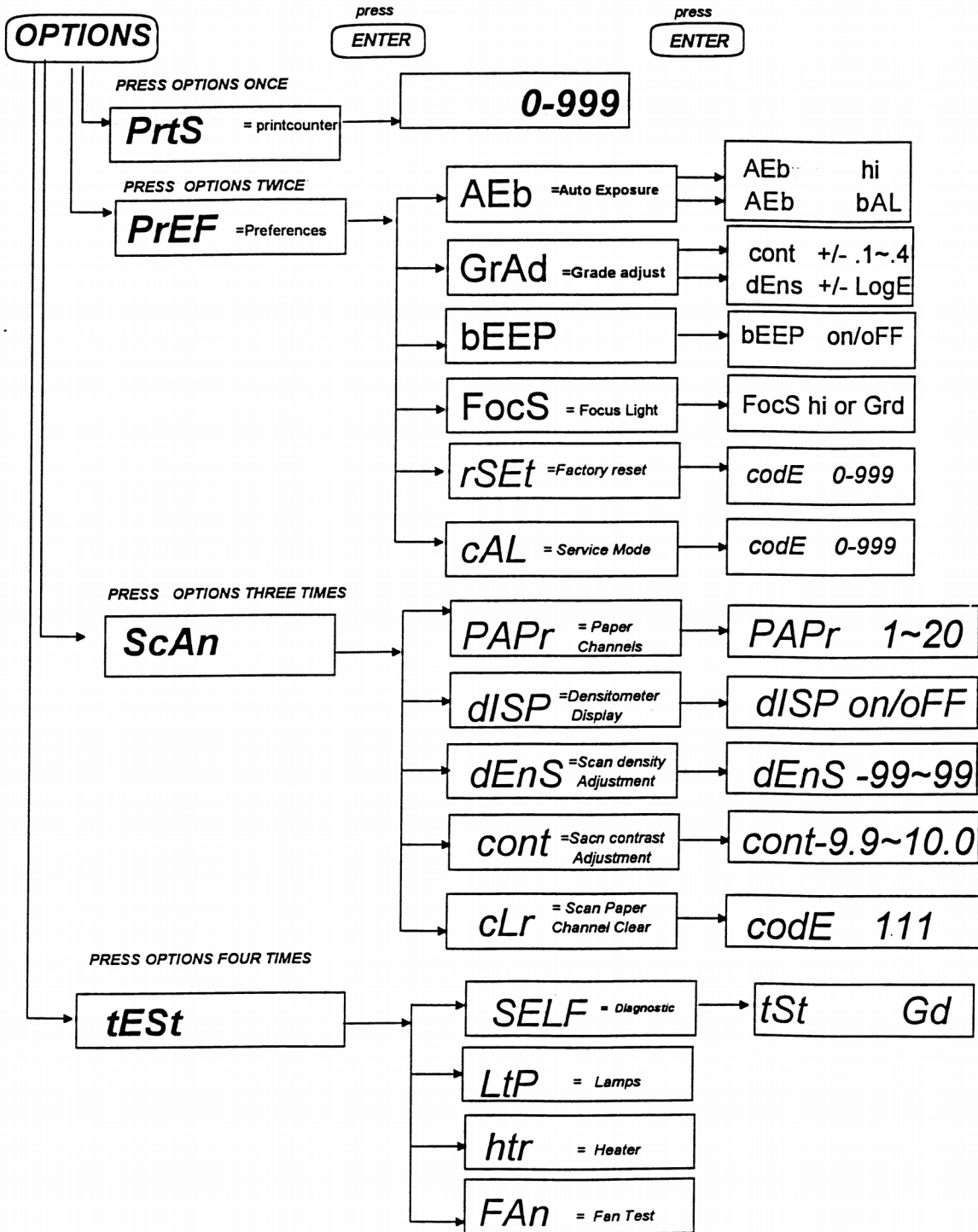


NEW SEAGULL

VC-CLS

Instruction Manual

Oriental New Seagull VC-CLS Options Flo-Chart





VC-CLS

Table of Contents

| | | |
|--|------|------------|
| 1. INSTALLATION | PAGE | 1 |
| 2. QUICKSTART | | 2 |
| 3. FEATURES | | 3 |
| 4. BASIC CONTROLS | | 4-6 |
| 5. ADVANCED CONTROLS | | 7-14 |
| 6. PRINTING TIPS | | 15-18 |
| 7. CARE AND MAINTENANCE | | 19 |
| 8. WARRANTY | | 19 |
| 9. U.L. SAFETY INSTRUCTIONS (READ FIRST) | | 20 |
| 10. NOTE | | 21 |
| 11. REGISTRATION | | BACK COVER |

OPERATING MANUAL FOR
VC-CLS

Congratulations on your purchase of the New Seagull VC-CLS Variable Contrast Light Source. Your new enlarger lightsource should provide you with years of trouble-free service. It was designed and manufactured to Oriental New Seagull specifications by ZBE, Inc. of Santa Barbara, California.

1. INSTALLATION

INSTALLATION IS SIMPLE

Follow these simple steps and you'll be up and running in a few minutes.

1. Remove all contents and packing material from original container.
 2. Do not discard any packing material until you're satisfied that all of the components are present and accounted for and are in good condition. If carton is found damaged CONTACT SHIPPER IMMEDIATELY!
 3. Caution has been taken to carefully pack and ship the VC-CLS; however, shipping damage may occur during transit. If you find concealed damage, please notify dealer immediately.
 4. The contents of the carton should contain the following:
 - ONE VC-CLS LIGHTSOURCE
 - ONE OPERATING MANUAL
 - ONE FOOTSWITCH
1. The VC-CLS has been designed to fit most 4x5 enlargers. The unit contained in this carton will fit Beseler M and V series and Omega D-5 series chassis without adapters. If you have a different series you should purchase the appropriate adapter kit from your dealer.
 2. Plug footswitch into either of the identical connectors at rear of unit. Secure with flatblade screwdriver---do not overtighten.
 3. Replace existing lamphouse with VC-CLS. When mounting the VC-CLS on a Beseler 4x5 chassis be sure to adjust top bellows to the closed position. Some Omega D series chassis require an

adapter plate to secure VC-CLS to the lifting rods. These adapter plates have been included at no additional cost. Do not discard these plates as you may need them for future use.

4. Adjust brackets to assure a level and secure fit.

We know you can't wait to get started so we made it real easy. You may begin "QUICKSTART". READ THE SAFETY INSTRUCTIONS FIRST.

2. QUICKSTART

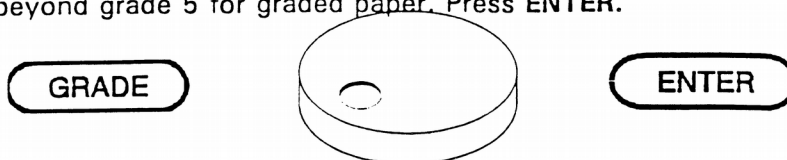
1. Plug AC cord into 110V grounded outlet.
2. Turn on the main power switch at rear of unit. The VC-CLS has a built-in audible timer...there's no need to use your timer.
3. Your Variable Contrast Cold Light System is now ready for use.
4. Press **FOCUS** to turn on the light; and compose your print.

FOCUS

5. Press **TIME**, turn the **SPEEDWHEEL** to the desired time. Clockwise, counterclockwise, slow, fast, whatever. Just stop where you want and press **ENTER**.



6. Press **GRADE** and spin wheel to desired grade, or spin to (-) beyond grade 5 for graded paper. Press **ENTER**.



7. Press **FOCUS** to turn off the focus light.

FOCUS

8. Use footswitch to make an exposure.

9. The VC-CLS requires some warm up time prior to making the first exposure. Turning on the focus light will speed up warming.

too

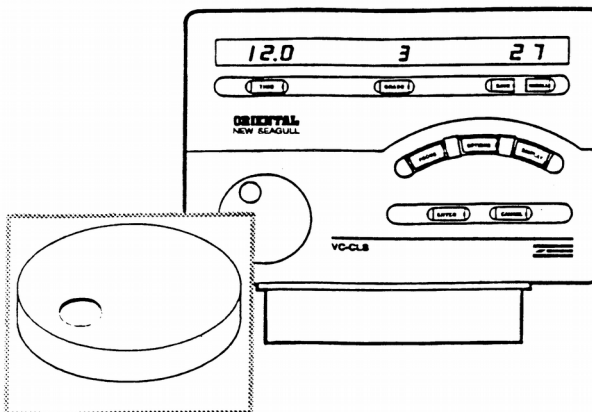
cold

This may seem just like any ordinary lightsource; however, read the rest of this manual to see what you can *really* do with this unique system.

3. FEATURES

- *Easy to read digital display*
- *Built-in audible timer*
- *Speedwheel*
- *Adjustable/Controllable contrast 0-5 in half-grades*
- *100 print memories*
- *Closed-Loop control*
- *Print number counter*
- *Built-in diagnostics/tests*
- *Long-life mercury vapor cold-cathode tubes*
- *Even illumination*
- *Automatic contrast dodge and burn*
- *Adjustable "Focus Light"*
- *Microprocessor-controlled, stabilized power supply*
- *Display dimmer*
- *U.L. Safety Features*
- *Paper Grade Bias Control throughout range*

4. BASIC CONTROLS



1. *The SPEEDWHEEL*

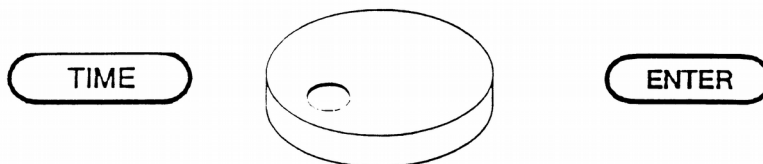
The SPEEDWHEEL is used anytime you need to enter or set a number. Turn the SPEEDWHEEL clockwise and the number will count up. Turn it counter-clockwise and the number will go down. The SPEEDWHEEL is also sensitive to how fast you turn it. If you spin it, the number will change in large steps---turn slowly and the numbers will change in small steps.

The SPEEDWHEEL is also used to select OPTIONS from the OPTIONS menu.

2. *Entering time*

Press **TIME**, turn SPEEDWHEEL to desired time, press **ENTER**.

(You may adjust exposure in log density units by pressing **TIME** twice and turning speed-wheel to the desired plus or minus log density. Note: 30 units = one full stop.)



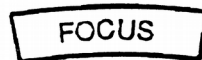
3. *Entering grade*

Press **GRADE**, turn the SPEEDWHEEL to the desired grade, press

ENTER. Or, you may press **GRADE** repeatedly and not use the **SPEEDWHEEL**. Each time you press **GRADE** you cycle through the contrast range in half-grade steps. You will see a (-) as you cycle past grade 5. The (-) is the setting for graded paper.



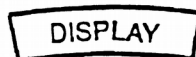
4. *Turning on the FOCUS light*
Press **FOCUS** to turn on the focus light. Press again, or press **CANCEL** to turn it off.



5. *Starting your exposure*
Use the footswitch to make an exposure. You may cancel exposure by pressing **CANCEL**.

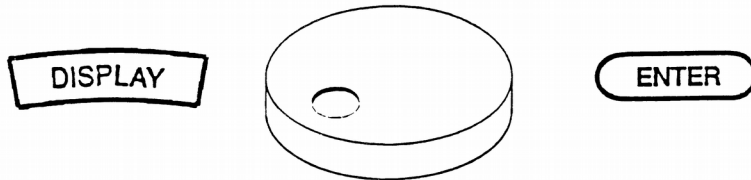


6. *Turning display panel lights off/on*
Press **DISPLAY** to turn off. Press again to turn on.



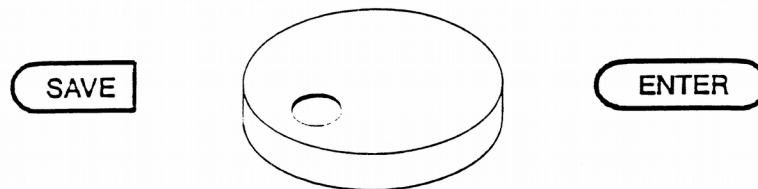
7. *Dimming display panel lights*

Press **DISPLAY**, turn the wheel, release **DISPLAY**, continue to turn wheel to desired display brightness, press **ENTER**.



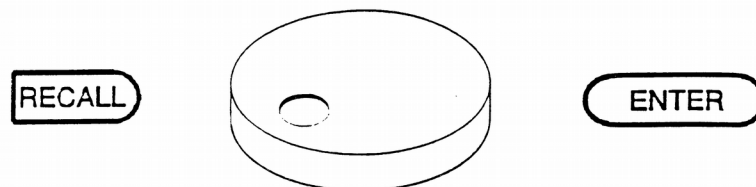
8. *Saving a print into memory*

After you make a print, you can save the exposure time and contrast grade of that print in memory. Press **SAVE** to select the memory save operation. Turn the **SPEEDWHEEL** to select memory number into which you want to store this print. Press **ENTER** to save the print in memory.



9. *Recalling a print from memory*

Press **RECALL**. Turn the **SPEEDWHEEL** to desired memory print number, press **ENTER** to recall memory.



5. ADVANCED CONTROLS

1. Additional features of your VC-CLS are accessed via the **OPTIONS** menu. Press the **OPTIONS** key repeatedly or use the **SPEED-WHEEL** to view the different options.

ORGANIZATION OF THE OPTIONS MENU:

PRINT COUNTER

AUTO EXPOSURE AND CONTRAST CONTROL (WITH VC-SCANNER)

USER SELECTABLE PREFERENCES MENU

- AUTOMATIC EXPOSURE BALANCING (A.E.B.)
- GRADE ADJUSTMENT
- BEEP ON/OFF
- FOCUS LEVEL
- MASTER RESET
- CALIBRATE

TEST MENU (fault diagnostics)

- SELF TESTS
- LAMP TEMPERATURE
- HEATER FAN ON/OFF

VIEWING THE PRINT COUNTER

The print counter keeps track of the number of exposures which you have made. Press **OPTIONS**. You will see:

| | |
|-------------|---------------|
| <i>prts</i> | <i>number</i> |
|-------------|---------------|

Press **CANCEL** to return to normal display.

CLEARING OR SETTING THE PRINT COUNTER

Press **OPTIONS**. You will see:

| | |
|-------------|---------------|
| <i>prts</i> | <i>number</i> |
|-------------|---------------|

Press **ENTER** to access print counter , turn the **SPEEDWHEEL** to the desired print count. Press **ENTER** to set the print counter. You may make exposures from this **OPTION** mode.

AUTOMATIC EXPOSURE BALANCING (A.E.B.)

This option is used to turn on the Automatic Exposure Balancing features. The A.E.B. features allow you to change the contrast grade and reprint without retesting the exposure. There are two different methods of exposure balancing available.

AEB BAL-In this mode, the light intensity is balanced so that all grades will print at the same exposure time. Note that this mode causes the middle grades to print slowly.

AEB HIGH- This mode runs all grades at maximum intensity. When changing grades, the exposure time will change automatically to keep the print density the same from grade to grade. This mode maintains the shortest exposure times.

AEB OFF- In this mode, none of the grades are exposure balanced. Changing grades will require changing exposure times.

Press **OPTION** to select options menu. Turn the **SPEEDWHEEL** until the preferences option appears. The display will show:

PREF

Press **ENTER**. Turn the **SPEEDWHEEL** until the Automatic Exposure Balancing (A.E.B.) option appears. The display will show:

AEB

Press **ENTER**. Turn the **SPEEDWHEEL** to select between the three modes.

AEB BAL

AEB HI

AEB OFF

Press **ENTER** to select the preferred mode.

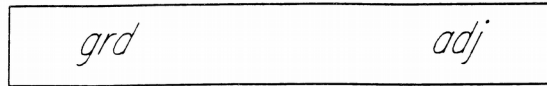
GRADE ADJUSTMENT (bias)

This option allows you to "fine tune" each grade. You can adjust both contrast and the density. The adjustment you make at this setting effects the *currently selected grade*.

Press **OPTION** to select options menu. Turn the **SPEEDWHEEL** until the preferences option appears. The display will show:

PREF

Press **ENTER**. Turn **SPEEDWHEEL** until the grade option appears. The display will show:



grd adj

Press **ENTER**. The display will flash the current contrast grade as a reminder of which grade you are now adjusting.

Turn the **SPEEDWHEEL** to select the amount of adjustment to this contrast grade. The contrast is adjustable in tenth grade (.1) increments. You may adjust up (+) or down (-) in tenths of a grade. Press **ENTER** to set the adjustment.

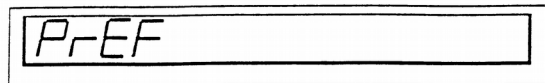
Turn the **SPEEDWHEEL** to select the amount of adjustment to the density. The density adjustment is in "log density units". Note: The density adjustment made here will effect the intensity of the printing light. It will not necessarily change the print density by that amount. The actual print density will depend on the contrast and density of the negative you are printing.

Press **ENTER** to set the density adjustment.

TURNING THE BEEP ON/OFF

Press **OPTIONS** to select options menu.

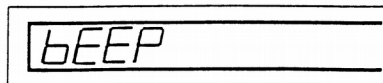
Turn **SPEEDWHEEL** until the preferences option appears. The display will show:



PREF

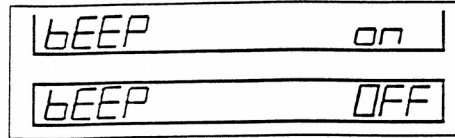
Press **ENTER** to select the preferences menu.

Turn **SPEEDWHEEL** until the beep option appears. The display will show:
Press **ENTER** to select the beep option.



BEEP

Turn SPEEDWHEEL to select:



Press ENTER to make selection.

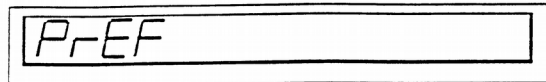
SETTING THE FOCUS LIGHT LEVEL

The light level used for focusing may be set to one of two levels:

1. MAXIMUM BRIGHTNESS
2. SAME BRIGHTNESS AND COLOR AS THE EXPOSING LIGHT FOR THE SELECTED GRADE.

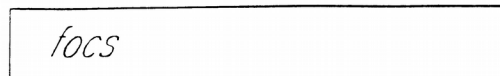
Press OPTIONS to select options menu.

Turn SPEEDWHEEL until the preferences option appears. The display will show:



Press ENTER to select the preferences menu.

Turn SPEEDWHEEL until the focus level option appears. The display will show:



Press ENTER to select focus level option.

Turn the SPEEDWHEEL to select the focus level.

focs *hi*

or:

focs *grd*

Press ENTER to set the selected focus light level.

MASTER RESET

The master reset operation will clear all memories and any grade adjustments. This is the condition in which you received the VC-CLS new from the factory.

Press **OPTIONS** to select options menu.

Turn SPEEDWHEEL until the preferences option appears. The display will show:

PREF

Press **ENTER** to select the preferences menu.

Turn SPEEDWHEEL until the reset option appears. The display will show:

rset

Press **ENTER** to select reset option.

The master reset operation is protected against accidental entry. Turn SPEEDWHEEL until display shows:

code *789*

Press **ENTER** for master reset.

SELF TEST

Note: This self test mode is for factory diagnostics only. It should be used only for telephone consulting diagnostics with factory personnel.

Press **OPTION** to select options menu.

Turn **SPEEDWHEEL** until the **test** option appears. The display will show:

TEST

Press **ENTER** to select the **test** menu.

self

Press **ENTER** to start the automatic self test.

TEMPERATURE, HEATER AND FAN TESTS

Press **OPTIONS** to select options menu.

Turn **SPEEDWHEEL** until the **test** option appears. The display will show:

TEST

Press **ENTER** to select the **test** menu.

Turn SPEEDWHEEL to access the temperature, heater, or fan tests. The display will show:

Temperature test:

L tp *124*

Heater test:

HETR *ON/OFF*

Fan test:

FAN *ON/OFF*

Press **CANCEL** to return to normal display.

6. PRINTING TIPS

Cold, diffused light sources produce superior quality images when compared to condenser light sources. The diffuser virtually eliminates dust spots and small imperfections in the negative. Condensers also degrade image quality by exaggerating dust particles in the condenser, lightpath, and on the negative. Condensers focus light and heat to the negative stage causing "negative pop" resulting in unsharp and uneven focus. The cold, diffused light generated by the New Seagull VC-CLS produces sharp, clear images with the added convenience of controlling contrast.

The VC-CLS has been programmed to allow speed-matched exposure throughout the contrast range. This enables you to dodge and burn contrast without having to calculate differences in exposure time. You may program your dodge and burn contrast, and exposure times directly into the memory for exact recall. See section 4, Basic Controls for memory storage.

In addition to memory storage you have the ability to store a sequence of dodge and burn contrast control. Example: From a single negative you may store an exposure of 2 seconds @ grade 5 in print memory number 3; 8 seconds @ grade 2 1/2 in print memory 4; and 4 seconds @ grade 0 in print memory 5. Insert negative into carrier, focus and compose. Recall memory print counter number 3, expose; recall number 4, expose; recall number 5, expose. It's simple and accurate.

Diffused, cold light requires a little extra contrast when compared to condenser light sources. The VC-CLS has been factory programmed to produce a paper grade range zero through five and ISO Range 50 to 180. If you wish to tailor any grade to your specific needs please see *grade adjust* in section 5. Advanced Controls.

The New Seagull VC-CLS is the perfect match for Oriental New Seagull VC and Graded papers. Be sure to try the New Seagull line of papers, chemicals, and darkroom equipment.

6. PRINTING TIPS CONTINUED

RECIPE FOR AN EXPOSURE SEQUENCE

How would you like to program your VC-CLS to make up to five different consecutive exposures without having to touch the expose button or footswitch? How would you like a five-second dark interval between each of the five exposures to pick up dodging and burning tools? How would you like this feature at no additional cost? But why would anyone want to make five different consecutive exposures?

Here's why. Suppose you have a negative that requires an overall grade 5 flash for a small percentage of exposure time, perhaps three seconds of an overall 15 second exposure. The remaining 12 seconds will be exposed at grade 2.5. Then say you need a two-second burn at grade one for the top left corner, and a two-second burn at grade 4 for the clouds at the top right corner, and a three-second grade 1.5 burn for the bottom third of the print. Sounds impossible? Read on.

Now, how would you like to make twenty-five exact duplicates of this wonderful negative without going crazy, missing a deadline or losing money?

Try this procedure with your VC-CLS (assuming that you have a negative that needs up to five repeatable dodge and burn sequences and/or overall grade flashing).

Set the A.E.B. (at the OPTION/PREF) to the BAL mode. Make a test print to judge proper overall exposure time and normal grade. As in the previous mentioned scenario, the total exposure time was 15 seconds (three seconds for an overall grade 5 plus 12 seconds at grade 2.5). Now make a judgment about the two-second grade-one burn for the top left corner, a two-second grade-four burn for the clouds at the top-right corner, and three-second grade 1.5 burn for the bottom third of the print. Be sure to write down the numbers for time and grade and sequence.

Press OPTION. Turn speedwheel to PREF. Press ENTER. Turn speedwheel to CAL. Press ENTER. You will see CODE. Turn speedwheel to the number 2 and press ENTER. You will see the number 90 at the far

right display, the time and grade have changed and the VC-CLS will now begin a live demonstration sequencing from channel 90 through 94. This CODE 2 is a demonstration feature of the VC-CLS; however, you may use this DEMO feature to program channel 90 through 94 with your dodge and burn and overall flash sequence as discussed in the preceding paragraph.

Now you can program your first exposure of the sequence in the SAVE-RECALL mode and enter at channel 90, then program channels 91, 92, etc. As in our example, set the time and grade (three seconds at grade 5), then at channel 91 (12 seconds at grade 2.5), channel 92 (two seconds at grade one), channel 93 (two seconds at grade 4), and channel 94 (three seconds at grade 1.5). The unit is now programmed for this sequence of five exposures. If you wish to program a sequence with fewer than five channels, just set time for zero for the next channel to automatically return to the beginning of the sequence. Now that you have programmed these five consecutive exposures you may check to see how it works. Press OPTION, turn speedwheel to PREF and press ENTER. Turn speedwheel to CAL and press ENTER. Turn speedwheel to CODE 2 and press ENTER.

Now watch the system cycle through the five custom-made time and grade changes. Notice the five-second dark time between exposures, this will allow you to pick up dodging cards, move your hands or diffusion plates into position, or just about anything for that matter. Now that you're impressed with your programming ability you may push any button for a safe return to the main program. To recall the sequence just repeat the step: OPTION/PREF/CAL/CODE/2 press ENTER to start. No need to worry about any voltage fluctuation during the exposure sequence, the VC-CLS closed-loop feature is always working to provide consistent results.

When the VC-CLS is in this DEMO mode it will cycle from channel 90 through 94 and return to 90. It will keep repeating this sequence until you press any button to stop. You will need to go to CODE 2 to restart; however, you will not need to reprogram. The VC-CLS has a mind of its own and it knows that you'll want to repeat this five step negative again.

There are only two drawbacks to operating in this mode:

1. You'll need to be quick to remove the paper from the easel after the last exposure, because this is where the program sequence begins. Or, you could get real creative and make multiple prints with the same sequence.
2. You could get use to this convenience and want to program a multitude of negatives, but your current program has room for only one. Good news though, a Memory Expansion Upgrade Item #1758 is now available to allow fifty more of these types of "recipes."

NEW SEAGULL VC-CLS ACCESSORIES

| ITEM NUMBER | DESCRIPTION |
|-------------|--|
| 1758 | Memory Expansion & Extended Recipe |
| 1779 | VC-Scan Auto Exposure & Density System |
| 1765 | VC-Remote Control |
| 1772 | VC-CLS Dual Footswitch (Focus & Hold) |
| 1782 | Mounting Adapter for Omega D5500 |
| 1756 | Mounting Adapter for Omega D-2 & 3 |
| 1781 | Mounting Adapter for Devere 504 |
| 1764 | Mounting Adapter for Durst 1200 |
| 1763 | Mounting Adapter for Beseler 23CII |

7. CARE AND MAINTENANCE

Actually there is no maintenance needed for your new VC-CLS. Reasonable care should be taken to keep the unit clean and as dust free as possible. Do not use any caustic or abrasive cleaners on your VC-CLS. Use a soft, lint free cloth to clean surface of the diffuser and control panel. Do not spray any liquid or aerosol cleaners directly on unit, spray onto clean cloth first then wipe surface to be cleaned.

PLEASE NOTE: DO NOT ATTEMPT TO OPEN VC-CLS, YOU WILL VOID THE WARRANTY.

DANGER: HIGH VOLTAGE EXISTS INSIDE THE UNIT. RETURN TO FACTORY FOR SERVICE. LOANER UNITS ARE AVAILABLE.

TOLL FREE HOTLINES: 800 833 1803 800 253 2084
ASK FOR EXT 617

8. WARRANTY

Your new VC-CLS is guaranteed to be free of defects in materials and workmanship for a period of one year from date of purchase. The lamps are guaranteed to perform to factory specification for a period of three years from date of purchase. Labor warranty is one year from date of purchase. Should your VC-CLS ever need service call the 800 hot line to arrange for repair or replacement. Lamps should last for many years under normal operating and production usage and cannot be replaced by consumer. CALL HOT LINE.

DANGER HIGH VOLTAGE EXISTS INSIDE VC-CLS DO NOT ATTEMPT TO OPEN. OPENING VC-CLS VOIDS WARRANTY.

9. U.L. SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

When using your photographic equipment, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions before using.
2. Close supervision is necessary when any appliance is used by or near children. Do not leave appliance unattended while in use.
3. Care must be taken as burns can occur from touching hot parts.
4. Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged-until it has been examined by a qualified serviceman.
5. Position cord so that it will not be tripped over, pulled, or contact with hot surface.
6. If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cords rated for less amperage than the appliance may overheat.
7. Always unplug appliance from electrical outlet before cleaning and servicing and when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
8. Let appliance cool completely before putting away.
9. To reduce risk of electrical shock, do not immerse this appliance in water or other liquids.
10. To reduce the risk of electrical shock, do not disassemble this appliance, but take it to a qualified serviceman when service or repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.
11. The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.
12. Connect this appliance to a grounded outlet.
13. Disconnect this unit from its source of supply before replacing lamps. **SAVE THESE INSTRUCTIONS**