output, proceed as follows.

1. Install Cubase LE on the computer.
   - When you insert the CD-ROM supplied with this product into the CD-ROM drive of the computer, the installer will start up automatically. Follow the on-screen instructions to install Cubase LE.

2. Connect the G2.1u to the computer using a USB cable.
   - Insert the CD-ROM supplied with this product into the CD-ROM drive of the Macintosh computer.

3. Start Cubase LE.
   - A window asking whether to check the audio input/output port appears. Click OK to perform the check.

4. After Cubase LE has started up, access the "Devices" menu, select "Device Setup..." and click "VST Multitrack" in the list of devices.

5. Click the "Control Panel" button in the device setup window.
   - In the advanced options window, check whether "USB Audio CODEC" is selected as ASIO driver in the right part of the device setup window.

6. Connect the G2.1u to the computer using a USB cable.
   - When the [POWER] switch of the G2.1u is ON, the unit will be powered via the USB cable (bus power). This is convenient when no AC adapter or batteries are available or when the batteries are exhausted.

---

This USB/Cubase LE Startup Guide explains how to install Cubase LE on a computer, how to make the G2.1u connection and settings, and how to record your guitar play.
Cubase LE Installation Windows XP MacOS X

Connections and Preparations

Recording with Cubase LE

To start recording, click the Record button in the transport panel.

As you play your guitar, the waveform appears in real time in the project window.

To stop recording, click the Stop button in the transport panel.

Recording stops.

Check the recorded content.

To play the recording, perform the following steps.

HINT
- When the Record Standby button is enabled, the level meter next to the fader shows the input level for the audio track. When the button is disabled, the output level for the audio track is shown.

HINT
- When the audio track is in recording standby mode, its recording level is shown by the level meter for the assigned channel. The level should be set in such a way that the meter registers to a fairly high value but remains below the maximum point.

For optimum enjoyment
- While using Cubase LE, other applications may slow down drastically or the message “Cannot synchronize with USB audio interface” may appear. If this happens frequently, consider taking the following steps to optimize the operation conditions for Cubase LE:
  1. Shut down other applications besides Cubase LE. In particular, check for resident software and utilities.
  2. Reduce plug-ins (effects, instruments) used by Cubase LE. When there is a high number of plug-ins, the computer’s processing power may not be able to keep up. Reducing the number of tracks for simultaneous playback can also be helpful.
  3. Power the G2.1u from an AC adapter.

When powered via the USB port, the current supply may sometimes fluctuate, leading to problems. See if using an AC adapter improves operation.

If applications still run very slowly or the computer itself does not function properly, disconnect the G2.1u from the computer and shut down Cubase LE. Then reconnect the USB cable and start Cubase LE again.

To create a new audio track, access the “Project” menu and select “Add track”. In the submenu that appears, select “Audio”.

A new audio track is added to the project window.

HINT
- You can add several tracks at once by accessing the “Project” menu, selecting “Add track” and then selecting “Multiple…” in the submenu.

Connect the guitar to the [INPUT] jack of the G2.1u and select the desired patch.

The sound selected here will be recorded on the computer via the [USB] port.

Access the “Devices” menu and select “VST Inputs”.

The VST inputs window appears.

This window shows the available input ports and their active/inactive status.

You can perform the following steps here:

1. When there are multiple input ports, drag here to enlarge the window.

2. Verify that the Active button for USB Audio CODEC 1/2 (USB Audio CODEC L/R on MacOS X) is enabled (not grayed out). If the button is grayed out, click the button to enable it.

3. Verify that the Record Standby button is shown in red. If the button is grayed out, click the button to enable it. This will set the audio track to the recording standby condition.

4. Verify that the Monitoring On button is shown in red. (If the button is grayed out, click the button to enable it. This will set the audio track to the recording standby condition.)

The new project window appears. Here you can select a project template.

Make sure that the “Empty” template is selected, and click the OK button.

