REVPAD

GTC Sound Innovations REVPAD Manual

REVPAD Firmware version: 1.0

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Copyright and Intellectual Property

The product can be used to record or duplicate audio without being limited by certain technological copy-protection measures. This is due to the fact that this product is intended to be used for the purpose of producing original music, and is therefore designed so that material that does not infringe copyrights belonging to others (for example, your own original works) can be recorded or duplicated freely.

Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

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Welcome to the Creative World of the GTC Sound Innovations REVPAD

The GTC Sound Innovations REVPAD is a sound effect controller for use with amplified instruments. It includes a sound processing base unit, which can connect to other equipment or systems. It has a Touchpad, which attaches to the guitar and communicates wirelessly with the base unit. The Touchpad attaches to the guitar by an adhesive that does not damage or otherwise affect the surface of the instrument. The base unit contains algorithms that provide a great number of effects, in addition to analog distortion and overdrive, and includes the possibility to change effects while playing.

The REVPAD includes multiple Patches (presets) of effect parameters, including analog distortion and overdrive, as well as additional effects, such as chorus, delays, and virtual faders. It enables the user to manipulate sound effects by swiping or tapping the Touchpad surface and allows for improvisation and creating new effects on the fly. The REVPAD enables smooth cross-fading between effects, a dynamic kill switch, a virtual whammy bar, volume control, ambient sounds, and control of external gear, such as a favorite pedal. With the REVPAD the user can manipulate the wah and virtual whammy bar, change volume, apply cross-fading, and create varying levels of feedback more easily than by using the knobs on the guitar.

The REVPAD supports your creativity to explore the limitless world of sound effects.

Important Safety Instructions

- Read and follow these instructions before operating your REVPAD system.
- Keep these instructions for future reference.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The REVPAD does not require preventive maintenance.
- Clean the REVPAD only with a dry cloth. Do not use any chemicals.
- 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. See “EMC and Certificate of Conformity” on page 8 for more information.

Warning! DO NOT INGEST BATTERY. CHEMICAL BURN HAZARD.

This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just two hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Protecting From the Elements

- The REVPAD is designed for indoor use. Do not operate the system outdoors without proper protection against mist or rain.
- Do not expose the REVPAD to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
- Unplug the unit during lightning storms and when not intended for use for long periods of time.

Protecting the Power System

- Use only the power adapter supplied with the system.
- Protect the power cord from being walked on or pinched.
- The DC power jack is used to disconnect the REVPAD. Please keep this plug accessible.
- Charge the REVPAD Touchpad frequently; this will increase the lifetime of the battery.
- In long storage periods it is recommended to remove the battery from the REVPAD Touchpad.
- Limit exposure to extremely high noise levels.
- Charge the REVPAD Touchpad with the USB cable supplied with the system. Do not charge the battery using an external charger at any time.

Note: After connecting the USB wait for a message to appear in the base unit display area before continuing. If this is the first time you are using the Touchpad the message will say **`PAD WAS SUCCESFLLY ASSIGNED`**. Otherwise the message will say **`PAD CONNECTED`**.

General Battery Safety Instructions

Warning! DO NOT INGEST BATTERY. CHEMICAL BURN HAZARD.

This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just two hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

- Before using the battery, be sure to read the instructions and observe the precautions printed on its packaging.
- Improper handling a Li-Ion rechargeable battery might cause leakage, heat, smoke, explosion, or fire. This could cause deterioration of performance or failure.
- See "Battery Replacement Instructions" on page 6 before installing or removing the battery from the REVPAD Touchpad.
- **All of the following are dangerous.**
  - Do not leave, charge, or use the battery in a car or similar place where inside temperature might be over 60º C / 140° F.
  - Do not leave the battery near a fire or a heat source. Do not throw the battery into a fire. Do not immerse, throw into, or wet the battery in water or seawater.
  - Do not short circuit positive (+) and negative (-) terminals with a metallic object intentionally.
  - Do not pierce the battery with a sharp object such as a needle or screwdriver.
  - Do not heat a partial area of the battery with heated objects or solder directly to the battery.
  - Do not hit with heavy objects such as a hammer and do not throw or drop the battery on a hard floor.
  - Do not disassemble the battery or modify the battery design, including the electric circuit.
  - Do not put the battery into a microwave oven, dryer, or high-pressure container.

- If at any time you witness a battery starting to balloon, swell up, smoke, heat, discolor, deform, or if an abnormal condition is detected during use, charge, or storage:
  - If charging, immediately discontinue charging process.
  - Immediately disconnect the battery and observe it in a safe place for approximately 15 minutes.
- If at any time leakage or foul odors are detected make sure that there is sufficient distance from fire.
- If liquid leaking from the battery gets onto your skin or clothes, immediately wash well with fresh water.
- If liquid leaking from the battery gets into your eyes, do not rub them. Immediately flush them with clean water and seek medical attention.

Battery Replacement Instructions

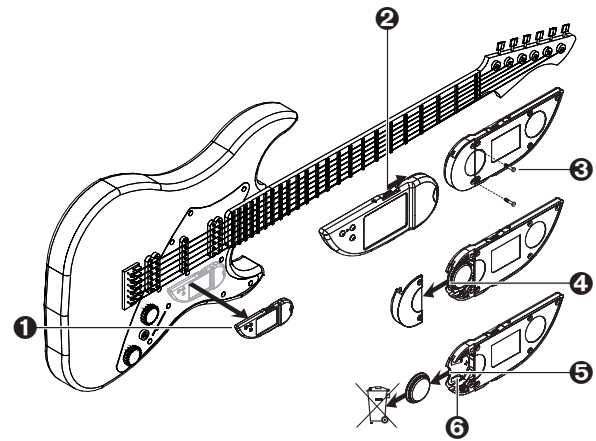
The REVPAD is supplied with a Li-Ion rechargeable battery.

The battery does not need to be replaced unless its operating time becomes much shorter than usual.

Warning! DO NOT INGEST BATTERY. CHEMICAL BURN HAZARD.

This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just two hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

To replace the battery:



1. Remove the REVPAD Touchpad from the guitar.
2. Turn off the Touchpad by clicking the microswitch toward the rounded end.
3. Turn the Touchpad over and use a Phillips screwdriver to release the two mounting screws. Set them aside.
4. Slide the cover off.
5. Remove the old battery from the holder by pulling it out using your fingers. Do not use any metal apparatus to pull out the battery, as it might short the battery leads.
   Note: Do not throw the spent battery in your household trash. It should be handed over to an authorized collection site for recycling waste electrical and electronic equipment. If recycling is not available in your community the battery should be disposed of responsibly, according to local codes.
6. Clean the leads of the new battery.
7. Replace the battery into the holder in the correct orientation.
   Note: Make sure that you place the battery as is pictured in the illustration. A battery placed the wrong orientation will short-circuit the battery and may cause it to heat up and possibly explode.
8. Close the cover and secure it in place with the two mounting screws.
9. Connect the USB connection of the Touchpad to the base unit to charge the battery. Wait for **`PAD CONNECTED`** to appear in the base unit display area before using the Touchpad. See “Charging the REVPAD Touchpad” on page 34 for more information.

EMC and Certificate of Conformity

Class B Warnings

The FCC Wants You to Know

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 radio 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

RF Exposure Warnings

Mobile Device RF Exposure Statement

Mobile Device definition:

a Mobile: (§2.1091) (b)

A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm / 8″ is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.

Per §2.1091d(d)(4)

In some cases (for example, modular or desktop transmitters), the potential conditions of use of a device may not allow easy classification of that device as either Mobile or Portable. In these cases, applicants are responsible for determining minimum distances for compliance for the intended use and installation of the device based on evaluation of either specific absorption rate (SAR), field strength, or power density, whichever is most appropriate

RF Exposure

This device is only authorized for use in a mobile application. At least 20 cm / 8″ of separation distance between the REVPAD and the user's body must be maintained at all times.

Quick Start

The REVPAD Touchpad provides a wireless connection to the REVPAD Base Unit so you can switch and control effects with a swipe or tap of your finger.

Driven by the *TouchFx Patented Technology* engine, the REVPAD provides guitarists full, simultaneous control of multiple effects parameters, including their own existing pedal board effects. This enables the player, for the first time, to actually *play* effects on the fly, instead of in a standard manner, and combine this naturally with playing the guitar.

Up to eight effects and their parameters can be simultaneously assigned to any axis on the pad and by that to actually perform as “virtual” faders and switches for any aspect of the signal and its processing. It gives the player full, accurate and super-dynamic control of the effects with just a simple finger tap, touch or swipe. It also eliminates the need to go to the pedal board to change effects and the hassle of bending down and tweaking knobs while playing.

Three buttons located on the REVPAD Touchpad can be assigned to operate many great features offered by the REVPAD. They can be used to switch between Patches, go through different modes, bypass, freeze, MIDI applications and much more.

Before exploring how to customize the REVPAD to fit your personal way of playing, let’s see what it can do by itself.

The REVPAD Touchpad

The REVPAD Touchpad provides a wireless connection to the REVPAD Base Unit so you can switch and control effects with a swipe or a touch of your finger.

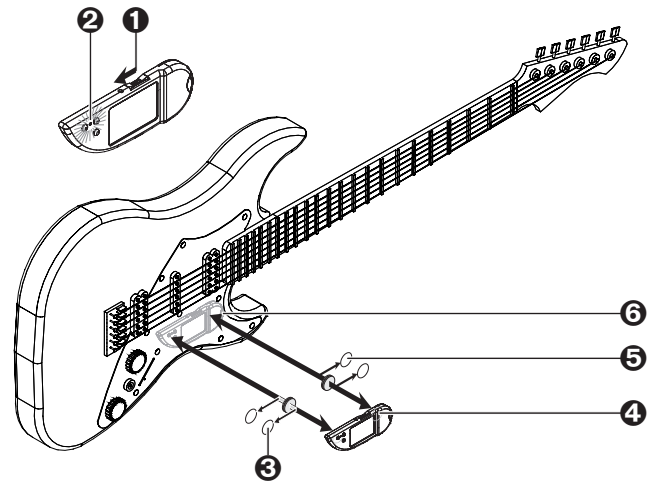
Attaching the Touchpad

The REVPAD Touchpad comes with three slim (0.6 mm) hook/loop fastener dots, which stick onto the guitar body in any location, according to your personal preference. It is easily removed if it needs to be replaced. The Touchpad attaches to the dots firmly enough to endure even the most vigorous live performance, while remaining easy to remove. The guitar remains clean and undamaged.

Note: The hook/loop fastener dots may leave marks on vintage guitars with nitrocellulose finishes. Check on an inconspicuous spot before attaching the hook/loop fastener dots.

To attach the Touchpad:

1. Turn the Touchpad on by pushing the switch toward the pointed end.
2. The power LED should glow green.
   Note: If the power LED glows yellow or red, or does not light up at all, the battery must be recharged. See “Charging the REVPAD Touchpad” on page 34 for more information.
3. Remove one side of the adhesive backing of a hook/loop fastener dot.
4. Press the adhesive firmly in the recessed circle on the inside face of the Touchpad. Repeat with the second hook/loop fastener dot.
5. Remove the adhesive backing of both hook/loop fastener dots.
6. Attach the Touchpad to your guitar where you can conveniently touch the Control Buttons and Touchpad.



The REVPAD Base Unit

It's all about preserving the natural sounds and soul of the guitar. The REVPAD is not generating sounds but processing them, so even though you can get synth-like sounds it is not a synthesizer, rather a signal-processing unit that preserves the natural sound of the instrument as well as the natural response to and feel of the guitar player's fingers.

The REVPAD System offers 200 factory and user presets to build and explore your own sounds.

Building a Patch is easy and intuitive:

- Step 1: Choose any effect you want.
- Step 2: Explore the effect to set parameters.
- Step 3: Push a button to select which one of those parameters you'd like to be controlled by the Touchpad and in which direction: X+, X-, Y+, Y-.

