Model 801 Series
Quick Start Guide

QUANTUMDATA

This *Quick Start Guide* is designed to help get your generator up and running quickly. Detailed operating instructions can be found in the *Owners and Programmer's Manual*.

Index Page

Making Connections

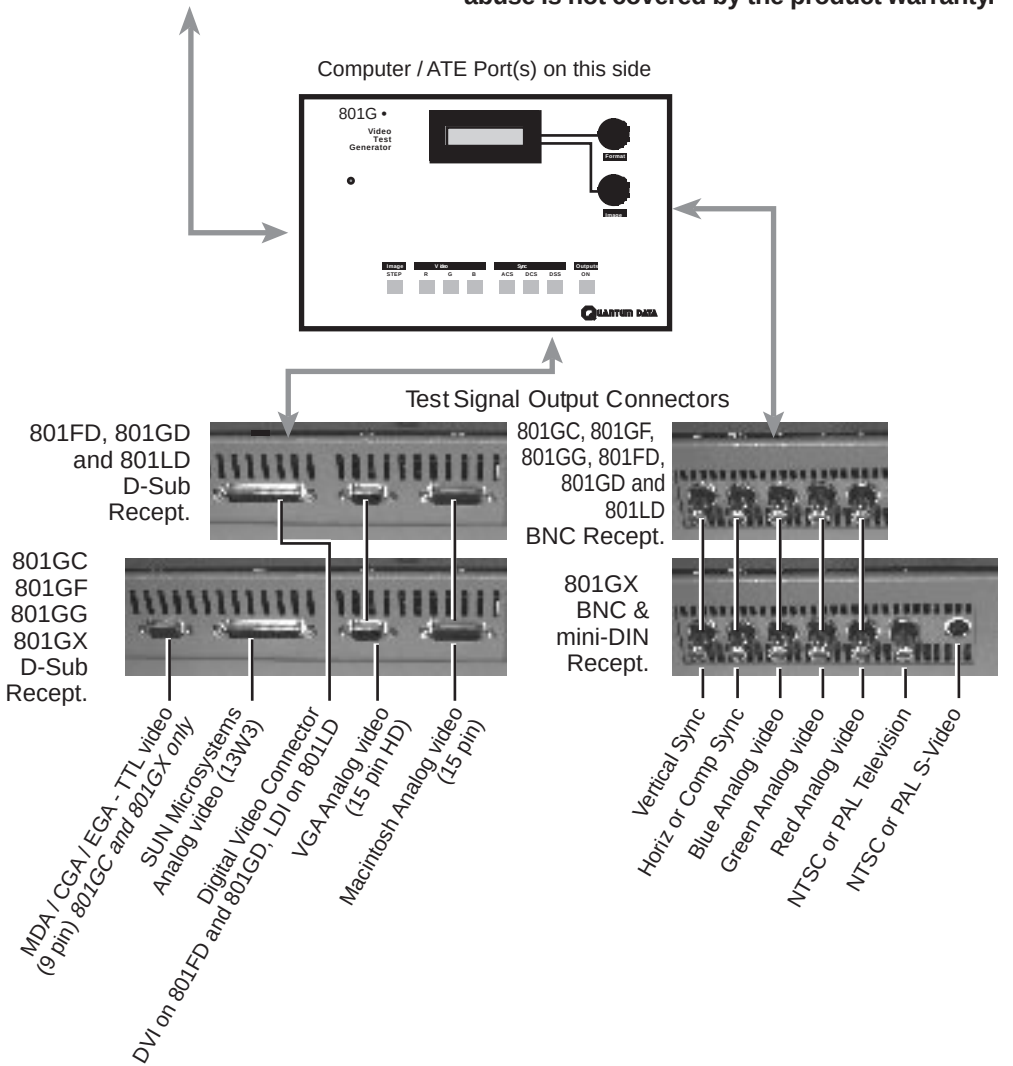
115V Setting
86 to 132 VAC Only
@48 to 66 Hz

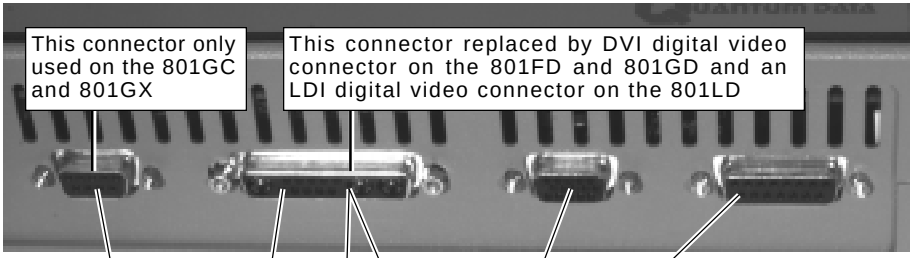
230V Setting
180 to 250 VAC Only
@48 to 66 Hz

AC Voltage Range Selector Switch

Always make sure that the AC voltage range selector switch is set correctly **before** plugging the generator into the AC mains.

Connecting the wrong AC voltage can cause permanent damage to your generator. Such abuse is not covered by the product warranty.