A window for selecting the project file save location appears.

After specifying the project file save location (such as the desktop), click the OK button (Choose button in MacOS 10.4).

A new project is created, and the project window for controlling most of the Cubase LE operations appears.

Access the “Devices” menu and select “Mixer”.

The mixer window appears.

This window shows the channels assigned to created tracks.

You can perform the following steps here:

1. To adjust the playback level after recording, click this button to bring up the master channel of the mixer.

2. Click here to set the port for the USB Audio CODEC 1/2 (USB Audio CODEC L/R on MacOS X) assigned as audio input port to the channel (see step 13).

Make the following settings for the new audio track.

1. Drag the audio track boundary to the right to display all buttons.

2. Verify that the Monitoring On button is Off (grayed out). If the button is On, click the button to turn it Off.

3. Click the Stereo/Mono button to set the audio track to Stereo. When the button is not grayed out and has changed from [       ] to [       ], the track is active as a stereo track.

4. Click here to set the audio output port of the master channel to “USB Audio CODEC”.

You can perform the following steps here:

1. Go to beginning of project

2. Use the controls on the transport panel to move to the beginning of the project.

3. Click the Play button in the transport panel to start playback.

HINT
- If no sound is heard when you click the Play button after recording, check the settings in the VST input window (step 13) and the master channel output port setting (step 15) once more.

For optimum enjoyment
- While using Cubase LE, other applications may slow down drastically or the message “Cannot synchronize with USB audio interface” may appear. If this happens frequently, consider taking the following steps to optimize the operation conditions for Cubase LE:
  1. Shut down other applications besides Cubase LE. In particular, check for resident software and utilities.
  2. Reduce plug-ins (effects, instruments) used by Cubase LE. When there is a high number of plug-ins, the computer’s processing power may not be able to keep up. Reducing the number of tracks for simultaneous playback can also be helpful.
  3. Power the G2.1u from an AC adapter.

When powered via the USB port, the current supply may sometimes fluctuate, leading to problems. See if using an AC adapter improves operation.

If applications still run very slowly or the computer itself does not function properly, disconnect the G2.1u from the computer and shut down Cubase LE. Then reconnect the USB cable and start Cubase LE again.

To create a new audio track, access the “Project” menu and select “Add track”. In the submenu that appears, select “Audio”.

A new audio track is added to the project window.

HINT
- You can add several tracks at once by accessing the “Project” menu, selecting “Add track” and then selecting “Multiple…” in the submenu.

Connect the guitar to the [INPUT] jack of the G2.1u and select the desired patch.

The sound selected here will be recorded on the computer via the [USB] port.
This USB/Cubase LE 4 Startup Guide explains how to install Cubase LE 4 on a computer, make connections and settings for this unit, and perform recording.

**To connect this unit to a computer running Windows Vista (or Windows XP) and to enable audio input/output, proceed as follows.** The installation description uses Windows Vista as an example.

1. **Download the latest ASIO driver from the web site of ZOOM Corporation (http://www.zoom.co.jp) and install the driver.**
   - The ASIO driver software is required to enable use of Cubase LE 4 for audio input and output with a computer. Refer to the read_me file included in the download package for instructions on how to install the driver correctly.

2. **Insert the supplied “Cubase LE 4” DVD-ROM into the DVD drive of the computer, and perform the installation steps.**
   - When you insert the DVD-ROM, a screen asking what you want to do appears. Select “Open folder to view files” and when the contents of the DVD-ROM are shown, open the “Cubase LE 4 for Windows” folder by double-clicking on it, and then double-click the executable Setup (“Setup.exe”) file to start the installation process.

3. **Connect this unit to the computer using a USB cable.**
   - Insert the supplied “Cubase LE 4” DVD-ROM into the DVD drive of the Macintosh.
   - Start Cubase LE 4. Then access the “Devices” menu, select “Device Setup...” and click “VST Audio System”.

