

# CZ PATCH LIBRARY MANUAL

Firmware Version 3.01

## CONNECTIONS

Connect the CZPL as follows:

### USB POWER

If using the USB cord for power, connect to an appropriate USB compliant (5V) power source. This can include a USB powerbank for cordless operation.

### POWER

If using the standard power port, connect to a 9V, center-positive adapter.

### CASIO MIDI

You will need 2 standard MIDI cables.

Connect the CZPL Casio OUT port to your synthesizer's MIDI IN port.

Connect the CZPL Casio IN port to your synthesizer's MIDI OUT port.

**Remember: OUT to IN, IN to OUT.**

### EXTERNAL MIDI

The CZPL MIDI OUT and IN port now take the place of your synthesizer's MIDI OUT and IN ports. Connect these to outside MIDI devices as necessary.

**Remember: OUT to IN, IN to OUT**

## PRE FLIGHT CHECKS

Prepare your Casio CZ to send and receive data from the CZ Patch Library. This depends on model, and in some cases, must be done each time you power on your synthesizer:

### CZ-101 / CZ-1000

On the back of your synth, move the Protect switch to the Off position.

Press the MIDI button. Ensure that the bottom line of the display reads:

PROG CHANGE=ENA

Use the Cursor and Value keys to change this if needed.

## CZ-3000 / CZ-5000

On the back of your synth, move the Protect switch to the Off position.

Press the MIDI button. Ensure that the bottom right line of the display reads:

PRG=ENA

Use the Cursor and Value keys to change this if needed.

## CZ-1

On the back of your synth, move the Protect switch to the Off position.

Press the MIDI button. Ensure that the bottom right line of the display reads:

PRG=ENA

Use the Cursor and Value keys to change this if needed.

Press the Page Down button. Ensure that the display reads:

SYSTEM EXCLUSIVE

TONE DATA=ENA

Use the Value key to change this. **Note that this must be done each time the synth is powered on.**

## CZ-230S

On the back of your synth, move the MIDI switch to the On position.

## POWER

The CZPL will turn on when power is applied at either power connection. To turn the CZPL off, disconnect the power source.

## MIDI PASSTHROUGH

When powered on, the CZPL will pass all MIDI messages received on the MIDI IN port on to the Casio synthesizer's MIDI IN port. All messages from the Casio synthesizer's MIDI OUT port will be passed through to the MIDI OUT port on the CZPL. When the CZPL is loading or saving a patch, this passthrough is disabled while the patch is being loaded or saved.

## KEYPAD

While some modes of operation will assign different functions to the keypad, in general, the keypad buttons are used as follows:

A – Access the Main Menu

B – Cancel an operation

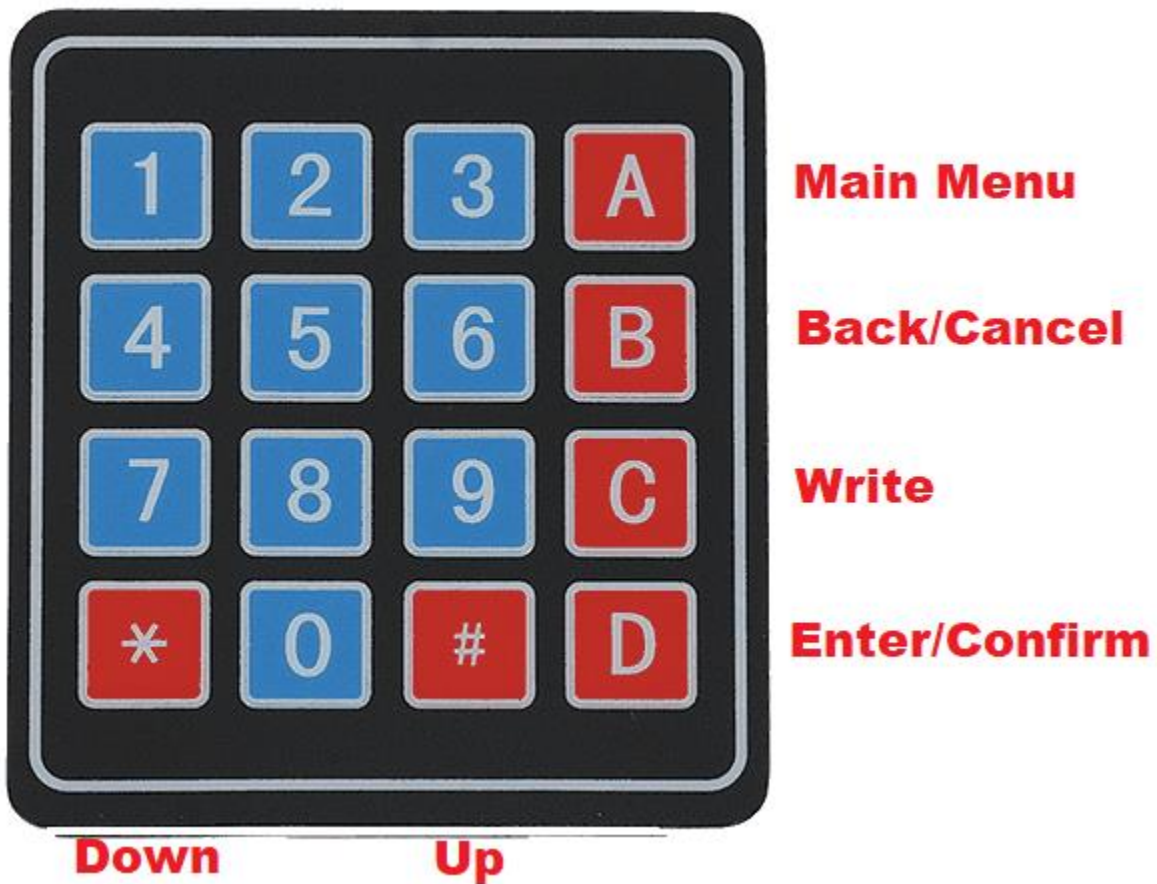
C – Initiate a Write operation to save data to the CZ Patch Library

