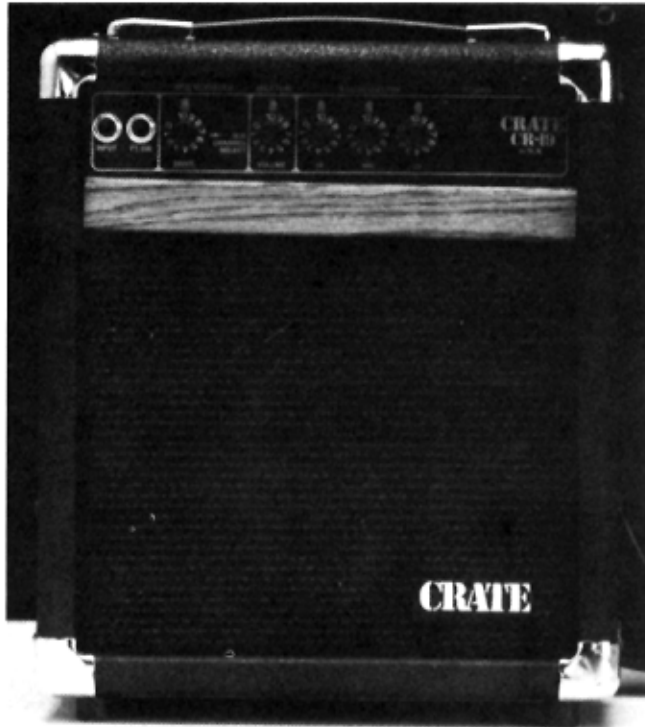




**CRATE** *Sprint*  
*series*  
**CR-19 AMPLIFIER**

# CRATE *Sprint* series



We would like to take this opportunity to thank you for selecting a Crate product, and to advise you of our commitment to the design and manufacture of only the finest musical instrument amplification equipment; built for you, the musicians.

You have purchased one of the most innovative sound amplification devices available today. Your Crate amplifier gives you more performance features than ever before, features that you the musician have asked for.

Your Crate amplifier is an American product manufactured at the Crate factory located in St. Louis, Mo. Only the finest available components and materials are used in the manufacture of each Crate amplifier.

All Crate amplifiers are subjected to seven or more inspection and testing steps to assure you of a high quality product. The final test for each amp is conducted by a trained musician with the instrument the amplifier was designed for. Any Crate that does not meet the standards of his discriminating ear will not be passed.

Since all Crate products are designed, developed, and manufactured through the co-operative efforts of engineers and professional musicians, the end result is a product that responds to the musician's audio requirements, and a product that will serve your needs for years to come.

## Model #CR-19 Guitar Amplifier Features:

CR-19—Black tolex unit	Channel Select Sw. (SCG/Norm)	Led "ON" Indicator
Front Panel: (left to right)	Volume	A-C Switch (rocker type)
Input	Treble Control	
Ft. Sw. Jack	Mid Control	Bottom Panel:
Drive Control (overdrive)	Bass Control	6' Heavy Duty 3 Wire A-C Cord

## DETAILED SPECIFICATIONS:

OUTPUT POWER RATING 3.2	10 WATTS RMS 10% THD (3.2 OHM LOAD—120 VAC LINE)	INPUT POWER REQUIREMENTS	120 VAC. 60 HZ 23 WATTS MAX.
SPEAKER SIZE AND RATING	8" Dia. Special Design 3.2 ohm 1" Alum. voice coil, 5.4 oz. mag. Power handling—10 watts rms. 20 watts eia.	FUSE RATING AND TYPE	1/2 amp, fast acting internal
BASS CONTROL	12 DB Boost @ 80 hz. (500 hz. action point)	CABINET SIZE AND WEIGHT	14-1/4" H. x 12-1/4" W. x 6" D. Ship. Wt. 13 lbs. (Stage Wt. 11 lbs.)
MID CONTROL	10 DB Boost @ 900 hz. (3 octave band width)	<b>CAUTION:</b>  To reduce the risk of electric shock, do not remove chassis. No user serviceable parts inside. Refer servicing to qualified service personnel. To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.	
TREBLE CONTROL	12 DB Boost @ 12K hz. (1.3K hz. action point)		
INPUT IMPEDANCE	220K OHMS		
MAX. INPUT SIGNAL LEVEL ACCEPTED 15	15 Volts peak to peak		
TOTAL SYSTEM GAIN	67 DB / with all tones @ "5"		
SIGNAL TO NOISE RATIO	-55 DB—all gains / levels/Tone @ mid rotation		

