

7000 RS232 Command List

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1 Overview

1.1 Introduction

This document contains lists of the available RS232-based FIPP (Frye Instrument Packet Protocol) commands for the Fonix 7000. Descriptions of the commands can be found in *commands.txt*.

1.2 Legend

Availability of some major modes and commands will be limited depending on options installed on the Fonix 7000. These commands are noted with an (OPTION) designation below.

Commands marked with † are dynamic data get commands. The data returned by these commands are not guaranteed to be valid immediately following operating state change of the 7000. Settling delays may be necessary before reading dynamic data after making changes in the system.

Commands marked with ‡ are get curve commands. The composite and fast pure tone modes are dynamic, and as previously mentioned, the data may not be valid immediately after changing the state of the instrument.

For more in-depth discussion of dynamic data and other Fonix 7000-specific notes, see *7000note.pdf*.

2 Common Commands

Common commands are available in all modes on the 7000 where RS232 is supported.

2.1 List of Common Commands

Command	Number
Set Label Information	6
Set Extended Label	66
Set Keyboard Scan Code	72
Set Poll Delay Time	73
Set Average Frequencies	82
Set Printer Label Storage	89
Set Printer Selection	92
Do Reset	38
Do Feed	64
Do Print	65
Get Software Version	28
Get Command Status	33
Get Instrument State	60
Get Poll Delay Time	74
Get Power State	80
Get Average Frequencies	81
Get Extended Label	86
Get Printer Selection	93
Get Software Information	95
Get Device ID Count	100
Get Long Device ID	101
Get Real Time Clock	103
Get Signal Information	109

2.2 Notes

Commands 28 and 33 are always supported on all instruments that follow the FIPP protocol. Command 38 is supported on all instruments that support the FIPP protocol, but its effects may differ between instruments.

Commands 80, 89, 100 and above 100 are not available on all instruments.

Be aware that commands may vary between instruments and software revisions. If supporting multiple instruments, refer to per-instrument documentation for implementation differences.

3 Major Modes of Operation

The Fonix 7000 supports the following major modes of operation via RS232:

Mode	Major
Opening	0
Coupler	1
ANSI87	(ANSI) 2
IEC	(IEC) 3
JIS	(JIS) 4
Probe Insertion Gain	(PROBE) 6
Attack & Release (standard)	9
Coupler I/O	11
ANSI92	(ANSI) 12
Default Setup Menu	16
ANSI96	(ANSI) 18
Local Menu	22
Probe SPL	(PROBE) 23
Probe Audiogram	(PROBE) 25
Enhanced DSP	28
Probe Target	(PROBE) 29
Probe Navigation	(PROBE) 30
ANSI03	(ANSI) 33

3.1 Opening Screen (0)

The following Opening Screen commands are available in major mode 0.

Command	Number
Set Probe Mode	(PROBE) !! 7
Set Instrument State	59
Set Option Parameters	70
Get Probe Mode	(PROBE) !! 35
Get Option Parameters	71

3.2 Default Setup Menu (16:0)

Command	Number
Set Instrument State	59
Set Option Parameters	70
Get Option Parameters	71

3.3 Coupler (1:0)

Command	Number
Set Source Amplitude Value	0
Set Harmonic Distortion Status	1

Set Frequency Value	2
Set OES Status	!! 3
Set Noise Reduction Value	4
Set Smoothing Status	5
Set Probe Mode	(PROBE) !! 7
Set Weighting Status	8
Set Curve Frame Data	9
Set Gain Status	12
Set Active Status	54
Set Instrument State	59
Set Spectrum	68
Set Option Parameters	70
Set Ear	75
Set Operating Mode	77
Set Measurement Delay Times	84
Set CIC Status	!! 88
Set Impulse Rejection Value	108
Set Selected Curve	112
Set Curve Status	114
Set List	118
Set Static Tone	121
Set Aid Type	123
Set Bias Tone Selection	125
Set Filter Selection	136
Set Coupler Type	173
 Do Start/Stop (press start)	 16
Do Leveling (press level)	17
 Get Source Amplitude Value	 21
Get Harmonic Distortion Status	22
Get Frequency Value	23
Get OES Status	!! 24
Get Curve Frame Data	† 25
Get Noise Reduction Value	26
Get Smoothing Status	27
Get Leveling Status	29
Get Weighting Status	30
Get Measurement Data	† 31
Get Harmonic Distortion Data	† 32
Get Probe Mode	(PROBE) !! 35
Get Gain Status	36
Get Last Measured Curve Data	‡ 42
Get Reference Microphone Status	53
Get Active Status	55
Get Instrument State	60
Get Option Parameters	71