D – Enter/Yes/Confirm an operation

Numeric keys – Enter values or select options

\*, # keys – Increase or decrease values or option selections

### 0-9 Numeric Entry



## MAIN MENU

The CZPL starts in Main Menu Mode. You can return to the Main Menu at any time by pressing A. There are 7 main modes, which you can access by entering the number with the keypad, or pressing the \*,# keys.

These modes are:

1. PRST (Preset) – Load one of the CZPL's 2,186 built-in presets.
2. USER (User) – Load or save a patch to one of the CZPL's 10,000 available user memory slots.
3. BANK (Bank) – Load or save an entire bank of 16, 32 or 64 patches (depending on model) to the synth.
4. ARPG (Arpeggiator) – Use an arpeggiator with the synth.
5. RAND (Random) – Load random presets from the CZPL to the synth.
6. SELF (Self-play) – Play random melodies on the synth using random presets.
7. SETT (Settings) – Adjust CZPL settings.

To select a mode, use the numeric keys, or \*/# keys, then press D (Enter) to enter that mode

### 1 – PRESET MODE

Here you can load one of 2,186 built in preset patches.

---

#### SELECT A DESTINATION

On your Casio synth, select a Memory location to send the preset to. (Note that if you do not select a memory location, location 1 or A1 or 96 will be used, depending on model).

---

#### SELECT A PRESET

Use the numeric keypad to enter the number of the preset you want to load. The display flashes slowly, indicating that the patch you have selected has not yet been loaded.

---

#### LOAD A PRESET

Once you have entered the desired patch, press the D (Enter) button to load the patch to the Casio synth. The display stops flashing, indicating that the selected patch has been loaded to the Casio.

---

#### SCROLL THROUGH PRESETS

You can use the \* and # keys to move up and down through the presets. When scrolling through presets this way, the new preset is automatically loaded, and you do not have to press the D (Enter) key.

## 2 – USER PATCH MODE

Here you can load patches that you have stored in one of 10,000 memory slots.

---

### SELECT A DESTINATION

On your Casio synth, select a Memory location to send the preset to. (Note that if you do not select a memory location, location 1 or A1 or 96 will be used, depending on model).

---

### SELECT A USER PATCH

Use the numeric keypad to enter the number of the slot containing the patch you want to load. The display will display the slot number, and if the slot contains data, the : symbol.

---

#### : IS NOT DISPLAYED

This indicates that the slot you selected does not contain a patch, and cannot be loaded.

---

#### : IS DISPLAYED

This indicates that the slot you selected **does** contain a patch.

---

### LOAD A USER PATCH

Once you have entered the desired patch, press the D button to load the patch to the Casio synth. The display stops flashing, indicating that the selected patch has been loaded.