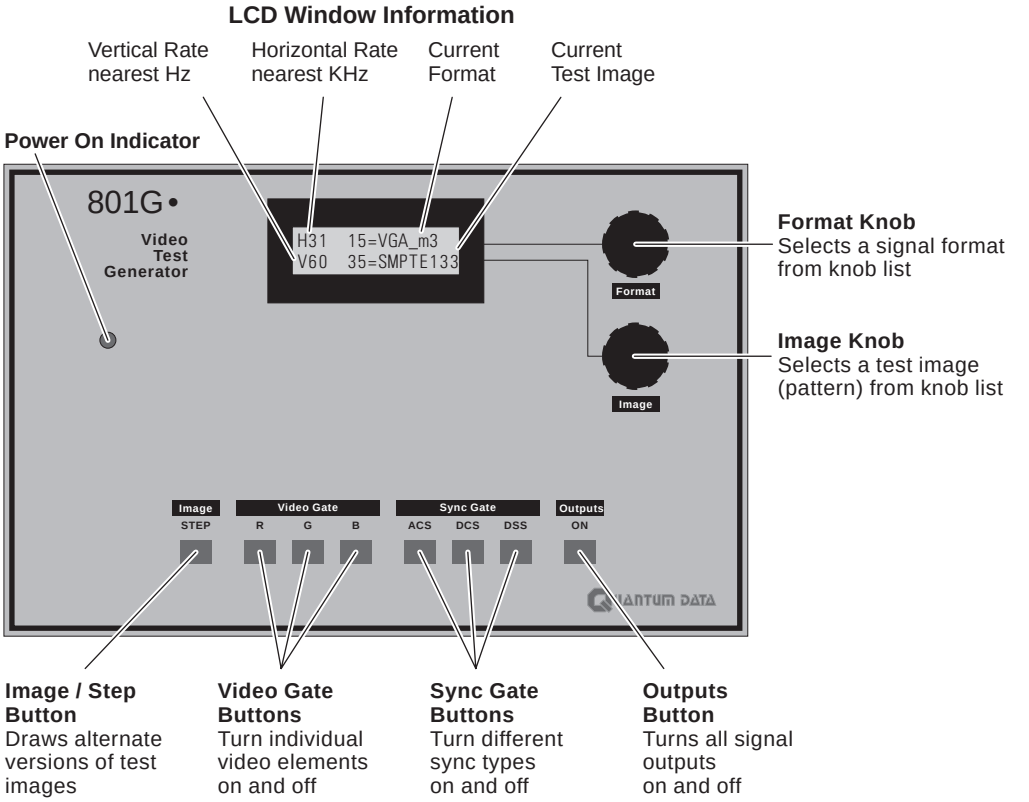
Pin #	801GC/GX			801GC/GF/ GD/GX		801FD 801GD	801LD	801GC/GF/ GD/GX	
	MDA	CGA	EGA	SUN	APPLE	DVI	LDI	VGA	MAC
1	GND	GND	GND	GND	GND	TMDS D2-	AØM	R	GND
2	NC	NC	Ir	VS	VS	TMDS D2+	A1M	G	R
3	NC	R	R	M2	M2	SHLD	A2M	B	CS
4	NC	G	G	GND	GND	TMDS D4-	CLK1M	M2	MØ
5	NC	B	B	CS	CS	TMDS D4+	A3M	+5V	G
6	I	I	Ig	HS	HS	DDC SCL	SHLD	GND	GND
7	V	NC	Ib	GND	GND	DDC SDA	Res	GND	M1
8	HS	HS	HS	M1	M1	NC	Res	GND	NC
9	VS	VS	VS	MØ	MØ	TMDS D1-	Res	NC	B
10				GND	GND	TMDS D1+	DDC SCL	GND	M2
11						SHLD	DDC +5V	MØ	GND
12						TMDS D3-	USB+	M1	VS
13						TMDS D3+	USB +5V	HS	GND
14						+5V	A4M	VS	GND
15						GND	A5M	M3	HS
16						HOT PLG	A6M		
17						TMDS DØ-	A7M		
18						TMDS DØ+	CLK2M		
19						SHLD	AØP		
20						TMDS D5-	A1P		
21						D5+	A2P		
22						SHLD	CLK1P		
23						TMDS CLK+	A3P		
24						TMDS CLK-	Res		
25							Res		
26							Res		
27							DDC GND		
28							DDC SDA		
29							USB GND		
30							USB-		
31							SHLD GND		
32							A4P		
33							A5P		
34							A6P		
35							A7P		
36							CLK2P		
A/C 1				R	B	R			
A/C 2				G	G	G			
A/C 3				B	R	B			
C 4						HS			
C 5						GND			

Explanation of some abbreviations used in table:

- B = Blue Video
- CS = Digital (TTL level) Comp Sync
- G = Green Video
- GND = Signal Ground
- HS = Digital (TTL level) Horizontal Sync
- I = Intensity Bit (monchrome, LSB)
- Ib = Blue Intensity Bit
- Ig = Green Intensity Bit
- Ir = Red Intensity Bit
- M0 - M3 = Monitor Display Code Inputs
- R = Red Video
- V = Video Bit (monchrome, MSB)
- VS = Digital (TTL level) Vertical Sync

Refer to published DVI and LDI standards for abreviations used for DVI and LDI connectors.

Front Panel Controls and Indicators (Normal Mode)



Notes:

VGA_m3	NewSeq
OutlineO	S1

If the format and image names are shifted to the left side of the LCD the unit is in Sequence mode.

H31	D4C=VGA_m3
V60	1=OutlineO

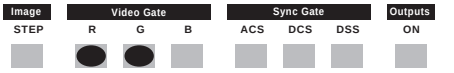
If there is a combination of two letters and a number to left of the equal sign in the top row of the LCD the unit is in Detailed Status display mode. The meaning of the letters and numbers are listed in the table. The number to left of the lower equal sign is the version number for images that have multiple versions.

Left Character		Center Digit		Right Character	
A	Analog Format	**4**	4 Bits-per-pixel	**M**	Monochrome mode
D	Digital Format	**8**	8 Bits-per-pixel	**C**	RGB Color mode
				Y	Color Difference mode

INSTRUCTIONS

After you have loaded the video format you wish to use, hold down one of the two keys indicated in the figure. Press the remaining key (repeatedly if necessary) to establish the desired state.

Once the format is in the desired state, let go of both keys. If one (or more) primary gates are inadvertently shut off by this procedure, you can press and release extinguished primaries, one at a time, to turn them back on. If you get an error, rotate the format knob to get things back to normal.



Toggle between default pixel depth (4 bits-per-pixel on most models) and 8 bits-per-pixel.

Cycle between monochrome, RGB and (on models that support it) color difference video signal types.

Toggle between analog and digital video signal types.

NOTES

If the original format is not stored with a color-difference (e.g. YCrCb) type, then the RB key combination will only switch between RGB and monochrome.

The 8-bits/pixel mode is only allowed in the digital video mode on the 801FD and 801GD.

If the image index number displayed has only two digits, then a letter may appear just to the left of the two digits as follows to indicate the current state of the generator:

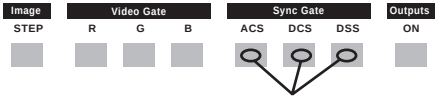
" " AVST=2 or 4;PELD=0	"d" DVST=10;PELD=0
"C" AVST=2 or 4;PELD=8	"D" DVST=10;PELD=8
"m" AVST=1 or 3;PELD=0	"b" DVST=9;PELD=0
"M" AVST=1 or 3;PELD=8	"B" DVST=9;PELD=8
"y" AVST=5,6,7,or 8;PELD=0	"z" DVST=13,14,15,or 16;PELD=0
"Y" AVST=2 or 4;PELD=8	"Z" DVST=13,14,15,or 16;PELD=8
" " DVST=1,2,5,6, or 7;PELD=0	

Special Power-up Modes

Overview

You can change how your video generator operates by holding down certain front panel button combinations for several seconds during power up and then releasing the buttons. Some modes only apply during the current operating session while others are maintained when the power is cycled. The only way to reset the maintained settings is to either perform a Default Reset or a Memory Re-initialization on power up.

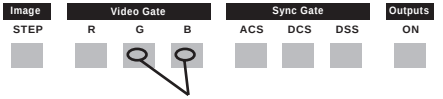
Default Reset



Momentarily hold down to restore all default operating modes of the generator without deleting any user created files in memory.

Set Digital Video Mode for all Formats (801FD, 801GD and 801LD)

CAUTION: This setting will be kept in system memory and can only be reset by a Default Reset operation or by Re-initializing Memory. This operating mode will cause all analog video formats to load in a matching digital video format. You can then temporarily toggle them to analog mode if need be.

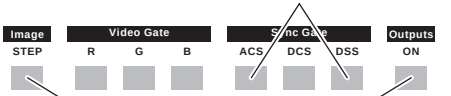


Momentarily hold down to force the generator to output an equivalent digital video format for any analog format that is used.

Re-initializing Memory

Re-initializing the generator's memory erases all user created data.

∂ Momentarily hold down both buttons during power-up to enable re-initialization.



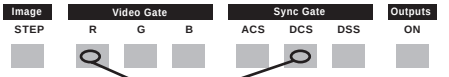
Σ Exits re-initialization mode **without** making any changes.

Π Re-initializes all user memory locations to factory default contents when re-initialization mode is enabled.

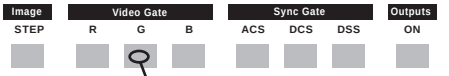
Enabling Detailed Format Status Display

Momentarily hold down to have the LCD window display detailed format status rather than than the format's index number. Setting is kept between operating sessions.

Special Serial Port Modes



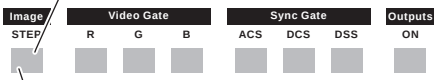
Momentarily hold down to switch serial port to 9600 Baud operation.Setting is kept between operating sessions.



Momentarily hold down to enable serial port support for #8020 Keypad Option. Setting is kept between operating sessions.

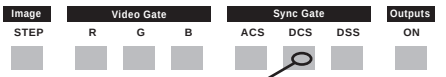
Enabling On-screen Editing (Program Mode)

Momentarily hold down during power-up to enable programming mode. Editor screens added to Image knob.



Launches appropriate editor when an editor screen or a custom image is selected.

GPIB Address Selection



Momentarily hold down to set GPIB address shown on GPIB address switches at rear of unit.

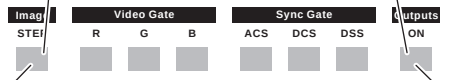
Older models without GPIB address switches will reset to address 15.

Cloning Generators

(Must be same model and firmware level)

Cloning clears all user created data previously saved in the receiving unit.

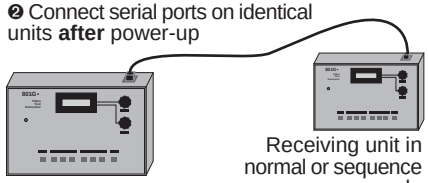
❶ Momentarily hold down both buttons on sending unit during power-up to enable cloning mode.