Get Ear	76
Get Operating Mode	78
Get Measurement Delay Times	83
Get CIC Status	!! 87
Get Impulse Rejection Value	107
Get Raw Sample Data	110
Get Selected Curve	113
Get Curve Status	115
Get List	119
Get Static Tone	122
Get Aid Type	124
Get Bias Tone Selection	126
Get Filter Selection	137
Get Coupler Type	172

3.4 Probe Navigation (30:0)

Command	Number
Set Instrument State	59
Set Option Parameters	70
Set Aid Type	123
Get Option Parameters	71
Get Aid Type	124

3.5 Probe Insertion Gain & SPL (6:0 & 23:0)

Command	Number
Set Source Amplitude Value	0
Set Frequency Value	2
Set Noise Reduction Value	4
Set Smoothing Status	5
Set Probe Mode	(PROBE) !! 7
Set Weighting Status	8
Set Curve Frame Data	9
Set Gain Status	12
Set Output Limiting Value	50
Set Reference Microphone Status	52
Set Active Status	54
Set Instrument State	59
Set Spectrum	68
Set Option Parameters	70
Set Ear Status	75
Set Operating Mode	77
Set Measurement Delay Times	84
Set Impulse Rejection Value	108

Set Selected Curve	112
Set Curve Status	114
Set Unaided Curve Selection	116
Set List	118
Set Static Tone	121
Set Aid Type	123
Set Bias Tone Selection	125
Set Filter Selection	136
 Do Start/Stop (press start)	 16
Do Leveling (press level)	17
 Get Source Amplitude Value	 21
Get Frequency Value	23
Get Curve Frame Data	‡ 25
Get Noise Reduction Value	26
Get Smoothing Status	27
Get Leveling Status	29
Get Weighting Status	30
Get Measurement Data (single tone)	† 31
Get Probe Mode	(PROBE) !! 35
Get Gain Status	36
Get Last Measured Curve Data	‡ 42
Get Output Limit Value	51
Get Reference Microphone Status	53
Get Active Status	55
Get Reference Microphone Input	57
Get Instrument State	60
Get Option Parameters	71
Get Ear Status	76
Get Operating Mode	78
Get Measurement Delay Times	83
Get Impulse Rejection Value	107
Get Raw Sample Data	110
Get Selected Curve	113
Get Curve Status	115
Get Unaided Curve Selection	117
Get List	119
Get Static Tone	122
Get Aid Type	124
Get Bias Tone Selection	126
Get Filter Selection	137

3.6 Audiogram Screen (25)

Command	Number
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Set Probe Mode	(PROBE) !! 7
Set Curve Frame Data	9
Set Active Status	54
Set Instrument State	59
Set Ear Status	75
Set Selected Curve	112
Set Curve Status	114
Set Fit Rule Selection	134
Set Client Age	140
Do Start/Stop (press start)	16
Get Curve Frame Data	‡ 25
Get Probe Mode	(PROBE) !! 35
Get Active Status	55
Get Instrument State	60
Get Ear Status	76
Get Selected Curve	113
Get Curve Status	115
Get Fit Rule Selection	135
Get Client Age	141

3.7 Target Edit Screen (29:0)

Command	Number
Set Probe Mode	(PROBE) !! 7
Set Curve Frame Data	9
Set Instrument State	59
Set Ear Status	75
Set Selected Curve	112
Set Curve Status	114
Get Curve Frame Data	‡ 25
Get Probe Mode	(PROBE) !! 35
Get Instrument State	60
Get Ear Status	76
Get Selected Curve	113
Get Curve Status	115

3.8 IEC Mode (3)

Command	Number
IEC Minor States #0&2 (IEC mode entry&complete)	
Set Noise Reduction Value	4

