

HAMMOND
NEW X-5
GUIDE

HAMMOND
ORGAN



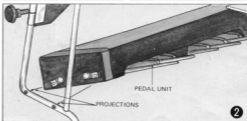
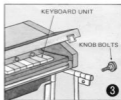
Meet the Hammond **NEW X-5**

Welcome to the exclusive circle of Hammond organ owners. We're proud you recognize the distinctive quality that makes Hammond the top choice of beginners and professionals alike.

The New X-5 is a portable organ with the capabilities of a traditional Hammond tonerbar organ. It is a synthesis organ; you're not "locked in" to the tones that have been pre-selected for you. You're free to experiment and to create your own sounds.

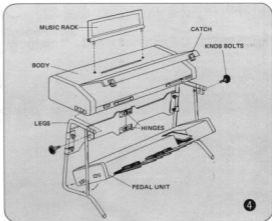
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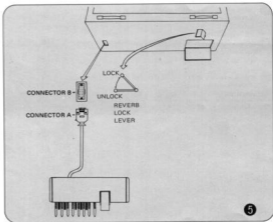
How to set-up and connect the New X-5

- 1** Unfold the legs. Then lock them in place by hooking the hinges of the crosspiece over the catch.
- 2** Add the pedal unit by sliding it in position and hooking it onto the projections inside both legs.
- 3** Add the keyboard unit. Rest the back part on the crosspiece then insert the knob bolts and tighten.
- 4** Add the music desk by setting it into the holes on the top of the keyboard unit, and remove keyboard cover.



5 Follow these steps to connect the New X-5

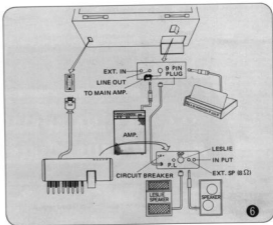
- A** Be certain power is turned off.
- B** Plug connector A into connector B (Keyboard unit). It's important to note the positioning of the holes in the jack and to align the connector properly before inserting it into the jack.
- C** Unlock reverb by moving reverb lock lever downwards as indicated in diagram.
Note: To disconnect the pedal unit remove connector A from connector B by squeezing together the two metal springs that hold it in place and pulling the connector downward.



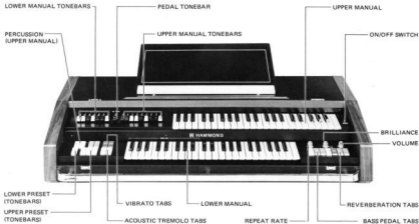
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6 How to hook up other instruments to the New X-5.

- 1** Connect other instruments (i.e., Auto-Varl 64 or Hammond Synthesizer) that are to be played thru the New X-5 to the Ext. In jack.
- 2** A speaker with 8 ohms impedance or more may be connected to the Ext. Speaker jack.
- 3** Connect the New X-5 to any one of many single channel Leslie tone cabinets. Tremolo speed will be controlled by the tabs on the keyboard.
- 4** Connect a guitar or vocal amp to the Line Out jack. Adjust carefully to obtain full efficiency.



New X-5 Features



Description of features & controls



LOWER PRESET TAB

Example 8: This is a general purpose accompaniment tone. It's a combination of string and orchestral tones (similar to tonerbar setting: 00 8088 855). In off position (top down), the lower keyboard tone is controlled by the lower keyboard tonerbars.



VIBRATO

Vibrato is the fast wavering of a note from slightly sharp to slightly flat.

Vibrato I, Vibrato II: Vibrato II is wider, therefore the pitch deviation is greater. The two tabs are additive, so the Vibrato is widest when both are on. Vibrato is not recommended for use with percussion because instruments usually don't have vibrato percussive.



UPPER PRESET TABS

When all three are in off position (top down), the upper keyboard tonerbars control tone. These tabs are not accumulative, and the tab to the right overrules any in the on position to its left.

