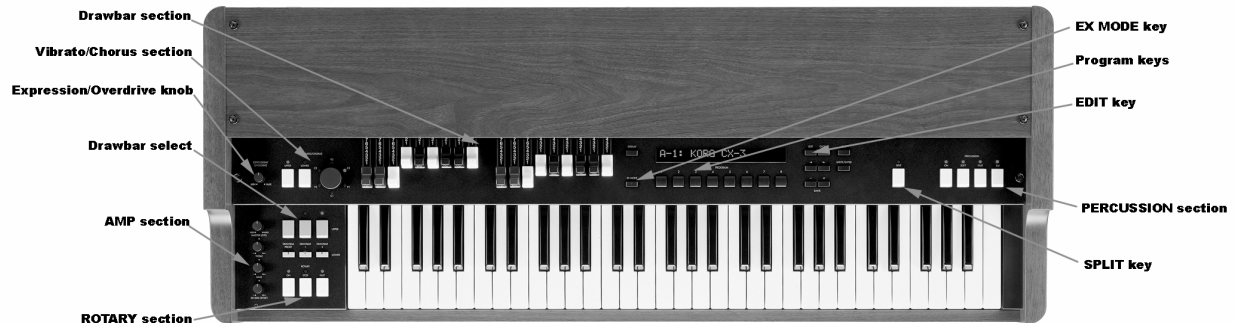


EasyStart

CX-3 COMBO ORGAN

KORG



CX-3 Modeled Combo Organ Main Features

- Tone Wheel Organ modeling system that perfectly reproduces a tone wheel organ's sound-producing mechanism
- Modeled parameters include leakage, key click (on and off), vintage and clean tone wheel simulations, adjustable overtones, proper foldback characteristics
- Two sets of nine drawbars easily assignable to upper or lower sound
- Classic percussion settings with proper polyphonically-triggered-yet monophonic performance
- 3 types of preamp/amp simulation with natural dynamic overdrive
- Detailed rotary speaker simulation
- Classic Vibrato/Chorus settings
- 128 Programs (64 regular/64 EX mode) with many signature artist settings
- Innovative EX mode for additional harmonics and percussion harmonics (allows both sets of drawbars to be linked)
- Fully polyphonic (for upper/lower, or dual manual performance)
- Use a 2nd MIDI keyboard for full-range access to lower manual settings
- MIDI controller capabilities, including 2nd channel transmission for each zone including velocity transmission. Every knob/switch/drawbar sends MIDI controller messages for accurate sequencing possibilities
- Large 16-character LCD display
- 3 controller pedal inputs, MIDI In/Out/Thru
- Natural wood case for a timeless appearance
- Weighs only 38 lbs.
- CX-3 Version 2 information on last page of this guide!

EasyStart CONTENTS

Making connections	2
Playing the demo songs	2
Selecting Programs, "Signature" Presets	2
CX-3 Preamp types, A word on Expression/Overdrive	3
Understanding the Drawbar Select switches	3
Understanding the Rotary switches	3
Editing the Drawbar settings of a Program	4
Splitting the keyboard, Changing Split Point, Changing the Octave	4
Writing a Program	4
Restoring Factory Preload data	4
Using another keyboard as the 'Lower Manual'	5
Overview of Edit Mode Groups	5
Brief Explanation of Extended Drawbar Mode	5

Making connections

1. Connect the CX-3's **L** and **R** outputs to a stereo monitoring system, or plug in headphones to the headphone jack, located on the left front edge.
2. Connect the included OXP-1 expression pedal (or any compatible expression/CV pedal) to the appropriate jack on the rear panel.



You may need to calibrate the CX-3 to recognize the pedal's minimum and maximum levels. To do so, press the **GLOBAL** key, then press key #8 → press the left **CURSOR** twice: the display reads, "ExpPdlCalibration"; press **ENTER** → The display reads, "Set Minimum:". With your heel back to the floor, press **ENTER**. The display now reads, "Set Maximum:" → Move the pedal all the way forward and press **ENTER** → press **WRITE/YES** and then press **GLOBAL** to write your new Global settings → press **WRITE/YES** again to confirm, and then press **EXIT** to exit Global mode.

Playing the Demo Songs

1. Press **GLOBAL**, then press key#8 → press **WRITE/ENTER**. There are nine demos, which will automatically start playing and will cycle through all of the songs. Sit back and enjoy!
2. To choose a specific demo song, make your selection with the **BANK +/-** keys.
3. To leave demo mode, press the **EXIT** key.

Selecting Programs:

1. Select a Bank with the **BANK +/-** keys. Then select a Program with keys # **1-8**. **Note:** Make sure that **UPPER** and **LOWER DRAWBAR SELECT** are set to "**PRESET**".
2. The Programs in the CX-3 are 'organ'-ized via Vertical Banking. For instance, pressing key #8, and then cycling through the Banks, shows off Programs that mimic a tone wheel organ's "Church" presets.
3. To select an EX Mode Program, press the **EX MODE** key, and then select Programs as above. Like in Normal mode, they are 'organ'-ized with Vertical Banking!

