RUN

ELECTRONIC VISUALIZATION

"COMPUTER PROGRAMMING: B.A.S.I.C. - ALLY INSIDE TELEVISION."

"ARTISTIC RESEARCH."

"AN INTERACTIVE, HOME COMPUTER-TELEVISION RESEARCH SATELLITE..."
TO: Bally Arcade computer users.

An add-on circuit which improves the audio and video signals, optimizing for recording and/or transmission.

This add-on circuit gives the computer user a line level audio signal output and a composite video signal output. It is a lowest-possible-cost solution to a highest-possible-quality goal.

This add-on circuit was designed and prototyped by Dan Sandin; copied and documented by Phil Morton. For assistance contact Phil at (312) 666-5628, Chicago, Illinois.

For Bally Arcade computer users who are not connected into the ongoing Sandin IMAGE PROCESSOR cybernet, you probably should simply collect the parts (see PARTS LIST) and wire-wrap this circuit.

The following circuit diagram and 2X printed circuit board pictorial can be directly copied by Sandin IMAGE PROCESSOR builders using parts already on hand. The circuit is a slight variation on the "standard driver" used so frequently through-out the IP. We used 1/4 of a #217 board to build the circuit on.

You can do a "neat" job by using either chassis-mount connectors, mounting them in the top plastic "fin", or cable-mount connectors by enlarging the RF Cable hole to run the audio and video cables out. We got away with using RG 174/U (coax) for both audio and video.

If you remove the RF Modulator from your computer then the BNC video out will deliver black-and-white composite video only; no color. This may be desirable for special applications which assume colorizing "down stream" in time.

Remove the five phillips-head screws on the bottom of the computer; the top plastic will now come off. Pull the RF Modulator off the 8 pin connector; solder to pins #1(video), #2(+10 volts), #3(audio). Pin #1 is closest to the heat sink and the front of computer.

Pin #8 = -5 volts
Pin #7 = B-Y
Pin #6 = R-Y
Pin #5 = +2.5 volts
Pin #4 = Chroma
Pin #3 = Audio
Pin #2 = +10 volts
Pin #1 = Video

"...enjoy your clean pictures and sounds!" - PM
PIN 2  +10V.

PIN 1

PIN 3

VIDEO

AUDIO

IN

IN

IN

IN

IN

IN

10K

100

100

10K

100

100

IN914

IN914

2N4123 (NPN)

2N4125 (PNP)

47

250uF

BNC VIDEO OUT

BNC VIDEO OUT

RCA PHONO AUDIO OUT

RCA PHONO AUDIO OUT

SOLDER THIS GROUND TO THE BOTTOM OF THE GAME BOARD SHIELD.
PARTS LIST

Resistors:
1  47Ω  1/4 watt
2  10Ω  1/4 watt
2  100Ω 1/4 watt
2  10kΩ 1/4 watt

Capacitors:
1  .1uF  50wvdc cer. disc.
1  10uF  25wvdc electrolytic
1  100uF 25wvdc electrolytic
1  250uF 12wvdc electrolytic

Transistors:
1  2N4125 (PNP)
1  2N4123 (NPN)

Diodes:
2  1N914

Wire/cable:
4 feet  RG 174/U (coax)
2 feet  hook-up, grounding, jumping wire

Connectors:
1  RCA phono-female (chassis or cable mount)
1  BNC video-female (chassis or cable mount)

PC Board:
1/4 of a #217 board (standard driver in IP)