Strings 8: This provides an organ string quality with a heavy upper harmonic development (similar to tonerbar setting: 00 8088 808).

Full Tones 16: A rich theatrical tone (similar to tonerbar setting: 80 8008 008).

Theatre Organ 16: A combination of powerful organ tones (similar to tonerbar setting: 84 8088 855).



PERCUSSION (UPPER KEYBOARD)

Percussive notes may be mixed with sustained notes. To do this, press one or both harmonic tabs on (bottom down) and pull out one or more of the upper tonerbars. When you play a key on the upper keyboard, the percussive note "decays" but the sound from the tonerbars continues.

Second and Third Harmonics: With tonerbars and upper preset tabs in off position, press on the Second Harmonic tab. Play an upper keyboard key. Now cancel the Second Harmonic tab and press the Third Harmonic tab. Play the same key. Note the tone is now a fifth higher. Next press both tabs on and play the same key. You now hear both tones—a perfect fifth interval.

Decay Slow/Fast: Percussive tones have a sharp attack which grows softer immediately until the tone finally fades away completely even though the key is still held down. This fading away is called "decay." There are two rates of decay for percussive tones—fast and slow. The tone lasts longer in the "slow" position.

Repeat: With the decay tab in Fast and this tab on, notes will repeat themselves as long as you hold the key. Control the speed of the repeat from slow to fast with the Repeat Rate knob. Use this to produce effects like Banjo, Mandolin, Xylophone, etc.



BASS PEDAL TABS

The single pedal tonebar controls the volume of the pedal tones. The farther out it's pulled, the louder the tone.

Pedal 16'/B': This determines pitch, 16' produces a deep, low tone; B' produces a tone one octave higher.

String Bass I and II: Provides a percussive quality similar to a string bass. If a pedal is played and not held, the tone will die away gradually. If the pedal is held, the tone continues to sound.

Pedal Mute: Determines the brightness or mellowness of the pedal tone. In off position (back down), both 16' and B' tones are crisp and bright. In on position (front down), both will sound mellow.

BASS TO LOWER MANUAL (BASS COUPLER)

When engaged, you can play 16' bass notes on the lower manual. Playable compass is from FF to c⁴. (20 notes)



REVERBERATION

Reverberation is an echo effect. Sound bounces off ceiling, walls and floor. Hammond reverb brings full, rich majestic sound to your living room. It compensates for the muffling effect of drapery, carpeting, furniture, etc. You'll feel you're in a concert hall.

Reverb I and II: Use them separately or together to get three degrees of reverberation.

VOLUME



This controls the overall volume of the organ from soft to loud. Plus you always have the full dynamic range of the expression pedal at all volume levels.

BRILLIANCE



Normal organ tone is a mellow combination of voices. This brightens the entire organ tone when extra brightness is desired.

WEIGHT AND DIMENSIONS

Weight: 165 lbs.
Dimensions: 44 1/2" W., 36" H., 25" D.

POWER SOURCE

60 Hz AC 120 volts



ACOUSTIC TREMOLO

An acoustic tremolo speaker (i.e., any one of many single channel Leslie tone cabinets) is a mechanical form of sound animation similar to Vibrato. You can achieve a chorus effect by playing through the Leslie speaker and a guitar or bass amp. There are outputs for both and they may be used simultaneously.

Leslie On/Off and **Leslie Slow/Fast**: When on, the Slow/Fast tab controls the speed of the tremolo.

PLUG IN JACKS

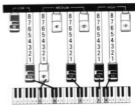
- (located under the keyboard unit)
- Line Out Jack**: If you should play the New X-5 through a conventional guitar amp (or other), plug from this Line-Out jack to amp input.
 - Ext. In Jack**: Use it for plugging in other instruments (i. e., Hammond Synthesizer, Auto-Vari 64) to play through the New X-5. These instruments will not be affected by expression pedal.
 - Ext. Speaker Jack**: Use it to connect an 8 ohm (or higher) speaker.
 - Leslie @ Output Jack**: Use it to connect any one of many single channel Leslie tone cabinets.

How to use tonebars

A Hammond is different from other organs for many reasons, but primarily because of its tonebars. These unique tonebars are the original synthesizers. They provide the capability to create millions of sound variations to suit any musical mood or style. Tonebars are the fun part of a Hammond organ. Just slide them in and out in varying degrees to create soft, medium and loud tones. The following will show you the capability of these tonebars.

1 Play 4 non-octave harmonics with one key on the upper.

- Action:
- Slide all upper tonebars into off position.
 - Slide out B⁷ tonebar to 8.
 - Press and hold middle C.
 - Slide out the second brown and all black (or fraction-numbered) tonebars to 8 one-at-a-time (left to right).



2 Play 9 notes (octaves and non-octaves) just by playing one key on the upper.

- Action:
- Slide all tonebars to off position.
 - Press and hold middle C.
 - Slide tonebars out to 8 one-at-a-time (left to right).
 - Each additional key you play (with all tonebars out) sounds nine more notes simultaneously. This is the full rich Hammond sound preferred by professionals throughout the years.



What are tonebar registrations

If you like a tonebar combination particularly well and you feel you want to use it again, you can. Hammond tonebars make it easy for you to keep

Here's a basic flute tone registration and pattern.



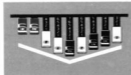
The registration number you would write down is 00 8400 000 (when a tonebar is not used it's identified by 0).



Here's a basic organ reed tone registration and pattern.



The registration number is 00 4676 543.

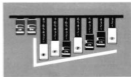


a record of favorite combinations. We call these combinations registrations. They form patterns that are easy to remember.

Here's a basic organ diapason tone registration and pattern.



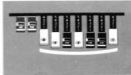
The registration number is 00 8776 543.



Here's a basic string tone registration and pattern.



The registration number is 00 4555 504.



Special jazz registrations

EXAMPLE 1			
UPPER:	83 8802 000	REVERB:	I
LOWER:	6654 000	LESLIE:	On/Slow
PEDAL:	6	PERCUSSION:	2nd
VIBRATO:	Off	DECAY:	Fast
BASS:	16' /String Bass II /Mute On		
EXAMPLE 2			
UPPER:	80 0024 228	REVERB:	II
LOWER:	4422 000	LESLIE:	On/Fast
PEDAL:	5	PERCUSSION:	3rd
VIBRATO:	Off	DECAY:	Slow
BASS:	16' /String Bass II /Mute On		
EXAMPLE 3			
UPPER:	86 4203 678	REVERB:	I
LOWER:	6000 000	LESLIE:	Slow/On
PEDAL:	5	PERCUSSION:	2nd & 3rd
VIBRATO:	Off	DECAY:	Fast
BASS:	8' /String Bass II /Mute On		

How to care for your Hammond

- POWER:** Connect your organ only to power source of voltage and frequency shown on name plate.
- TUNING:** All notes of your organ are accurately and permanently tuned relative to each other. The entire organ can be tuned sharp or flat (e.g. to be in tune with another instrument) by a single control inside the organ.
- KEYS AND TABS:** Clean lightly with a soft cloth or chamois slightly dampened. Don't use a dry cloth. It builds up an electrostatic charge that attracts dust particles from the air. Do not use detergents. Just plain water.
- PEDALS:** Clean the same as plastic keys and tabs.
- FINISH:** Dust with soft damp cloth or chamois. Use mild soap and lukewarm water if necessary. Apply it with a soft cloth. Remove it with a soft cloth slightly dampened. Dry thoroughly.
- SHIPPING:** Be certain to always lock reverb unit before moving or dismantling the organ. Turn the lever clockwise to lock it and counter clockwise until a "click" sound is heard to unlock it before playing.
- NOTE:** Please make certain you send in your Warranty Card today to insure your instrument's protection.