Normal:

1	2	3	4	5	6	7	8
JazzPerc	Comp	Rock	Gospel	R&B	JazzPerc2	Rock2	Church

EX Mode:

1	2	3	4	5	6	7	8
Standard	Pipe Organ	Attack	Comp	Bright	Clean/Perk	Combo	EFX

About the "Signature" presets:

When you see initials in front of a sound, it is a Signature preset made by one of the consulting artists who helped to develop the CX-3. The artists are: **AK** – Al Kooper, **BA** – Brian Auger, **BC** – Bill Champlin, **DM** – Don Muro, **DS** - Derek Sherinian, **GP** – Greg Pillinganes, **LS** – Dr. Lonnie Smith, **TC** – Tom Coster.

The CX-3 features two types of preamp sounds...

Type 1 models the classic tonewheel organ through a rotary speaker. **Type 2** models the classic British Rock sound of a tonewheel organ run through both a rotary speaker and a tube guitar amplifier. For a couple examples of the **Type 2** sound, try Presets **A7 – DS Balls!**, **B7 – Turkish**, **C7 - SmokelnJapan**, **G7 – BC RockSolo**, or **F3 – Gimme Some**.

A word on Expression / Overdrive...

Notice, as you play through some of the Programs and work the OXP-1 pedal that Expression and Overdrive coincide: the sound gets grittier as it gets louder! If you don't have an OXP-1 pedal connected, the **EXPRESSION/OVERDRIVE** knob duplicates this function. Just be sure to check the setting of this knob – if it is up all the way, your Presets may sound “dirtier” than desired. Conversely, if the knob is set too low, you won't be getting the extra “drive” that many sounds require.

Understanding the Drawbar Select switches: Control of two separate tone generators

History:

The classic B-3 has an octave of reverse-colored keys to the left of each of its two manuals. Pressing one of these keys selects a Preset; except Bb, which engages Drawbar set #1, and B, which engages Drawbar set #2. The lowest C cleared any selected keys/presets.

- The key in the **UPPER** row determines the status of the Upper tone generator; the key in the **LOWER** row determines the status of the Lower tone generator. Each tone generator is independently switched to one of three choices: Preset, Drawbar Set #1, or Drawbar Set #2.



Note that the physical layout mimics the real B3 – the preset is to the left and the live drawbar selects are to the right! This makes the CX-3 immediately comfortable to the experienced B3 player!

- In EX Mode, the **LOWER** Drawbar Select keys are dark: in Extended Drawbar Mode, both of the tone generators are used for additional harmonics and percussion, and the two sets of drawbars are working in tandem. Version 2 adds a three-drawbar tone source for the lower sound, controlled from within the Edit Mode only.
- In either mode you can freely switch between the Preset and live drawbars: your basic tonality (tonewheel type, key click, preamp, EQ, percussion, rotary speaker and reverb settings) remain the same, so you can easily interact with the two sets of drawbars and return to the preset as desired.

Understanding the Rotary switches



*It is helpful (but not necessary) to connect a PS-2 footswitch to **ASSIGNABLE PEDAL/SW 1**'s jack.*

1. Select Program **A-1 Organized** → play and hold a chord on the CX-3, and then step on the footswitch once, or press the **ROTARY FAST** key – you'll hear the Rotary effect gradually accelerate. Hit the **FAST** key again to bring the Rotary speaker back to a slow spin.
2. To completely stop the rotation of the Rotary speaker, press the **STOP** key. To return it to “spinning”, press either the **SLOW** or **FAST** keys for the desired result.
3. It's been common for jazz organists to switch between a stopped setting and a fast setting. To do this on the CX-3, you simply toggle the **FAST** key on and off. With Presets that “come up” stopped, this means that you first hit the **FAST** key to speed up the Rotary speaker effect, and then hit the **FAST** key again when you want to return to a stopped state.



*Pre-Version 2 CX-3's toggle **FAST** and **STOP** keys to switch between and stopped and fast setting.*

- !** *The Rotary Stop function can be assigned to a second PS-2 footswitch on a per-Program basis, for hands-free Rotary control!*

Editing the Drawbar settings of a Program: “Live” drawbars in Drawbar Preset mode

1. Press the **[EDIT]** key, then press key #2. The Display reads “**UPPER**” and shows a graph of the programmed drawbar levels. The display is now in an interactive state: move the Upper drawbars, and the Display reflects the change → press the right cursor key **[>]** and the Display now reads “**LOWER**”: Now you can freely edit the Lower drawbars in the same manner.
2. To edit a Preset it is likely that you will want to first get the drawbars set exactly like the Preset. Just pay attention to the display, and move each of the nine drawbars until they catch up with the original settings in the display. Then you can make changes with the physical drawbars, accurately reprogramming what was stored.

