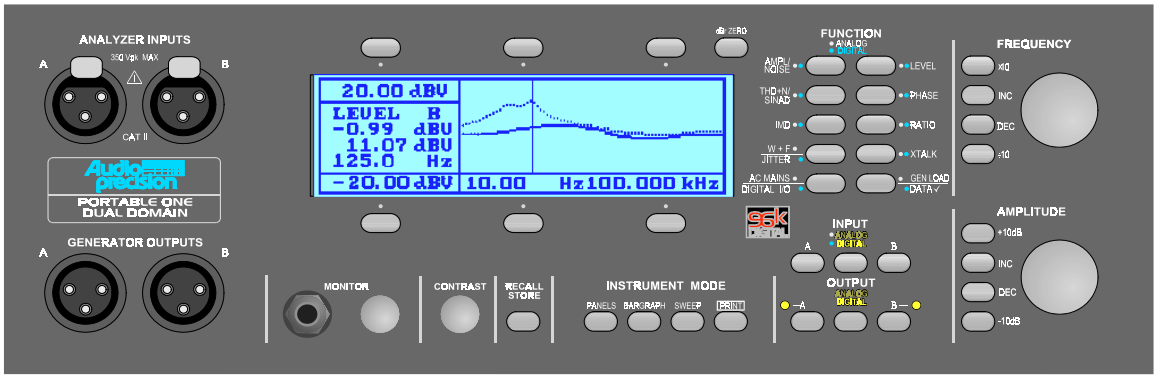
Portable One Dual Domain 96 k Addendum to GPIB Programmers Reference Guide



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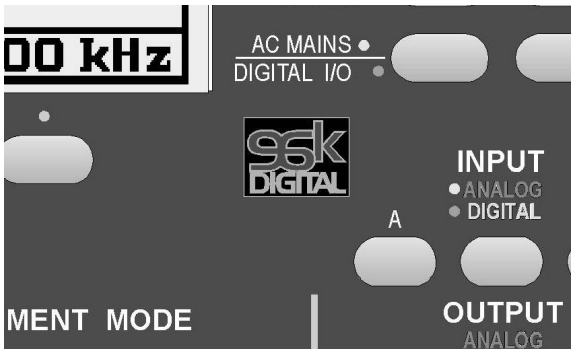
Introduction

Since printing the accompanying manual (Audio Precision PN 8211.0044), Audio Precision has introduced a 96 kHz Sample Rate Option (96K-P1DD) for the Portable One Dual Domain. This option expands the range of supported digital sample rates so that 96 kHz audio equipment can be tested. The 96 kHz option may have been installed when the unit was originally manufactured, or may have been installed as an upgrade.

This addendum addresses only the GPIB aspects of the 96 kHz option. For further details, refer to the Portable One Dual Domain User's Manual.

Identifying 96 kHz Instruments

All Portable One Dual Domain units should have a brightly-colored "96k" escutcheon added to the front panel when the 96 kHz upgrade was performed. If you are unsure whether your instrument has the upgrade, check the rear panel Options Label (see page 2-10 of the Portable One Dual Domain User's Manual).



GPIB Programmer's Reference Manual Changes

The following table replaces the second table on page 8-2 of the GPIB Programmer's Reference Manual:

Changes to CONS state when PROF command is received.					
Professional Rate		**Consumer Rate**		**Professional Emphasis**	**Consumer Emphasis**
GPIB String	**Actual Frequency (Hz)**	**GPIB String**	**Actual Frequency (Hz)**		
AUTO		AUTO		NONE	NONE
NI		AUTO		CD	CD
R32K	32000	R32K	32000	J17	NONE
R440	44056	R44K	44100	NI	NONE
R44K	44100	R44K	44100		
R479	47952	R48K	48000		
R48K	48000	R48K	48000		
R88K	88200	AUTO			
R96K	96000	AUTO			

On page 8-3, four additional settings are available for the DOSTatus:PROF command. Replace the entire text under DOSTatus:PROF with the following text:

DOSTatus:PROF

Specifies the professional standard status bit settings for the rate, output pre-emphasis, origination, and destination status bits. These settings are affected by the :DOSTATUS:CONS command. These are the settings that will be set when the professional standard is enabled with the STDO PROF command. Four arguments specify the rate, the emphasis, the four-character origination string, and the four-character destination string. The first argument indicates sample rate. The second argument indicates digital output pre-emphasis. The third argument indicates the origination string. The fourth argument indicates the destination string.