## LIMITED WARRANTY

SLM Electronics, a division of St. Louis Music Supply Company, warrants this electronic equipment for one (1) year from date of purchase to the original purchaser and is not transferable. This warranty includes defects in workmanship and materials within this one (1) year period except for tubes, meters and speakers covered separately. Tubes and meters will carry a 90 day warranty.

Excluded from this warranty are defects caused by wear and tear, misuse, neglect, alterations or modifications, or any act of nature. Such determinations will be made by SLM Electronics.

All parts costs will be borne by SLM Electronics within the warranty period. Labor costs will be covered within this warranty period according to rate schedules established by SLM Electronics or an authorized field service center. Transportation charges involved in warranty service are the sole responsibility of the purchaser.

Crate speakers are guaranteed for ninety (90) days against manufacturing defects. Realizing that any speaker can be overloaded or misused causing failure, Crate will replace it with a speaker of the same type at a price equal to one-half of the then current suggested list price of the new speaker for life from date of registration, regardless of reason.

This warranty only applies if this piece of Crate equipment was purchased from an authorized Crate Dealer. If this Crate piece of equipment is to be returned to SLM Electronics, it must be accompanied with an authorized Crate Dealer's instructions as to needed repairs and a SLM Electronics return authorization.

There are no other warranties expressed or implied other than those stated in this warranty. This warranty registration card must be filled out and returned to us within ten (10) days after purchase. We reserve the right to repair or replace this piece of Crate equipment at our option.

SLM ELECTRONICS division of ST. LOUIS MUSIC • 1400 Ferguson Ave. • St. Louis, Mo. 63133

## OPERATION and MAINTENANCE

### INPUT:

#### 1) INPUT JACK (Input):

This standard 1/4" phone jack accepts input from a guitar or other input source.

#### 2) FOOT SWITCH JACK (Ft. Sw.):

This 1/4" jack is used to connect an optional remote footswitch, for use in switching from normal to overdrive (SCG) operation. When a remote footswitch is in use, the Channel Selector (4) must be in the left or "SCG" position for proper operation. Refer to #4.

### SCG BOOSTER (Overdrive Channel) OPERATION:

NOTE: The Drive Control (3) will operate only when the Channel Select Switch (4) is in the left or "SCG" position.

#### 3) DRIVE CONTROL (Drive):

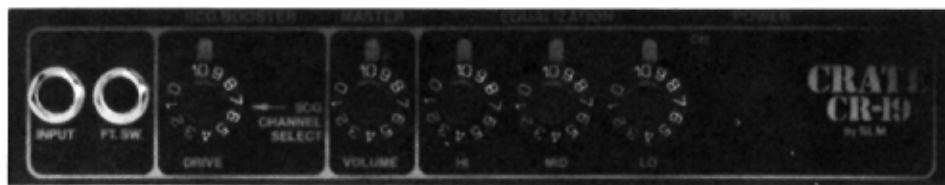
This knob determines the amount of overdrive or distortion. By increasing the gain setting, the player will increase the amount of distortion and sustain of the guitar signal.

#### 4) SCG CHANNEL SELECT SWITCH (SCG Channel Select):

This switch offers the manual selection of overdrive or clean channels. Overdrive is the left position, while the normal or clean channel is obtained with the switch to the right. Channel selection may also be achieved by the use of a footswitch plugged into the Footswitch Jack (2). When using the remote footswitch, the channel selector switch must be in the left or "SCG" position.

### NORMAL CHANNEL OPERATION:

(SCG Selector switch to the right or "Clean" position). NOTE: For best results, it is suggested that the Normal or "Clean" channel settings be made prior to SCG (Overdrive) adjustments.



#### 5) MASTER VOLUME CONTROL

(Volume): When playing thru the Normal (clean) channel, the volume at which the CR-19 will operate is determined with this knob. This volume control will also retain operation when the SCG (Overdrive) Channel is being used. In SCG Channel operation, the volume control functions as a "Master" type of control. The player can affect the overall level of both channels at once through proper use of this volume control.

### EQUALIZATION:

(All EQ controls will operate with either channel selected).

#### 6) TREBLE CONTROL (Hi):

This knob will affect the upper harmonic range of the guitar. In the "SCG" or Overdrive mode it brings out the "bite" or "edge" of the guitar, while in the "Normal" or "Clean" mode it sharpens or adds crispness to the sound.

#### 7) MIDRANGE CONTROL (Mid):

The tonal qualities of the midrange are very important to a good guitar sound. This knob can "thin-out" the sound

when turned down, or "fatten-up" the tone when larger amounts are used. This knob controls the critical midrange tones of the guitar.

#### 8) BASS CONTROL (Lo):

The desired amount of "Bottom" or "Warmth" may be increased or decreased with this knob.

### POWER ON/OFF SECTION:

#### 9) ON/OFF LED INDICATOR (On):

The amplifier is "ON" when this LED is lit.

#### 10) ON/OFF POWER SWITCH (Power):

This is a two position switch, the left position will turn the unit "ON", while the right position will turn the unit "OFF".

### CR-19 BOTTOM PANEL:

#### 11) POWER CORD:

Your CR-19 amplifier is equipped with a Heavy Duty three wire grounded A-C Cord. Be sure the amplifier is properly plugged into a safely wired outlet before use. For your safety, do not defeat the ground connection on the cord set.

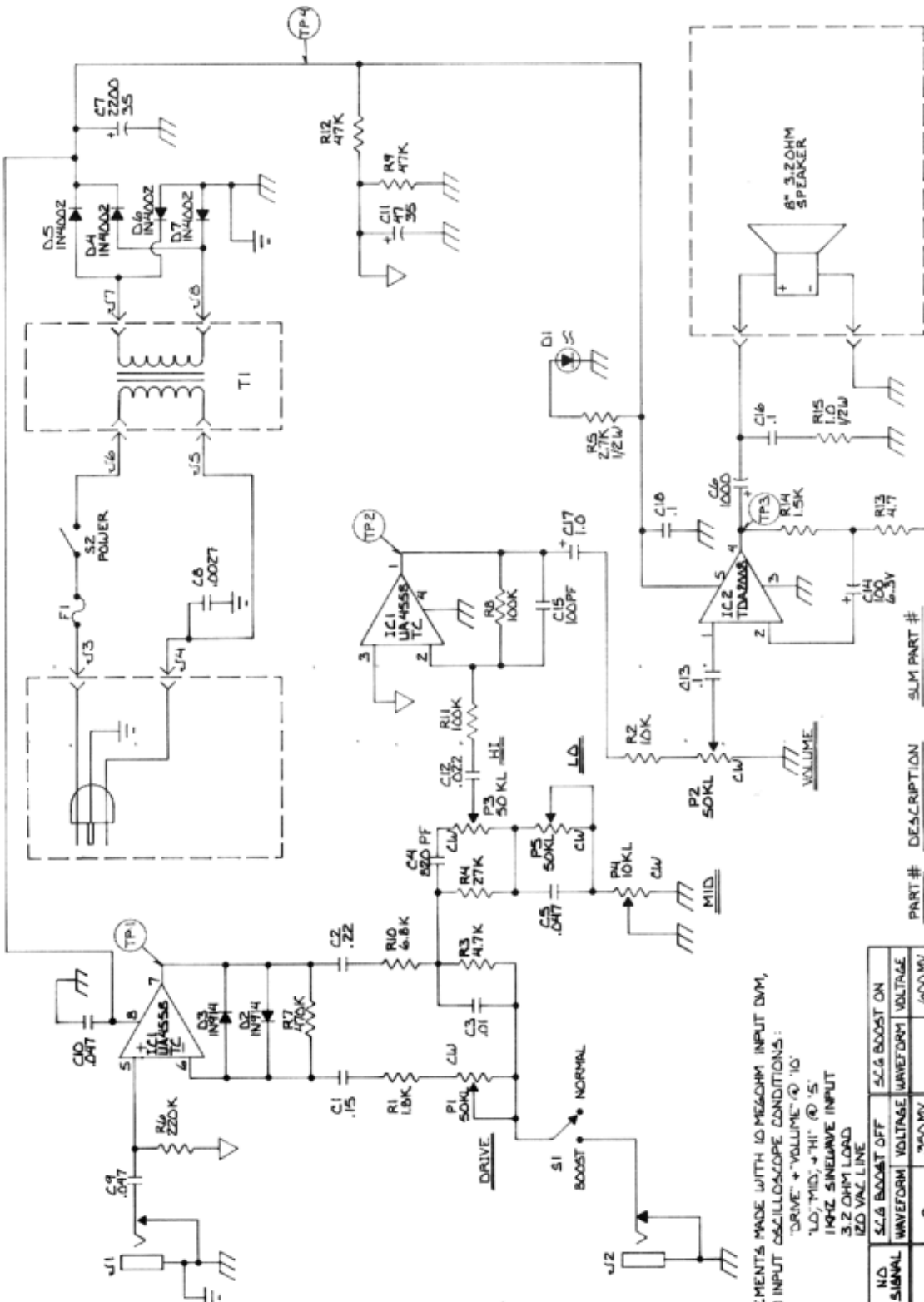
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE CHASSIS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

MADE IN USA BY: SLM ELECTRONICS  
1400 FERGUSON AVE./ST. LOUIS, MO 63133

CRATE  
CR-19  
AMP

SERIAL NUMBER  
19-

**CAUTION:**  
To reduce the risk of fire, replace only with same type 1/2 amp 250v. normal blow 3AG fuse. Disconnect line cord before replacing fuse.



**P.C. ASSY. #07-207-04**

PART #	DESCRIPTION	SLM PART #	ALM PART #
D1	RED LED ASSY.	9T721-01	
D2,3	1N914	21-914-01	
D4-7	1N4002	21-402-01	
P4	10 KL	70-133-01	
P1,2,3,5	50 KL	70-133-01	
J1,2	RN112 APC R. JACK	37-012-02	
J3,5,8	#694 FASTON TAB	17-694-01	
F1	1/2 AMP NORMAL BLOW	Z3-300-01	
IC1	UA4558B TC	37-458-01	
IC2	TDA2008B	37-200-01	
T1	10W POWER TRANSFORMER	74-099-01	
	6" 3.2OHM SPKR	86-099-01	



MEASUREMENTS MADE WITH 10 MEGOHM INPUT DMM,  
1 MEGOHM INPUT OSCILLOSCOPE CONDITIONS:  
"DRIVE" + "VOLUME" @ "10"  
"LO", "MID", + "HI" @ "5"  
100HZ SINEWAVE INPUT  
3.2 OHM LOAD  
120 VAC LINE

TEST POINT	NO. SIGNAL	SC.G BOOST OFF	SC.G BOOST ON
1	11VDC	350MV P-P 9VDC	400MV P-P 9VDC
2	11VDC	45MV P-P 9VDC	45MV P-P 9VDC
3	11VDC	10V P-P 9VDC	10V P-P 9VDC
4	22.6 VDC	1.2V P-P 19VDC	1.2V P-P 19VDC
INPUT VOLTAGE		300 MV P-P	10 MV P-P

**CR-19 SCHEMATIC DIAGRAM**

SLM ELECTRONICS  
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ST. LOUIS, MO 63133

DATE: 1-11-84

1 of 1

16-100-03