



**First Combo Organ in the nation  
with its own 'Built-In' Amplifier  
and Spectrosonic Speaker System  
at an outstanding value price**

**SPECIFICATION AND INSTRUCTION MANUAL FOR C-100 MAGNUS COMBO ORGAN by Sanford Hertz**





**MAGNUS**



**COMBO**

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## INTRODUCTION

The combo organ is now recognized as an integral part of the tremendously popular combo groups that have formed in the past five years. These groups usually consist of Lead or Melody Guitar, Rhythm Guitar, Bass Guitar and Drum. Amplification gives the listener the impressive dimension of much larger instrumentation. In the last few years, the combo organ was integrated within already compact combo orchestras. When augmented by the combo organ, the impact of a solid and tight rhythm is delivered to the listening audience as never before.

The Magnus Organ Corporation, through years of electronic research, has given the combo musician a fine combo organ at a price within reach of everyone who loves music. But Magnus engineers wanted more for their organ than any previous combo on the market, so they developed the 3-D Combo Organ featuring the Magnus "Q" Chassis.

### WHAT IS 3-D? (Three Dimensions of Sound)

**1-D** An internal solid-state amplifier, with space-age components delivering audio power to satisfy the needs of most combo groups.

**2-D** A speaker system capable of reproducing audio fidelity through internal amplifier circuits within its own dynamic self-contained Magnus "Q" Chassis Audio System.

**3-D** An external output feed allowing the Combo to be used:

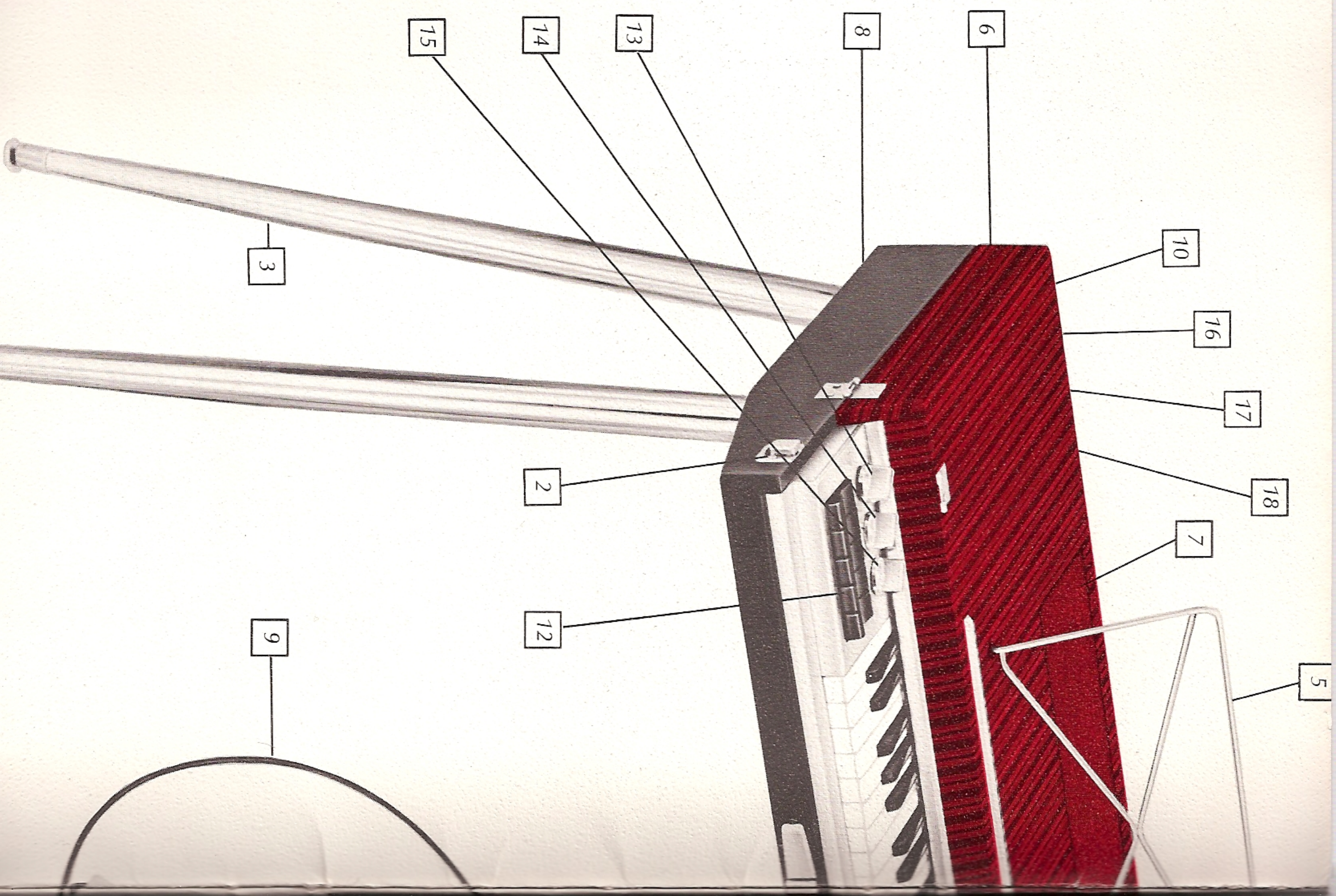
- (1) with earphones for personal listening, (2) with the most powerful external amplifiers up to 200 watts of music power, (3) "Siesta Speaker Sound" (4) Remote speakers.

The pages of this Manual contain all the fabulous facts of the Magnus "3-D" Combo Organ and the wide variety of effects with the amazing Magnus "Q" Chassis Audio System.

**MAGNUS ORGAN CORPORATION**  
Sanford Hertz  
MUSIC DIRECTOR



- 1 CARRYING HANDLE
- 2 COVER LOCKS
- 3 LEGS (SELF-LEVELING)
- 4 FULL, 4 OCTAVE KEYBOARD. 49 KEYS, C TO C.
- 5 MUSIC RACK
- 6 SLIMLINE 5 1/2-INCH CABINET
- 7 SPECTROSONIC SPEAKER
- 8 MAGNUS "Q" CHASSIS
- 9 EXPRESSION CONTROL CABLE
- 10 PATCHING JACK
- 11 MAGNUS EXPRESSION PEDAL, SHOCK PROOF, SKID PROOF
- 12 FIVE VOICE TABS
- 13 VIBRATO SPEED CONTROL
- 14 VIBRATO INTENSITY CONTROL
- 15 BASS REGISTER RESET BUTTON
- 16 CIRCUIT BREAKER RESET BUTTON
- 17 SELECTOR SWITCH FOR EXTERNAL "SIESTA" SPEAKER OR EARPHONES, PROVIDES "SIESTA" SOUND
- 18 AUDIO OUTPUT JACK







The illustration shows a red, boxy organ with a white keyboard. A callout '4' points to the top of the organ. A callout '7' points to a cable connected to the organ. A callout '11' points to a separate speaker unit. A large red circle is drawn around the organ, and a smaller red circle is drawn around the text 'EXCITING DIMENSIONAL SOUND!'.

## EXCITING DIMENSIONAL SOUND!

- The Magnus "3-D" Combo Organ is new in concept . . . Excitingly new, dramatically different in appearance.
- The Magnus "3-D" Combo Organ is the first Combo in the nation featuring its own amplifier and speaker system.
- This feature combination was never before possible with any combo!
- Wide range of audio response delivers full spectrum from theatre sound levels to a mere whisper . . . at the musician's command.
- A "Flick of a Tab" instantaneously provides a full four octave bass register.
- 31 exciting combinations of sound with 5 voice tabs.
- Speed and intensity control for complete variance of vibrato.
- A unique selector switch is located in the rear panel of the Combo Organ. When placed in "up" position, it provides maximum audio sound to the internal speaker of the organ. In this position, using the earphone or external amplifier outlet, maximum audio power would be delivered to the earphones or amplifier. In the "down" position of the delivered switch, "siesta sound" will emit from the internal speaker of the organ. The same reduced output will be provided when external outlet is used for remote amplification, earphones, or speaker. In short, the selector switch in "up" position offers a high output of sound; in "down" position, a lower sound level.

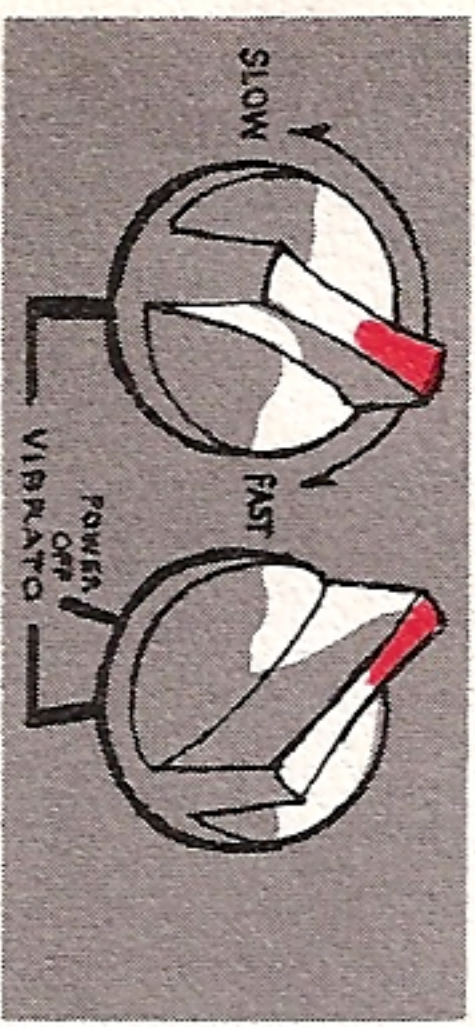


## SPECIAL FEATURES



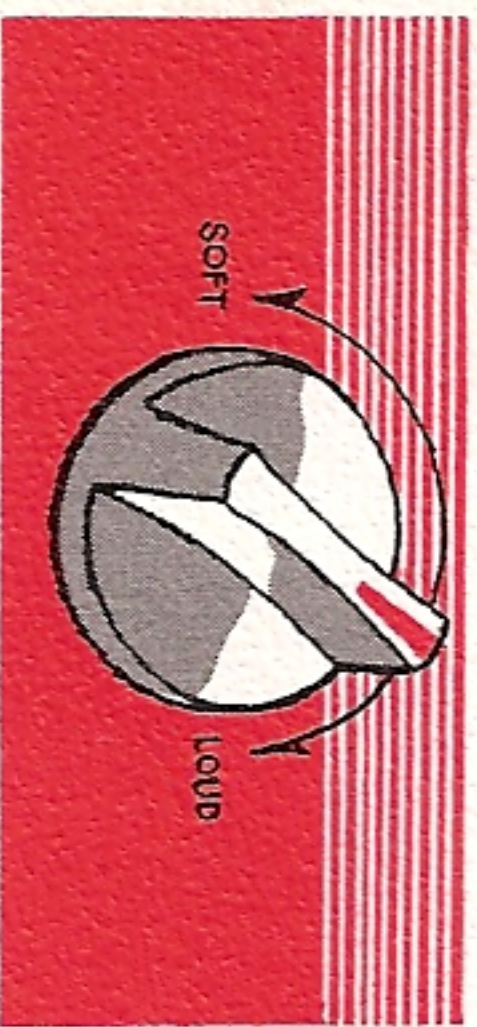
### 4 OCTAVE KEYBOARD

4 full octaves, C to C. True to the 440 international pitch. 49 piano keys. 12 note manual bass (converts to a full 49-key bass register) on flute voice tab. Keyboard scientifically designed to allow chord formations never before possible with one hand. Creative tonal effects are now relatively easy to accomplish.



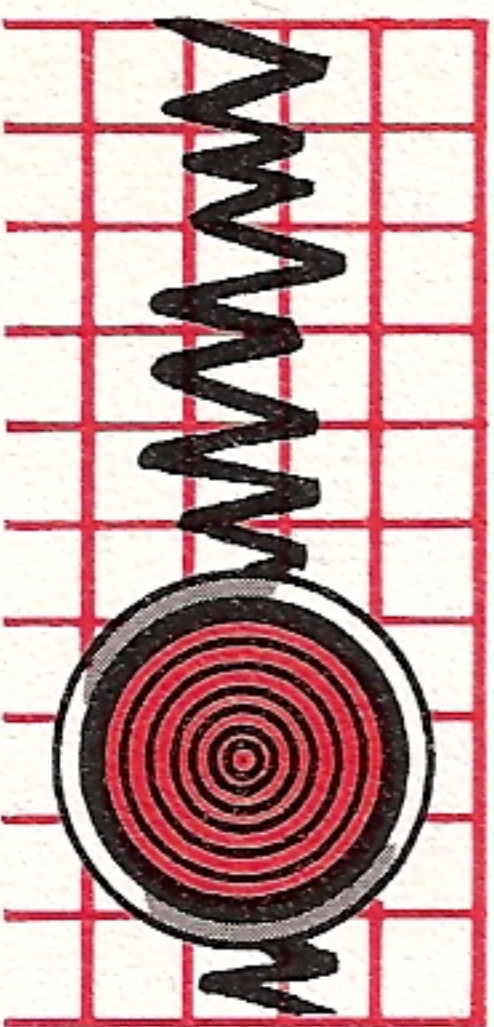
### VIBRATO CONTROLS

Two vibrato rotary controls. Intensity and speed separately operated to allow maximum "dip" and "speed" variation. The chrome-accented controls, are located on the gleaming console panel to the left of the Magnus 3-D Combo keyboard.



### BASS BALANCE SHADING

Full spectrum range to allow perfect balance between rhythm bass and treble melodic output. The professional touch that means so much to the combo musicians is incorporated in this bass balance range. The Magnus Combo provides the finest bass blending.



### INSTANT-ON POWER SWITCH

Incorporated in vibrato intensity control. Power switch, designed for use with 117 volts A.C., 60 cycles, assures instantaneous output from solid state fully transistorized "Q" chassis. Magnus assures you of immediate audio without time-consuming warm-up periods.

### VOICE TABS

Five individual smooth-action rocker type tabs: Full Organ, Oboe, Strings, Flute, and Horn. Allows multi-combinations of solo instrument voicing; adds full depth and dimension to musical rendition. Tabs are located on the satin chrome console panel.



### FLUTE TAB VOICING

Automatically renders 4 octave walking bass for all 49 keys on the Combo organ. Touch the rocker tab to establish full 49 key bass register conversion. This Magnus feature places an integrated bass at the command of the player.



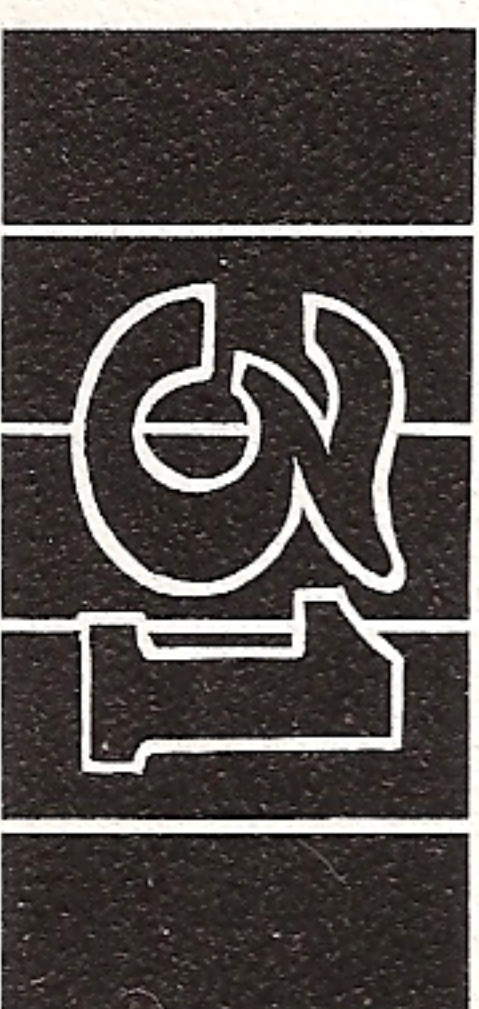
### CONSTANT BASS CONTROL

Automatic, built-in Magnus feature. The bass octave provides its own separate flute voicing circuit. This allows changes of voicing with no interruptions of bass output. Professional effects are assured with the smoothest transition possible on a combo instrument.



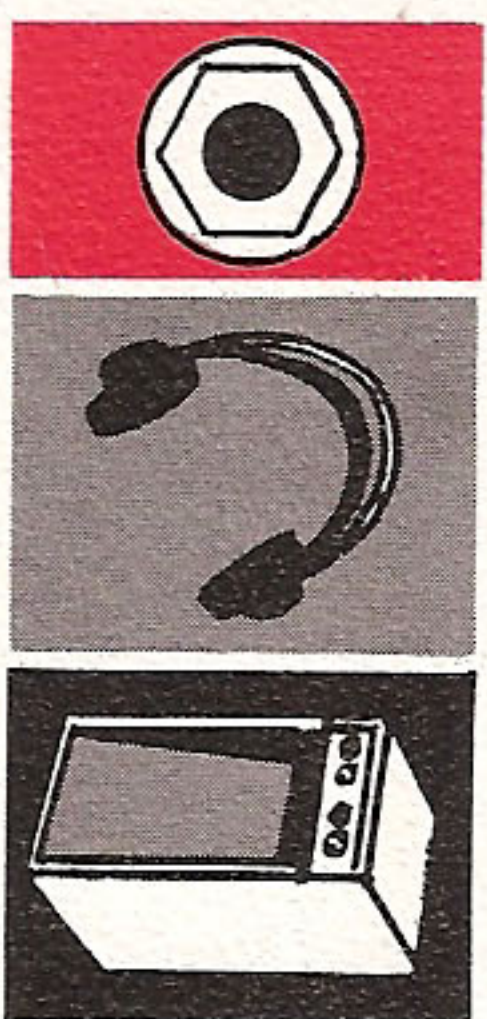
### MIXTURE FEATURE

31 combinations of voicing. Delivers every degree from "Harsh to Mellow"; possible at a flick of a tab. See the center fold of this manual to acquaint yourself with the myriad of combinations your voicing circuits offer.





## SPECIAL FEATURES



### REAR PANEL FEATURES

Rear panel selector switch and phone jack allows: (1) Earphone outlet for those desiring silent practice sessions. (2) "Siesta Speaker Sound", (3) External remote amplifier outlet. (4) External speaker outlet. A full choice of outlet uses for every Combo musician.



### EXPRESSION PEDAL

Full spectrum foot pedal volume control with smooth rocker action. Instant response from near silence to peak volume output. Slip-proof, chrome-plated, handsome appearance. The Magnus Combo expression pedal is one of the finest in the industry; an outstanding value accessory included with your organ.



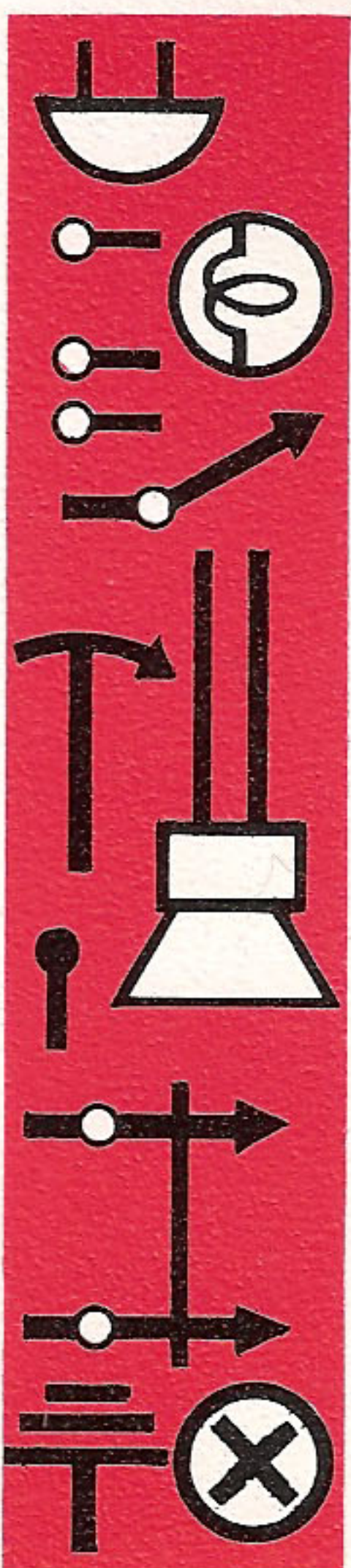
### SAFE CIRCUIT RESET

Circuit breaker control protects against voltage overloads which might damage amplifier. Gives maximum protection to Combo electrical circuits. Reset button on back of organ serves as an automatic fuse which never needs replacement. It can be reset over and over again with a touch of your finger.



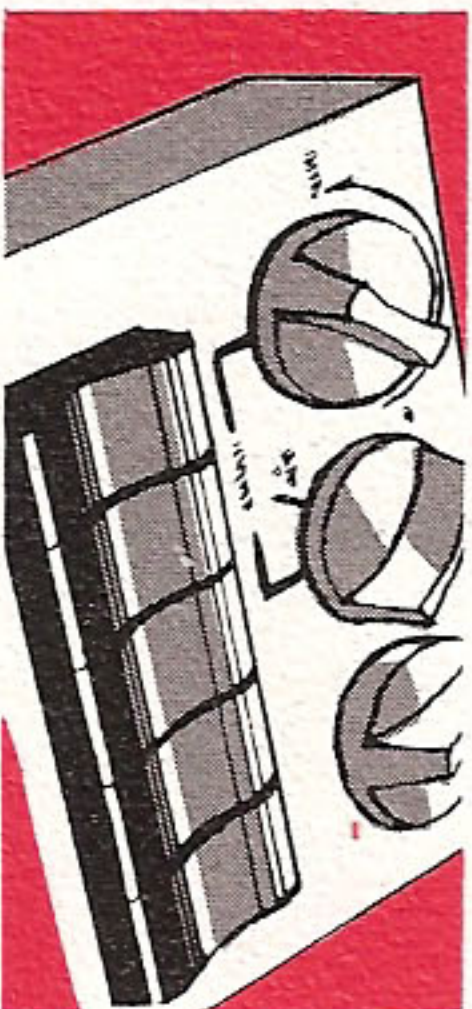
### SPECTROSONIC SPEAKER SYSTEM

Produces bright vivid highs, clear mid-range notes, and lows. Rear-loaded reflex cabinet design. The Magnus Spectrosonic speaker is a dramatic proof of the quality built-in to your Combo organ. Providing a speaker is a Magnus exclusive feature. Size 6" x 9", oval, heavy duty.



### MIRACLE "Q" CHASSIS

Designed for use with 105-125 volts A.C. 60 cycles. All Treble and Bass Oscillators, ultra-stable with the following factors: ● 2% deposited carbon resistors ● Polystyrene capacitors ● Silicon Transistors. Low loss printed circuit boards of special design to give optimum stability to bridged "T" oscillators. Gold-plated key contacts for maximum reliability and long life.



### CONTROL PANEL

Includes: Bass compensation circuit ☐ Vibrato speed and strength controls with ability to eliminate vibrato ☐ Five rocker-type voice tabs.



### PORTABILITY

One compact unit; includes storage compartment to hold expression pedal, connecting cable and electric cord.

### DIMENSIONS and WEIGHT

**Overall height:** With legs, 33 1/2 inches.

**Cabinet Thickness:** 5 1/2 inches.

**Height to keyboard:** With legs, 31 1/2 inches.

**Weight:** With legs, expression pedal, and music rack: 41 1/2 lbs.

**Width:** 32 1/2 inches.

**Depth:** 20 inches.

**Shipping Weight:** 48 lbs.



# Voicing and Emphasis Control Console



## THE LOOK OF THE FUTURE

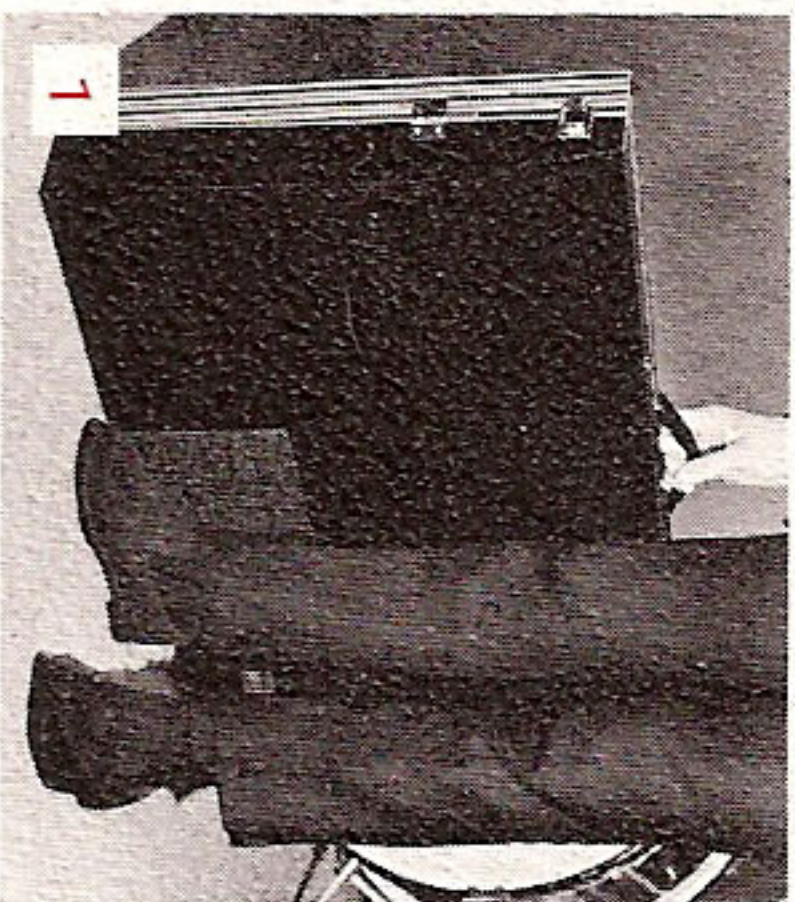
Satin-chrome console is smooth to the touch and luxurious to the eye. The panel is accented with gleaming chromed controls for vibrato and harmonic balance, jet black rocker-type tabs for voicing arrangements. The futuristic look is built into your Magnus 3-D Combo. This control console identifies your instrument as "years ahead" in styling and performance.

## POSITIVE ACTION CONTROLS

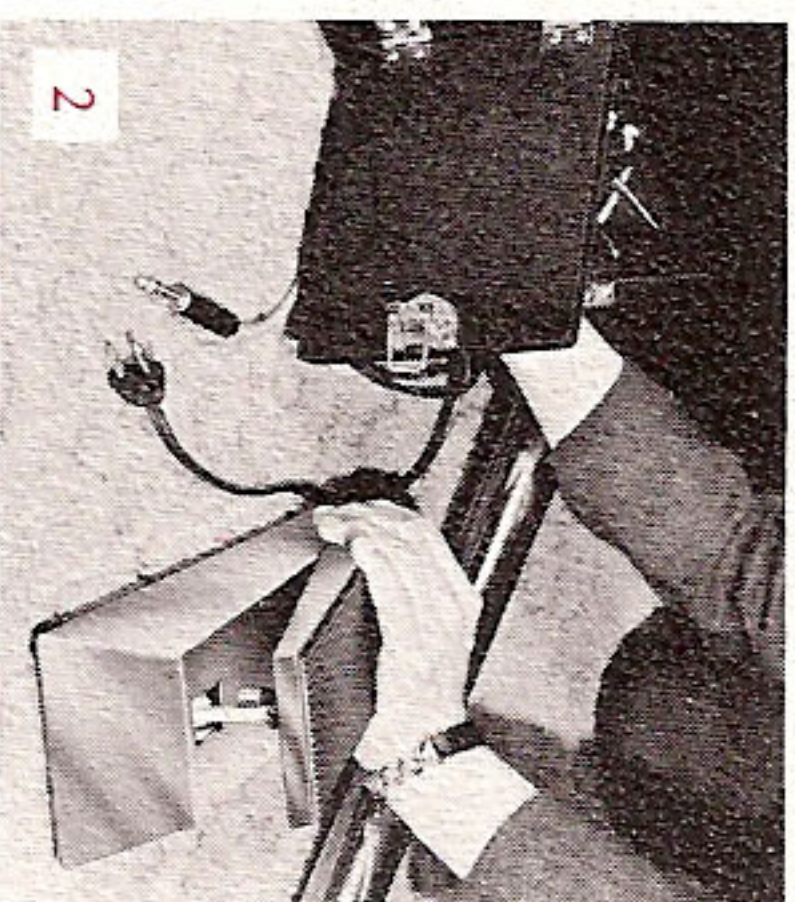
Vibrato speed, clearly marked "Slow-Fast." Vibrato strength, Weak-Strong. Both controls offer 270-degree rotary action for widest choice of vibrato accents. Bass balance control also rotates a full 270 degrees to allow for soft or loud bass response plus infinite variance in between. Rocker tabs permit 31 tone combinations. Four-octave "Walking Bass" in Flute tab.