The sample rate parameter may be set to AUTO (set by output sample rate), NI (Not Indicated), R32K (32000 s/sec), R440 (44056 s/sec), R44K (44100 s/sec), R479 (47952 s/sec), R48K (48000 s/sec), R88K (88200 s/sec), or R96K (96000 s/sec). The emphasis parameter may be NONE (no emphasis), CD (50/15 µs pre-emphasis), J17 (CCITT J17 pre-emphasis), or NI (Not Indicated). The origination string may be set to NULL, AP1D, SRC1, SRC2, SRC3, or TEST. The destination string may be set to NULL, AP1D, DES1, DES2, DES3, or TEST.

Related Commands: :DOSTatus:PROF?, :DOSTatus:CONS

Syntax: :DOSTatus:PROF *rate* { AUTO | NI | R32K |R440 | R44K | R479 | R48K |R88K | R96K },
emphasis { NONE, CD, J17, NI },
origination { NULL | AP1D | SRC1 | SRC2 | SRC3 | TEST },
destination { NULL | AP1D | DES1 | DES2 | DES3 | TEST }

Factory Default: PROF AUTO, NI, NULL, NULL

Example: `:DOSTATUS:PROF R48K,NONE,SRC1,DES1`

On pages 9-2 and 9-3, additional choices are available for the DISTatus:STATus? responses. Replace the entire text under DISTatus:STATus? with the following text:

DISTatus:STATus?

Decodes the received status bits and returns the two possible sets of status bit information depending on the standard being received as indicated by the :DISTatus:STDI? query response. If Consumer standard status is being received then three arguments will be returned. If Professional standard status is being received then four arguments will be returned.

Consumer Mode– If Consumer standard is being received then received status bits will be decoded and the following data will be returned in three consecutive arguments:

- The first argument indicates the encoded sample rate. The sample rate parameter may be R32K (32000 samples/second), R44K (44100 samples/second), or R48K (48000 samples/second).
- The second argument indicates the digital pre-emphasis of the received audio. The emphasis parameter may be NONE (no emphasis) or CD (50/15 µs pre-emphasis).
- The third argument indicates the copyright protection status. The copy parameter may be NO (copy prohibited) or OK (copy permitted).

Professional Mode– If Professional standard is being received the received status bits will be decoded and the following data will be returned in four arguments: the sample rate, the audio pre-emphasis, the four-character origination string, and the four-character destination string.

- The sample rate will be indicated in samples/second as:

Indication	Rate	Indication	Rate
NI	Not Indicated	R88112	88112
R22028	22028	R88K	88200
R22050	22050	R95904	95904
R23976	23976	R96K	96000
R24K	24000	R176224	176224
R31968	31968	R176400	176400
R32K	32000	R191808	191808
R44056	44056	R192K	192000
R44K	44100	USRDEF	User Defined
R47952	47952	RESRVD	Reserved
R48K	48000	INVALD	Invalid

- The emphasis parameter may be NONE (no emphasis), CD (50/15 µs pre-emphasis), J17 (CCITT J17 pre-emphasis), or NI (Not Indicated).
- The origination and destination strings will be delimited in double quotation characters (") and may be up to four characters in length.

Related Commands: :DISTatus:STATus?, :DISTatus:STD?

Syntax: :DISTatus:STATus?

Example: `:DISTATUS:STATUS?`

Response: Consumer standard response: `STATUS R44K,CD,OK`

Response: Professional standard response: `STATUS R48K,NONE,"ABCD","WXYZ";`