

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Wayne Kerr SSA1000A* at our website: *Click HERE*

6. OPERATING INSTRUCTIONS

6.1 USER CONTROLS

THE ALPHANUMERIC DISPLAY



The alphanumeric display is a 24 character display.
In normal operation, Frequency is displayed on the left and Level on the right-hand side of the display.
The display is also used for warnings and data entry.

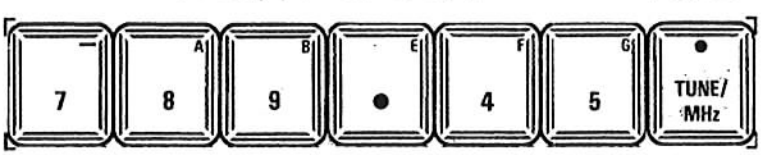
RF INPUT

The RF INPUT is via an 'N' type connector on the front panel.

The maximum input level is +20dBm (0dBm with pre-amp selected).

This input is protected against accidental overload. If the input power exceeds a safe level a continuous bleep is sounded and a warning message displayed. The excess power protection circuit can be reset, once the source of power has been removed, by pressing the CLEAR key.

DIRECT CENTRE FREQUENCY ENTRY

EG 

ENTERS 789.45 MHz AS THE CENTRE FREQUENCY

A centre frequency can be directly entered from the keyboard in MHz to 10kHz resolution if required.

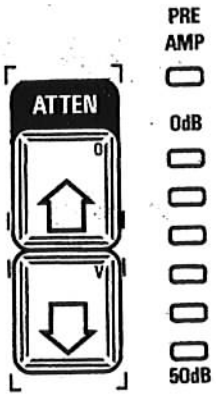
If the instrument's span setting is such that the entered frequency cannot be positioned at the centre of the screen the frequency cursor is used to indicate the corresponding frequency position.

Spanning up and down maintains the 10kHz resolution if set.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Tuning or changing the frequency cursor, with the spin-wheel, will lose the 10kHz resolution on the higher spans as they are invalid settings. If this information needs to be retained the entered centre frequency can be stored as part of a front panel set up and recalled as required.

INPUT ATTENUATION

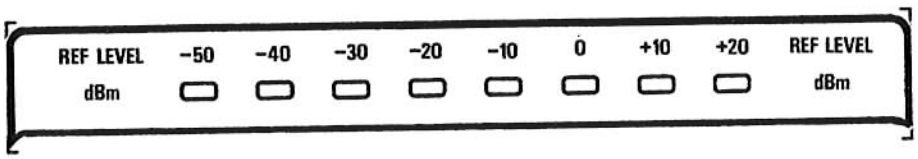


INCREASE SENSITIVITY — Reduce attenuation / Select Pre-amp

REDUCE SENSITIVITY — Increase attenuation / Deselect Pre-amp

Input attenuation is displayed on the 7 off LED's on the front panel. 50dB to 0dB attenuation in 6 steps of 10dB is indicated by the appropriate LED. The 7th step sets nominal 10dB gain (pre-amp and 10dB LED illuminated). The 8th step sets nominal 20dB gain (pre-amp LED illuminated).

REFERENCE LEVEL



The reference level LEDs. indicate the level at the top of the screen. They are automatically set depending on the input attenuation selected.

ABSOLUTE LEVEL UNITS



TOGGLES LEVEL UNITS DISPLAY — dBm / dBμV / (dBμV/m)

This key toggles the level units, displayed in the right-hand section of the alphanumeric display.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

RELATIVE LEVEL UNITS



SELECTS RELATIVE LEVEL

LED ON when Relative selected

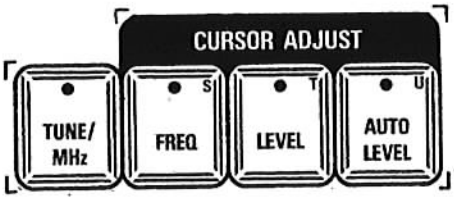
The current level setting is set to zero and all further level measurement displays are referenced to this zero setting.