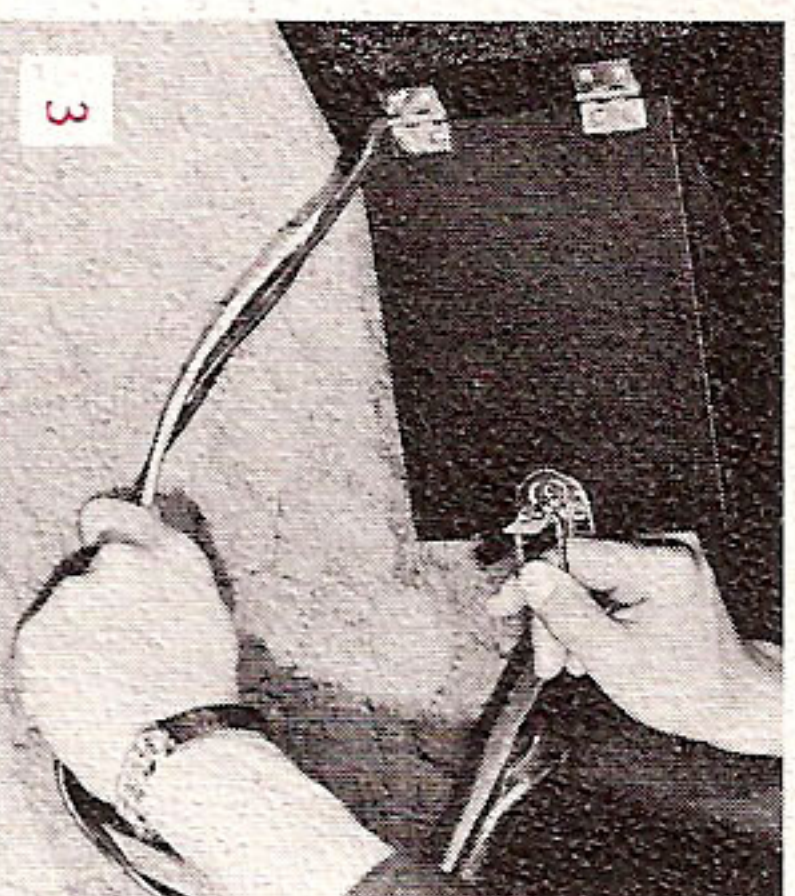
# Set-up and Assembly



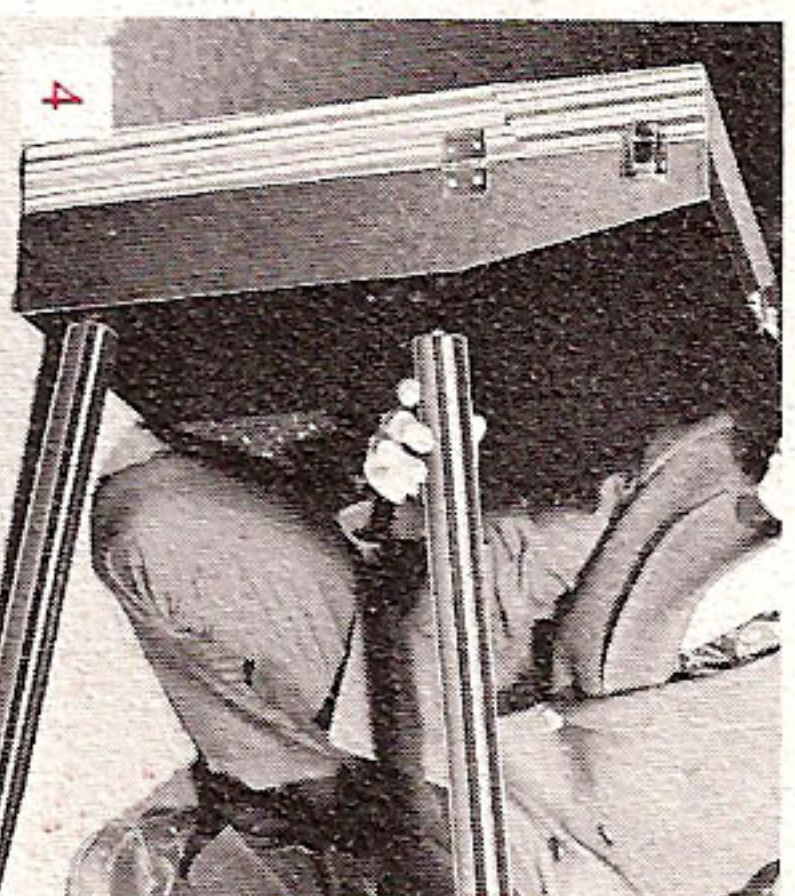
Always carry Combo Organ by handle; set gently on level surface with brackets for legs facing toward you.



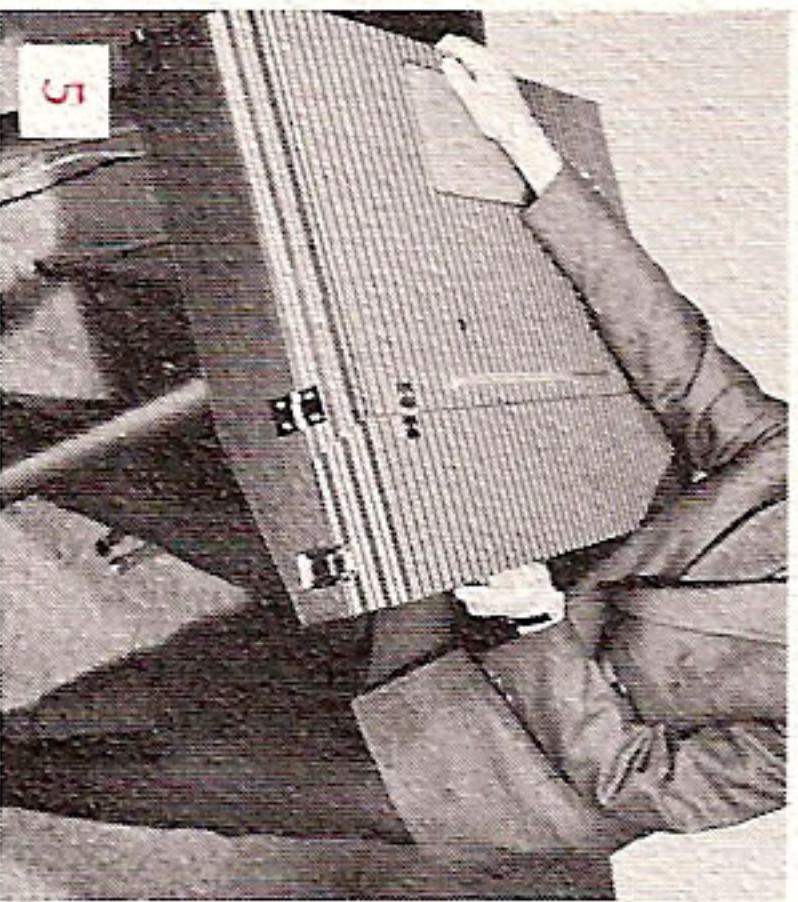
Open the compartment door which holds the expression pedal, patching cable, and electric power line. Remove all.



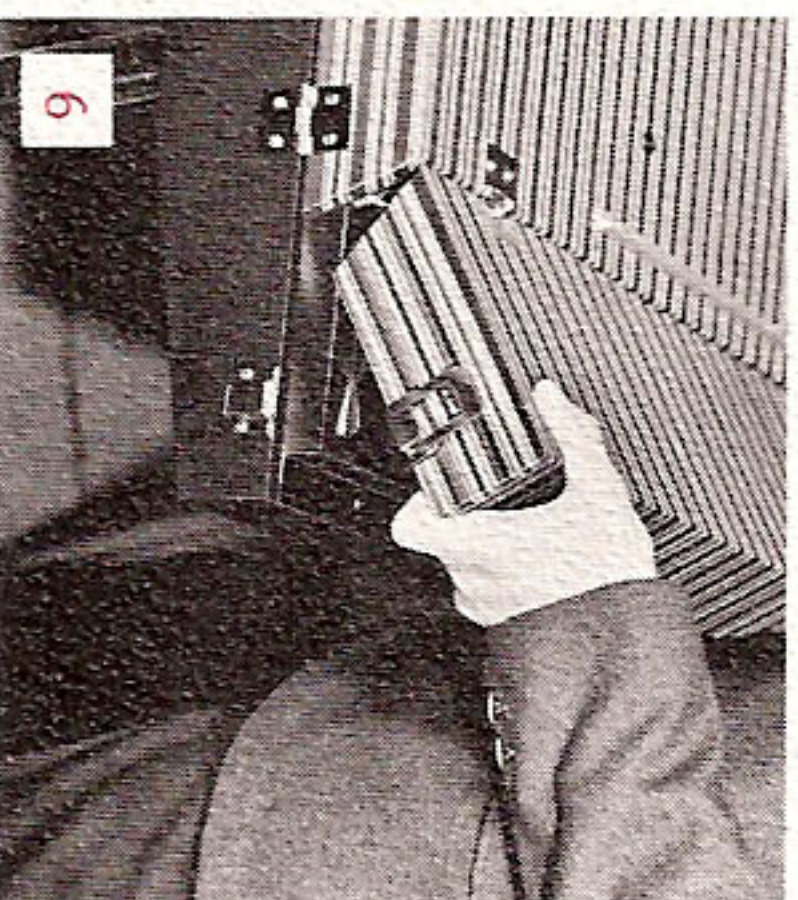
Slide cable and line into slot provided; close and lock compartment door securely to prevent vibration of locks while playing.