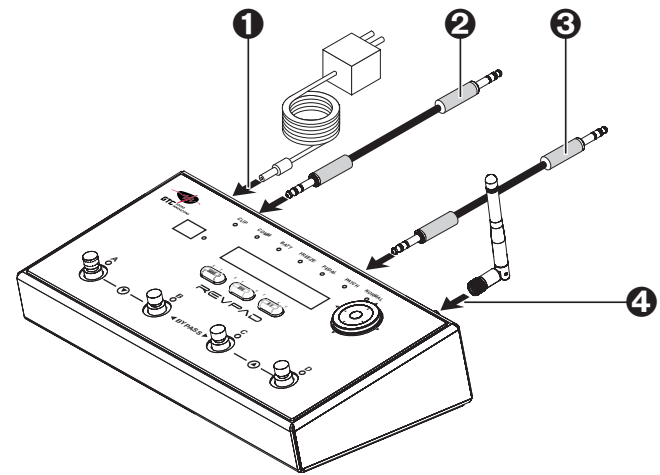
Repeat those three action steps to all of the other effects you'd like to add to the effect chain and press the save button. That's all you need to do to build a fully customized Patch.

Setting up the REVPAD Base Unit

The REVPAD Base Unit provides high-end effects, analog distortion and an overdrive circuit. While designed with footswitches, the REVPAD system displays its greatest power and flexibility through wireless communication with the Touchpad.

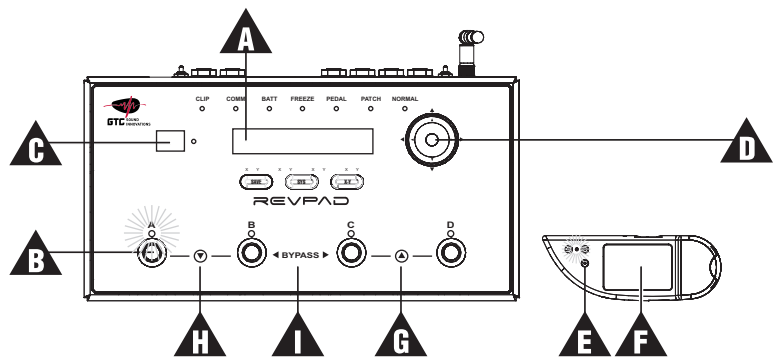
To set up the base unit:

1. Connect the included 9 VDC transformer to the POWER inlet on the base unit back panel.
2. Run a ¼" guitar cable from your electric guitar to the INPUT connector.
3. Run a ¼" guitar cable from the OUTPUT LEFT connector on the REVPAD Base Unit to your amplifier.
   Note: The REVPAD system accommodates a wide range of output options. See "Connecting Your REVPAD to the Outside World" on page 28 for more information.
4. Connect the antenna to the ANT. connector of the base unit.



Take the REVPAD for a Spin

When you power up your REVPAD Base Unit the editing screen (A) indicates that you are in true bypass mode.



To begin using your new REVPAD system:

- Press any footswitch to exit true bypass mode. For example, if you press Footswitch A (B) the green LED will illuminate and the number of the default Effect Bank will appear in the Active Patch Screen (C).
  or
- Press any part of the Navigation Roller (D). The default Bank and Patch will appear in the Active Patch Screen (C).
  or
- Press any of the three Touchpad Control Buttons (E). The default Bank and Patch will appear in the Active Patch Screen (C).

Now experiment and explore. Tap the Touchpad (F) or slide your finger along the X- or Y-axis as you play. Scroll through all of the Patches by rotating the Navigation Roller (D), or Bank by Bank by pressing Next Bank (G: footswitch C and D together) or Previous Bank (H: footswitch A and B together), and then one of the footswitches to change the Bank's Patch.

When you want to return to True Bypass mode, press footswitches B and C together (BYPASS – I).

See "Setting Patch Favorites" on page 48 for more information about how to get started.

Exploring Your GTC Sound Innovations REVPAD

The GTC Sound Innovations REVPAD is a sound effect controller for use with amplified instruments. It includes a sound processing base unit, which can connect to other equipment or systems. It has a Touchpad, which attaches to the guitar and communicates wirelessly with the base unit. The Touchpad attaches to the guitar by an adhesive that does not damage or otherwise affect the surface of the instrument. The base unit contains algorithms that provide a great number of effects, in addition to analog distortion and overdrive, and includes the possibility to change effects while playing.

The REVPAD includes multiple Patches (presets) of effect parameters, including analog distortion and overdrive, as well as additional effects, such as chorus, delays, and virtual faders. It enables the user to manipulate sound effects by swiping or tapping the Touchpad surface and allows for improvisation and creating new effects on the fly. The REVPAD enables smooth cross-fading between effects, a dynamic kill switch, a virtual whammy bar, volume control, ambient sounds, and control of external gear, such as a favorite pedal. With the REVPAD the user can manipulate the wah and virtual whammy bar, change volume, apply cross-fading, and create varying levels of feedback more easily than by using the knobs on the guitar.

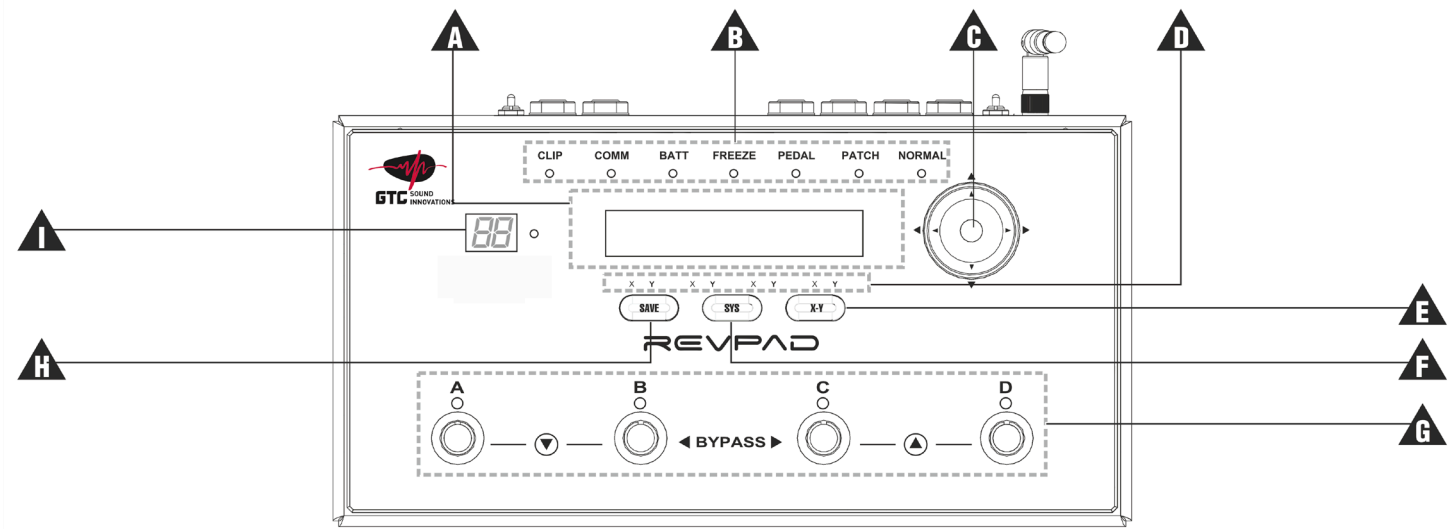
The REVPAD supports your creativity to explore the limitless world of sound effects.

Getting to Know the REVPAD Base Unit

The REVPAD Base Unit is used to for electronic connections, status of the system, editing Patches and modifying effects.

The Front Panel of the REVPAD Base Unit

REVPAD Base Unit Controls



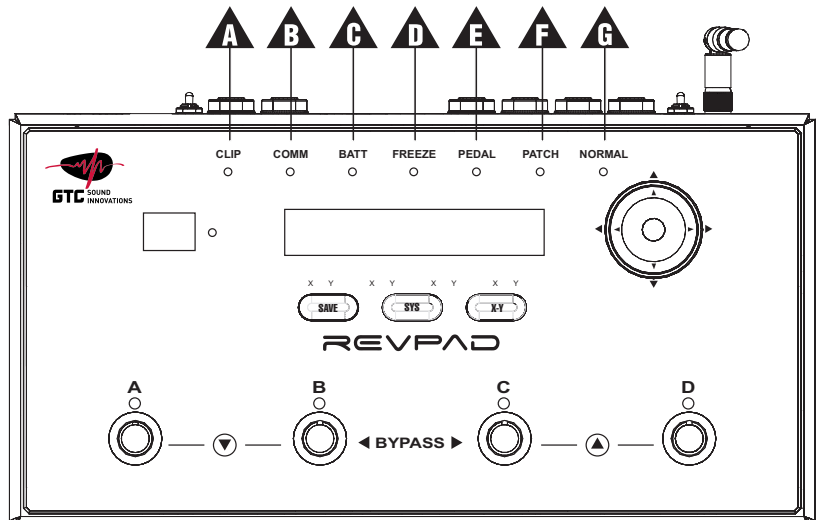
Item	Name	Function
A	Editing Screen	The editing screen facilitates navigation and operation of the REVPAD and modification of REVPAD Patches.
B	Mode and Status LEDS	▪ Clip: Indicates that the input level or one of the effects levels is too high. ▪ Comm: Green, orange, or red indicates the quality of communication with the Touchpad. ▪ Batt: Green or red indicates battery strength. ▪ Freeze: Lights when a Patch is in Freeze mode. See “Freeze Mode” on page 46 for more information. ▪ Pedal: Lights when the REVPAD is in Single mode. See “Single Mode” on page 49 for more information. ▪ Patch: Lights when the REVPAD is in Patch Favorite mode. See “Patch Favorite Mode” on page 47 for more information. ▪ Normal: Lights when the REVPAD is in Normal mode. See “Normal Mode” on page 46 for more information.
C	Navigation Roller	▪ Arrows above, below, to the left, and to the right of the Navigation Roller knob are used for navigating between screens. Above each arrow a LED lights up to indicate the directions available for navigation. ▪ Use the actual Navigation Roller (rolls clockwise and counter-clockwise) for changing values and effects. ▪ The Home button returns the REVPAD to the beginning of the current Patch edit screen. This is useful if you lose track of your location within the Patch.
D	X-Y LEDs	Indicates the X/Y assignment for a parameter.

Item	Name	Function
E	X-Y Button	Use this button to assign X or Y control for specific parameters. The user increases or decreases a parameter value on the X-axis by moving a finger on the Touchpad to the right or left. To increase or decrease a parameter value on the Y-axis the user moves a finger up or down on the Touchpad. **Note:** The rules for changing parameter values are not rigid. The user can decide if a given effect, such as volume, is controlled by the X or Y axis on the Touchpad. See "Setting X-Y Values in Effects" on page 41 for more information.
F	SYS Button	Use this button to access the System Preferences screen. See "System Configuration" on page 61 for more information.
G	Footswitches	The footswitches (A, B, C, and D) are used to scroll through Banks of Patches, change Patches within Banks and toggling between Normal mode and True Bypass mode. See "Footswitch Control and Patch Navigation" on page 25 for more information.
H	SAVE Button	Saves an edited Patch. See "Saving a New Patch" on page 43 for more information.

Item	Name	Function
I	Current Bank Screen	The REVPAD makes 200 Patches available, stored in 50 Banks, each of which with four Patches. The Current Bank Screen shows which Bank is active (01 through 50). The LEDs above the footswitches (G) show which of the four Patches in the Bank (A, B, C, or D) is active. The full Patch ID also appears in the Editing Screen (A).

Status and Mode LEDs

This section describes the meaning of the LED indicators on the front panel of the REVPAD base unit.