Using the UNIT SELECT key in the relative level mode returns the level display to the previous absolute level units.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SPIN WHEEL CONTROL

The operation of the spin-wheel is dependent on the function selected below.





LED ON SELECTS TUNE MODE.

In tune mode, the spin-wheel varies the crt screen centre frequency. The frequency shift is dependent on the selected span. The alphanumeric display indicates the centre frequency.



LED ON SELECTS FREQUENCY CURSOR

In the frequency mode the spin-wheel varies the frequency cursor position on the crt screen.
The alphanumeric display indicates the frequency at the cursor position. A change of span moves the frequency cursor to the centre of the crt screen if possible.



LED ON SELECTS LEVEL CURSOR

In the level mode the spin-wheel varies the level cursor position on the crt screen.
The alphanumeric display indicates the level at cursor position.



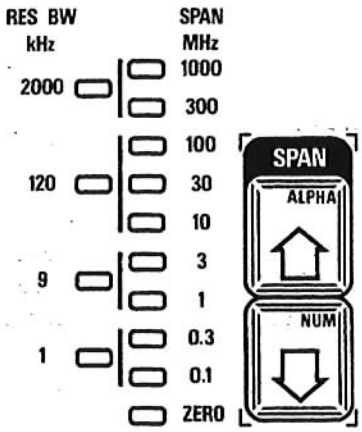
LED ON SELECTS AUTOMATIC LEVEL MODE
FORCES FREQUENCY CURSOR LED ON

In the auto level mode the spin-wheel varies the frequency cursor position. The level cursor automatically indicates the value of any signal selected by the frequency cursor.

The alphanumeric display indicates the frequency and level at the cursor positions. Auto level is useful for simultaneously identifying frequency and level of individual signals.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SPAN AND RESOLUTION BANDWIDTH SETTING



INCREASES THE SPAN WIDTH
AND THE RESOLUTION BANDWIDTH

DECREASES THE SPAN WIDTH
AND THE RESOLUTION BANDWIDTH

The span and resolution bandwidth are linked in software. The instrument setting is displayed on the front panel LEDS.

The span and resolution bandwidth can be separated using a secondary command. (Refer to secondary command listing later in this section).(#40,#41,#42,#43).

SCAN TIME

The scan time is automatically set by the instrument dependent on span, resolution bandwidth and video filter selection for optimum level accuracy.



LED ON SELECTS VIDEO FILTER
SECOND KEY PRESS DESELECTS

There are three Video Filter time constants each automatically selected if required dependent on the Resolution Bandwidth and Span setting.
Video Filter cannot be selected on the 2000kHz resolution bandwidth settings. If selected a warning message will be displayed on the alphanumeric display.



LED ON SELECTS HOLD MODE
SECOND KEY PRESS DESELECTS
PEAK HOLD DESELECTS

Selection of HOLD DISPLAY freezes the crt screen display.
Valid key selections in the hold display mode are:-
CURSOR ADJUST (FREQ,LEVEL,AUTO LEVEL),TUNE,PLOT,PEAK/STEP>,UNIT SELECT and REL.
note:-TUNE may be selected but the frequency cannot be incremented by the spinwheel in the hold display mode.
A warning is displayed and the function ignored for invalid key selections.(Refer to user message listing later in this section).

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



LED ON SELECTS PEAK HOLD
SECOND KEY PRESS DESELECTS
HOLD DISPLAY DESELECTS

In peak hold the peak value of any displayed signal is held in memory and displayed on the crt screen. This peak value is only updated when a higher peak value is measured on subsequent sweeps.



LED ON SELECTS PEAK MODE
FURTHER KEY PRESSES SELECT NEXT PEAK RIGHT
ANY OTHER KEY DESELECTS

The first key press moves the Frequency and Amplitude cursor to the maximum signal position of any displayed signal above a threshold value set by the user. The threshold level can be altered using a secondary command(#10) (refer to table later in this section).