❹ Exit cloning mode

❸ Start data transmission in cloning mode

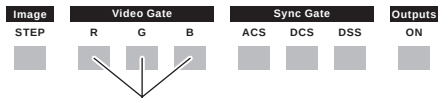
❷ Connect serial ports on identical units **after** power-up



Sending unit in cloning mode

Receiving unit in normal or sequence mode

Self Calibration (801GC, 801GF, 801GG, 801GX, 801FD, 801GD and 801LD)

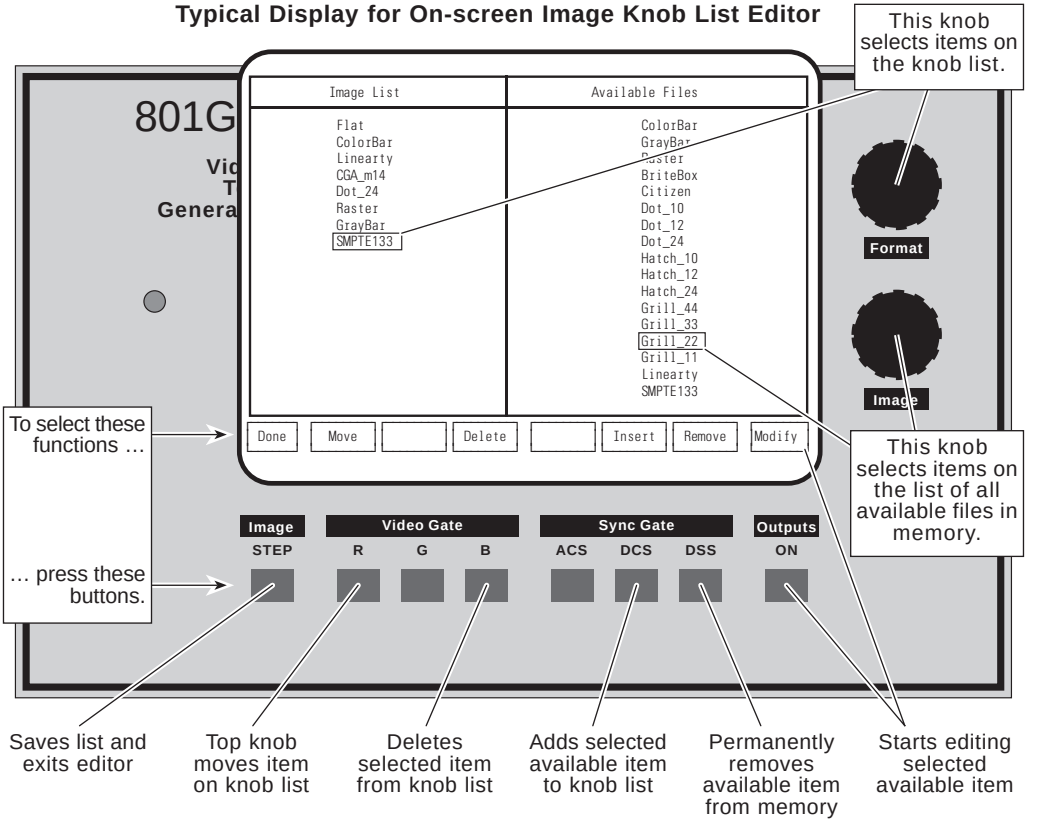


Momentarily hold down all three buttons during power-up to self calibrate all analog output levels.

On-screen Format, Image and Sequence Knob List Editors

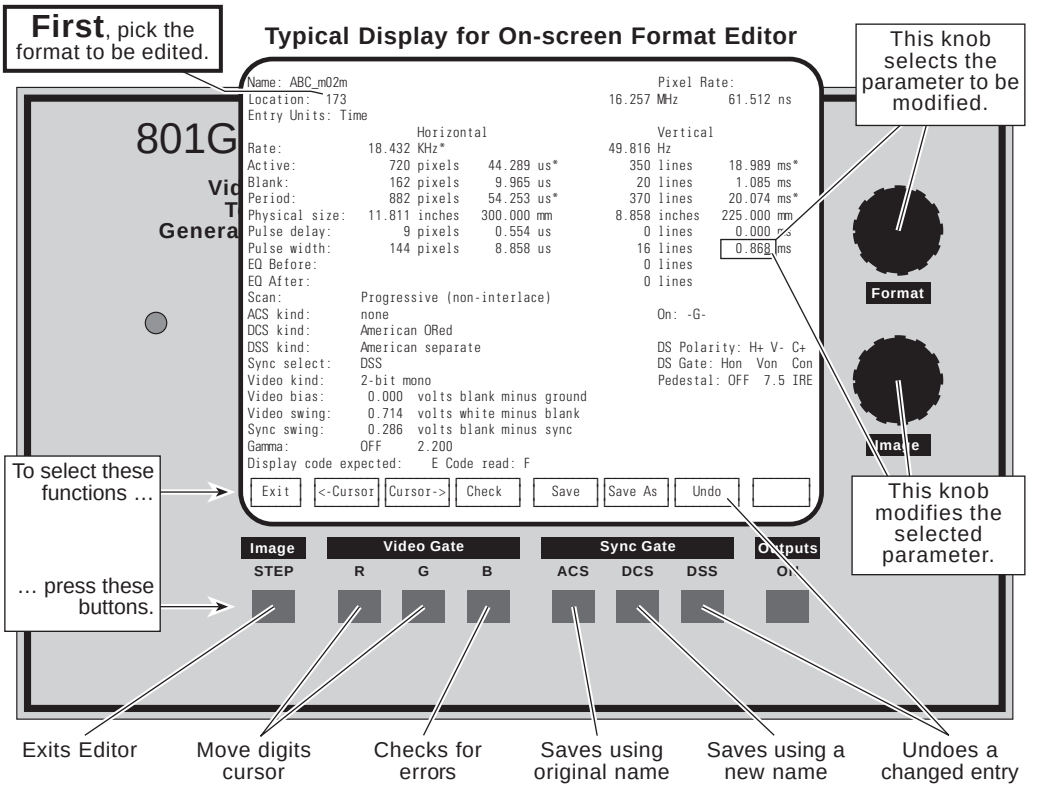
Knob lists determine which formats, images and sequences can be selected with the front panel knobs. Please note that on-screen editing must be enabled in order to view and modify these lists. Pressing the Image / Step button while viewing the list will launch the editor.