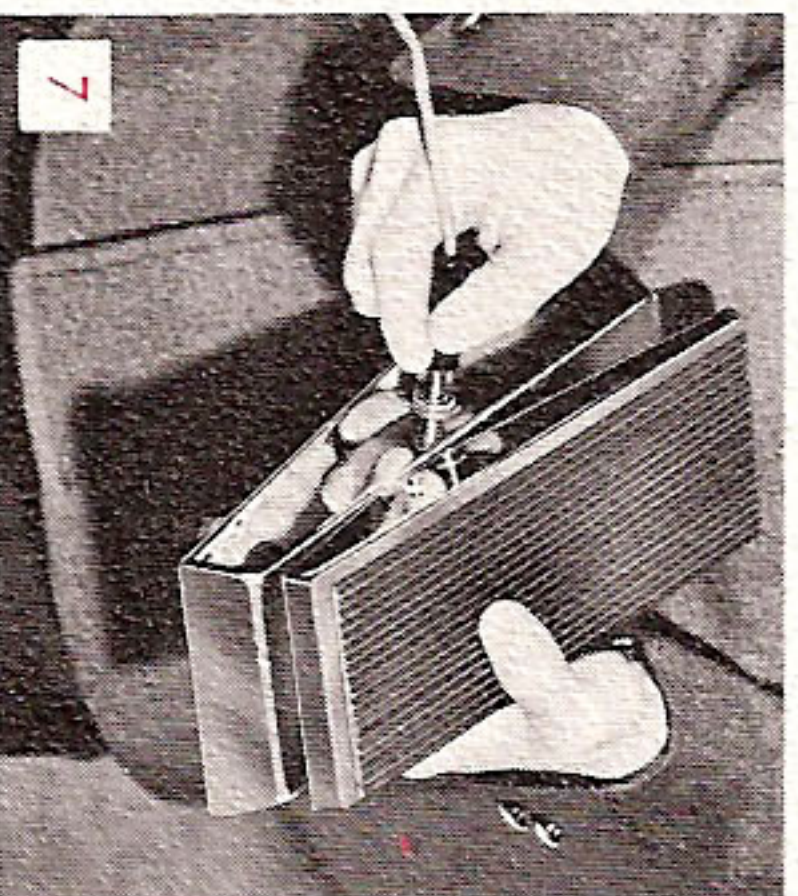
Attach lower right leg (back right) to bracket. Be sure leg is firmly set; then, attach other legs in their positions.



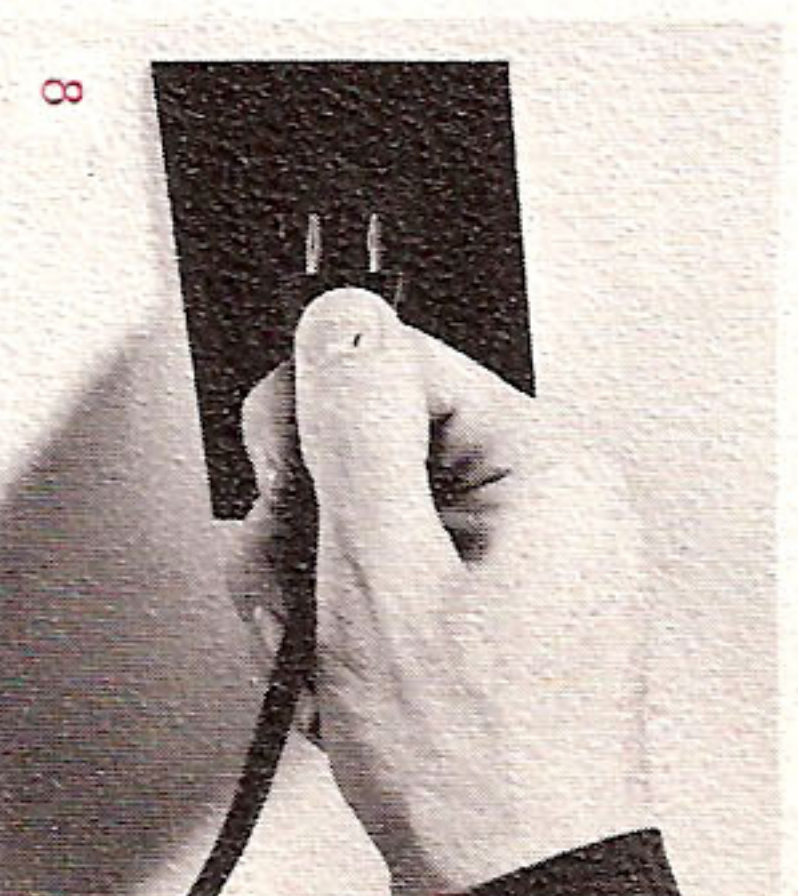
Now, firmly grasp Combo Organ by front and rear of cabinet and lower gently with legs down, to floor or platform.



Unlatch the keyboard and control panel protective cover and place in safe location where it can be located after the session.



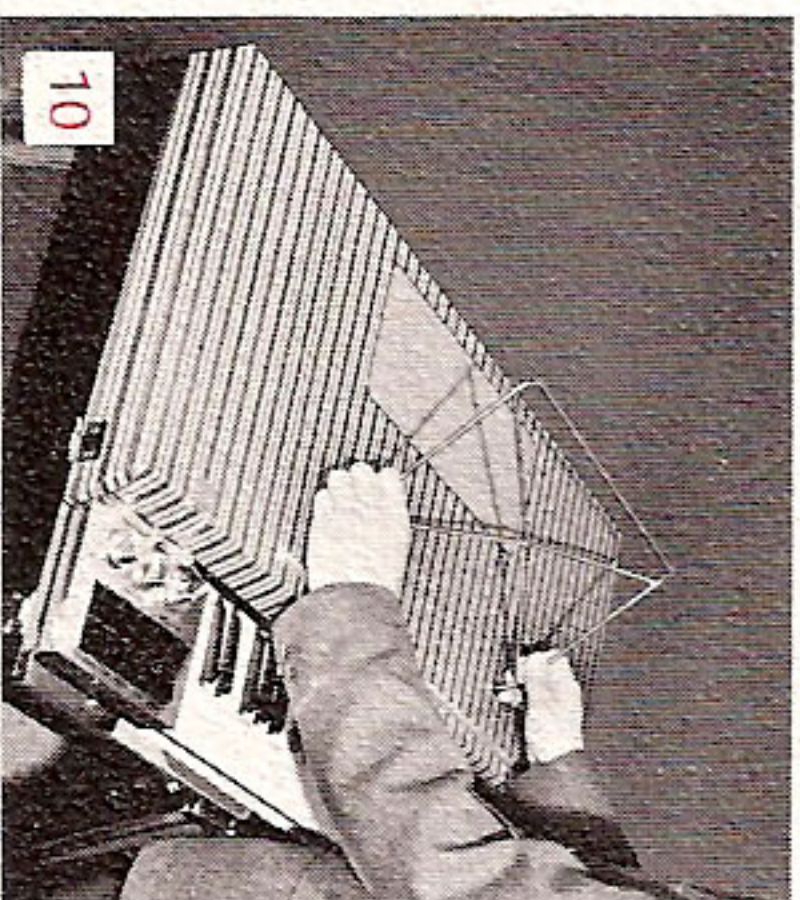
Plug the phone plug into expression pedal receptacle. When inserting always grasp plug, never the cable.



Then plug the electric chord into proper matching outlet (117 volt A.C.). Use an extension cord, if necessary.



Place expression pedal in desired position. Use your right or left foot. (No set rule is used by combo musicians.)



Place music rack (if desired) into position and press ends of rack firmly into the two receptacles provided at top of cabinet.



Turn power switch to the right. ("ON" position). Power switch is located on the vibrato intensity control within the console area.



Your Magnus "3-D" Combo Organ is ready to play. Note: Reverse the above procedures to disassemble your Combo.

IMPORTANT! NEVER MOVE COMBO BY SLIDING ACROSS FLOOR, PLATFORM, OR CARPETED FLOOR. WHEN MOVING COMBO ALWAYS LIFT COMPLETELY CLEAR OF SURFACE.



# 31 Voicing Combinations . . . . .

WITH OR WITHOUT VIBRATO

SINGLE

## DOUBLE

Full Organ	Oboe					Full Organ						Full Organ						Full Organ							Horn						Oboe	Strings			
------------	------	--	--	--	--	------------	--	--	--	--	--	------------	--	--	--	--	--	------------	--	--	--	--	--	--	------	--	--	--	--	--	------	---------	--	--	--

## TRIPLE

Full Organ	Oboe	Strings				Full Organ	Oboe					Full Organ	Oboe					Full Organ							Horn						Full Organ					Strings				Horn
------------	------	---------	--	--	--	------------	------	--	--	--	--	------------	------	--	--	--	--	------------	--	--	--	--	--	--	------	--	--	--	--	--	------------	--	--	--	--	---------	--	--	--	------

## QUAD

Full Organ	Oboe	Strings	Flute			Full Organ	Oboe	Strings				Horn						Full Organ	Oboe						Horn						Full Organ					Strings	Flute	Horn
------------	------	---------	-------	--	--	------------	------	---------	--	--	--	------	--	--	--	--	--	------------	------	--	--	--	--	--	------	--	--	--	--	--	------------	--	--	--	--	---------	-------	------