If no signal is found a warning message is displayed and the Frequency and Amplitude cursor remain in their original positions.

Further key presses move the Frequency and Amplitude cursor to the peak of the next displayed signal to the right then wrapping round to the left-hand side of the crt screen and continuing to step right.
Any different key press deselects this mode.



LED ON SELECTS QUASI PEAK MODE
SECOND KEY PRESS DESELECTS

Selection of Quasi Peak is only valid in the 9kHz and 120kHz resolution bandwidth settings. The charge and discharge time constants of the peak detectors are changed according to the resolution bandwidth set. Zero span is forced on in this mode.
note:for the 9kHz Resolution Bandwidth,Quasi peak measurement a small sweep signal is applied to the second local oscillator.This is to overcome the level measurement inaccuracy caused by a combination of the 9kHz RBW filter shape and the minimum 10kHz frequency step of the analyser.The peak value of the signal displayed on the screen is the valid measurement and can be found using the level cursor or the peak find key.

Selection of Quasi Peak in any other mode will be ignored and a warning message displayed.
Selecting invalid instrument settings in Quasi Peak will automatically cancel Quasi Peak.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

RADIO MODE



LED ON SELECTS AM
SECOND KEY PRESS DESELECTS

Selecting AM will force the instrument to set zero span and the 120kHz resolution bandwidth.

Tune and auto level are also forced in this mode to ease tuning in on a signal.

Selecting invalid instrument settings in the AM mode will automatically cancel AM.

The demodulated signal can be heard on either the internal speaker or via the headphone socket.



LED ON SELECTS FM
SECOND KEY PRESS DESELECTS

Selecting FM will force the instrument to set zero span and the 120kHz resolution bandwidth.

Tune and auto level are also forced in this mode to ease tuning in on a signal.

Selecting invalid instrument settings in the FM mode will automatically cancel FM.

The demodulated signal can be heard on either the internal speaker or via the headphone socket.

For low deviations a times 10 gain amplifier can be switched in using a secondary command.(#31) (Refer to table later in this section)



LED ON SELECTS CAL
LOCAL/CLEAR KEY DESELECTS

Connect the CAL output to the RF input.

The first press of the CAL key turns on the internal 50MHz source. The second press of the CAL key enables the calibration routine. If an input is not detected at this stage a warning is displayed on the alphanumeric display and the routine is aborted.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



LED ON SELECTS LOCAL MODE

When the led is on the key's only function is in the clear mode. Pressing the CLEAR key clears the keyboard data buffer and returns the instrument to its last valid setting.

If the instrument is controlled externally, via the GPIB, the led will be extinguished. Control can be returned to the front panel, unless GPIB Local Lockout command is active, by pressing the LOCAL key.

STORE



PROMPTS FOR STORE NUMBER

The instrument can store front panel settings or crt screen display and front panel settings.

The storage capacity can be increased by using an optional memory card which plugs into the back panel. Stores can be write protected by using secondary commands.(#90,#91) (Refer to table for valid store and secondary commands later in this section).

RECALL



PROMPTS FOR STORE NUMBER

Recalls previously stored front panel or crt screen display and front panel settings from instrument memory or optional memory card. (Refer to table for valid store and secondary commands later in this section).

GATE



PROMPTS FOR QUALIFICATION KEYS
LOCAL/CLEAR KEY ABORTS.

All secondary commands are entered using the # key qualified by data keys. (Refer to list later in this section)

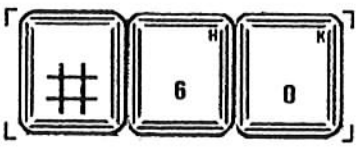
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



EXECUTES CRT SCREEN DUMP

Selection of PLOT forces the instrument into hold mode and dumps the crt screen display contents to the internal plotter. The plot also includes frequency and level cursor readings, input attenuator settings, span and resolution bandwidth.

