

Section Four: Appendices

TROUBLESHOOTING GUIDE

Boeckeler's quality inspectors test each *Pointmaker* for software and hardware performance prior to shipment. Therefore, most problems which presenters encounter are related to installation. *Table 4.1* below describes common problems and their solutions. If, after referring to this table, a problem still exists, call Boeckeler Instruments, Inc., at (800) 552-2262 or (520) 745-0001. Ask for technical assistance. There are no user serviceable parts in the *Pointmaker*. Do not open the cabinet.

Table 4.1

Symptoms	Possible Solutions
The green indicator light on the front of the <i>Pointmaker</i> does not light up.	<ol style="list-style-type: none"> 1. Check that the <i>Pointmaker</i> is plugged into a live outlet. 2. On the back panel of the <i>Pointmaker</i>, remove the plastic cover above the power supply connector and check for a blown fuse. Replace the fuse only with a BUSS MDL 1/2 amp slow blow.
Monitor does not light up.	<ol style="list-style-type: none"> 1. Check that the monitor is plugged into a live outlet. 2. Check that the monitor is switched on. 3. Check that the monitor brightness and contrast controls are properly adjusted.
The <i>Pointmaker</i> markers appear to bloom.	<ol style="list-style-type: none"> 1. Adjust system parameters on the video output device, monitor or video source, such as contrast, gain, brightness, color, light, and intensity. 2. Decrease brightness of <i>Pointmaker</i> markers or use a different marker color.

(continued from page 113)

Symptoms	Possible Solutions
<p>Monitor lights up but does not display a picture.</p>	<ol style="list-style-type: none">1. Check that the video source and <i>Pointmaker</i> are each plugged into a live outlet.2. Check that the video source and <i>Pointmaker</i> are both switched on.3. Check that the proper cables are connected to the proper connectors on the video source, the <i>Pointmaker</i>, and the monitor. Some sources and monitors have multiple output and input connectors. Consult your video or computer manuals for correct connection information.4. If the video source or monitor has a switch for 75 OHM or high Z, ensure this switch is in the 75 OHM position.5. On the back panel of the <i>Pointmaker</i>, remove the plastic cover above the power supply connector and check for a blown fuse. Replace the fuse only with a 1/2 amp slow blow. A spare fuse is provided.6. Bypass the <i>Pointmaker</i> by connecting the monitor directly to the video source, or by powering down the <i>Pointmaker</i> (the PVI-64 automatically passes along the video signal when powered down). If the video image still does not appear, have the video source and monitor checked.
<p>Monitor automatically adjusts brightness so that video image is dull while markers are bright.</p>	<ol style="list-style-type: none">1. Monitor is automatically adjusting for the overall brightness level of the markers <i>and</i> the video image. On the <i>Pointmaker</i>, enter SETUP MENU and select the BRIGHTNESS option. Tone down the brightness level of the markers. The monitor will adjust accordingly.

(continued from page 114)

Symptoms	Possible Solutions
Video image on monitor scrolls.	<ol style="list-style-type: none">1. Ensure that video connectors in and out of the <i>Pointmaker</i> are properly connected. Also, check for loose video connections.
Monitor displays a scrambled picture.	<ol style="list-style-type: none">1. Check the horizontal hold control on the video monitor for proper adjustment. Also check the <i>Pointmaker</i> timing adjustments in the Setup Menu.2. Check that the Dual Voltage Switch (110V/220V) located on the back panel of the <i>Pointmaker</i> is properly set.3. Monitor is not compatible with video source. Use compatible system.4. Check to be sure that the video in and out connectors on the <i>Pointmaker</i> are secure.5. Ensure that video connectors in and out of the <i>Pointmaker</i> are properly connected. Also, check for loose video connections.
Light pen, mouse pen, or remote control will not operate properly.	<ol style="list-style-type: none">1. Refer to specific section on controllers entitled <i>Components</i>, which begins on page 8.
Touch screen will not operate properly.	<ol style="list-style-type: none">1. Refer to touch screen installation instructions beginning on page 27 AND the manufacturer's operating instructions that came with the controller. For touch screens, calibration may be needed. Not all touch screens are compatible with <i>Pointmaker</i> touch screen drivers.

(continued from page 115)

Symptoms	Possible Solutions
Preview monitor displays markers, but program monitor does not.	<ol style="list-style-type: none"><li data-bbox="633 334 1201 444">1. Enter <i>Setup Menu</i>, select PLAYBACK<MARKER MODE OUTPUT<PREVIEW AND PROGRAM OUT. Exit menu. Markers should be displayed on both program and preview monitors.<li data-bbox="633 477 1201 527">2. Be sure that proper video connections have been made for both PROGRAM OUT and PREVIEW OUT.

GLOSSARY

ACTIVE POINTER

-- the arrow, caret, cross hairs, "X," "O," or dot which is positionable, often used as a pointer, but also used to position the starting point of a freehand drawing. When the active pointer is *anchored*, another identical active pointer appears on screen. One active pointer is always displayed while marking, unless the pointer has been disabled.

ANCHORED POINTER

-- the opposite of an *active pointer*. An anchored pointer has been placed in a fixed position on the *Pointmaker* overlay and cannot be moved again. However, anchored pointers or drawn lines (which are always anchored) may be erased or *cleared*.

AUTODETECT

-- the ability of the *Pointmaker* to automatically detect devices plugged into its COMM ports during initialization.

BACKGROUND

--the area behind the *Pointmaker* markers. Presenters may choose a source video background or a solid background.

BLOOM

-- markers or text which enlarge or blur on the monitor due to excessive brightness.

CLEAR

-- the action on the controller which allows presenters to clear the overlay of all markers at once. A single *active pointer* will remain on screen unless the pointer has been disabled.

CLICK

-- the action of quickly depressing and releasing a button on the *Pointmaker* controller, as opposed to a *press* of the button.

COLOR PALETTE

-- the group of three colors which may be displayed on the marker overlay at one time. These three colors may be selected from a master palette of seven colors, that may be displayed in one of two *color schemes*, for a total of 14 color varieties.

COLOR SCHEME

-- the *Color Palette* option that allows users to display colors in either a primary color scheme or pastel color scheme.

CONNECTOR

-- hardware installed on cable ends to provide cable attachment to an input or output device. Input and output device ports which mate with this hardware are also called connectors.

CONTROLLER

-- a device that controls the selection, positioning, anchoring, and clearing of markers on the *Pointmaker* overlay. Such devices for the *Pointmaker* include a light pen and digitizing tablet -- each sold as options by Boeckeler Instruments. Other compatible controllers include Elographics IntelliTouch and AcuTouch touch screens, some wireless remote control remote devices, and other mouse devices.

DRAW

-- the *Pointmaker* feature which allows presenters to freehand draw or write over a video or computer image.

DROP SHADOW

-- the *Pointmaker* option which allows presenters to attribute a baseline shadow to drawing lines for the purpose of creating a line that stands out from the video image. All drop shadows are black. See also *Outline*.

EIA RS-170

-- the specifications describing monochrome electrical performance standards issued by the Electronic Industries Association (EIA). Also referred to as RS-170 (Recommended Standard). The EIA standard is used in North and South America, Japan, and most of Asia.

ERASE / UNDO

-- the action initiated with a drawing/pointing device which allows presenters to erase anchored markers on an overlay one at a time, beginning with the most recently anchored marker.

KEY OUTPUT

-- from the *Pointmaker*, a TTL or composite video signal that can be used with a broadcast switcher to overlay markers over video.

MARKERS

-- pointers and drawn lines which can be placed and anchored on a *Pointmaker* marker overlay.

NTSC

-- the commonly accepted term describing the composite color version of the EIA RS-170 video standard. The color version of EIA RS-170 is in process of standardization by the Electronics Industries Association (EIA). NTSC is used in North and South America, Japan, and most of Asia.

OFFSET

-- the *Pointmaker* option which allows presenters to set the margin between the point the optional light pen touches the screen and the point where freehand drawing is to begin.

OUTLINE

-- the *Pointmaker* option which allows presenters to attribute a double shadow (top and bottom shadow) to drawing lines for the purpose of creating a line that stands out from the video image. All outlines are black. See also *Drop Shadow*.

OVERLAY

-- a combination of one or more markers (pointers and drawn lines) placed on the screen using the capabilities of the *Pointmaker*. These markers overlay a chosen video image. While the markers are visible, the actual overlay is invisible, allowing users to mark directly on top of a video image (or solid background if selected in the *Setup Menu*).

PLAYBACK

--- the ability of the *Pointmaker* to replay the drawing of markers at the speed

selected. Playback is initiated from one of three playback modes selected from the menu or from the digitizing tablet. Playback modes are PLAYBACK NEXT which plays back only one marker at a time, each alone; PLAYBACK ADD, which progressively adds a marker to the overlay; and PLAYBACK ALL, which plays back all markers in the order they were anchored.

Markers are played back on both preview and program video. Normally, creation of the markers would be displayed on preview alone, but can be shown on both preview and program.

PRESS

-- the action of depressing and not releasing a button on the *Pointmaker* controller, as opposed to a *click* of the button. A press is discontinued after the desired effect takes place on the screen.

PREVIEW

-- the output from the *Pointmaker* that allows users to view markers, menus, and active pointers that are not generally displayed to audiences or broadcast on program video.

PROGRAM

-- the output from the *Pointmaker* that will be seen by the audience. Menus and color tabs are never displayed on program output. Marking in general, and active pointers in particular, can be displayed on program video or just on *preview* video. Playback is always displayed on program and preview.

PROXIMITY

-- a feature of the PVI-64 that affects the light pen or digitizing tablet. When proximity is activated, the active marker automatically disappears each time the pen is lifted from the drawing area.

TIMING ADJUSTMENT

-- the *Pointmaker* feature that allows users to counteract video delays caused by extended cabling or by the *Pointmaker*. Vertical timing adjustments are made in lines of video, and horizontal adjustments are made in nanoseconds.

VIDEO SOURCE

-- a device from which the *Pointmaker* receives a video signal, such as a VTR or camera. Sometimes these signals pass through routers, switchers, and frame synchronizers prior to connecting to the *Pointmaker*.

INDEX

A

a/v programmable systems 6, 101
absolute positioning
 (digitizing tablet) 10
active area
 on tablet 9
active pointer 35, 121
 to position 42
amx/crestron setup menu 79
anchored pointer 121
anchoring
 a pointer 43
appendices 115
autodetect 76, 121

B

background 5, 67, 121
 menu 68, 69, 91
barrel button
 (digitizing tablet) 9, 36
 (light pen) 11
baud rate 80
bloom 117, 121
boeckeler instruments ii, 3, 4, 117
brightness level 6, 64, 117, 118
brightness menu 65, 82, 86
built-in line drivers. See line drivers, built-in

C

calibrate light pen 11, 70, 74, 95
calibrate remote control 70, 74
calibrate touch screen 13, 28, 70, 74
calibration menu 72, 119
clear
 markers 5, 35, 44, 45, 56, 121

click 121
color
 change 5, 46, 57
 palette 5, 122
 option 59, 64
color palette menu 46, 57, 61, 65
color scheme menu
 (pastel/primary) 60, 122
combination
 of markers 5, 35
comm port 19, 20, 21
commands
 for using RS-232 port 101
composite 3, 6
composite ntsc / pal
 installation 16
configuration
 general system 4
connector 122
contrast switch
 back panel
 (for light pen) 20, 22
controller 122
copyright
 message 30

D

digitizing tablet 3, 6, 7, 8, 22, 24, 25,
35, 36, 38, 40, 41, 42, 44, 45, 46, 52, 54,
55, 56, 57, 59, 61, 64, 67, 70, 75, 78, 80,
81, 85, 88, 91, 94
 installation 22
 extended 24, 25
display color tab
 option 46, 47, 58, 62, 63
draw
 freehand 5, 35, 54, 122, 123

drop
 shadow 57, 62, 122
dual voltage switch 30, 119

E

eia rs-170 122, 123
erase 35, 44, 55, 123

F

first button
 (mouse device) 14
freehand
 drawing
 writing 123
function areas
 (touch screen) 13
fuse 117