Tip: *Edit Mode remembers the Edit page you ‘parked’ on the last time you used it. When you select another Program and press the **EDIT** key, the display returns you to Group 2, the Drawbar Edit page.*

Splitting the keyboard, Changing Split Point, Changing the Octave

1. Select Program **A-3 Felix’s Da Kat**. To split the keyboard, press the **SPLIT** key (it will light).
2. To change the Split Point, press the **EDIT** key, then press key #7. The display says “**Split Point:**” Press the **[-]** key once to change the Split Point from **C4** to **B3**.
3. To change the octave of the lower manual sound (below the split), press the **[>]** CURSOR key twice, so that the display reads “**Split Lower Octave:**” → press the **[+]** key twice to raise the lower area of the keyboard two octaves.

! *These edits will not be retained unless they are written to the Program.*

Writing a Program

1. Press the **WRITE/ENTER** key. The display reads “WRITE “. Note the **speaker icon**: when it is next to the left Bank/Program#, it allows you to hear the edited Program in the buffer.
2. Press the **[>]** CURSOR key once, and the **speaker icon** moves to the right Bank/Program #. This allows you to audition the destination Program before you destructively write over it. Use the **[+]** or **[-]** keys if you wish to find another destination.
3. Press the **WRITE/ENTER** key twice to execute the Write operation.

Restoring Factory Preload data

1. **Hold down** keys #2 and #7 while turning on the power (power switch located on the back of the CX-3).
2. The display will prompt “**Load Factory Data?**” → press the **WRITE/ENTER** key to complete the operation.

Using another keyboard as the 'Lower Manual'

...Taking advantage of the two independent tone generators:

1. Using a short MIDI cable, connect the MIDI Out of any MIDI keyboard/controller to the MIDI In of the CX-3 and set its MIDI channel to Ch. 2.
2. The parameter for the MIDI Channel of the CX-3's Lower tone generator defaults to Ch 2, but it can be set to any channel: Press **GLOBAL**, then press key #4, and **CURSOR [>]** four times until the display reads "**MIDI Lower Rx ch:**".
3. If you call up a Program that has an active Split (**SPLIT** Key is lit), press the **SPLIT** Key once to turn it off. You now have a dual-manual tonewheel organ, with each manual having its own fully-polyphonic (61-note) tone generator.set of drawbars!

Overview of the Edit Mode Groups

Group 1	LEVELS	Output, tone wheel type, overtone level, leakage noise level, key on and key off click levels
Group 2	DRAWBARS	Settings of the drawbar levels (some different parameters in EX Mode)
Group 3	PERC	Percussion level, soft perc. Offset, normal perc, attenuation, perc fast decay, perc slow offset
Group 4	AMP	Amp Type, Amp Gain, Tone: treble, middle and bass
Group 5	REVERB	Reverb type, time, mix level, and routing (before and after the Rotary effect)
Group 6	ROTARY	Horn/Rotor balance, Horn and Rotor fast and slow speeds, Horn and Rotor Down, Up and Stop transitions, miking characteristics
Group 7	SPLIT PT/PEDAL	Split Point, Split Octaves, Pedal assignments (different parameters in EX Mode)
Group 8	NAME	Rename the Program

Brief Explanation of Extended Drawbar Mode

...The CX-3 is the only organ to extend the harmonic possibilities of the tone wheel organ tradition!

Drawbar set #1 is governing the levels of the standard nine harmonics of a traditional tonewheel organ, while Drawbar set #2 controls the extended harmonics of EX Mode. This included four additional tone generator harmonics, and four additional percussion tone harmonics.

- The first four drawbars of set #2 add additional, higher harmonics to the basic tone-generating system. There are four Presets for these extended harmonics. These tables can be found in GLOBAL mode, Page 8 > scroll right.
- EX Drawbar #5, [2 2/3] controls the level of the entire traditional percussion section when it is ON.
- EX Drawbars #6 and 7 provide 16' and 5 1/3' percussion harmonics; and EX Drawbars #8 and 9 provide a percussion harmonic of the pitches assigned to EX Drawbars #1 and 2.

CX-3 Version 2 Features

- Rebalanced drawbars for better performance across the full key range (Drawbar Level Curve="Mellow"). Original setting ("Bright") is available for those that like the extra "scream" in the upper octaves.
- Noise parameter added to recreate the standing-state noise of an old, beat-up organ when desired.
- Improved Vibrato/Chorus emulation as well as Rotary Speaker algorithm improvements
- Speaker simulator bypass in the Preamp for a whole new world of tonalities.
- Added a 4th Reverb algorithm (Dark)
- Added a three-drawbar sound source for the lower manual in EX mode, allowing for split-keyboard settings.
- Pedal assignments can now be set to momentary or alternating and Wheel Brake "return" setting has been sped-up to better-emulate the classic effect.
- Selectable key triggering (Shallow and Deep) to allow tailored response of the keyboard based on a player's style