Typical Display for On-screen Image Knob List Editor



On-screen Format Editor

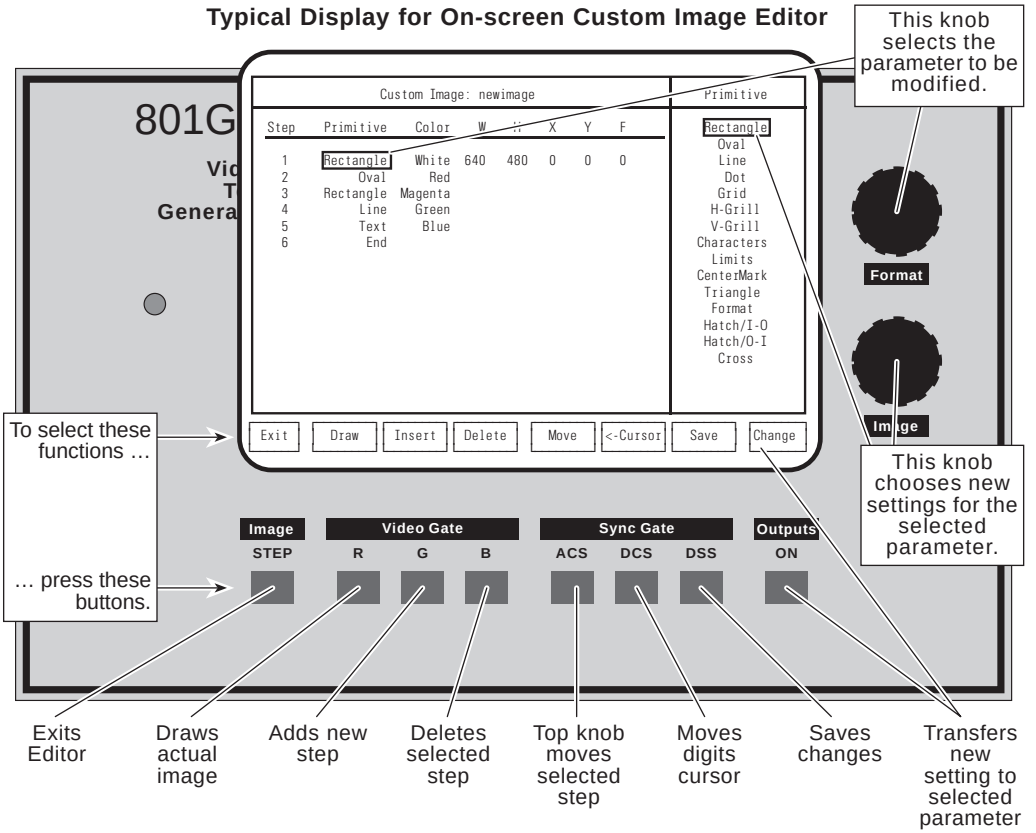
You can display the contents of any signal format using the "Format" test image. Please note that on-screen editing must be enabled in order to modify the displayed data. Pressing the Image/Step button while viewing the image will then launch the editor.



On-screen Custom Image Editor

The standard built-in test images can not be modified. However, you can create your own custom test images. Please note that on-screen editing must be enabled in order to create or modify a custom image. Pressing the Image/Step button while viewing a custom image will hide the image and launch the editor screen.