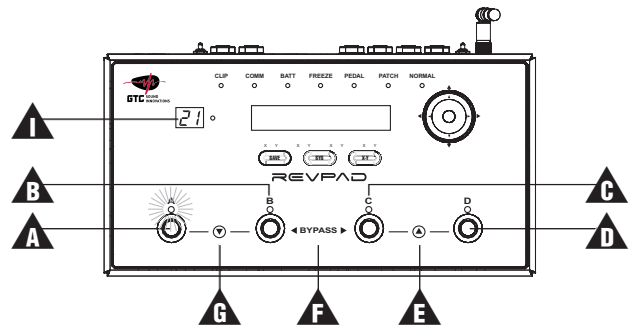
Item	LED	Function
A	CLIP	The LED turns red to indicate when the input gain to the REVPAD is too high. Adjust the input gain of the signal until the LED is no longer red.
B	COMM	When the Touchpad is touched, the LED lights to indicate the strength of communication between the Touchpad and the base unit. ▪ Green: Good communication with the base unit. ▪ Yellow: Weak communication with the base unit. (Information from the Touchpad is not fully transmitted to the base unit.) ▪ Red: Bad communication with the base unit. (Most of the information from the Touchpad does not reach the base unit.) A weak signal can result from the following causes: ▪ The distance from the base unit is too great. ▪ There is a physical barrier, such as a wall, between the REVPAD base unit and the guitar with the Touchpad. ▪ The battery in the Touchpad is weak. ▪ The antenna is not connected properly. ▪ There is a problem with the transmitters and/or receivers.

Item	LED	Function
C	BATT	Indicates, by color, the battery power level: ▪ Green: Good ▪ Red: Needs recharging ▪ Flashing Red: Battery is about to run out of power.
D	FREEZE	Indicates that the REVPAD is in Freeze mode. See “Freeze Mode” on page 46 for more information.
E	PEDAL	Green LED indicates that the REVPAD is operating in Single mode. See “Single Mode” on page 49 for more information.
F	PATCH	Indicates that the REVPAD is working in Patch Favorite mode. See “Patch Favorite Mode” on page 47 for more information.
G	NORMAL	Green LED indicates that the REVPAD is operating in Normal mode. See “Normal Mode” on page 46 for more information.

Note: Single, Patch and Normal modes cannot work simultaneously. Only one of these three LEDs can be lit at any given time.

Footswitch Control and Patch Navigation

The footswitch controls on the REVPAD base unit allow you to scroll through all of the Patches in the system.



REVPAD Patches are organized in fifty *Banks* – 01 through 50. Each Bank contains four different *Patches:* A, B, C, and D. The current Bank screen (I) displays the active Bank, and the footswitch pedal LED of the active Patch in the Bank is illuminated. In the illustration, Patch 21A is active: Bank 21, Patch A.

To change the active Patch:

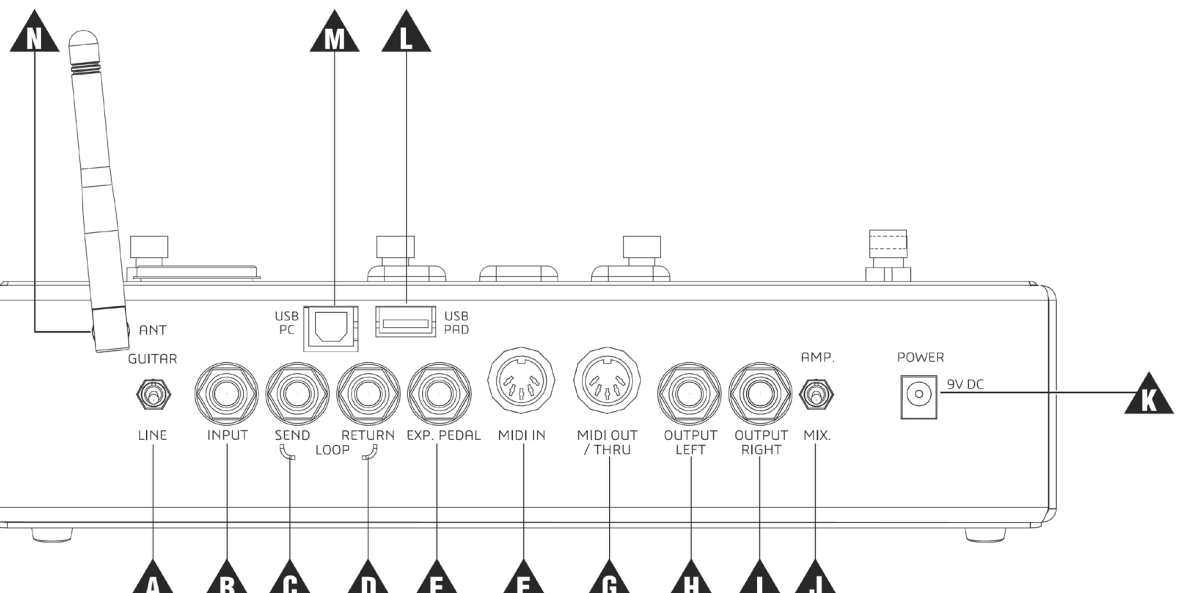
- Press footswitches A and B simultaneously (G) to move the REVPAD from the current Bank to the next Bank down – for example from 21 to 20. The selected Bank number will flash. Press one of the footswitch pedals to select one of the four Patches in the Bank.
- Press footswitches C and D simultaneously (E) to move the REVPAD from the current Bank to the next Bank up – for example from 21 to 22. The selected Bank number will flash. Press one of the footswitch pedals to select one of the four Patches in the Bank.

Press footswitches B and C simultaneously (F) to toggle between True Bypass Mode and Normal Mode.

Changing Banks and Patches is more easily done using the REVPAD Touchpad. See “Touchpad Control Button Assignment” on page 65 for more information.

The Back Panel of the REVPAD Base Unit

This section describes the controls and sockets on the back panel of the REVPAD base unit.



Item	Name	Function
A	GUITAR / LINE	Switch for select either Guitar or Line as the input source.
B	INPUT	Main input jack
C	SEND (LOOP)	Sends output signal for looping external gear. External effect must be on.
D	RETURN (LOOP)	Returns signal input for looping external gear. External effect must be on.
E	EXPRESSION PEDAL	Jack enabling the REVPAD to act as an expression out pedal. Uses a TRS cable to control.
F	MIDI IN	MIDI IN socket to receive commands for control change, program change, and clock (tempo) changes. See “MIDI Control” on page 71 for more information.
G	MIDI-OUT / THRU	MIDI OUT and/or MIDI THRU socket. See “MIDI Control” on page 71 for more information.
H	OUTPUT LEFT	Main audio output.
I	OUTPUT RIGHT	Secondary audio output.
J	AMP. / MIX	For switching the output source: amplifier or mixer (direct output)
K	POWER	9 VDC power jack
L	USB PAD	USB socket for connecting the Touchpad for charging and for updating firmware.
M	USB PC	USB socket for connecting to a computer for editing software and updating firmware.
N	ANT.	The antenna for communication with the Touchpad.

Connecting Your REVPAD to the Outside World

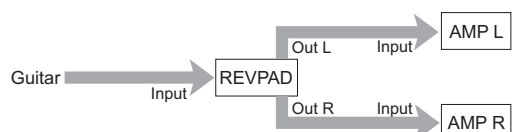
To meet various situations and needs there are multiple ways to connect your REVPAD to other equipment. Following are some of those types of connections. Diagrams and a short description for each one can be found below.

REVPAD to Single Amplifier

Connect the REVPAD Output to the amp's input. The AMP/LINE switch should be set to AMP.

REVPAD to Two Amplifiers

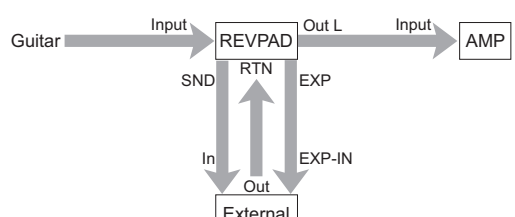
1. Connect the REVPAD Output L in to the main amp input.
2. Connect the REVPAD Output R in to the secondary amp input.
3. Make sure the amplifier switch is on.



REVPAD Loop and Expression to External Audio Devices

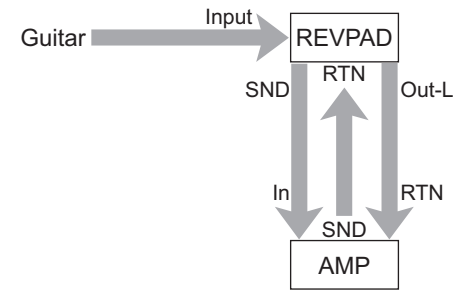
Follow the diagram to use the REVPAD Loop and Expression to add external audio devices.

Note: *The LOOP effect must be on for this to work.*



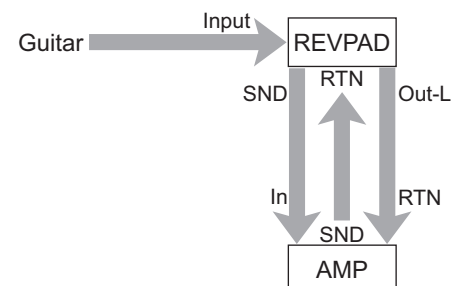
REVPAD in an Amplifier Loop

Use this configuration to use the REVPAD after the amplifier pre-amp.



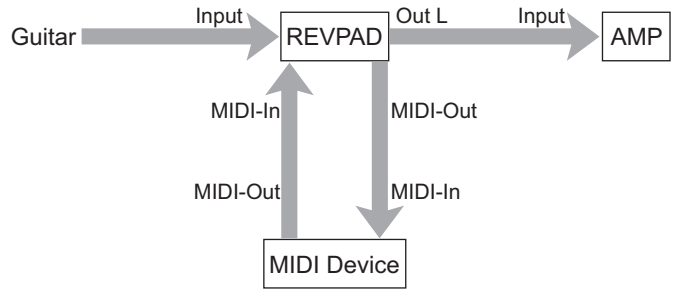
REVPAD Before and After Amp Pre-Amp

Connect the REVPAD before *and* after the amplifier's pre-amp using a combination of the REVPAD and amp loops. You must use the LOOP effect in the REVPAD. Effects before the LOOP in the REVPAD will be processed *before* the amplifier pre-amp. Effects that will be after the LOOP in the REVPAD will be processed *after* the amplifier's pre-amp.



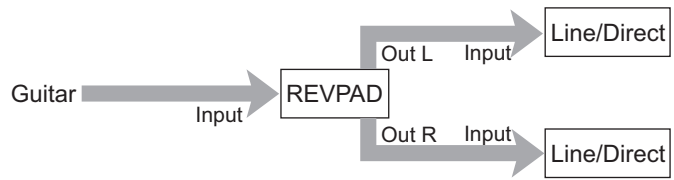
Connecting MIDI Devices

Use this configuration to connect one or more MIDI devices to your REVPAD.



REVPAD to Line or Mixer

Use this configuration to connect the output of the REVPAD to one or multiple lines or mixers. The AMP/LINE switch should be set to LINE.



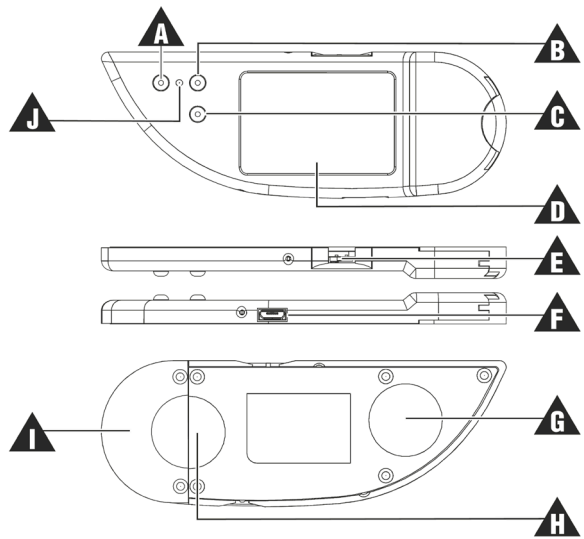
Getting to Know the REVPAD Touchpad

The REVPAD Touchpad provides a wireless connection to the REVPAD Base Unit so you can switch and control effects with a swipe, touch or tap of your finger.