USER DEFINED TITLES



ALLOWS PLOT TITLE ENTRY
LOCAL/CLEAR EXITS

Selecting # 60 allows user defined titles to be entered on the instruments alphanumeric display.



OR

TOGGLES BETWEEN ALPHA AND NUMERIC CHARACTERS.

The ALPHA and NUMERIC keys can be used to enter alpha or numeric data onto the alphanumeric display.

The ALPHA characters are shown at the top right hand corner of the keys.The spin-wheel can be used in this mode to insert spaces or delete characters.



EXITS DATA ENTRY MODE
STORES USER DEFINED TITLE IN MEMORY

The LOCAL/CLEAR key exits the user title define mode storing any displayed information in memory. The current title is plotted whenever a CRT screen dump is executed.

Note: The current title will be stored with CRT screen stores (refer to store/recall codes later in this section for valid CRT store locations).

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

PLOTTER PAPER CHANGE

Undo the two quick-release fasteners on the plotter cover plate to expose the printer mechanism. Undo and remove the two quick-release fasteners securing the printer roll. Unclip the perspex rod, remove bobbin and fit new paper roll. Replace the brackets to secure the roll (note larger bracket fits to the higher support post). Replace perspex rod and feed the paper between the rod and the back of the printer tray. Now feed the paper into the base of the printer mechanism, turn the power on, and press the paper feed button to allow the paper to be drawn in. Feed the paper through the plotter cover and fasten the cover in position.

PLOTTER PEN CHANGE

On power on the black pen position is selected.
Remove the plotter cover plate as above.
The pens are stored in a plastic tube under the cover plate.

If the pens are not in use for long periods of time they should be stored in the plastic tube to avoid drying out.

To change or insert a pen use the secondary command (#61) (refer to list later in this section) to move the pen barrel mechanism to the right hand side of the plotter carriage. To remove a pen operate the small nylon lever adjacent to the barrel.



ROTATES THE PENS FOR CHANGING



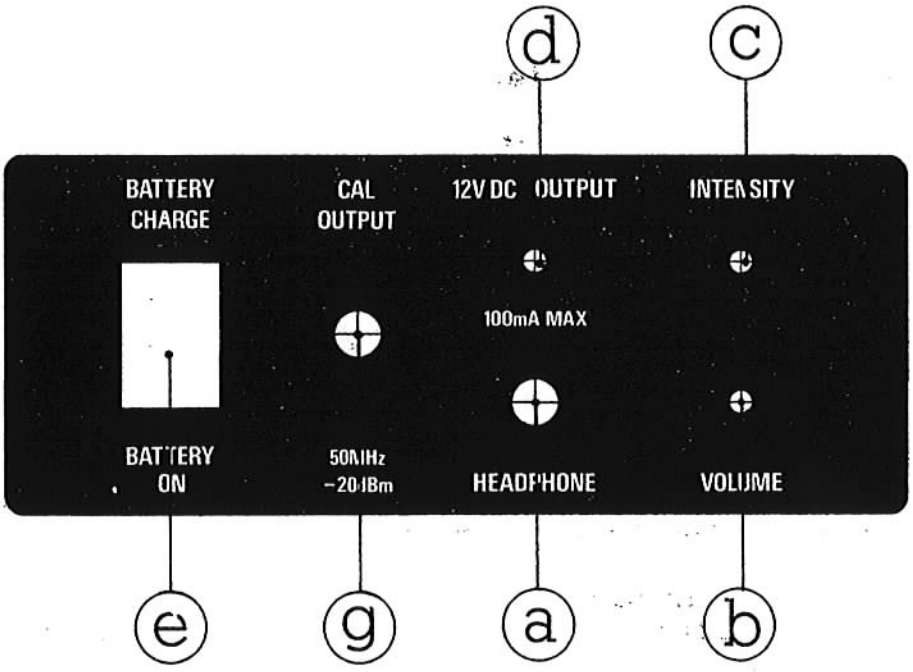
EXITS SECONDARY COMMAND

When installing pens match the pen colour to the colour coding on the pen holder.