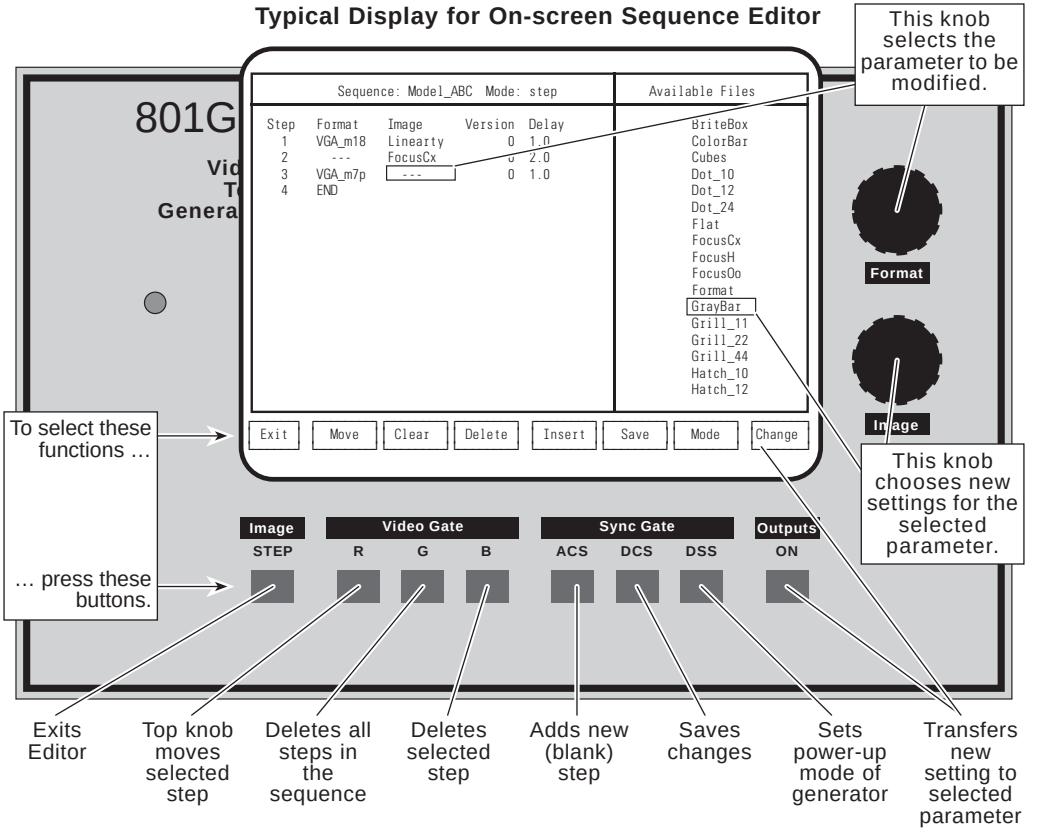
Typical Display for On-screen Custom Image Editor



On-screen Sequence Editor

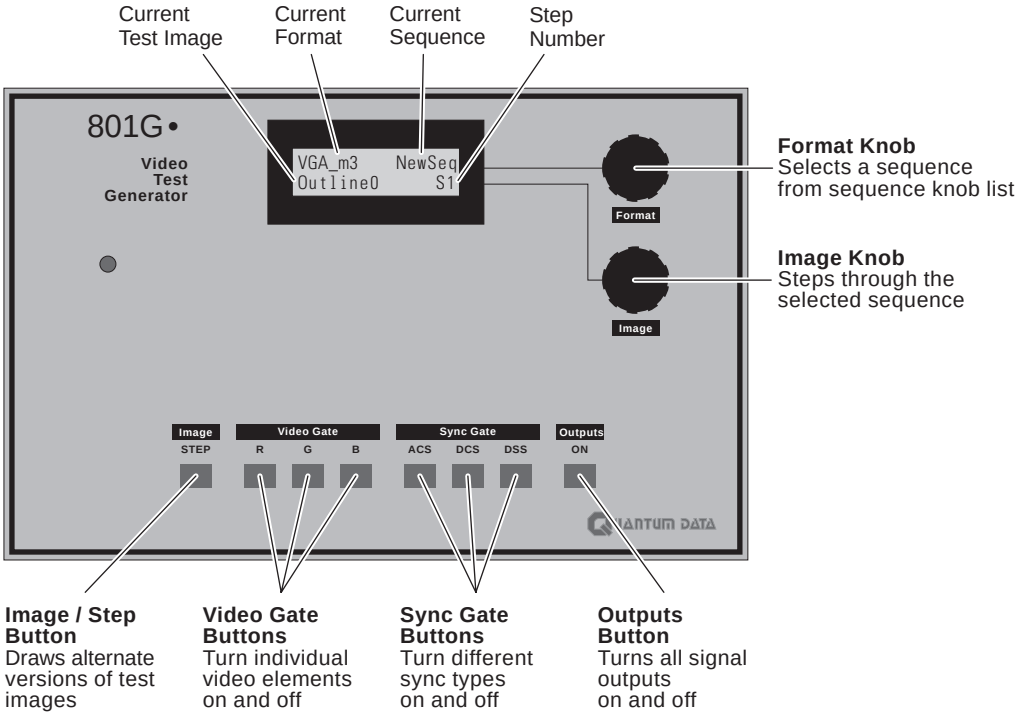
The Sequence Editor can only be accessed through the sequence knob list editor. On-screen editing must be enabled to use either editor.