4. **Bring up the “Sound” window from the Control Panel and make the input device setting for the computer.**
   - To bring up the “Sound” window, select “Control Panel” from the Start menu and click “Hardware and Sound”, then click “Sound”.

5. **The device indication in the left section of the window now shows “ZOOM ASIO Driver” as the ASIO driver.**
   - Click on this indication to select it, and then click the “Control Panel” button in the right section of the Device Setup window.

**NOTE**
- If nothing happens when you insert the DVD-ROM, open the Start menu and click “Hardware and Sound”, then click “Sound” window. Check whether “USB Audio CODEC” is selected as default input/default output.

**HINT**
- If you monitor the audio signal during recording via the audio output of the computer, there will be an audible delay. Be sure to use the [OUTPUT] jack of this unit to monitor the signal.

6. **When the installation of Cubase LE 4 is complete, a screen appears asking about installation of activation (software license authentication) management software.** Install this software, because it is required for registering Cubase LE 4.

7. **Download the latest ASIO driver from the web site of ZOOM Corporation (http://www.zoom.co.jp) and install the driver.**
   - The ASIO driver software is required to enable use of Cubase LE 4 for audio input and output with a computer. Refer to the read_me file included in the download package for instructions on how to install the driver correctly.

8. **Insert the supplied “Cubase LE 4” DVD-ROM into the DVD drive of the Macintosh.**
   - When the contents of the DVD-ROM appear, open the “Cubase LE4” icon shown on the desktop.

9. **Start Cubase LE 4. Then access the “Devices” menu, select “Device Setup...” and click “VST Audio System”.**
   - To start Cubase LE 4, double-click the Cubase LE 4 shortcut icon that was created on the desktop. After startup, select “ZOOM ASIO Driver” as the ASIO driver in the right section of the Device Setup window. When you change the ASIO driver selection, a confirmation message appears. Click the “Switch” button.

10. **Connect this unit to the computer using a USB cable.**
    - Simply disconnect the USB cable from the computer.

11. **If another item is selected, use the pull-down menu to change the selection to “USB Audio CODEC”.**
    - When the setting has been made, close Audio MIDI Setup.

12. **Start Cubase LE 4. Then access the “Devices” menu, select “Device Setup...” and click “VST Audio System”.**
    - To start Cubase LE 4, double-click the Cubase LE 4 icon that was placed in the “Applications” folder during installation. After startup, be sure to verify that “USB Audio CODEC (2)” is selected as ASIO driver in the right section of the Device Setup window.

**NOTE**
- Use a high-quality USB cable and keep the connection as short as possible. If USB bus power is supplied to this unit via a USB cable that is more than 3 meters in length, the low voltage warning indication may appear.

**HINT**
- No special steps are necessary for canceling the USB connection. Simply disconnect the USB cable from the computer.

When you connect this unit for the first time to a computer running Windows Vista, a message saying “New Hardware Found” will appear. Before proceeding, wait a while until this message disappears.

Continued overleaf
Continued from front

6. From the “Devices” menu of Cubase LE 4, select “VST Connections” and select the device containing the string “Zm In (Out)” (USB Audio CODEC for MacOS X) as input and output port.

Use the tab at top (top center for Mac OS X) left to switch between input and output, and verify that “Zm In (Out)” is selected as device port. If another device is selected, click the device port field and change the selection.

7. Access the “File” menu and select “New Project”.

The new project window appears. Here you can select a project template.

8. Make sure that the “Empty” template is selected, and check the OK button.

A window for selecting the project file save location appears.

9. After specifying a suitable project file save location, check the OK button (Choose button in MacOS X).

A new project is created, and the project window for controlling most of the Cubase LE 4 operations appears.

New audio track

10. To create a new audio track, access the “Project” menu and select “Add Track”. In the submenu that appears, select “Audio”.

The Add Track window for specifying the number of audio tracks and the stereo/mono setting appears.