H

hardware menu 71, 75, 79, 82
hardware setup option 70, 71, 72, 74,
75, 76, 77, 78, 79, 81, 82, 84, 85,
86, 88, 95, 97
help feature 6
help menu 90
help submenu 92

I

installation
 for key signal extraction 31
 problems 117
 with video looping through 16

K

keep current option
 (in hardware setup) 76
key signal output 3, 6, 31, 123

L

light pen 3, 7, 10, 11, 37, 38, 41,

42, 43, 44, 45, 46, 48, 50, 53, 54, 55, 56,
57, 58, 60, 61, 63, 64, 67, 70, 72, 73, 75, 78,
81, 85, 91, 95, 119, 122

 installation 18
 offset calibration 11, 72, 73, 77, 80

line

 thickness 53

line drivers

 built-in 3, 7

line style 35, 52

 menu 53, 62

M

marker overlay 123.
markers 123
marking mode output 87
 menu 87
menu strip
 (digitizing tablet) 9
mouse pen
 (or mouse controllers) 14, 37, 38, 41,
 42, 43, 45, 46, 47, 49, 51, 53, 54, 56,
 57, 58, 60, 65, 68, 71, 75, 79, 82, 85, 91
 installation 29

N

ntsc 123

O

offset margin 123
ohm position 118
outline
 line style 53, 57, 62, 123
overlay 123
 maker 123

P

pal model 3
parity 80
pastel colors 60
playback 3, 5, 84, 123

- playback add
 - option 88
- playback all
 - option 88
- playback next
 - option 88
- playback setup menu 86, 89
- playback speed menu 86
- pointer 121
 - selection menu 48, 50
 - style 41
 - type 40
- pointer modes menu 41, 44, 45, 50
- pointer style menu 42, 44, 45, 57
- pointers 5, 35, 123
 - option 40, 48, 50, 52
- positioning pointers 42
- power supply 118
- press 121, 124
- preview & program monitors
 - display active marker on 50
 - display markers on 4, 87
- preview monitor
 - display active marker on 50
 - display markers on 4, 30, 35, 87, 124
- preview out
 - connections
 - composite 17
 - s-video 17
- primary colors 60
- program monitor 30, 124
- program out
 - connections
 - composite 17
 - s-video 18
- proximity 5
 - pen (light pen & tablet) 35, 44, 45, 48, 94, 95, 124

Q

- quick notes 93

R

- re-detect now option
 - (in hardware setup) 76
- remote clear plug-in 3, 7, 46, 57
 - installation 30
- remote control. See wireless remote control
- remote playback plug-in
 - installation 30
- restart 112
- right button 9
- rs-232
 - parameters set 78
- rs-232 port 101
 - commands for 101

S

- s-video
 - general 3, 6
 - installation 17
- serial ports setup menu 79
- setup menu 6, 9, 35, 36, 52, 59, 64, 67, 70, 74, 78, 81, 85, 90
 - exiting the 38
- source video 68
- speed switch
 - (mouse pen) 15
- startup options menu 76
- stop bit 80
- sync default
 - (when two sources used) 18

T

- time base corrector 18
- timing adjustment
 - menu 82
- timing adjustments 3, 6, 81, 124
- tip button
 - (digitizing tablet) 36
 - (light pen) 11
- touch screen 12, 13, 37, 38, 41, 42,

43, 44, 45, 47, 49, 51, 53, 54,
55, 57, 58, 60, 65, 68, 70, 71, 75, 79, 82,
85, 91, 96
 calibration 13, 28
 installation 27
touch screen labels 28
track ball
 (mouse pen) 15
tracking area
 (digitizing tablet) 9
 (touch screen) 13
troubleshooting
 guide 117

U

undo 55, 123

V

video
 sources 125
video pass-through, 3, 7

W

wireless remote control 14, 70.