Set Reference Microphone Status	52
Set Active Status	54
Set Instrument State	59
Set Operating Parameters	70
Set Measurement Delay Times	84
Set Blob	99
Set List	118
Set Aid Type	123
Do Start/Stop (press start)	16
Do Leveling (press level)	17
Get Noise Reduction Value	26
Get Leveling Status	29
Get Last Measured Curve Data	‡ 42
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83
Get List	119
Get Aid Type	124

IEC Minor State #1 (Set reference test gain)

Set Active Status	54
Set Instrument State	59
Set Measurement Delay Times	84
Do Start/Stop (press start)	16
Get Noise Reduction Value	26
Get Leveling Status	29
Get Measurement Data	† 31
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83

3.9 JIS Mode (4)

Command	Number
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JIS Minor States #0&2 (JIS mode entry&complete)

Set Noise Reduction Value	4
Set Reference Microphone Status	52
Set Active Status	54
Set Instrument State	59

Set Operating Parameters	70
Set Measurement Delay Times	84
Set Blob	99
Set List	118
Set Aid Type	123
Do Start/Stop (press start)	16
Do Leveling (press level)	17
Get Noise Reduction Value	26
Get Leveling Status	29
Get Last Measured Curve Data	‡ 42
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83
Get List	119
Get Aid Type	124

IEC Minor State #1 (Set reference test gain)

Set Active Status	54
Set Instrument State	59
Set Measurement Delay Times	84
Do Start/Stop (press start)	16
Get Noise Reduction Value	26
Get Leveling Status	29
Get Measurement Data	† 31
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83

3.10 ANSI ANSI87(2)/ANSI96(18) Modes

Command	Number
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Minor States #0&4 (ANSI87/ANSI96 Entry and complete)

Set Noise Reduction Value	4
Set Reference Microphone Status	52
Set Active Status	54
Set Instrument State	59
Set Operating Parameters	70
Set Measurement Delay Times	84
Set Blob	99

Set Aid Type	123
Do Start/Stop (press start)	16
Do Leveling (press level)	17
Get Noise Reduction Value	26
Get Leveling Status	29
Get Last Measured Curve Data	‡ 42
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83
Get List	119
Get Aid Type	124

Minor States #1,2,3 (Set reference test gain and telecoil)

Set Active Status	54
Set Instrument State	59
Set Measurement Delay Times	84
Do Start/Stop (press start)	16
Get Noise Reduction Value	26
Get Leveling Status	29
Get Measurement Data	† 31
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83

3.11 ANSI ANSI03(33) Mode

Command	Number
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Minor States #0&4 (ANSI03 Entry and complete)

Set Noise Reduction Value	4
Set Reference Microphone Status	52
Set Active Status	54
Set Instrument State	59
Set Operating Parameters	70
Set Measurement Delay Times	84
Set Blob	99
Set Aid Type	123
Do Start/Stop (press start)	16
Do Leveling (press level)	17
Get Noise Reduction Value	26

Get Leveling Status	29
Get Last Measured Curve Data	‡ 42
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83
Get List	119
Get Aid Type	124

Minor States #1,2,3 (Set reference test gain, telecoil, and AGC)

Set Active Status	54
Set Instrument State	59
Set Measurement Delay Times	84
Do Start/Stop (press start)	16
Get Noise Reduction Value	26
Get Leveling Status	29
Get Measurement Data	† 31
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83

3.12 ANSI92(12) Mode

Command	Number
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Minor States #0&2 (ANSI91 Entry and complete)

Set Noise Reduction Value	4
Set Reference Microphone Status	52
Set Active Status	54
Set Instrument State	59
Set Operating Parameters	70
Set Measurement Delay Times	84
Set Blob	99
Set Aid Type	123
Do Start/Stop (press start)	16
Do Leveling (press level)	17
Get Noise Reduction Value	26
Get Leveling Status	29
Get Last Measured Curve Data	‡ 42

Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83
Get Aid Type	124

Minor State #1 (Set reference test gain)

Set Active Status	54
Set Instrument State	59
Set Measurement Delay Times	84
Do Start/Stop (press start)	16
Get Noise Reduction Value	26
Get Leveling Status	29
Get Measurement Data	† 31
Get Reference Microphone Status	53
Get Active Status	55
Get Blob	61
Get Operating Parameters	71
Get Measurement Delay Times	83