Typical Display for On-screen Sequence Editor



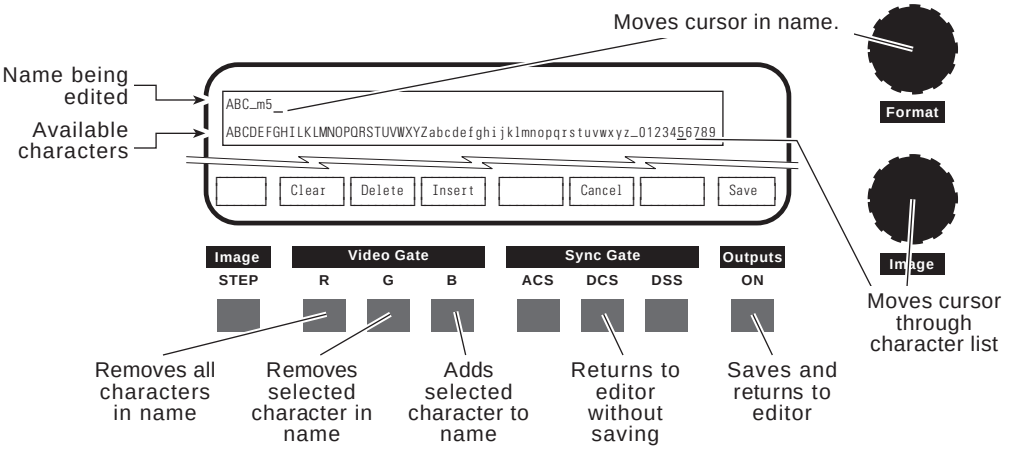
Sequence Mode Operation

The generator must be programmed to power-up in the sequence mode. This is done by selecting any sequence mode in the sequence editor. The only way to disable the sequence mode is to deselect the mode with the sequence editor. Enabling the on-screen editors on power-up temporarily overrides sequence mode operation.



Saving Files Using a New Name

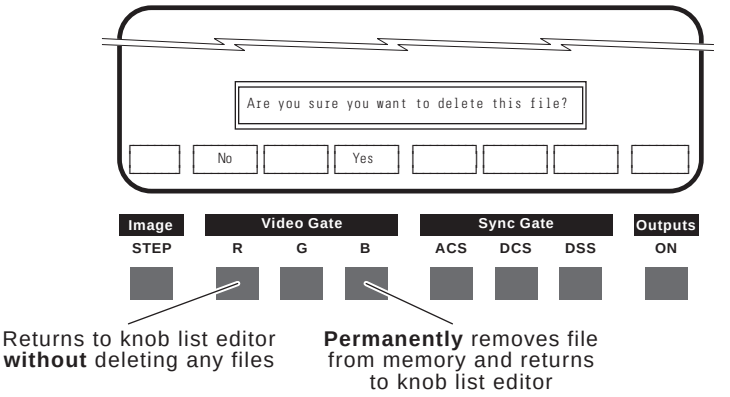
Typical Sub-screen when saving with a new name



Deleting Files From Memory Using the Knob List Editors

Formats, Custom Images and Sequences are removed from non-volatile memory using the appropriate knob list editor. Pressing the **Remove** button in the editor displays the following confirmation sub-screen:

File Removal Confirmation Sub-screen



Video Generator Manager (VGM)

The VGM software package provides a graphical user interface that allows you to operate and program our stand alone, ISA card and PCI card Model 801 Series video generators. The current versions of the software run on computers using Microsoft® Windows® 95/98/NT. The software also allows you to save copies of custom formats, images and sequences on the computer's disk drive. These files can then be uploaded into other Model 801 generators. The included custom image editor provides a simple WYSIWYG interface that allows you to quickly setup custom test images. The VGM package includes an extensive "Help" section that covers its operation as well as documentation of the commands and queries supported by the generators.

A copy of the VGM software is included with each unit sold. The software is also available as free download from the Tech Support area of our Web site at www.quantumdata.com.

Smart Testing And Repair (STAR) Package

The STAR software package allows you set up and document test procedures for both DDC and non-DDC compliant monitors. The software runs on computers using MS-Windows 95/98/NT. Please contact your Quantum Data sales representative for more information.

Archiver Utility

The Archiver utility provides a simple text based interface that allows you to communicate with our stand alone, ISA card and PCI card Model 801 Series video generators. The software runs as an MS-DOS application. It includes a simple terminal function for sending commands and queries to the generator.

The Archiver utility is also used to update the firmware on more recent vintage Model 801 Series generators that have the proper Flash EPROMs installed. The software allows you to backup any user created data to disk prior to performing the update. The backed up files can then be updated and uploaded back to the generator after the firmware update.

The Archiver software is available as free download from the Tech Support area of our Web site at www.quantumdata.com.

Built-in Standard Formats Library (subject to change)

Type	Name
Apple Mac	MAC_12c
Apple Mac	MAC_12ce
Apple Mac	MAC_12m
Apple Mac	MAC_13c
Apple Mac	MAC_13LC
Apple Mac	MAC_13m
Apple Mac	MAC_15
Apple Mac	MAC_16
Apple Mac	MAC_19
Apple Mac	MAC_1960
Apple Mac	MAC_21
Apple Mac	MAC_TVos
Apple Mac	MAC_TVus
ATT PC	AT&T_EVC
ATT PC	AT&T_IVC
ATT PC	AT&T_SVC
Barco	BAR2060
Barco	BAR2080
Barco	BAR2560
Factory Test	TEST150
Factory Test	TEST250
HDTV	ATV1259
HDTV	ATV1259C
HDTV	ATV1260
HDTV	ATV1260C
HDTV	ATV1823
HDTV	ATV1823P
HDTV	ATV1824
HDTV	ATV1824P
HDTV	ATV1825
HDTV	ATV1825A
HDTV	ATV1825P
HDTV	ATV1829
HDTV	ATV1829P
HDTV	ATV1830
HDTV	ATV1830P
HDTV	ATV1850
HDTV	ATV1850A
HDTV	ATV1859
HDTV	ATV1860
HDTV	ATV1923
HDTV	ATV1923P
HDTV	ATV1924
HDTV	ATV1924P
HDTV	ATV1925
HDTV	ATV1925A
HDTV	ATV1925P
HDTV	ATV1929
HDTV	ATV1929P
HDTV	ATV1930
HDTV	ATV1930P
HDTV	ATV1950
HDTV	ATV1950A
HDTV	ATV1959