---

### SCROLL THROUGH USER PATCHES

You can use the \* and # keys to move up and down through the user patches. When scrolling through presets this way, the new preset is automatically loaded, and you do not have to press the D (Enter) key. Note that if you scroll to a slot that does not contain a patch, nothing will be loaded to the Casio.

## SAVE A PATCH FROM THE CASIO TO THE CZPL

You can save the contents of the currently selected synth patch location to the CZPL. You can do this in any of the following modes:

1. Preset Mode
2. User Mode
3. Random Mode

Press C (Write) to access the Save User Patch Mode. Here you can save the contents of the currently selected Casio patch location to the CZPL. **You cannot access this mode on a CZ-230S, as it is unable to transmit tone data.**

---

### SELECT A SAVE SLOT

Use the numeric keypad , or the \* and # buttons, to enter the number of the slot where you want to save the patch. The display will flash quickly, and the : symbol will be displayed if the slot already contains a patch:

---

#### : SHOWN

This indicates that the slot you selected **contains patch data, and if you confirm, you will overwrite the patch data in this slot.**

---

#### : NOT SHOWN

This indicates that the slot you selected does not contain patch data, and is free for saving.

---

---

### SAVE A USER PATCH

Once you have entered the desired slot number, press the D (Enter) button to save the patch from the Casio synth. The display stops flashing, indicating that the selected patch has been saved. The CZPL automatically switches to user patch mode.

### 3 – BANK MODE

In Bank Mode, you can store and recall all patches in your synthesizer's internal memory. The synthesizer presets and cartridge patches (if any) cannot be saved or altered. The number of patches per bank is:

- CZ-101 / CZ-1000 – 16 patches
- CZ-3000 / CZ-5000 – 32 patches
- CZ-1 – 64 patches
- CZ-230S – 4 patches (numbers 96-99) **The CZ-230S can only receive bank data, it cannot save bank data.**

---

### SAVE A BANK

Set up your synthesizer with the patches that you want to save to the bank.

Select the bank number you wish to save to with the numeric keypad or the #/\* keys.

Press C (Write/Save). The display will flash quickly, and the : symbol will be displayed if the slot already contains bank data.

---

#### : SHOWN

This indicates that the slot you selected **contains bank data, and if you confirm, you will overwrite the bank data in this slot.**

---

#### : NOT SHOWN

This indicates that the slot you selected does not contain bank data, and is free for saving.

---

### TO SAVE THE ENTIRE BANK

Press D (Enter/Confirm) to save the bank. You will receive a confirmation prompt (SURE) if you have selected a slot that already contains a bank.

---

### TO SAVE A PARTIAL BANK

Press the button on your synth that marks the first patch you want to save. The display flashes “St” + your selection. Press D(Enter). The Display flashes “Ed” + your selection. Press the button on your synth that marks the last patch you want to save.

Press D (Enter/Confirm) to save the bank. You will receive a confirmation prompt (SURE) if you have selected a slot that already contains a bank.

---

### LOAD A BANK

Select the bank number you wish to load using the numeric keypad or the #/\* keys.

---

### TO LOAD THE ENTIRE BANK

Press D (Enter/Confirm). You will receive a confirmation prompt (SURE), and when you press Enter/Confirm, the patches will be loaded to the synthesizer.

---

### TO LOAD A PARTIAL BANK

Press the button on your synth that marks the first patch you want to overwrite. The display flashes “St” + your selection. Press D(Enter). The Display flashes “Ed” + your selection. Press the button on your synth that marks the last patch you want to overwrite.

Note that if you load a bank from a CZ model which has more internal storage than the model you are loading to, only the patches that fit will be loaded. For instance, if you save a 32-patch bank from a CZ-5000 and load it onto a CZ-101, only the first 16 patches will be loaded on the CZ-101. You can get around this by saving the banks from the more capable machine as partial banks, e.g., from a CZ-5000, save its 32 patches as 2 partial banks of 16 patches each for loading onto a CZ-101.

## 4 – ARPEGGIATOR MODE

The arpeggiator mode functions quite differently from the other modes. Please see the Arpeggiator section at the end of the manual.

## 5 – RANDOM MODE

**Before pressing D (Enter) to enter random mode, select a patch location on the synthesizer that can be overwritten.**

---

### SELECT RANDOM PRESETS FOR MANUAL PLAY

Press the D (Enter) button repeatedly to send random presets to the synthesizer. When you find something you like, you can press C (Write) to write that patch to one of the user slots.