PLOTTER COLOUR CHANGE

The pen colour can be selected for trace,text and graticule using secondary commands (#62,#63,#64) (refer to list later in this section).

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



Lower case letters in brackets after each title below refer to the diagram above.

HEADPHONE SOCKET (a)

Optional headphones can be plugged into the ¼" jack socket for listening to demodulated AM or FM signals. Using the headphones automatically turns the internal speaker off.

Volume (b)

The volume potentiometer varies the audio level to either the internal speaker or the Headphone socket when listening to demodulated AM or FM signals.

Intensity (c)

The intensity potentiometer varies the brightness of the CRT display.

+12V DC Output (d)

An auxiliary regulated +12 Volt DC output is provided, accessed via the shrouded accessory jack plug (refer to section 5 for jack plug wiring information).

This general purpose output has a maximum current rating of 100mA.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Battery Charge/Battery On (e)

This switch is for use with the battery pack option (refer to section 5 for installation).

To charge the battery pack connect an AC input to the back panel, turn the back panel power switch to the on position and the front panel switch (e) to Battery Charge. The instrument will operate normally while charging. When fully charged (approximately 10 hours for a completely flat battery) the AC input can be removed.

To power the instrument from the internal battery check the back panel toggle switch is in the internal battery position, the back panel power switch is in the on position and the front panel switch (e) is in the Battery on position.

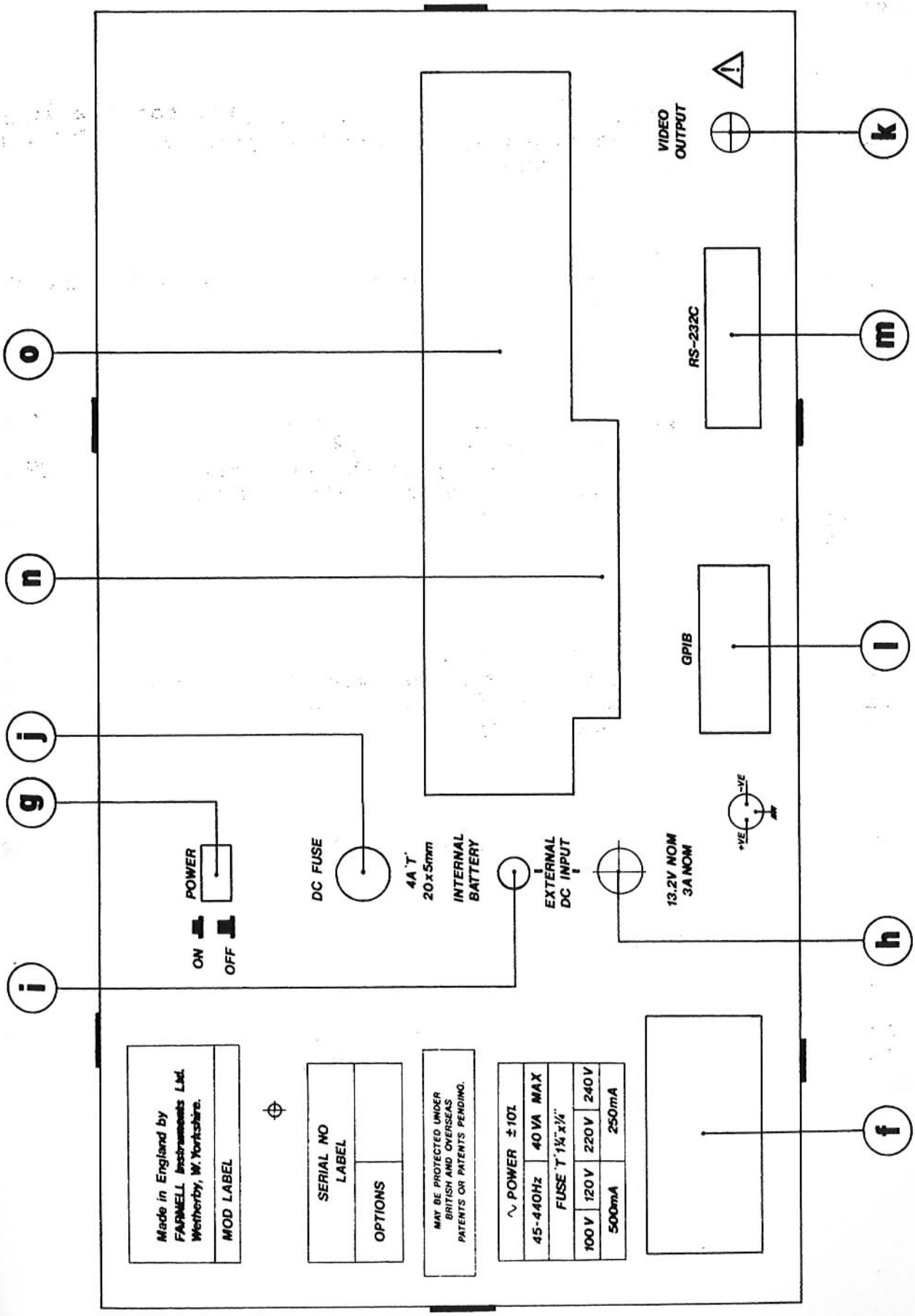
When the AC power is disconnected and the back panel power switch is in the on position the front panel Battery Charge/Battery On switch can be used as a power on/off switch.