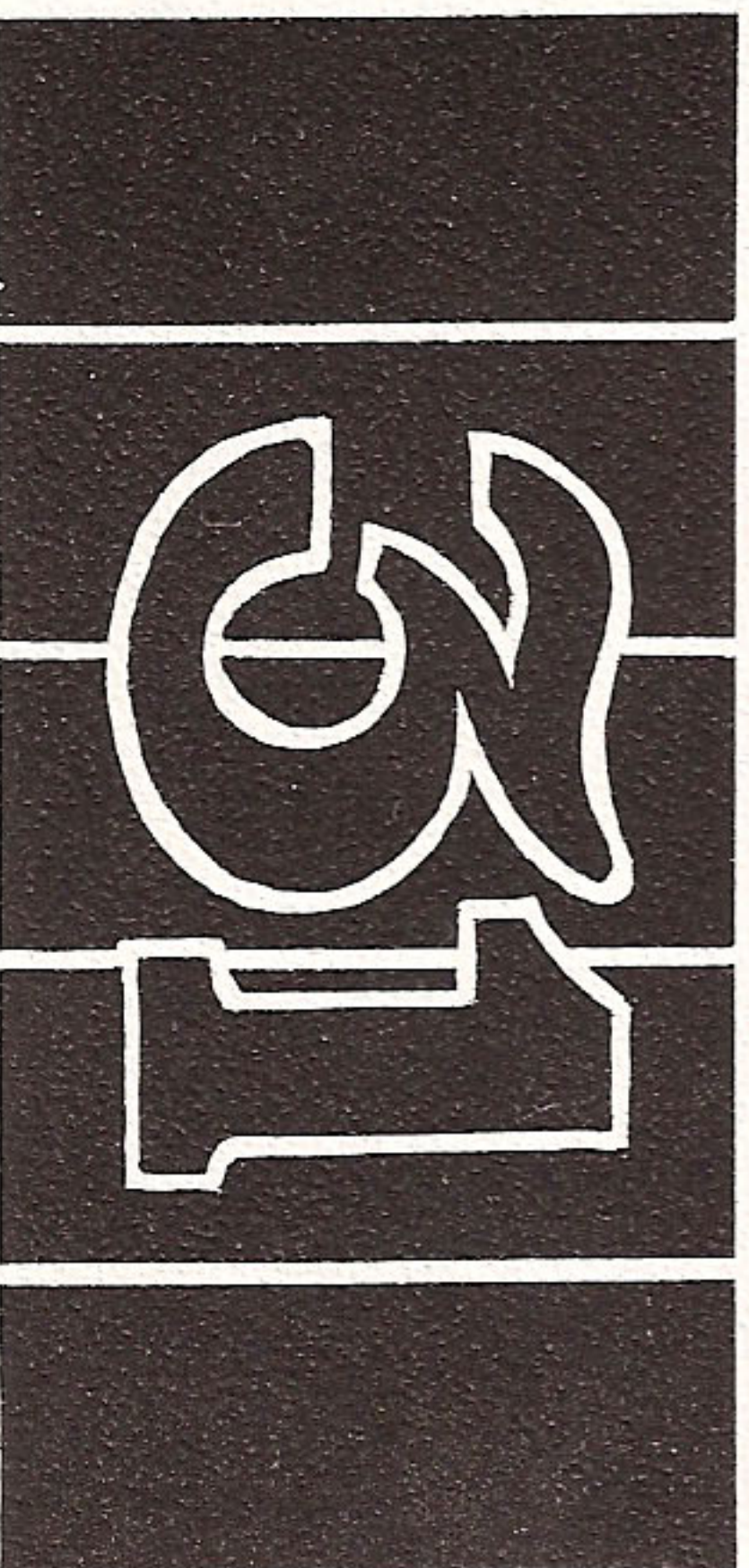


# Playing your Magnus 3/D Combo Organ

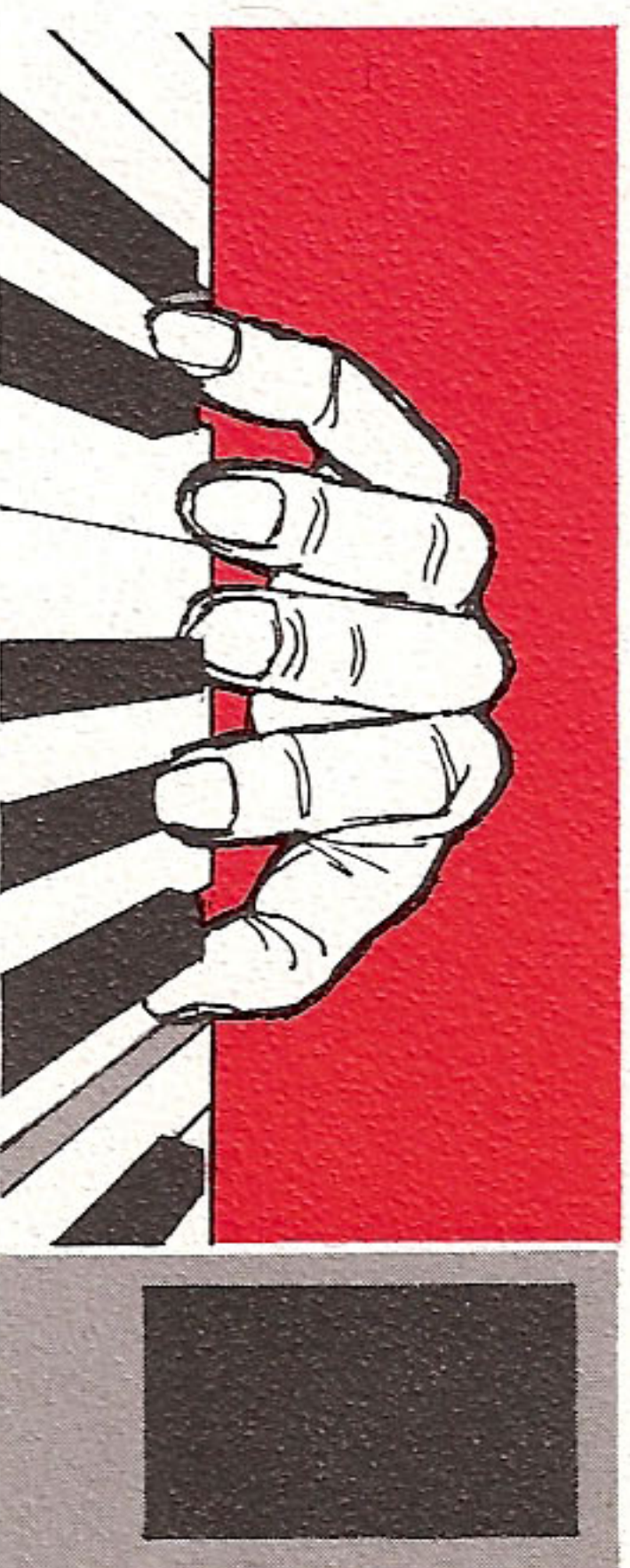
**1** With Combo set up and power switch "ON", place all voice tabs "OFF" position. (Note: only first 12 keys, bass register, operate.) C to B.



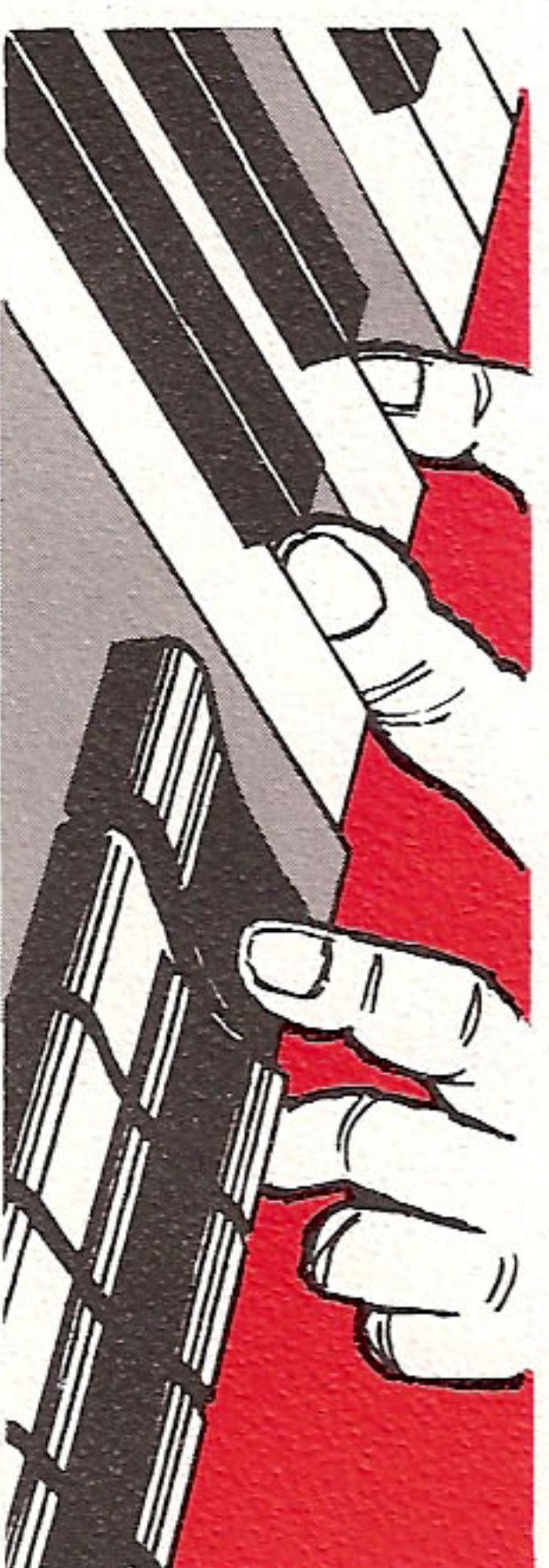
**2** Try varying output of bass with bass control and foot expression pedal. (Attain good bass output without overloading.) Now, try the 31 combinations of voice tabs with bass control at "3/4 open" position.



**3** Use flute voice tab, alone. This voice tab will supply you with a full four octave "Walking Bass" sound. Then try the vibrato controls. (See next page.)

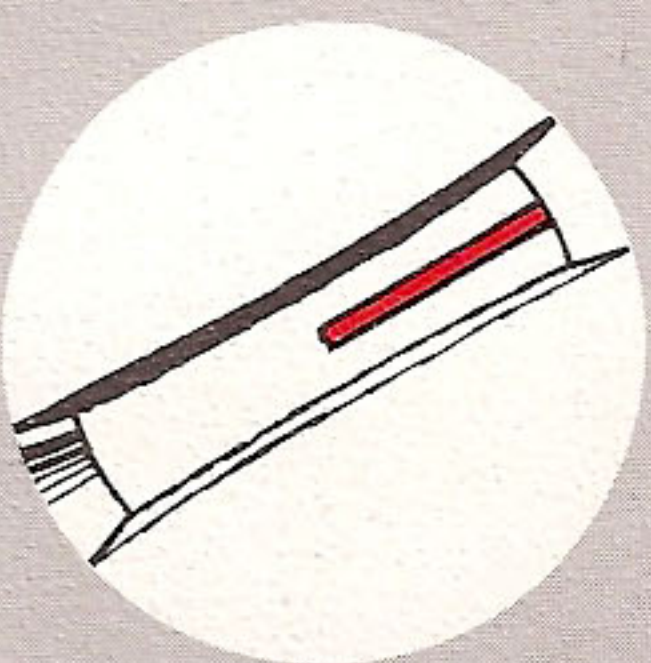
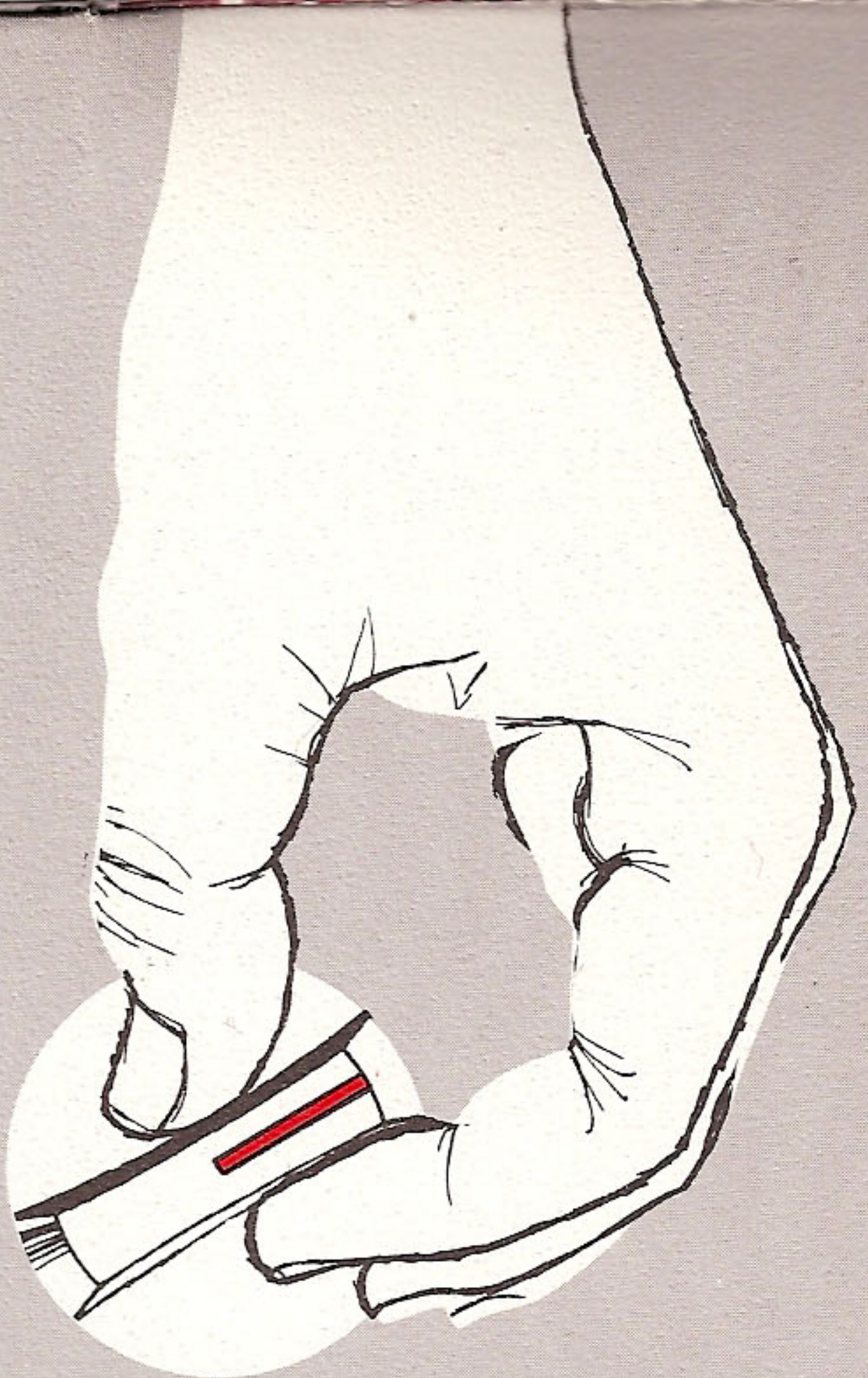


**4** Mix voice tabs without loss of bass register, a technique vital to the combo musician; a correct audio balance of bass and melody is very important to the total tonal output of your Combo and the "pro" sound desired.



**5** Now, familiarize yourself with the 31 combinations of voice tabs, with and without vibrato. Experiment with the foot expression pedal and enjoy your Magnus "3-D" Combo Organ.





## Creating special effects with the Vibrato Controls

The vibrato in your Magnus "3-D" Combo can be varied in both intensity and in speed.

It requires two controls to produce this desired effect:

The first selector on the control and voice panel, marked "Slow-Fast", controls the speed of the vibrato. This control will gradually increase or decrease the amount of vibrato per second.

The second selector must be fully turned to the right to attain speed control. The second vibrato control serves not only as a power switch, but when turned gradually to the right increases the depth or intensity of the vibrato.

It is of particular importance to experiment with these two controls to attain proficiency in the professional use of vibrato.

### Defining "Vibrato" . . .

The word "Vibrato" means pulsing, throbbing, oscillating, musically speaking. Vibrato creates resonance, pulsating warmth and expression to the music you create on your "3-D" Combo Organ.

In the combo groups, it is general practice to use **very little** vibrato both in speed and intensity, when playing staccato or short phase music for Rock & Roll, Latin-American, and the typical "up-beat" rhythms which require very little resonance. (No one note is held long enough for the full effect of the vibrato to be felt.) But, when playing **slow moving passages of music** which require longer tones and sustained backgrounds, the use of vibrato controls enhances the beauty, warmth and expression of the selections. Waltzes, slow ballads and folk music give vibrato full opportunity to express itself in beautiful effects.



**WALTZES**  
Use strong and medium vibrato



**BALLADS**  
Use strong and fast vibrato



**ROCK & ROLL**  
Use weak and very slow vibrato



**FOLK**  
Use strong and medium speed vibrato



**LATIN-BEAT**  
Use weak and very slow vibrato

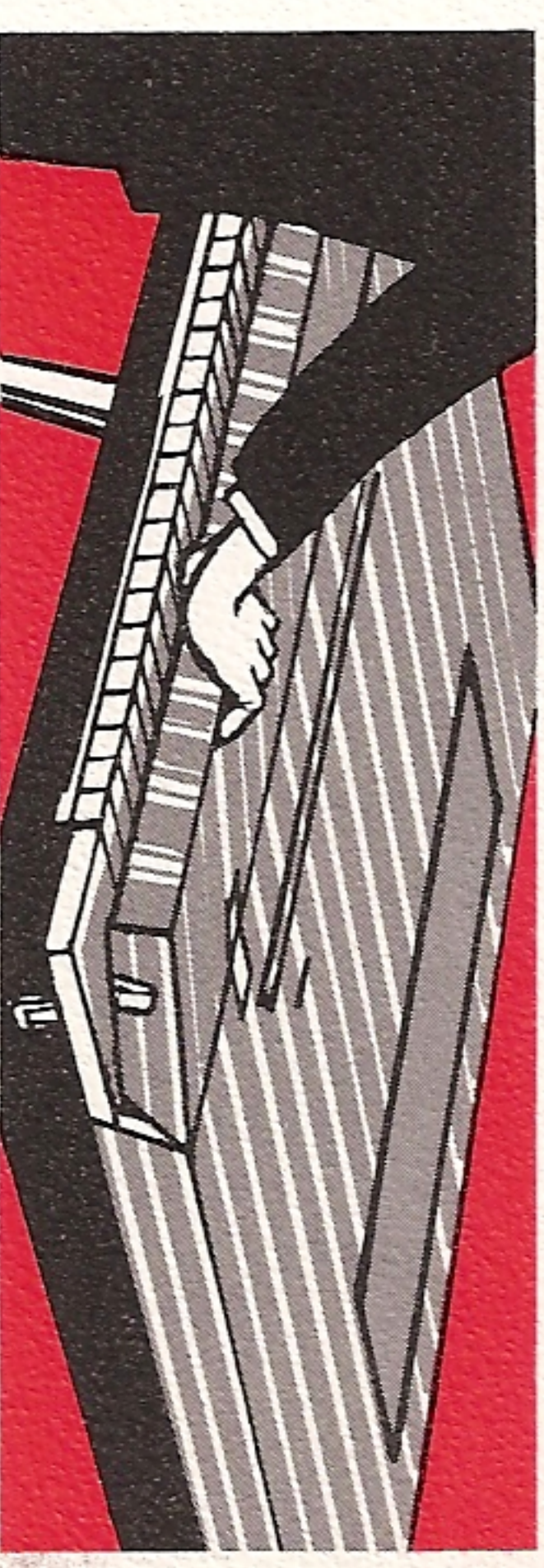


**HYMNS**  
Use strong and fast vibrato



## CARE OF YOUR MAGNUS

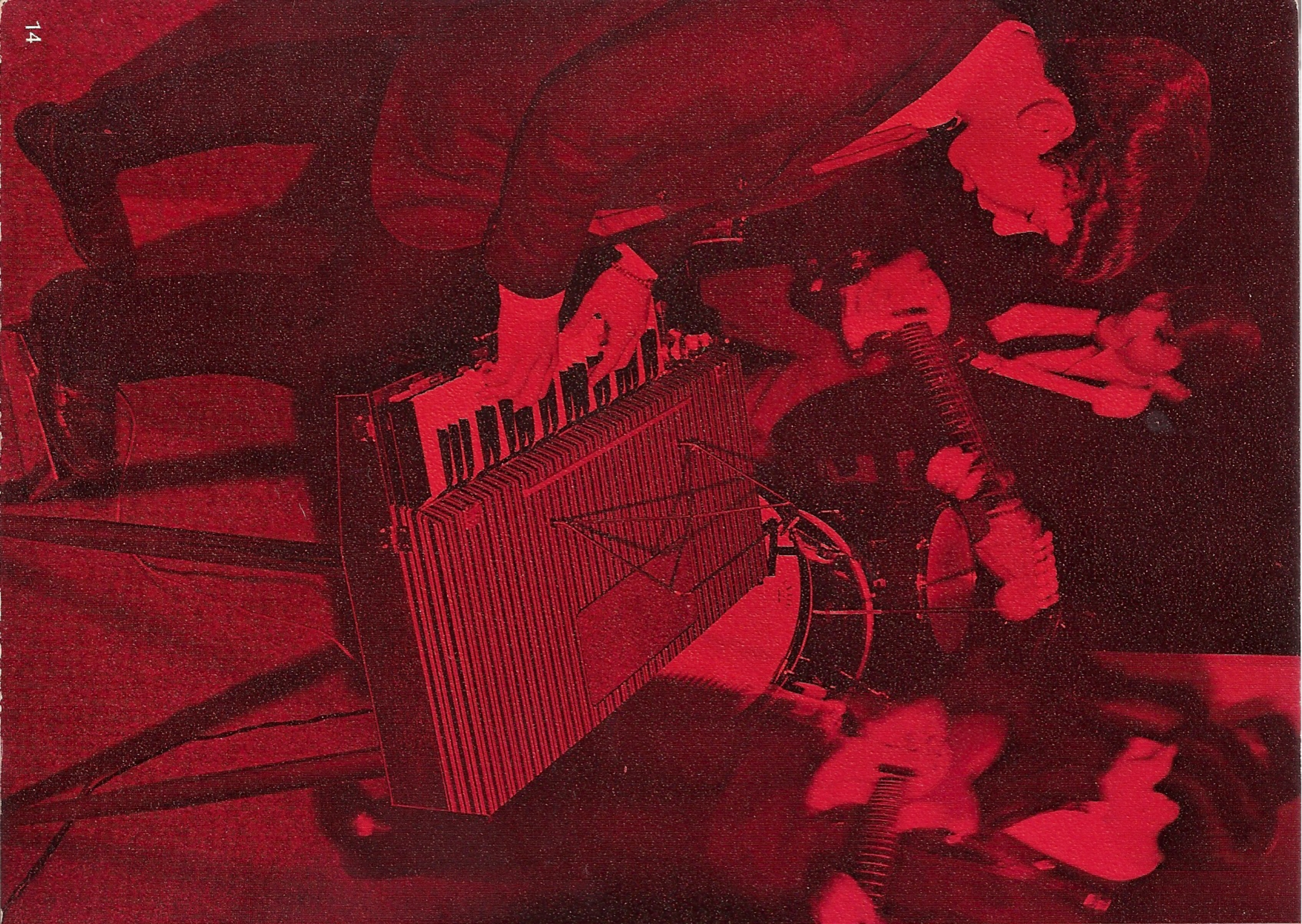
The MAGNUS Combo is a precision musical instrument; proper care and maintenance should be observed. The instruction page on assembly and disassembly should be studied carefully and memorized so that possibility of damage is minimized.



When not in use, power switch should be in "off" position and the protective lid cover for the control panel and keyboard should be in position and locked. Precautions against tripping over power cords or cables should be observed. A simple basic rule: **Keep the combo, when not in use, either completely packed away or placed against a wall where there is little traffic.** We know that you would like to keep your Combo in "tip-top" condition. **Never** slide the Combo over any surface; accidents could happen.



**CABINET MAINTENANCE:** The pyroxalin covering of your Combo will maintain its luster by a simple dusting with a dry cloth. Remove dust, fingerprints with a fine furniture wax. To maintain the high luster of the chrome legs and the chrome expression pedal, a lint-free soft cloth should be used daily. Be sure the Combo power switch is turned to "off" position when the organ is not to be used for any length of time.

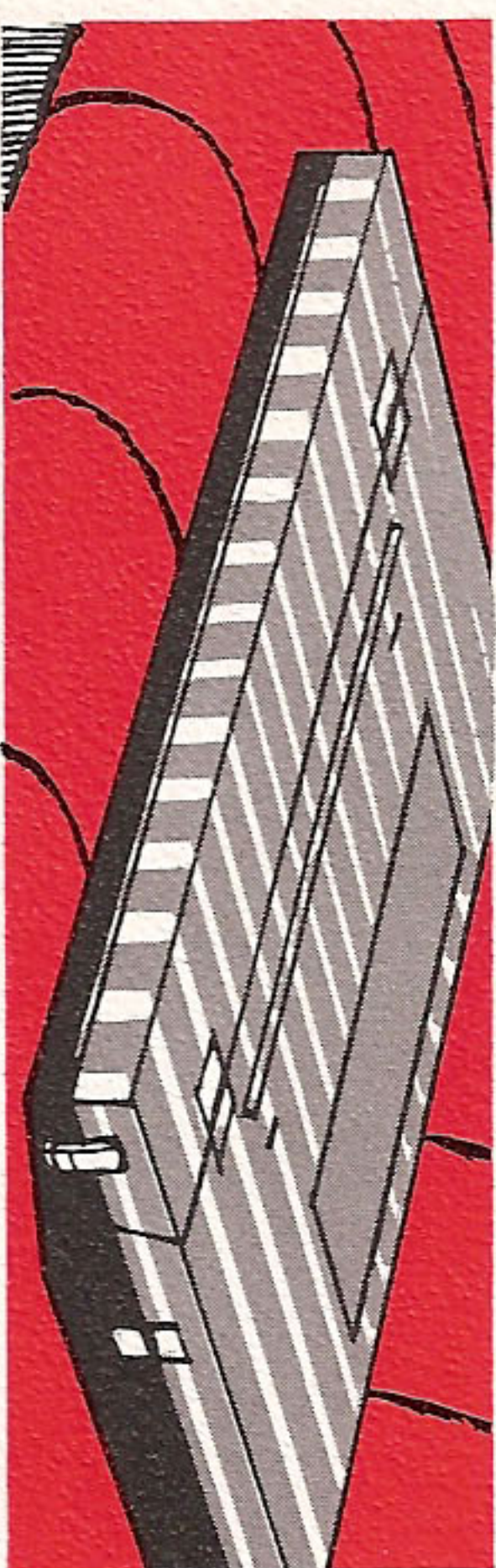




## "3-D" COMBO ORGAN

**KEY MAINTENANCE:** To maintain the "just new" appearance of your keyboard, a lint-free cloth should be used. "Hard-to-remove" fingerprints and other soilmarks can be removed with a dampened cloth. (**Caution: Never use any cleaning fluid, solvent or acids on the keyboard.**)

**LOCATION:** The Combo is designed to operate in any normal room temperature. Extreme temperatures will affect the fine playing qualities of any instrument and the Combo is no exception to this rule. Avoid placing the Combo near heated radiators or in direct sunlight for any long period of time. Electronic circuits and the fine woods used in the cabinet construction should never be exposed to heat or sunlight.



**TRANSPORTATION:** When moving the Combo from one location to another, especially when the Combo is placed in an automobile, the following precautions should be taken:

(1) Place the Combo in a completely flat position with brackets for legs facing down to avoid rocking or tipping while in transit. (2) When removing from vehicle, be sure Combo is placed in a safe area to avoid abuse.

Your Combo should give you many years of fine service. If the above simple rules are observed, mechanical, cabinet, and electronic problems will be greatly reduced.

## Accessories

### EARPHONES

The rear receptable output of your Magnus "3-D" Combo Organ provides an outlet jack for earphones. This is particularly advantageous when "silent sessions" are desired. Note: A regular phono plug is the terminal point of the earphone cord.

### EXTERNAL AMPLIFICATION

The earphone output can also be used for a remote amplifier and speaker system jack. (**Note: When this receptacle is used, the speaker system within the Magnus "3-D" Combo Organ is automatically disconnected.**) This Magnus design prevents over-loading the internal speaker system.

### PROTECTIVE COMBO COVER

A heavy-duty innerlined canvas cover is available as an optional, extra cost accessory for your organ. This protective cover affords excellent protection for your instrument. It has zippered compartments which house the four chrome legs and music rack. Compartments can also hold auxiliary line cords, amplifier, patch cords, electrical extensions, music books, etc.

### REMOTE SPEAKERS

Additional speakers may be used with the Magnus "3-D" Combo Organ with or without additional amplification. Your dealer can supply you with speakers matched to the output of your Magnus "3-D" Combo Organ. **See your local dealer for all the accessories listed above.**



# Magnus ORGAN CORPORATION

1600 W. EDGAR ROAD (RT. 1),  
LINDEN, NEW JERSEY 07036

The world's largest manufacturer of  
electric chord organs . . . first again in precision  
electronic organs featuring the exclusive "Q" chassis.

## WARRANTY

All parts in your Magnus "3-D" Combo Organ are warranted for 1 year. Any part proving defective will be replaced, free of charge, within 1 year from date of purchase.

For a period of 90 days, defective parts will be repaired or replaced, without labor charge, at any authorized Magnus Service Center.

After 90 days, labor will be charged to the customer.

After 1 year, both labor and parts will be charged for.

The warranty must be registered at the Magnus Organ Corporation within 10 days of purchase. Failure to do so may invalidate the terms of this warranty. This warranty does not apply to any Magnus "3-D" Combo Organ which has been tampered with, altered in any way, or subjected to misuse, negligence, or accident, or which has a serial number that has been defaced, altered, or removed.

Warranty applicable within Continental limits of the United States and the Dominion of Canada.