Driven by the *TouchFx Patented Technology* engine, the REVPAD provides guitarists full, simultaneous control of multiple effects parameters, including their own existing pedal board effects. This enables the player, for the first time, to actually play effects on the fly, instead of in a standard manner, and combine this naturally with playing the guitar.

Up to eight effects and their parameters can be simultaneously assigned to any axis on the pad and by that to actually perform as "virtual" faders and switches for any aspect of the signal and its processing. It gives the player full, accurate and super-dynamic control of the effects with just a simple finger tap, touch or swipe. It also eliminates the need to go to the pedal board to change effects and the hassle of bending down and tweaking knobs while playing.

Three buttons located on the REVPAD Touchpad can be assigned to operate many great features offered by the REVPAD. They can be used to switch between Patches, go through different modes, bypass, freeze, MIDI applications and much more.



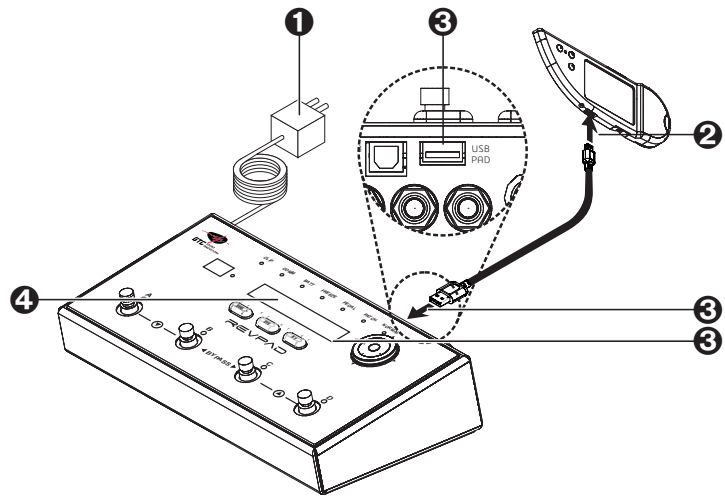
Item	Name	Function
A	Control Button 1	Touchpad Control Button 1. See “Touchpad Control Button Assignment” on page 65 for more information.

Item	Name	Function
B	Control Button 2	Touchpad Control Button 2. See “Touchpad Control Button Assignment” on page 65 for more information.
C	Control Button 3	Touchpad Control Button 3. See “Touchpad Control Button Assignment” on page 65 for more information.
D	Touchpad Area	The Touchpad area for controlling the Touchpad functions.
E	On/Off Switch	Use this switch to turn the Touchpad on and off. (Top view)
F	Mini USB port	For charging the battery and updating firmware. This port can also be used for USB communication with the base unit, thus bypassing the antenna. Wait for **PAD CONNECTED** to appear in the base unit display area before using the Touchpad. If this is the first time you are using the Touchpad the message will say **PAD WAS SUCCESFLLY ASSIGNED**.
G / H	Hook/loop fastener area (Back view)	See “Attaching the Touchpad” on page 12 for more information.
I	Battery Housing Cover (Back view)	Remove this cover to replace the battery. See “Battery Replacement Instructions” on page 6 for more information.
J	Battery Power LED	Indicates the power level of the Touchpad battery. ▪ Green: Full power ▪ Red: Recharge battery

The functions of the Control Buttons can be customized in the System (SYS) screen. See “Touchpad Control Button Assignment” on page 65 for more information.

Charging the REVPAD Touchpad

The REVPAD Touchpad comes with a USB cable that connects the Touchpad to the base unit. This serves to recharge the Touchpad and enables firmware updates and the installation of additional applications. Battery life meets the industry standards of at least three hours of constant use, meaning continuous physical contact with the Touchpad, which is not likely during actual operation.



Though generally used wirelessly, you always have the option to remain connected with the USB cable when playing off stage, at home, or in a recording studio.

To recharge the REVPAD Touchpad:

1. Make sure that the base unit is connected to an electrical source via the power supply.
2. Attach the micro USB end of the cable to the Touchpad.
3. Connect the other end to the base unit.
4. Wait for **`PAD CONNECTED`** to appear in the base unit display area before touching the Touchpad. If this is the first time you are using the Touchpad the message will say **`PAD WAS SUCCESFLLY ASSIGNED`**.
   Note: After attaching the Touchpad to the base unit with the USB cable switch the Touchpad off and on again to reinitialize settings.

Customizing your REVPAD

This section describes how to modify your REVPAD system to work exactly the way you want it to.

The REVPAD System offers 200 factory and user presets to build and explore your own sounds.

Building a Patch is easy and intuitive:

- Step 1: Choose any effect you want.
- Step 2: Explore the effect to set parameters.
- Step 3: Push a button to select which one of those parameters you'd like to be controlled by the Touchpad and in which direction: X+, X-, Y+, Y-.

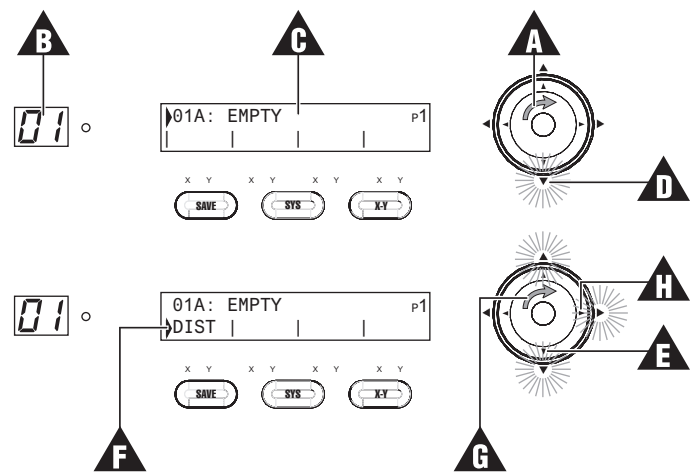
Repeat those three action steps to all of the other effects you'd like to add to the effect chain and press the save button. That's all you need to do to build a fully customized Patch.

Creating and Editing Patches

Your REVPAD comes loaded with a wide variety of Patches, each with up to eight effects, which you can modify as you wish. Or you can create new Patches using the many effects that come with the REVPAD. This tutorial describes a step-by-step procedure to create a new Patch by scrolling through effects, adding them, and customizing their parameters.

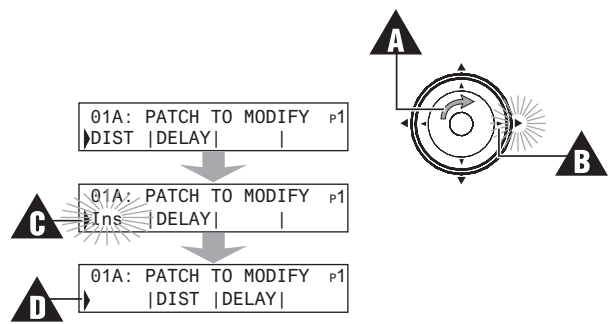
Note: When adding effects remember that the order of the effects in the Patch is important.

1. Rotate the Navigation Roller (A) to scroll through Patches (B) until you see a blank editing screen (C). The down arrow will glow yellow (D).
2. Press (E) on the Navigation Roller to enter the first effect block (F).
   Note: The Up, Right, and Down arrows now glow, indicating available navigation directions.
3. Rotate the Navigation Roller (G) to scroll through the list of available effects until you find one you wish to add to the Patch. In this tutorial a distortion effect (**DIST**) is added.
4. Press (E) on the Navigation Roller to set parameters for this effect.
   Note: To accept the default parameter values and continue adding more effects to this Patch, press (H).



Modifying a Patch

You may modify Patches you have created or fine tune Patches that came with your REVPAD. First rotate the Navigation Roller (A) until the Patch you want to modify appears in the editing screen.



- To modify an existing effect, press the right arrow (B) until the cursor points to the effect you want to modify. See “Creating and Editing Patches” on page 36 for more information.
- To add a new effect, press the right arrow (B) to a blank effect field. See “Creating and Editing Patches” on page 36 for more information.
- To insert a new effect into an existing list, press the right arrow (B) until the cursor stands on the existing effect you need to move in order to make room for a new effect. Rotate the Navigation Roller (A) until **`Ins`** appears (C). It flashes three times. Continue with adding the effect. See “Creating and Editing Patches” on page 36 for more information.
- To delete an effect in a Patch, press the right arrow (B) until the cursor stands on the existing effect you want to remove. Rotate the Navigation Roller (A) until **`Del`** appears. It flashes three times, and the effect is removed.

When you are finished modifying the Patch, save it. See “Saving a New Patch” on page 43 for more information.

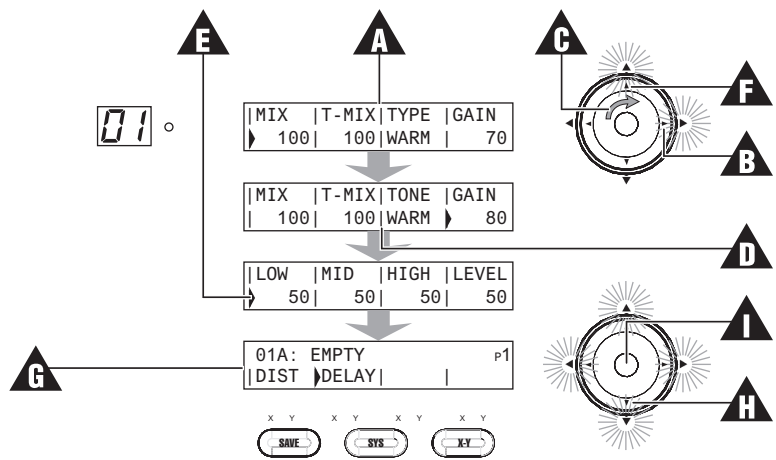
Note: You cannot add two effects of the same kind or category into a Patch.

Setting Patch Effect Parameters

Once an effect has been added to a Patch, you may then review and adjust the parameters. Every effect includes up to eight parameters. Press the down arrow when the cursor is on a selected effect to enter page one of the parameter screens (A). You may now edit the effect so you will get the sound you want.

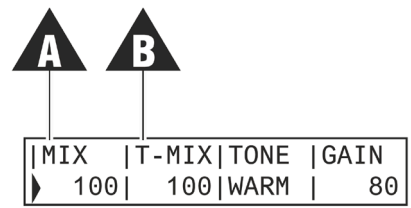
1. For example, to increase the gain from 70 to 80, press the right arrow (B) three times until the cursor stands on the **GAIN** parameter (D). Rotate the Navigation Roller (C) until the desired value appears.
2. Press the right arrow (B) once more to enter page two of the parameter screens (E).
3. When you have finished adjusting these parameters press the up arrow (G) to return to the effects screen (G).
4. To add a delay effect to this Patch, press the right arrow (B) and rotate the Navigation Roller clockwise (C) until the **DELAY** effect appears. As before, press the down arrow (H) to enter the parameters screen for the delay effect.

Note: You may always press the **Home** button (I) to return to the main screen of the Patch.



Mix / Touch Mix

In each effect, the first two parameters are **MIX** (**A**) and **T-MIX** (**B**). **MIX** is always the first parameter of any effect. It adjusts the mix of the effect in the Patch. It determines how much of the effect will be heard in the global Patch mix. **T-MIX** determines the mix of the effect while the user is touching the Touchpad.



The **T-MIX** parameter overrides the normal **MIX** parameter.

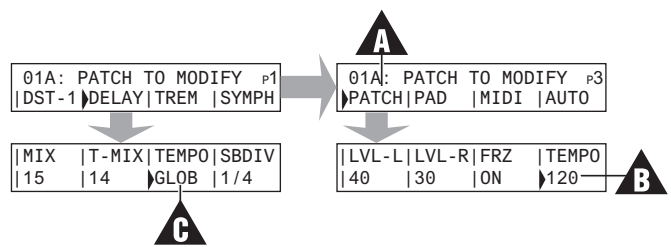
Note: The **MIX** parameter cannot be assigned to an X/Y Touchpad control. The **T-MIX** parameter can be assigned to an X/Y Touchpad control. In Freeze Mode only **T-MIX** is active.

Tempo and Global Tempo

Some effects, such as DELAY and TREM (tremolo) include a **TEMPO** parameter that you set to anything from 30 to 300 beats per minute.

When you have a Patch that has more than one effect with tempo parameters you may want to make sure that they use the same tempo. Set a global tempo for the Patch as follows:

1. Go to **p3** of the Patch and select PATCH (**A**).
2. Navigate to the **TEMPO** parameter (**B**) and rotate the Navigation Roller to the tempo you want to use for all effects in the Patch.
3. For each effect with a tempo parameter edit the **TEMPO** value by rotating the Navigation Roller until you see **GLOB** (**C**) so it will conform to the global tempo.



You can easily change the global tempo of the Patch by using Tap Tempo mode. See “Tap Tempo Mode” on page 50 for more information.

Setting X-Y Values in Effects

Many effects include parameters that you can control using the REVPAD Touchpad. The user can assign most of the parameters of an effect to either the X or Y axis on the Touchpad, allowing wireless control of the parameter values. The Touchpad controls the full range of values of a specific parameter. The range of values is set to the axis from its set value (the maximum) to the parameter minimum value. For example, if set to 70, the range will be from 0 to 70.

You may set a new maximum value for the range. If you set 50 as the maximum, you won't be able to go beyond this maximum with the Touchpad. When you remove your finger, it goes back to the default maximum.

Note: You cannot change an effect parameter's *minimum* value.

When in Freeze mode, the value will stay on the point the value attained after removing the finger from the Touchpad.

When there is no contact with the Touchpad, an effect parameter will revert to its predefined maximum value, even after being surpassed during contact with the Touchpad while playing.

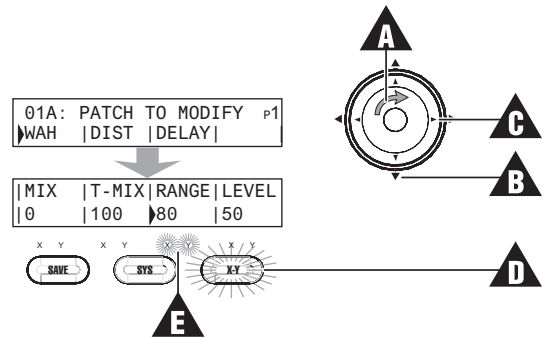
- If a maximum value of a parameter is set to 60 and assigned to X axis control on the Touchpad, the value remains 60 when there is no contact with the Touchpad.
- When removing contact from the Touchpad, the maximum value automatically reverts to its previously set value of 60 (unless you are in Freeze mode).

These rules are universal to any parameter that can be assigned to the X/Y axes of the Touchpad.

In this example a wah-wah effect is added to a Patch and its range is modified for the Touchpad.

1. First rotate the Navigation Roller (A) until the Patch you want to modify appears in the editing screen.
2. Insert a new effect into the existing list. See “Modifying a Patch” on page 37 for more information.
3. Rotate the Navigation Roller (A) until you see **WAH**. Press the down arrow (B) to enter page one of the parameter screens.
4. Keep the **MIX** parameter at 0 so that the wah-wah effect is only active when the Touchpad is pressed.
5. Press the right arrow (C) to advance to the **RANGE** parameter. Rotate the Navigation Roller (A) to change the range to 70.
6. Press the X-Y button (D). Each press changes the axis and direction as seen in the arrow by the range value. A fifth press to the button removes the X-Y value.
   The color of the X or Y LED (E) under the parameter indicates:
   - X LED – red: The effect is controlled by the X+ axis.
   - X LED – green: The effect is controlled by the X- axis.
   - Y LED – red: The effect is controlled by the Y+ axis.
   - Y LED – green: The effect is controlled by the Y- axis.
7. Finish modifying the Patch and save it. See “Saving a New Patch” on page 43 for more information.

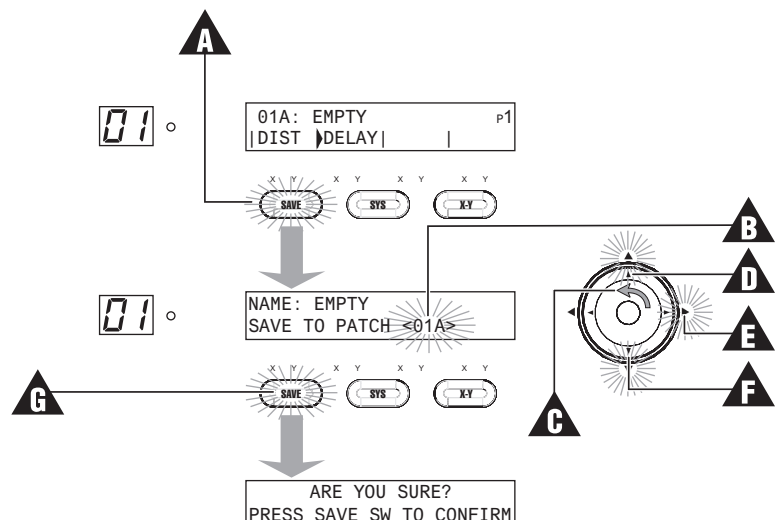
Note: Not all effect parameters have an X-Y parameter. The X-Y button (D) for these effects will be inactive.



Saving a New Patch

When you add or modify an effect to a Patch, the SAVE button (A) illuminates, indicating that changes have been made.

1. Press SAVE (A). The current Patch number flashes (B). Rotate the Navigation Roller (C) if you wish to change the Patch number. Otherwise press the up arrow (D) to move the cursor to the **NAME** field.
2. When the underline cursor blinks, rotate the Navigation Roller counter-clockwise (C) until the first letter or number of the name you want to give this new Patch appears.
3. Press the right arrow (E) to continue adding to the name. Press twice to insert a space between words.
4. When you have completed writing the name for the Patch, press the down arrow (F) and then SAVE (G). Press the SAVE button once more to confirm the operation.
   Note: You can cancel the save process at any time by pressing the HOME button. Also, if you do not confirm the save within three seconds, you will be returned to the previous screen.



Organizing Your Patch List

You may want to organize your Patches so that the ones you use most often will be at the beginning of the list. Since the REVPAD includes blank slots for creating your own Patches, you can use them to move existing Patches in order to make space. This example shows how to move Patch 01A to make room for a new Patch created in slot 25B.

1. Select Patch 01A and press the SAVE button.
2. Change the Patch number to a currently blank spot (40B) and press the SAVE button again.
   Note: Saving a new or modified Patch to an existing Patch number will overwrite the original Patch definition.

Modes

The REVPAD can be operated in different work modes, which change the way the Touchpad controls the base unit.

The modes are:

- True Bypass Mode
- Normal Mode
- Freeze Mode (a selected function of Normal Mode)
- Patch Favorite Mode
- Single Mode
- Tap Tempo Mode

True Bypass Mode

When you power up your REVPAD it is in True Bypass mode, meaning that sound goes directly to the connected amplifier. See “Take the REVPAD for a Spin” on page 16 for more information about changing to Normal mode.

You may also toggle your REVPAD system between normal mode and true bypass mode by pressing a Touchpad Control Button.

1. Assign True Bypass (**Byp**) to a Control Button or Control Button pair on the Touchpad. See “Touchpad Control Button Assignment” on page 65 for more information.
2. Activate True Bypass mode by pressing the assigned Control Button or Control Button pair. The editing screen will display **byPASS**.
3. Press the assigned Control Button or Control Button pair again to toggle back to the previously active Patch.

Normal Mode

The basic way to work with your REVPAD system is in Normal mode. In Normal mode the guitarist can control effect parameters, and even make changes to them on the fly, while playing the guitar.

When Normal mode is active, the Normal LED on the base unit front panel is illuminated. See “Status and Mode LEDs” on page 22 for more information.

Freeze Mode

Freeze mode modifies Normal mode by skipping the **MIX** parameter of the active Patch and activating the level set with the **T-MIX** (Touch Mix) parameter, with all other parameters remaining at the values set for the X/Y axes on the Touchpad. The REVPAD transmits using the parameter values of the last location of contact with the Touchpad. This gives the user the freedom to cease contact with the

Touchpad while retaining the current parameters values. See “Mix / Touch Mix” on page 39 for more information about these two parameters.

Follow the procedure below to set up REVPAD to toggle Freeze mode on and off.

1. Assign Freeze (**`Frz`**) to a Control Button or Control Button pair on the Touchpad. See “Touchpad Control Button Assignment” on page 65 for more information.
2. Activate Freeze mode by pressing the assigned Control Button or Control Button pair. Both the Freeze and Normal LEDs on the base unit front panel will be illuminated. See “Status and Mode LEDs” on page 22 for more information.
3. Press the assigned Control Button or Control Button pair again to exit Freeze mode.
   Note: You can also go to **`p3`** of the Patch setting to set Freeze mode on or off. See “Patch Setup” on page 51 for more information.

Patch Favorite Mode

See “Setting Patch Favorites” on page 48 for instructions on how to create sets of Patches you can access by pressing a Touchpad Control Button or Control Button pair and then tapping a specified area of the Touchpad.

When Patch Favorite mode is active the Patch LED on the base unit front panel is illuminated. See “RF Exposure” on page 9 for more information.

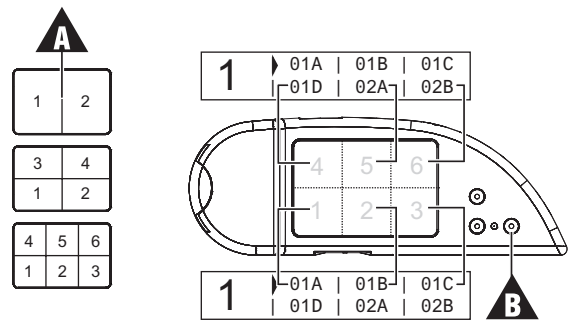
Note: If you have chosen **`Select Only`** in Pad Settings for FAVORITE MODE FUNC., the editing screen on the base unit continues to display the Patch Favorite set. You may play using the selected Patch, but pressing the Touchpad will change the Patch. Press the Touchpad Control Button again to remove the display. If you have selected **`Select and Play`**, touching the Touchpad makes the Patch selection immediately and exits the mode. See “Touchpad Control Button Assignment” on page 65 for more information.

Setting Patch Favorites

You can configure your REVPAD Touchpad to provide three Patch Favorite sets. You can then switch from Patch to Patch by pressing a Touchpad Control Button (or Control Button pair) and a designated area of the Touchpad.

Note: Because you will be looking at the Touchpad from above when it is attached to your guitar, the illustration shows the "guitarist-eye-view."

1. Choose the number of segments you wish to make active on the Touchpad.
   You can split the Touchpad into two, four, or six segments (**A**). Press the SYS button and then navigate to the **`Pad Setting`** screen in System Configuration. See "Pad Settings" on page 63 for more information.
2. Specify the behavior you want when invoking a favorite Patch set. While still in **`Pad Settings`**, navigate to the **`Favorite Mode Func`** screen and select one of two options:
   - **`Select Only`**: After pressing a Touchpad segment to activate the assigned Patch, the editing screen on the base unit continues to display the Patch Favorite set. You may play using the selected Patch, but pressing the Touchpad will change the Patch. Press the Touchpad Control Button again to remove the display.
   - **`Select and Play`** makes the Patch selection immediately upon touching the desired segment and exits the mode.
3. Next assign a Patch Favorite layout to a Touchpad Control Button. Press the SYS button and then navigate to the Control Button assignment screen in System Configuration. See "Touchpad Control Button Assignment" on page 65 for more information.
4. For this example, Control Button 1 of the Touchpad invokes FAV-1 (**B**), or Patch Favorite set 1, and the Touchpad is configured for six segments. Press Control Button 1 to see the current assignments on the Editing Screen. Use the right arrow button to move



from Patch Slot to Patch Slot and then use the Navigation Roller to set the Patch.
Note: You may define three Patch Favorite sets. However, you cannot configure a Patch Favorite set unless it has been assigned to a Touchpad Control Button.

5. To use your Patch Favorites while you are playing, press Touchpad Control Button 1 and then the segment on your Touchpad assigned to the Patch you wish to use. In this case, pressing segment 1 on the Touchpad will invoke Patch 01A.

If you decide to reduce the number of active segments on the Touchpad from 6 to 2 or 4, the last four or two selections are hidden. If you return to 6 segments, REVPAD remembers the previous favorites.

Single Mode

Single mode gives you the ability to toggle individual effects in the active Patch off or on by pressing a Touchpad Control Button and then tapping regions of the Touchpad.

Follow the procedure below to set up REVPAD system to use Single mode.

1. Assign Single to a Control Button or Control Button pair on the Touchpad. See “Touchpad Control Button Assignment” on page 65 for more information.
2. Each Touchpad segment is automatically assigned to the first six effects in the active Patch. Activate Single mode by pressing the assigned Control Button or Control Button pair. The Pedal LED on the base unit front panel is illuminated. See “Status and Mode LEDs” on page 22 for more information.
3. Tap the Segment representing an effect on the Touchpad to bypass that effect. The bypassed effect will be shown as “BYP” in the REVPAD’s main display. To toggle an effect back on, tap the respective Touchpad Segment again.
Note: If you have selected **`Select Only`** in Pad Settings for Single mode, you remain in Single mode when you tap the Touchpad to bypass or activate an effect. The Pedal LED continues to be illuminated. If you have selected **`Select and Play`**,

you exit Single mode, the Base unit displays the active Patch, and the Normal LED becomes illuminated. See “Touchpad Control Button Assignment” on page 65 for more information.

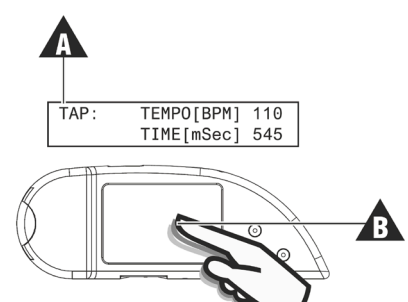
Tap Tempo Mode

Tap Tempo mode allows you to change the tempo of the active Patch. When you have set the tempo parameter of individual effects to **GLOB** (global), you can invoke Tap Tempo mode and change the global tempo of the Patch by tapping your desired tempo on the Touchpad. See “Tempo and Global Tempo” on page 40 for more information.

Note: Because you will be looking at the Touchpad from above when it is attached to your guitar, the illustration shows the “guitarist-eye-view.”

Follow the procedure below to initiate Tap Tempo mode.

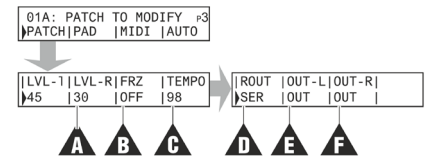
1. Assign Tap to a Control Button or Control Button pair on the Touchpad. See “Touchpad Control Button Assignment” on page 65 for more information.
2. Activate Tap Tempo mode by pressing the assigned Control Button or Control Button pair.
3. The current global tempo and time appear in the Editing Screen (**A**).
4. Tap the Touchpad (**B**) with your finger in the desired tempo. The tempo (beats per minute and time) in the editing display changes in response to your taps.
5. Once you have finished tapping the new global tempo is set.



Patch Setup

Go to **p3** of a selected Patch editing screen to access the Patch setup parameters.

1. Select a Patch for setup. See “Creating and Editing Patches” on page 36 for more information.
2. Go to **p3**.
3. With **PATCH** selected, press the down arrow button on the Navigation Roller.
4. See the table below for an explanation of the settings in this and the next screen.



Item	Name	Value	Notes
A	LVL-L LVL-R	0 through 100	Level through left and right outputs.
B	FRZ	OFF/ON	See “Freeze Mode” on page 46 for more information.
C	TEMPO	30 through 300	Global Patch tempo. See “Tempo and Global Tempo” on page 40 for more information.
D	ROUT	SER	See “Routing” on page 53 for more information.
		COMB1	
		COMB2	
		COMB3	

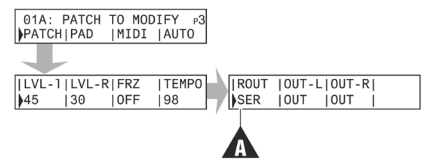
Item	Name	Value	Notes
		COMB4	
		PAR	
E	OUT-L OUT-R		Use these options to send the audio signal from any point in the REVPAD's audio chain to the left or right output (Out-L / Out-R). See "Routing" on page 53 for more information.
		OUT	The signal goes through all effects until the end of the signal chain to the output.
		BYPASS	The signal bypasses all the effects and goes directly to the output.
		FX1	The signal outputs after FX1.
		FX2	The signal outputs after FX2.
		FX3	The signal outputs after FX3.
		FX4	The signal outputs after FX4.
		PAGE1	The signal outputs after FX1 through FX4.
		FX5	The signal outputs after FX5.
		FX6	The signal outputs after FX6.
		FX7	The signal outputs after FX7.
		FX8	The signal outputs after FX8.
		PAGE2	The signal outputs after FX5 through FX8.

Routing

Routing defines the configuration of the eight effects in the selected Patch.

To set the routing options, follow the procedure below.

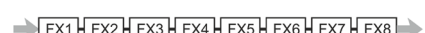
1. Select a Patch for setup. See “Creating and Editing Patches” on page 36 for more information.
2. Go to **p3**.
3. With **PATCH** selected, press the down arrow button on the Navigation Roller.
4. Press the right arrow button on the Navigation Roller to Routing options (**A**) on page two.



Turn the Navigation Roller to select one of the six routing options.

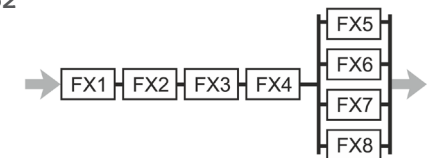
Note: FX1 through FX4 are the four effects on **p1**. FX5 through FX 8 are the four effects on **p2**.

SER: Serial
Serial (SER) processes all effects one after the other.

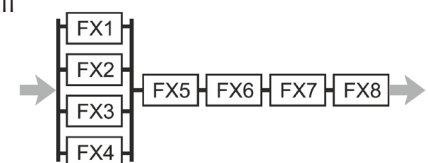


COMB1: Combination One
Combination One (COMB1) processes all **p1** effects (FX1 through FX4) in parallel to all **p2** effects (FX5 through FX8).

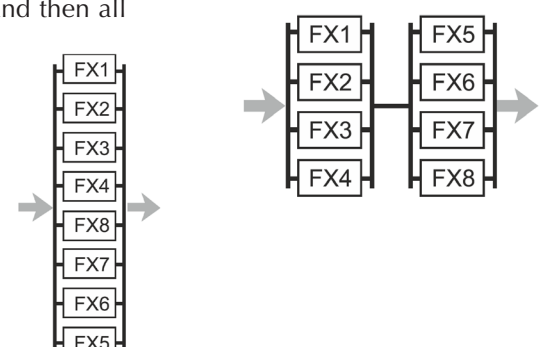
COMB2: Combination Two
Combination Two (COMB2) processes all **p1** effects (FX1 through FX4) serially and then all **p2** effects (FX5 through FX8) in parallel.



COMB3: Combination Three
Combination Three (COMB3) processes all **p1** effects (FX1 through FX4) in parallel and then all **p2** effects (FX5 through FX8) serially.



COMB4: Combination Four
Combination Four (COMB4) processes all **p1** effects (FX1 through FX4) in parallel and then all **p2** effects (FX5 through FX8) in parallel.



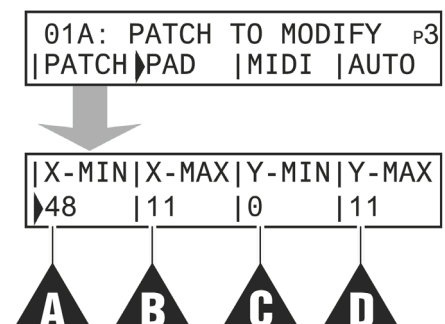
PAR: Parallel
Parallel (PAR) processes all effects in parallel.

Pad Setup

Go to **p3** of a selected Patch editing screen to access the pad setup parameters.

As the default, the REVPAD Touchpad axis is set for values between 0 and 100. Using the Pad setup screen, you can set minimum and maximum values for the borders to other values.

1. Select a Patch for setup. See “Creating and Editing Patches” on page 36 for more information.
2. Go to **p3**.
3. With PAD selected press the down arrow button on the Navigation Roller.
4. See the table below for an explanation of the settings.

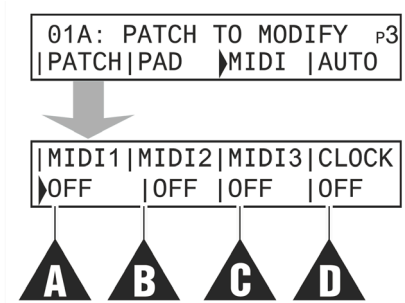


Item	Name	Value	Notes
A	X-MIN	0 through 100	Minimum border of the x-axis
B	X-MAX	0 through 100	Maximum border of the x-axis
C	Y-MIN	0 through 100	Minimum border of the y-axis
D	Y-MAX	0 through 100	Maximum border of the y-axis

MIDI Setup

Go to **p3** of a selected Patch editing screen to access the MIDI setup parameters.

1. Select a Patch for MIDI setup. See “Creating and Editing Patches” on page 36 for more information.
2. Go to **p3**.
3. With MIDI selected press the down arrow button on the Navigation Roller.
4. See “MIDI OUT Control Change” on page 75 for information about the first options A, B and C. See “MIDI Clock” on page 76 for information about option D.

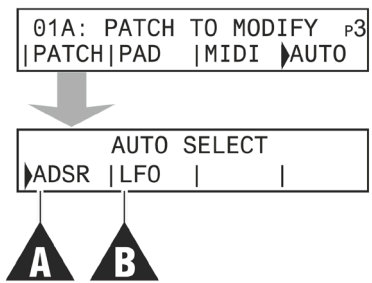


Auto Setup

Go to **p3** of a selected Patch editing screen to access the Auto setup parameters.

The Auto function simulates a finger movement on the REVPAD Touchpad by pressing (touring) on the Touchpad, and without the need to move the finger at all.

When Auto mode is on, the Touchpad will respond only to *touching*. Finger *movement* on the Touchpad will be disabled.



1. Select a Patch for setup. See “Modifying a Patch” on page 37 for more information.
2. Go to **p3**.
3. With **AUTO** selected press the down arrow button on the Navigation Roller.
4. See the table below for an explanation of the settings of the ADSR and LFO options.
   Note: Only one of these options can be active at the same time. If LFO is chosen ADSR is disabled. Likewise, if ADSR is chosen LFO is disabled.

ADSR Options (A)

Name	Value	Notes
ADSR	X, Y, XY, Z, OFF	Choose the direction the simulation will work.
MIN	0	The minimum value of the movement, where the movement begins.
MAX	0 to 100	The maximum value of the movement, where the movements ends.

Name	Value	Notes
GAP		Simulates removing the finger from the Touchpad in the end of the simulation cycle.
T.UP		Determines the time for the movement to go from the minimum to the maximum value.
HOLD1		Determines how long the simulation holds the maximum value.
T.DN		Determines the time for the movement to go from the maximum to minimum value.
HOLD2		Determines how long the simulation holds the minimum value.

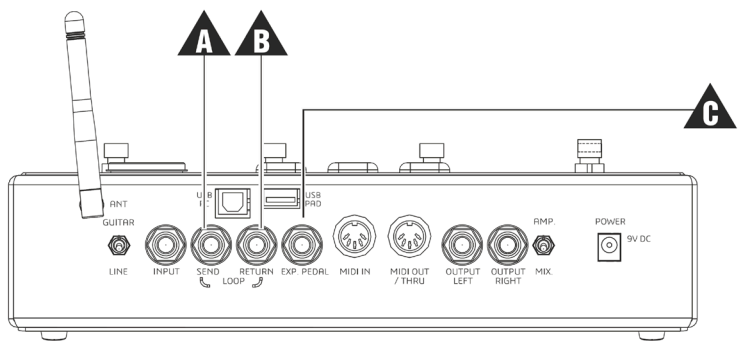
LFO Options (B)

Name	Value	Notes
LFO	X, Y, XY, Z, OFF	Choose the direction the simulation will work.
MIN	0	The minimum value of the movement, where the movement begins.
MAX	0 to 100	The maximum value of the movement, where the movements ends.
WAVE	Various wave shape types	
TEMPO	30 to 300, global	

External Control of Internal Effects

You can use REVPAD to control the level of external effect devices (such as a distortion pedal), and integrate them into the REVPAD's audio signal path. To do so, you need to connect these devices using the REVPAD's SEND (**A**) and RETURN (**B**) LOOP jacks. You will also have to add LOOP to the chain of effects in all Patches where you want to use these external devices.

If the external device has an expression pedal input jack, connect the REVPAD's EXP PEDAL socket (**C**) to the expression pedal input of the external device.



The **MIX** and **T-MIX** parameters are used to control the mix of the external audio devices that run through the loop connections.

The **RANGE**, **AUTO** and **TIME** parameters are used to control the expression signal coming from an external device with the REVPAD.

- **RANGE** determines the maximum range of the expression emulation that the REVPAD will send to the device. The minimum is always 0.
- **AUTO** is an auto movement for the expression that will activate by touching the REVPAD Touchpad.
- **TIME** is the speed with which the **AUTO** parameter will work.

Note: A LOOP effect must be on in the Patch.

System Configuration

Press the SYS button to access the following system configuration settings:

- Device Utilities
- Pad Settings
- Touchpad Control Button Assignment
- MIDI Settings
- MIDI IN CC Map

Device Utilities

Press the SYS button to view **DEVICE UTILITIES**. Press the right button on the Navigation Roller to see the next screen (Pad Settings). Press the down button on the Navigation Roller to view and modify REVPAD device utilities.

Rotate the Navigation Roller to scroll through your options in each configuration field. Press the right arrow to continue to the next configuration field. Press the up arrow to return to the main System Configuration Screen.

Number	Name	Default Value	Notes
1.1	INPUT GAIN		The level of the input gain to the REVPAD.
1.2	MASTER VOLUME		Global master volume for the REVPAD outputs.
1.3	POWER-UP PRE-SET	01A	Scroll through all of your Patches (presets) to select the Patch that will be active when the REVPAD is turned on.
1.4	RF CHANNEL	1	The Touchpad is set to this RF channel. Do not change unless two REVPAD units will be operating in same area or if any other device is using the same channel. When you have changed the RF value, connect the Touchpad to the base unit with the USB cable. Then, turn the Touchpad off and on again to reset the unit calibration. Wait for **PAD CONNECTED** to appear in the base unit display area before using the Touchpad.
1.5	DI_BOX	Off	Set this parameter to On or Off to globally enable or disable all the DIBOX effect in all Patches. If it is set to Off, the DIBOX effect will not work, even if it is used in a Patch.
1.6	OUT-R PHASE INVERT	Off	Inverts the phase of the audio signal going to the REVPAD's right output.
1.7	RESTORE SYSTEM	No	Change to **Yes** to return to the factory system settings.
1.8	RESTORE PATCHES	No	Change to Yes to return to the factory-installed Patches and erase all user-created or modified Patches.

Pad Settings

Press the SYS button and then the right arrow button on the Navigation Roller once to see the **PAD SETTINGS** screen. Press the left arrow button on the Navigation Roller to see the previous screen (**Device Utilities**). Press the right arrow button on the Navigation Roller to see the next screen (Touchpad Control Button Assignment). Press the down arrow button on the Navigation Roller to view and modify the settings for the REVPAD Touchpad.

Rotate the Navigation Roller to scroll through your options in each configuration field. Press the right arrow to continue to the next configuration field. Press the up arrow to return to the main System Configuration Screen.

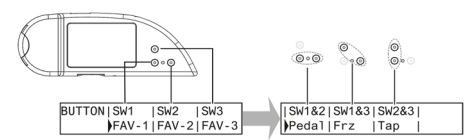
Number	Name	Values	Notes
2.1	PAD SPLITS	▪ 2 Segments ▪ 4 Segments ▪ 6 Segments	The Touchpad can be split into 2, 4, or 6 segments for use in Patch Favorite mode and for MIDI Control. Each segment can be assigned to various functions. See “Touchpad Control Button Assignment” on page 65 for more information.
2.2	FAVORITE MODE FUNC. See “Patch Favorite Mode” on page 47 for more information.	▪ Select Only	Press the Touchpad Control Button or Control Button pair assigned to a favorite mode. Then, tap a Touchpad segment to select and activate the assigned Patch. The base unit editing screen displays the segments you have set up for the Favorite set and remains visible so you may see all of the assignments on the Touchpad.

Number	Name	Values	Notes
		▪ Select and Play	Press the Touchpad Control Button or Control Button pair assigned to a favorite mode. Then, tap a Touchpad segment to select and activate the assigned Patch and exit Patch favorite mode.
2.3	SINGLE MODE	▪ Select Only	Press the Touchpad Control Button or Control Button pair assigned to Single mode. Then, tap the Touchpad to select an effect to bypass or turn back on. The base unit displays the first six effects of the active Patch. The effects remain visible so you may bypass other effects or turn bypassed effects back on.
		▪ Select and Play	Press the Touchpad Control Button or Control Button pair assigned to Single mode. Then, tap the Touchpad to bypass the effect assigned to that particular segment. Once you have tapped an effect you exit Single mode.
2.4	PADS ENABLE	▪ Enable ▪ Disable	Select **Disable** to disable Touchpad functions.
2.5	PAD X-Y BORDER		Adjusts the margins of the Touchpad area. Use this if your fingers do not comfortably reach the edges of the Touchpad. 100 = no limit. 0 = smallest Touchpad area.

Touchpad Control Button Assignment

Press the SYS button and then the right arrow button on the Navigation Roller twice to see the **PAD BUTTONS ASSIGN** screen. Press the left arrow button on the Navigation Roller to see the previous screen (**Pad Settings**). Press the right arrow button on the Navigation Roller to see the next screen (**MIDI Settings**). Press the down arrow button on the Navigation Roller to view and modify the REVPAD Touchpad Control Button assignments.

Note: Because you will be looking at the Touchpad from above when it is attached to your guitar, the illustration shows the "guitarist-eye-view."



1. Press the down button of the Navigation Roller to view and modify your REVPAD Touchpad Control Button assignments.
2. To change the present assignment for SW1 (Touchpad Control Button 1), rotate the Navigation Roller to scroll through your options. (See table below for a list of all options.)
3. Press the right arrow to set SW2 and SW3.
4. In the next screen you assign actions to Control Button *pairs*.
5. Press the up arrow of the Navigation Roller to return to the main System Configuration Screen.

Label	Function	Notes
FAV-1	Toggles between Favorite Patch Collection 1 (FAV-1) and Normal mode.	See "Patch Favorite Mode" on page 47 for more information.

Label	Function	Notes
FAV-2	Toggles between Favorite Patch Collection 2 (FAV-2) and Normal mode.	
FAV-3	Toggles between Favorite Patch Collection 3 (FAV-3) and Normal mode.	
Single	Toggles Single mode on and off.	See “Single Mode” on page 49 for more information.
Frz	Toggles Freeze mode on and off.	See “Freeze Mode” on page 46 for more information.
Up	Scrolls up to the next higher Patch.	
Down	Scrolls down to the next lower Patch.	
BnkUp	Scrolls up to the next higher Bank. Then press one of the footswitches to select the A, B, C, or D Patch from that Bank.	
BnkDn	Scrolls down to the next lower Bank. Then press one of the footswitches to select the A, B, C, or D Patch from that Bank.	
Tap	Toggles Tap Tempo mode on or off.	See “Tap Tempo Mode” on page 50 for more information.
MPC-1	Toggles between MIDI Program Change 1 (MPC-1) and normal mode.	See “MIDI Control” on page 71 for more information.

Label	Function	Notes
MPC-2	Toggles between MIDI Program Change 2 (MPC-2) and normal mode.	
MPC-3	Toggles between MIDI Program Change 3 (MPC-3) and normal mode.	
Byp	Toggles Bypass mode on and off.	
F.S-A	Changes to Patch A in an active Bank.	
F.S-B	Changes to Patch B in an active Bank.	
F.S-C	Changes to Patch C in an active Bank.	
F.S-D	Changes to Patch D in an active Bank.	

MIDI Settings

Press the SYS button and then the right arrow button on the Navigation Roller three times to see the **MIDI SETTINGS** screen. Press the left arrow button on the Navigation Roller to see the previous screen (Touchpad Control Button Assignment). Press the right arrow button on the Navigation Roller to see the next screen (**MIDI IN CC Map**). Press the down arrow button on the Navigation Roller to view and modify the REVPAD MIDI settings.

Rotate the Navigation Roller to scroll through your options in each configuration field. Press the right arrow to continue to the next configuration field. Press the up arrow to return to the main System Configuration Screen.

Number	Name	Values	Notes
4.1	PC TX CHANNEL	▪ Off ▪ 1 to 16	The MIDI channel on which the REVPAD sends program change messages.
4.2	PC TX FUNCTION	▪ Select Only ▪ Select	See “MIDI OUT Program Change” on page 74 for more information.
4.3	RX CHANNEL	▪ Omni ▪ Off ▪ 1 to 16	The MIDI channel on which the REVPAD receives messages.
4.4	MIDI THRU	Off/On	When set to ON, REVPAD will forward MIDI messages received on the IN port to the MIDI OUT port.

MIDI IN CC Map

Press the SYS button and then the right arrow button on the Navigation Roller four times to see the **`MIDI IN CC MAP`** screen. Press the left arrow button on the Navigation Roller to see the previous screen (**`MIDI Settings`**). Press the down arrow button on the Navigation Roller to view and modify the REVPAD MIDI IN Control Change (CC) map.

MIDI Control Change messages can be used to turn a particular effect within the current Patch on or off.

Use the right arrow button on the Navigation Roller to scroll through all effects that can be controlled using MIDI IN Control Change messages. When the cursor stands on a particular effect, use the Navigation Roller to select the MIDI IN channel (1 to 16), turn the mapping for this effect off, or set the effect to LEARN.

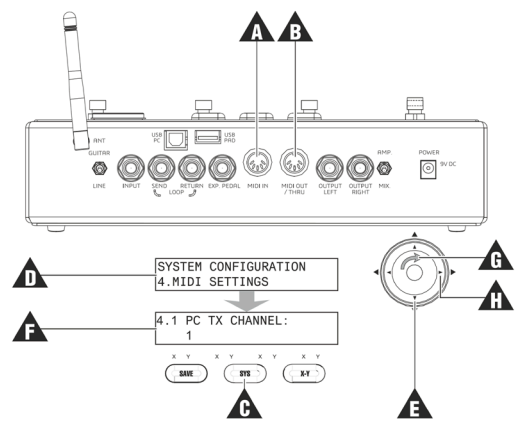
Press the up arrow to return to the main System Configuration Screen.

MIDI Control

You can use your REVPAD system to interface with MIDI devices you already use, or to accept MIDI control of your REVPAD system.

To have another MIDI device control your REVPAD (MIDI IN), connect a cable from the MIDI OUT port of your MIDI device to the MIDI IN connector (A) on the back panel of your REVPAD Base Unit.

To have your REVPAD control another MIDI device (MIDI OUT), connect a cable from the MIDI OUT/THRU port (B) in the back panel of your REVPAD Base Unit to the MIDI in port of your MIDI Device.