In this example, select the number of tracks to “1” and select stereo, then click the OK button. A new stereo audio track is added to the project window.

11. Make the following settings for the newly created audio track.

If the Inspector is not shown, click here to toggle the Inspector show/hide setting.

Select the input/output path for the track. (The path name assigned to this unit in step 6 is shown here.) To select a different path, click this section and select a new path from the menu that appears.

Make sure that the “Empty” template is selected, and verify the window is being shown.

12. Connect the guitar or other instrument to the [INPUT] jack of this unit and select the desired patch.

The mixer window appears.

The mixer window shows the channel assigned to the created track, and the master channel.

Perform the following steps here.

Mixer window

13. When the recording level has been adjusted, click the monitoring button to disable it.

The input level is no longer shown on the meter, and the signal returned to this unit via the computer is muted. In this condition, only the signal before sending to the computer can be monitored via the [OUTPUT] jack of this unit.

14. Verify that the transport panel is being shown.

If the transport panel is not shown, access the “Transport” menu and select “Transport Panel”.

To start recording, click the Record button in the transport panel.

HINT

When the monitoring button is enabled, the level meter next to the fader shows the input level to the audio track. When the monitoring button is disabled, the meter fader shows the audio track output level.

While playing your instrument, adjust the output level of this unit to achieve a suitable recording level for Cubase LE 4.

The recording level for Cubase LE 4 can be checked with the level meter for the channel that is assigned to the recording standby track. Set the level as high as possible without causing the meter to reach the end of the scale.

To adjust the level, do not use the fader of Cubase LE 4. Instead, change the recording level and gain settings at this unit.

NOTE

While the monitoring button is enabled, the direct signal input to this unit and the signal routed to the computer and then returned to this unit will be output simultaneously from this unit, causing a fanger-like effect in the sound. To accurately monitor the sound while adjusting the recording level, temporarily set the output device port for the VST connection (step 6) to “Not Connected”.

The level meter as in the above illustration shows the signal level after processing in this unit. When you plug a guitar string the meter may register with a slight delay, but this is not a defect.

While using Cubase LE 4, other applications may slow down drastically or a message such as “Cannot synchronize with USB audio interface” may appear. If this happens frequently, consider taking the following steps to optimize the operation conditions for Cubase LE 4.

1. Shut down other applications besides Cubase LE 4.

In particular, check for resource consuming software and other utilities.

2. Reduce plug-ins (effects, instruments) used by Cubase LE 4.

When there is a high number of plug-ins, the computer’s processing power may not be able to keep up. Reducing the number of tracks for simultaneous playback can also be helpful.

3. Power the unit from an AC adapter.

If applications still run very slowly or the computer itself does not function properly, disconnect this unit from the computer and shut down Cubase LE 4. Then reconnect the USB cable and start Cubase LE 4 again.

HINT

If no sound is heard when you click the Play button after recording, check the VST connection settings (step 6) once more.

NOTE

To continue using Cubase LE 4, a process called activation (license authentication and product registration) is necessary. When you start Cubase LE 4, a screen offering to register the product will appear. Select “Register Now”. A web site for registration will open in your Internet browser. Follow the instructions on that page to register and activate the product.

For optimum enjoyment

While using Cubase LE 4, other applications may slow down drastically or a message such as “Cannot synchronize with USB audio interface” may appear. If this happens frequently, consider taking the following steps to optimize the operation conditions for Cubase LE 4.

1. Shut down other applications besides Cubase LE 4.

In particular, check for resource consuming software and other utilities.

2. Reduce plug-ins (effects, instruments) used by Cubase LE 4.

When there is a high number of plug-ins, the computer’s processing power may not be able to keep up. Reducing the number of tracks for simultaneous playback can also be helpful.

3. Power the unit from an AC adapter.

If applications still run very slowly or the computer itself does not function properly, disconnect this unit from the computer and shut down Cubase LE 4. Then reconnect the USB cable and start Cubase LE 4 again.