

TR-6s / TR-8S SysEx Formats

M00	M01	M02	M03	M04	M05	M06	M07	M08	M09	M0A	M0B	M0C	M0D	M0E	M0F	M10	M11
Roland TR - 8s / TR - 6s SysEx Format																	
Data Trans	58	58	00	00	V	08	-	01	00	:							
F0	41	10	00	00	00	45	12	10	59	18	10	00	01	6E	F7		
SysEx Start																	
	Roland ID																
		Device ID,	Manual indicates 10-1F are valid, default 10														
			Roland four byte model ID (45 = TR-8s, 6D = TR-6s)														
							Data Tx = 12										
								Start Memory Address - always 4 bytes									
								A3	A2	A1	A0	Data - 1 to 256 bytes, two in this example					
								Data included in checksum ->						Checksum			
								Sum data, mod 128, subtract from 128, mod 128							SysEx End		
Data Request																	
F0	41	10	00	00	00	45	11	10	59	18	10	00	00	00	02	6E	F7
SysEx Start																	
	Roland ID																
		Device ID,	Manual indicates 10-1F are valid, default 10														
			Roland four byte model ID (45 = TR-8s, 6D = TR-6s)														
							Data req = 11										
								Start Memory Address - always 4 bytes				L3	L2	L1	L0		
								A3	A2	A1	A0	Bytes requested - always 4 bytes					
								Data included in checksum ->						Checksum			
								Sum data, mod 128, subtract from 128, mod 128							SysEx End		
Note, the example Data Request would generate the Data Transmission shown (with the current data values)																	

TR-8s / TR-6s Memory Overview

TR-8s / TR-6s Memory Overview
(work in progress)

	A3	A2	A1	A0		
Unknown	00	01	00	00	User Names 01-32? More research here	
System Data	00	03	xx	xx	Rx edit data, Tx edit data, etc	
General	01	xx	xx	xx	Current kit, current pattern, next pattern, Run status, beat, etc.	
Kit - General	10	##	00	xx	## is kit number 0 - 7F (1-128)	
Kit - Reverb	10	##	01	xx		
Kit - Delay	10	##	02	xx		
Kit - