AUTO DIM------ CRT SAVER (COCO 3 only)

HERE IS THE DEVICE THAT WILL NOT ONLY ENHANCE YOUR COCO 3 BUT MAY ALSO SAVE YOU HUNDREDS OF DOLLARS. I CALL THIS PROJECT "AUTO DIM", WHICH IS EXACTLY WHAT IT DOES; IT AUTOMATICLY DIMS YOUR TV/MONITOR OR RGB MONITOR IF YOU LEAVE YOUR COCO UNATTENDED. FOR THE REMAINDER OF THIS DOCUMENT , MONITOR WILL REFER TO TV, VIDEO MONITOR OR RGB MONITOR INTERCHANGEABLY.

AUTO DIM CONSISTS OF AN ACCURATE COUNTER TIMER THAT ACTIVATES A SET OF ELECTRONIC SWITCHES IF THE KEYBOARD OR JOYSTICK FIRE BUTTONS ARE NOT PRESSED FOR 2 1/4 MINUTES. EVERY TIME A KEY OR FIRE BUTTON IS PRESSED ,THE COUNTER IS RESET AND STARTS COUNTING FOR 2 MINUTES AND 18 SECS. IF THE COUNTER REACHES 2 1/4 MINUTES THE ELECTRONIC SWITCHES ACTIVATE TO STOP VIDEO AND RGB DATA INFORMATION FROM REACHING YOUR MONITOR. THIS RESULTS IN THE MONITOR SCREEN GOING BLACK. PRESSING ANY KEYBOARD OR JOYSTICK FIRE BUTTON WILL RESTORE THE MONITOR SCREEN TO NORMAL USE AND THE CYCLE CONTINUES UNTIL THE COCO IS TURNED OFF. HOW CAN THIS SAVE ME HUNDREDS OF DOLLARS? AUTO DIM HELPS TO STOP CRT (CATHODE RAY TUBE) IMAGE BURN IN. BURN IN OCCURS WHEN A HIGH CONTRAST PICTURE IS ALLOWED TO BE DISPLAYED FOR LONG PERIODS OF TIME. THE RESULT OF BURN IN IS A GHOST IMAGE PERMANENTLY BURNED ON THE CRT SCREEN. THE IMAGE CAN BE SEEN EVEN WHEN THE MONITOR IS TURNED OFF. THE ONLY WAY TO REMOVE THE BURNT IMAGE IS TO REPLACE THE PICTURE TUBE OR BUY A NEW MONITOR.

THE AUTO DIM MODULE HAS 8 COLOR CODED WIRES THAT ARE CONNECTED TO THE COCO3 MAIN BOARD.

        1. RED   WIRE - +5VOLT WIRE CONNEECTS TO PIN 14 OF IC15.
        2. BLACK WIRE - GROUND WIRE CONNECTS TO PIN 7 OF IC15.
        3. WHITE WIRE - 60 HERTZ CLOCK TO PIN 18 OF IC5.
        4. YELLOW WIRE - RESET LINE CONNECTS TO PIN 9 OF IC15.
        5. GREEN WIRE - VIDEO SWITCH CONNECTS TO LEFT SIDE OF R68.
   6,7,8. THREE WIRE - RGB SWITCHES CONNECTS TO BASE LEADS OF Q5;Q6;Q7.
                        ONE WIRE TO EACH TRANSISTOR.

TO INSTALL THIS DEVICE YOU MUST OPEN THE CASE OF THE COCO 3. OPENING THE CASE WILL VOID YOUR WARRANTY SO YOU MAY WANT TO WAIT 90 DAYS IF YOUR COCO IS NEW. UNPLUG THE COCO WHEN INSTALLING AUTO DIM TO PREVENT ELECTRICAL SHOCK. WITH A PHILIPS SCREW DRIVER, UNSCREW THE SIX SCREWS FROM THE BOTTOM OF THE COMPUTER. THE SIXTH SCREW IS UNDER THE BLACK WARRANTY STICKER. PLACE A PIECE OF MASKING TAPE LOOSELY OVER EACH SCREW TO STOP THEM FROM FALLING OUT WHEN YOU TURN THE COCO OVER. REMOVE THE TOP COVER ,EXPOSING THE INSIDE OF THE COCO. USE THE ENCLOSED HOOKUP DIAGRAM TO LOCATE THE 8 CONNECTION POINTS ON THE MAIN BOARD. REMOVE THE KEYBOARD BY USING BOTH HANDS TO WIGGLE THE KEYBOARD RIBBON OUT OF IT'S SOCKET. USE THE CLIPS OR SOLDER THE CONNECTIONS AS INDICATED. IF YOU ARE SOLDERING THE CONNECTIONS, SOLDER QUICKLY TO AVOID HEAT DAMAGE TO THE DELICATE BOARD AND MAKE SURE THE CONNECTIONS ARE CLEAN AND SOLID. MOUNT THE AUTO DIM MODULE TO THE CHASSIS; UNDER THE KEYBOARD WITH THE DOUBLE SIDED TAPE.

REINSTALL THE KEYBOARD AND RIBBON CABLE. PUT THE TOP BACK ON AND SCREW THE CASE SHUT. CONNECT YOUR MONITOR AND PLUG IN THE COCO. WITH THE MONITOR ON, TURN ON THE COCO AND PRESS THE KEYBOARD SPACEBAR. THE MONITOR SHOULD HAVE A PICTURE AND LOOK NORMAL IN ALL RESPECTS. IN 2 MINS AND 18 SECS THE SCREEN SHOULD GO BLANK. IF THE SCREEN DOES NOT GO BLANK WITHIN 2 MINUTES AND 30 SECS OR THE COCO DOES NOT WORK PROPERLY ,TURN THE COCO OFF AND RECHECK YOUR HOOKUP FOR ERRORS. IF NO ERRORS ARE FOUND , THE PROBLEM IS IN AUTO DIM MODULE. AUTO DIM IS PRETESTED BEFORE SHIPMENT. IF YOU ARE SURE THE MODULE IS DEFECTIVE SIMPLY SEND IT BACK TO LUCAS INDUSTRIES WITH THE ORIGINAL SALES RECEIPT FOR REPLACEMENT WITHIN 30 DAYS OF SALE.
YOU MAY FIND THAT CERTAIN SOFTWARE MAY RECONFIGURE THE KEYBOARD AND NOT ALLOW ALL KEYS TO BE USED. WHEN THIS OCCURS, PRESSING A KEY WILL NOT RESTORE THE SCREEN. IN THIS CASE USE A JOYSTICK OR MOUSE FIRE BUTTON TO RESTORE THE SCREEN AS THEY ARE HARDWIRED AND CANNOT BE BYPASSED.

I HOPE YOU FIND AUTO DIM A NICE ENHANCEMENT TO YOUR COLOR COMPUTER SYSTEM. IF YOU HAVE ANY QUESTIONS OR SUGGESTIONS FOR FUTURE PROJECTS YOU CAN CALL ME AT (216) 823-4221 AFTER 3 PM EST OR SEND A SELF ADDRSESED STAMPED ENVELOPE FOR REPLY TO:

        DON LUCAS JR.
        LUCAS INDUSTRIES 2000
        14720 CEDAR ST. N.E.
        ALLIANCE , OHIO 44601

LFT RGT SER CASS TV RF VIDEO AUDIO
OUT
RESET

COCO 3

Q3

R68

PC
BOARD

KEYBOARD
RIBBON
SOCKET

ROMPACK
PORT

IC1

IC4

IC5

IC14

IC6
GIMME

IC2

E Q5 Q6 Q7
C
B

IC15

1

7

BLK
PIN 7
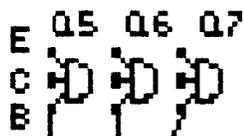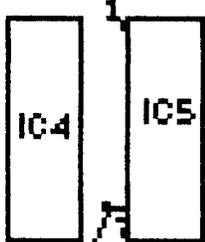
YELLOW
WIRE TO
PIN 9

20

RED
PIN 15

VIDEO
GREEN WIRE
TO R68
LEFT SIDE

RGB
3WIRE
CONNECT TO
BASE
IC5 IC6 IC7

WHITE WIRE
PIN18 IC5

MODULE