## 6 – SELF PLAY MODE

**Before pressing D (Enter) to enter random mode, select a patch location on the synthesizer that can be overwritten.**

The CZPL selects a random preset and plays a random melody. It will continue selecting presets and playing melodies until you switch to another mode.

Random mode only plays presets, it does not play user patches.

## 7 – SETTINGS MODE

In settings mode you can move through the available settings using the #/\* keys. Press D (Enter) to adjust the settings for:

- MODL (Model)
- CLOC (Internal/External Clock)
- ATRG (Internal/External Arpeggiator Trigger)
- ACNL (Arpeggiator MIDI Channel)
- ACUT (Arpeggiator Key Cutoff)

---

### MODEL (MODL)

Display the currently selected Casio model. Cycle through the options by pressing the #/\* buttons, then press D again to select a different model. The model is retained when the CZPL is powered off.

---

### INTERNAL/EXTERNAL CLOCK (CLOC)

The arpeggiator runs from an internal clock, but can be changed to listen for incoming MIDI Start/Stop/Song Position Reset and Clock messages on the MIDI IN port.

The current clock location (INTL or EXTL) is shown. To switch between states, use the #/\* keys. Press D to confirm.

---

### ARPEGGIATOR TRIGGER SOURCE (ATRG)

The notes that trigger the arpeggiator can come from either the Casio synth, or a MIDI controller that is connected to the CZPL MIDI IN port.

Press \* to display the current status:

- INTG – the arpeggiator notes are triggered by the Casio keyboard. Notes that come from an external MIDI controller are passed through and played as normal.
- EXTG – the arpeggiator notes are triggered by the external controller. Notes that are played on the Casio keyboard are played normally.

To switch between states, use the #/\* keys. Press D to exit.

This allows you to essentially play 2 parts, an arpeggiated part and a lead part, at the same time.



---

## ARPEGGIATOR CHANNEL (ACHN)

By default, the arpeggiator sends its notes to the Casio on channel 1. It is possible to set the Casio to Mono mode and select different voices to be played on different MIDI channels (although, in practice, this is cumbersome at best due to the Casio's inherent limitations).

Nevertheless, it is possible to change the channel that the arpeggiator sends on.

Use the numeric keypad to enter the channel you want to use. Press D (Enter) to confirm.

---

## ARPEGGIATOR CUTOFF (ACUT)

You can split the keyboard such that the arpeggiator "listens" for notes only on the bottom half of the Casio keyboard, and ignores notes played on the upper half. This lets you play an arpeggiated part with the left hand and a solo/lead part with the right.

Note that the cutoff is only applicable when using the arpeggiator with the Casio's built in keyboard.

The display shows the current cutoff note. To change the cutoff note, press a note on the Casio keyboard. Notes to the left of this note will trigger the arpeggiator, while notes to the right will be played unchanged.

## SD CARD

The SD card is standard FAT32 format, and can be read by any computer. It contains the following folders:

### CONFIG

Stores a CONFIG file with the CZPL settings. This file should not be removed or edited.

### PRESET

Contains the 2186 SysEx files corresponding to the presets on the device.

### SNAP

Stores the SysEx files corresponding to the banks stored on the device. Banks are numbered 0000 to 0999.

### USER

Contains the SysEx files corresponding to the user patches on the device. Patches are numbered 0000 to 9999.

## CZ-230S USERS

When the CZ-230S model is selected, patches can be sent to sound slots 96-99 on the CZ-230S.

## FUNCTIONALITY

Functionality of the CZPL in 230S mode is identical to standard mode EXCEPT:

- You cannot save patches or banks from the CZ-230S to the CZPL.
- Patches are sent to locations 96-99
- The first 4 patches of any saved bank are sent to locations 96-99.

## CZ-1 USERS

CZ-1 patches contain extra data related to velocity and aftertouch settings. The CZ Patch Library will load any valid patch from any CZ model to any other model. However, patches that contain velocity or aftertouch data may not sound the same on earlier models, as these models cannot utilize the extra data.

Patches loaded from other models onto the CZ-1 will not change the name of the patch they overwrite, as only the CZ-1 has the ability to attach a name to a patch in the patch data.

## TROUBLESHOOTING

### PATCHES DO NOT LOAD

- Make sure the CZPL Casio OUT port is connected to the Casio synth MIDI IN port.
- Make sure the CZPL Casio IN port is connected to the Casio synth MIDI OUT port.
- Make sure the Write protect switch on the back of your Casio is switched OFF.
- Make sure you are either on Memory position A1 or 1 or 96, depending on model, or that you have pressed the button on your Casio where you want to send the patch.
- CZ-1 users, please make sure SysEx messages are enabled, this must be done each time you power on your synth.

## ARPEGGIATOR

In arpeggiator mode, the keypad functions are:

**1-4 Octave**

**6-9 Pattern**

**5 Pause    0 Rest**



**Main Menu**

**Tempo/Div**

**Mute Steps**

**Enter/Confirm**

**Latch**

**Follow**

The CZPL arpeggiator offers 4 patterns:

- Up
- Down
- Up/Down
- Random

And can play these patterns across 1 to 4 octaves.

To start, enter ARPG mode by pressing the A (Main Menu) key, then 4., then D (Enter/Confirm).

The display will show Up 4, indicating the current arpeggiator pattern is Up, covering 4 octaves.

Hold down one or more keys on the Casio. You should hear these notes being played in a pattern

#### IF YOU DO NOT HEAR ANY SOUNDS IN ARPEGGIATOR MODE

---

There is a bug in the CZ MIDI implementation (it was over 30 years ago, after all). If you do not hear sound, press the MIDI button on your CZ, then press the Up button, then the Value Up button, then the Value down button on the synthesizer. You should now hear sound. You may have to do this each time you enter arpeggiator mode.

You can select different patches on the synthesizer while in arpeggiator mode.

#### NOTE ORDER

---

The order that notes are played depends on the order in which you play them on the keyboard. Even a difference of a fraction of a second will be picked up. This allows you to vary the pattern quite widely – pressing C,E,G will produce a purely rising set of tones, while pressing G,E,C will play a descending pattern, but then jump up an octave and play the descending pattern again, etc.

#### CHANGING OCTAVES

Numeric keys 1-4 select the span of the arpeggio to be played, from 1 to 4 octaves. Changes are applied immediately.

#### CHANGING PATTERNS

Numeric keys 6-9 select from the available patterns:

- 6 – Up
- 7 – Down
- 8 – Up/Down
- 9 – Random

#### LATCH MODE

Pressing the \* key activates the Latch feature. After you press \*, you can remove your hand from the keyboard and the arpeggio will keep playing. The colon will be displayed, for example, Up: 4 to indicate the arpeggio is latched in Up, 4-octave mode.

While in latch mode, you can continue to add notes to the pattern by playing them on the keyboard.

The pattern has a maximum length of 8 notes. Once this length is reached, the oldest note is removed from the beginning of the sequence to make room for the newest note. In this way you can continuously evolve the arpeggiator pattern.

You can also enter a rest into the pattern by pressing the 0 key on the numeric keypad.

Press \* again to Unlatch. Note that this will immediately “forget” any pattern that was playing.

## FOLLOW MODE

From latch mode, you can lock the current pattern and enter Follow mode, where the arpeggiator will transpose the currently playing pattern based on key input from the synthesizer.

First enter latch mode by pressing the \* key. Enter follow mode by pressing the # key. The display adds an F to indicate the arpeggiator is in follow mode, for example Up:F4. Pressing keys on the synthesizer now transposes the currently playing pattern. For example, if the pattern as originally entered was C-E-G, pressing a D key will change the pattern to D-F#-A.

Press # to exit Follow mode.

## PAUSE/RESTART

To pause or restart a latched pattern, press the 5 key on the keypad.

## PATTERN STEP MUTE

By default, the arpeggio plays every note in the pattern. You can mute or unmute steps in the pattern:

Press the C key to enter pattern step mute.

The display changes to show the first 4 steps in the pattern along the top row, and the last 4 steps in the bottom row.

Press the numeric 1-8 keys to mute or unmute the steps.

Press the D key again to return to the main arpeggiator mode.

## TEMPO / DIV

Press B to adjust the tempo or note division, as follows:

---

### INTERNAL CLOCK

When using the internal clock, the tempo can be adjusted from 20-500 BPM, using either the numeric keypad or the #/\* buttons to adjust. Press D to exit.

---

---

## EXTERNAL CLOCK

When using an external clock signal, the divisor can be set to one of 8 options using the numeric keypad buttons 1-8. Options are:

1. Whole Note
2. Half Note
3. Quarter Note
4. 8th Note
5. Triplets
6. 16th Note
7. Sextuplets
8. 32<sup>nd</sup> Note

Press D to exit.