Type	Name
HDTV	ATV1960
HDTV	ATV6429
HDTV	ATV6429C
HDTV	ATV6459
HDTV	ATV6459C
HDTV	ATV7025
HDTV	ATV7025E
HDTV	ATV7025L
HDTV	ATV7029
HDTV	ATV7029E
HDTV	ATV7029L
HDTV	ATV7050
HDTV	ATV7050E
HDTV	ATV7050L
HDTV	ATV7059
HDTV	ATV7059E
HDTV	ATV7059L
HDTV	ATV7225
HDTV	ATV7225E
HDTV	ATV7225L
HDTV	ATV7229
HDTV	ATV7229E
HDTV	ATV7229L
HDTV	ATV7250
HDTV	ATV7250E
HDTV	ATV7250L
HDTV	ATV7259
HDTV	ATV7259E
HDTV	ATV7259L
HDTV	ATV7625
HDTV	ATV7650
HDTV	ATV9325
HDTV	ATV9329
HDTV	ATV9350
HDTV	ATV9359
HDTV	ATV9625
HDTV	ATV9629
HDTV	ATV9650
HDTV	ATV9659
HDTV	HDTV_1E
HDTV	HDTV_1J
HDTV	HDTV_4E
HDTV	HDTV_4J
HDTV	JTV1829
HDTV	JTV1830
HDTV	JTV1929
HDTV	JTV1930
H-P	HP1060
H-P	HP1070
H-P	HP1075A
H-P	HP1075B
H-P	HP1260
H-P	HP1272
H-P	HP1275

Type	Name
IBM Workstation	IBM6Km1
IBM Workstation	IBM6Km2
IBM Workstation	IBM6Km3
IBM Workstation	IBM6Km4
Intecolor	INT1160
Intecolor	INT1176
Intecolor	INT1660
Intecolor	INT1676
Lockheed	LMC_1
Lockheed	LMC_2
Lockheed	LMC_3
Lockheed	LMC_4
Military	HOBO
Military	MAVERIK
NEC PC	NECPC400
NEC PC	NECPC750
NTSC NoBurst	RS170Y
NTSC NoBurst	RS170Yos
NTSC NoBurst	RS170Yus
NTSC w/Burst	NTSC_443
NTSC w/Burst	NTSC_601
NTSC w/Burst	NTSC4xSC
NTSC w/Burst	NTSCTVos
NTSC w/Burst	NTSCTVus
PAL NoBurst	PAL_Y
PAL NoBurst	PAL_Yos
PAL NoBurst	PAL_Yus
PAL w/Burst	PAL_4xSC
PAL w/Burst	PAL_N
PAL w/Burst	PAL_TVos
PAL w/Burst	PAL_TVus
PAL w/Burst	PALTV601
PC	CGA_m14
PC	EGA_m2
PC	HGC_text
PC	HGCgraph
PC	IBM_3164
PC	IBM_3179
PC	MDA_m7
PC	PGA_400
PC	PGA_480
PC	VGA_m1
PC	VGA_m2
PC	VGA_m3
PC	VGA_m4
PC	XGA_m4a
PC	XGA_m4b
PC	XGA_m5
PC	XGA_m6
PC	XGA1076
PC	XGA2
PC	XGA6475
Sony	SON1072
Sony	SON1274
Sony	SON1276

Type	Name
STANAG	STANAGA
STANAG	STANAGB
STANAG	STANAGC
Sun Micro	SUN1061
Sun Micro	SUN1077
Sun Micro	SUN1166
Sun Micro	SUN116B
Sun Micro	SUN1176
Sun Micro	SUN117B
Sun Micro	SUN1267
Sun Micro	SUN126B
Sun Micro	SUN1276
Sun Micro	SUN1667
VESA	DMT1075
VESA	DMT1085
VESA	DMT1170
VESA	DMT1175
VESA	DMT1185
VESA	DMT1243
VESA	DMT1260
VESA	DMT126A
VESA	DMT1275
VESA	DMT127A
VESA	DMT1285
VESA	DMT128A
VESA	DMT1648
VESA	DMT1660
VESA	DMT1665
VESA	DMT1670
VESA	DMT1675
VESA	DMT1680
VESA	DMT1685
VESA	DMT1760
VESA	DMT1775
VESA	DMT1860
VESA	DMT1875
VESA	DMT1960
VESA	DMT1975
VESA	DMT6475
VESA	DMT6485
VESA	DMT648A
VESA	DMT648B
VESA	DMT7285
VESA	DMT8075
VESA	DMT8085
VESA	VG900601
VESA	VG900602
VESA	VG901101
VESA	VS900603
VESA	VS901101
VESA	VS910801
ViewSonic	VPD180_8
ViewSonic	VPD180_4

Quantum Data, Inc.
2111 Big Timber Rd
Elgin, IL 60123-1100
U.S.A.

"Model 801 Series Quick Start Guide"
Part # 68-00151 Rev. D (19-Jan-2000)

Phone: (847) 888-0450
Fax: (847) 888-2802

Toll Free Tech Support
Phone: 1-888-252-6133

Internet Connections
World Wide Web Site:
http://www.quantumdata.com
Sales E-mail:
sales@quantumdata.com
Customer Service E-mail:
service@quantumdata.com
Technical Support E-mail:
support@quantumdata.com