Set up communication between your MIDI device and your REVPAD system as follows:

1. Press the SYS button (C) three times. You will see the MIDI SETTINGS menu (D).
2. To set the MIDI OUT channel, press the down arrow (E). The default program change transmit (PC TX) channel (F) will be shown. Use the Navigation Roller (G) to adjust the setting.
3. To set the MIDI IN channel, press the right arrow (H). The default MIDI Receive (RX) channel will be shown. Use the Navigation Roller (G) to adjust the setting.

MIDI IN

The MIDI IN procedures below allow you to…

- Use your MIDI device to change the Patches you have set up in the REVPAD system (MIDI IN Program Changes)
- Map MIDI device control change (CC) messages to REVPAD effects, allowing you to bypass individual effects in a Patch (MIDI IN Control Changes).

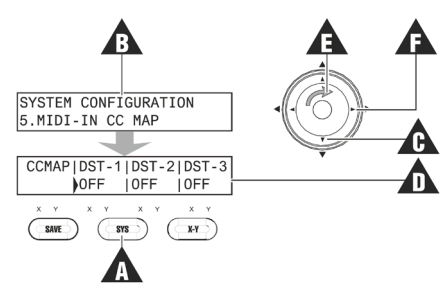
MIDI IN Program Change

Setting up your REVPAD system to accept incoming MIDI Program Change messages allows you to use your MIDI device to change the active REVPAD Patch.

1. Connect a cable from the MIDI OUT port of your MIDI device to the MIDI IN connector in the back panel of the base unit. Make sure that the MIDI receive channel (**RX**) is set to the channel the other MIDI device is sending on. See “MIDI Control” on page 71 for more information.
2. When a program change command is sent from a MIDI device (0 to 127), it will change the Patch with the corresponding value on your REVPAD system. For example, pressing a button on the MIDI device that sends the Program Change value 0 will activate the REVPAD Patch 01A.

MIDI IN Control Change

Setting up your REVPAD system to accept incoming MIDI Control Change messages allows you to use your MIDI device to turn REVPAD effects on or off (bypass).



1. Connect a cable from the MIDI OUT port of your MIDI device to the MIDI IN connector in the back panel of the base unit. Make sure that the MIDI receive channel (**RX**) is set to the channel the other MIDI device is sending on. See “MIDI Control” on page 71 for more information.
2. Press the SYS button (**A**) four times. You will see the MIDI IN CC MAP menu (**B**).
3. Press the down arrow (**C**) to see the CC Map (**D**). The first effect, Distortion 1 (DST-1), is selected with the default value of **Off**.
4. Use the Navigation Roller (**E**) to select the Control Change value (from 0 to 127) of the external MIDI controller that you want to use to turn on and off (bypass) the selected effect in the current REVPAD Patch.
   Note: If you do not know the Control Change value sent by a controller on your MIDI device, set the CC Map value to **LEARN** and then send the CC message from the MIDI device you wish to use to control the selected effect. The REVPAD will use the received CC number.
5. When the CC value has been set, press the right arrow (**E**) to select another effect to map.
   Note: You can map the same CC value to more than one effect.

MIDI OUT

The MIDI OUT procedures below allow you to…

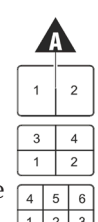
- Use your REVPAD Touchpad to send MIDI Program Change messages to your MIDI device (MIDI OUT Program Change).
- Use your REVPAD Touchpad to send MIDI Control Change messages to your MIDI device (MIDI OUT Control Change).

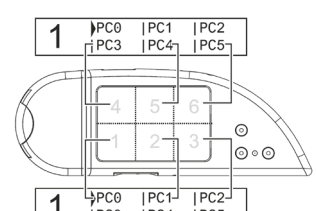
MIDI OUT Program Change

Setting up your REVPAD to send MIDI Program Change allows you to use the Touchpad to send program change messages to external MIDI devices.

Note: Because you will be looking at the Touchpad from above when it is attached to your guitar, the illustration shows the "guitarist-eye-view."

1. Connect the MIDI OUT/THRU port on the back panel of the REVPAD base unit to the MIDI IN port of your MIDI device using a standard MIDI cable. Make sure that the MIDI TX channel on the REVPAD and the MIDI Receive channel on your MIDI device are set to the same channel. See "MIDI Control" on page 71 for more information.
2. Choose the number of segments you wish to make active on the Touchpad. You can split the Touchpad into two, four, or six segments (**A**). Press the SYS button and then navigate to the **`Pad Setting`** screen in System Configuration. See "Pad Settings" on page 63 for more information.





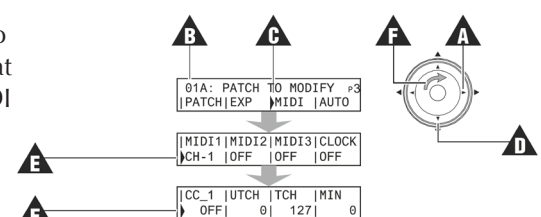
3. Decide the behavior you want when invoking MIDI Program Change. Go to **`MIDI Settings`** in the **`SYS`** menu and navigate to the **`PC TX FUNCTION`** screen and select one of two options:

- **`Select Only`** allows you use the Touchpad to *select* the MIDI Program Change to be sent. Press the Touchpad Control Button again to *send* the selected MIDI Program Change message.
- **`Select and Play`** sends the MIDI Program Change message immediately when you touch the respective Touchpad segment and exits MIDI Program Change mode.

4. Finally, assign a MIDI Program Change layout to a Touchpad Control Button. Press the SYS button and then navigate to the Control Button assignment screen in system configuration. See “Touchpad Control Button Assignment” on page 65 for more information.

MIDI OUT Control Change

Setting up your REVPAD to send MIDI Control Change messages allows you to use the Touchpad to send up to six different CC values to external MIDI devices.



1. Connect the MIDI OUT/THRU port on the back panel of the REVPAD base unit to the MIDI IN port of your MIDI device using a standard MIDI cable. Make sure that the MIDI TX channel on the REVPAD and the MIDI Receive channel on your MIDI device are set to the same channel. See “MIDI Control” on page 71 for more information.
2. Select a Patch for which you want to add MIDI OUT settings. See “Modifying a Patch” on page 37 for more information.
3. Press the right arrow button (**A**) eight times until you see the third effects screen (**B**).
4. Press the right arrow button (**A**) twice more to select **`MIDI`**.
5. Press the down arrow (**C**) to see the MIDI Channel page (**E**). Rotate the Navigation Roller (**F**) to set the appropriate MIDI channel (CH-1 through CH-16). In this example, CH-1 has been selected.

6. Press the down arrow (D) to see CC-1, the first MIDI Control Change page (F). Rotate the Navigation Roller (E) to adjust values according to the table below.
   Note: Press the right arrow button (A) four times to view and adjust values for CC-2, the second MIDI Control Change page.

Label	Values	Function	Notes
CC_1	Off / 0 to 127	Select MIDI OUT CC number.	Each MIDI channel has two control change screens.
UTCH	0 to 127	Value sent when the user lifts his fingers from the Touchpad (“Untouch”).	
	HOLD	Cancels the “Untouch” value.	If set to “Hold”, lifting the finger from the Touchpad will *not* send another value for this Continuous Controller.
TCH	0 to 127	Value sent when the Touchpad is touched.	See “Setting X-Y Values in Effects” on page 41 for more information.
MIN	0 to 127	Sets the minimum value for the X-Y range.	

MIDI Clock

MIDI Clock messages are used to sync the tempo of MIDI devices. You can set up your REVPAD to either send or receive MIDI Clock messages.

Controlling REVPAD with incoming MIDI Clock messages
Incoming MIDI Clock messages can be used to control the global tempo of the current Patch.

To set up your REVPAD as the MIDI Clock *slave,* go to the MIDI setting on **p3** of the Patch setup. Set the Clock parameter to **SLAVE**. With this setting, MIDI CLOCK messages received by the REVPAD from an external MIDI device will change the global tempo of the current Patch to the received clock.

Sending MIDI Clock messages from REVPAD
You can send the global tempo of the current Patch as Clock messages to an external MIDI device. Changing the global tempo of the Patch will change the outgoing Clock messages as well.

To set up your REVPAD as the MIDI Clock *master,* go to the MIDI setting on **p3** of the Patch setup. Set the Clock parameter to **OUT**.

Specifications

User Interface

Base Unit	▪ 2 x 7 segment display: Patch indicator display ▪ 24 x 2 LCD screen: Patch info, parameter values and editing pages ▪ Navigation Roller: Scrolling and editing ▪ Save button for saving Patches ▪ System button for system configurations ▪ X-Y button for quick effect parameters assignment and their directions to the Touchpad's X-Y axis ▪ Four footswitches for switching to true bypass or between Patches ▪ Eight LED indicators ▪ Output Master Level Control Knob
Touchpad	▪ Wireless assignable X-Y (+Z) pad controller and sound shaper ▪ Three assignable buttons for control operational modes

External Interface

Instrument Input	Connection	¼" Phone Jack
	Impedance	1MΩ
Loop (Send/Return)	Connection	¼" Phone Jack

	Impedance	▪ Input 200 kΩ ▪ Output 100 Ω
Analog Outputs (L/R)	Connectors	2 x ¼" Phone Jack
	Impedance	100 Ω

Control Interface

MIDI IN & OUT / THRU	Connection	2x 5 Pin DIN
USB PC	Purpose	PC connection for firmware updates and user downloads
	Connection	USB 2.0, type B
USB PAD	Purpose	Touchpad association, Touchpad battery charging and wired communication
	Connection	USB 2.0, type A
Pedal (Exp and Vol)	Purpose	Control external units with expression pedal input
	Connection	¼" stereo phone jack

Audio Specifications

Sample Rate	44.1 kHz
A to D Conversion	24 bit
D to A Conversion	24 bit
True bypass	Relay

Wireless Communication

Frequency	2.4 GHz
Range	20 m / 65″
Working Time (between charges)	7 hours continuous, 20 hours typical playing

Environment

Storage Temperature	-20° to 70° C / -4° to 158° F
Operating Temperature	0° to 40° C / 32° to 104° F

Power Requirements Base Unit

Transformer Main Voltage	100 to 240 VAC, 50/60 Hz
DC input	9 VDC input, 2000 mA
Power consumption	< 18W

Power Requirements Touchpad

DC input	5 VDC through USB connection

Mechanical Specifications

Base Unit	Dimensions	290 x 167 x 70 mm / 11.4″ x 6.6″ x 2.8″

	Weight	1.2 kg / 2.7 lb
Touchpad	Dimensions	122 x 44 x 8 mm / 4.8″ x 1.73″ x 0.32″
	Weight	45 gm / 0.1 lb
Attachment mechanism		3M double side scotch

Note: Due to continuous development these specifications are subject to change without prior notice.

MIDI Implementation Map

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	
	Changed	1 to 16	1 to 16	
Mode	Default	X	X	
	Messaged	X	X	
	Altered	X	X	
Note number		X	X	
	True Voice	X	X	
Velocity	Note ON	X	X	
	Note OFF	X	X	
After touch	Key	X	X	
	Channel	X	X	
Pitch bend		X	X	
		X	X	
Control change		0 to 127	0 to 127	
Program change		O	O	

Function		Transmitted	Recognized	Remarks
	True #	0 to 127	0 to 127	
System exclusive		X	X	
Common	Song pos	X	X	
	Song sel	X	X	
	Tune	X	X	
System Real time	Clock	O	O	
	Commands	X	X	
Aux Messages	Local ON/OFF	X	X	
	All notes OFF	X	X	
	Active sense	X	X	
	Reset	X	X	

- O = Yes
- X = No

Contact & Support

GTC Sound Innovations Support Resources

- REVPAD product home page: gtcsound.com/product/revpad/
- REVPAD FAQ: gtcsound.com/faq/

GTC Sound Innovations @ Social media

- GTC Sound Innovations on Facebook:
  facebook.com/gtcrevpad/

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