CAL Output (g)

A 50 MHz, -20dBm signal is available at this output on pressing the CAL KEY. Refer to CAL KEY description earlier in this section.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SSA1000A BACK PANEL CONNECTORS AND CONTROLS



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

BACK PANEL CONNECTORS AND CONTROLS

Lower case letters in brackets after each title refer to the back panel drawing on the adjacent page.

AC Input (f)

Check that the power input setting is correct for the local supply and connect an AC supply via the lead provided. (Refer to section 5 for installation).

Power On/Off (g)

The power on/off switch (g) provides input power switching for both AC and DC supplies.

DC Input (h)

Connect a DC supply to the Back Panel External DC input socket (h). (Refer to section 5 for installation).
Switch the back panel switch (i) to the External DC input position and switch the back panel power switch (g) to on.
A separate DC fuse (j) is provided on the back panel for this input.

Video Output (k)

A composite video output is provided on the Back Panel for use with monochrome monitors.This allows visual identification of TV channels .Select using a secondary command (#50) (refer to listing later in this section).

GPIB Connector (l)

REFER TO THE LISTING LATER IN THIS SECTION FOR REMOTE OPERATION USING THE GPIB.

RS232-C Connector (m)

SOFTWARE NOT IMPLEMENTED.

The hardware is included with the instrument for an RS232-C interface but it is not intended to support this function in software.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Memory Card (n)

The optional memory card can be used to increase the storage capacity of front panel settings and CRT screen display data.

The analyzer operating system automatically checks that the memory card is installed before data storage and retrieval.

If the memory card is not detected, a warning message is displayed on the front panel display.

To access the memory card use the STORE OR RECALL KEY followed by the memory location number. (Refer to the listing later in this section for valid store locations).

Battery pack housing (o)

The optional Battery pack can be fitted under the battery cover plate. (Refer to section 5 for installation instructions).

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SECONDARY COMMANDS

All secondary commands are entered by using the # key together with data keys.
Note: When using secondary commands with GPIB control, # can be replaced by GATE if preferred but both commands must be followed by a blank space before the qualifying data(e.g # 00,GATE 00).

KEY SEQUENCE

#00	Displays software version number
#01	Display test exercises all front panel displays. Aborts if LOCAL/CLEAR key is pressed
#04	Displays most recent message i.e. last error or warning.
#05	Displays GPIB address and prompts for new address. Abort if CLEAR is pressed.
#10	To define the threshold level in the PEAK/STEP> mode, first set the required threshold level with the spin-wheel using level cursor mode. Select #10 to store the threshold level for use in PEAK/STEP> mode.
#20	Graticle off
#21	Graticle on
#30	Reduces demodulated FM signal gain for deviations >7.5kHz. Use for broadcast FM signals.
#31	Amplifies demodulated FM signal level for low deviations. Use for narrow band FM signals.
#40	WARNING: LEVEL NOT CALIBRATED Forces 2000kHz resolution bandwidth irrespective of span setting. Changing the span automatically cancels the setting.
#41	WARNING: LEVEL NOT CALIBRATED Forces 120kHz resolution bandwidth irrespective of span setting. Changing the span automatically cancels the setting.
#42	WARNING: LEVEL NOT CALIBRATED Forces 9kHz resolution bandwidth irrespective of span setting. Changing the span automatically cancels the setting.
#43	WARNING: LEVEL NOT CALIBRATED Forces 1kHz resolution bandwidth irrespective of span setting. Changing the span automatically cancels the setting.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

#50 Switches the back panel video output on for connection to an external monitor to display TV video. This forces zero span and 2000kHz resolution Bandwidth. Changing the span turns the video output off returning to normal operation.

#60 Returns stored title for editing

#61 Moves the plotter pen barrel to the right for pen removal.
Press SPAN UP/ALPHA key to rotate pens if required.
Press LOCAL/CLEAR to exit this function.

#62 Selects plotter trace colour change.
SPAN UP/ALPHA key rotates colour on data display.
LOCAL/CLEAR key exits and stores colour choice.

#63 Selects plotter text colour change.
SPAN UP/ALPHA key rotates colour on data display.
LOCAL/CLEAR key exits and stores colour choice.

#64 Selects plotter graticule colour change.
SPAN UP/ALPHA key rotates colour on data display.
LOCAL/CLEAR key exits and stores colour choice.

#70 Reserved for test/service use

#71 Reserved for test/service use

#90 Memory write protect prompts for store number. Aborts if LOCAL/CLEAR is pressed.

#91 Removes memory write protect, prompts for store number. Aborts if LOCAL/CLEAR is pressed.

#95 The power on instrument setting is from user set stored values. Prompts for store number

#96 Returns instrument to default setting status.

#97 Instrument memory clear out keeping the instrument's current setting and any write protected stores

#98 RAM card memory clear out

#99 Instrument memory clear out returning the default setting

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

STORE/RECALL CODES

STORE NUMBER	Store contents and location
01 to 09	Stores instrument setting in internal non-volatile RAM
10 to 13	Stores crt screen display , instrument setting and current user defined title in internal non-volatile RAM. The instrument state is forced into the hold mode. Deselecting hold returns the instrument to normal operation.
20 to 59	Stores instrument setting in the external optional memory card. A warning message is returned if the memory card is not fitted.
60 to 99	Stores crt screen display ,instrument setting and current user defined title in the external optional memory card. The instrument is forced into the hold mode. Deselecting hold returns the instrument to normal operation. A warning message is returned if the memory card is not fitted.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

6.3 REFERENCE TABLES

The tables below show the default instrument state, states which can be stored, states initialised on power on and user messages output to the display.

Default instrument state

The secondary command #96 can be used to force the instrument into the default state. The default parameters are:

Frequency at cursor	500.00 MHz
Span	1000MHz
Resolution BW	2000kHz
Attenuation	50dB
Level units	dBm
Relative level units	Off
Cursor mode	Frequency and Auto-level
Freq cursor position	Centre screen
Remote/Local	Local
Video filter	Off
AM	Off
FM	Off
Hold display	Off
Peak hold	Off
Peak/Step >	Off
Cal	Off
Quasi-peak	Off
Plot	Off
GPIB address	08
Peak/step > threshold	1/3rd of full screen
Graticule	Off
FM demodulation	>7.5kHz
Back panel video	Off
Plotter trace pen colour	Black
Plotter text pen colour	Black
Plotter graticule pen colour	Black
User plot title	"Farnell SSA1000A"

User memory stores and any write protection of same are unaffected by the default state.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Non-volatile storage

The following parameters are saved in the numbered front panel stores on request, except where noted otherwise in the comments below. They are also automatically saved and recalled on power down and power up except where noted otherwise.

Parameter	Comment number
Frequency at cursor	
Span	
Resolution bandwidth	
Attenuation	
Level units	
Relative level	(1)
Cursor mode	
Frequency cursor position	
Remote/Local	(2)
Video filter	
AM	
FM	
Peak hold	(2)
Peak/Step >	(2)
Cal	(2)
Quasi-peak	
Plot	(2)
GPIB address	(3)
Peak/step threshold >	
Graticule	
FM demodulation sensitivity	
Back panel video	
Plotter pen colour	
User plot title	(4)
CRT screen display	(4)

1) Relative level mode is not saved. The unit will save the previous absolute level units used.

2) Parameters initialised on power on or memory recall: see next section.

3) GPIB address is not stored in user numbered stores. The current value only is non-volatile.

4) Only saved for store numbers 10 to 13 using internal memory and 60 to 99 using external memory card.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

States initialised on power on or memory recall

The following states are initialised on power on or memory recall:

Parameter	Initialised state
Remote/Local	Local*
Hold display	Off on power on. On when CRT screen recalled
Peak hold	Off
Peak/Step >	Off
Cal	Off
Plot	Off

*Local state is initialised on power on only. It is not stored.

User messages

Displayed message	Comment
"No Previous Message"	---
"Software Version N.N."	Installed software version number (see section 9, Calibration Procedure, for details of how to fit upgraded software.
"Invalid on 2MHz Res BW"	Video filter and/or Quasi-peak detector cannot be selected on this Resolution BW setting.
"Excess RF Power" "Remove Input/Clr Resets"	Remove source of excess power and reset using CLEAR key.
"Farnell SSA1000A"	---
"Frequency Out of Range"	Valid range is 0MHz to 1010MHz
"Invalid on 1kHz Res BW"	Quasi-peak detection is only valid for 9kHz and 120kHz resolution bandwidths.
"No peak found"	Attempt to find a signal above current peak threshold value has failed.
"Cal Signal not Present"	An attempt to self-calibrate has been made without connecting a 50MHz, -20dBm RF source to the RF input.
"Invalid- hold selected"	An attempt to select an invalid function with either peak hold or hold display on.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

"Store Write Protected"	---
"Invalid Store Number"	Valid range is 01 to 13 and 20 to 99.
"Store Empty"	Memory has been cleared since the last write to this store.
"Invalid # Command"	---
"Warning Uncalibrated" "Power Off/On to Reset"	#60 implements a special test function. Power off/on to exit.
"GPIB address: NN"	#05 displays GPIB address. A new value can be entered directly from the keyboard or CLEAR returns to normal display leaving current value.
"Peak Threshold Set"	#10 sets peak find threshold to current level cursor position.
"Memory Card Not Detected"	An attempt to store or recall from memory positions 20 to 99 without Memory Card option fitted.
"Recharge Battery"	Indicates that the internal battery option should be recharged (refer to section 6.1). Press CLEAR to return to normal display.
"10 Minutes Battery Use"	Audible warning of battery use for ten minutes. Press CLEAR to acknowledge warning and return to normal display.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP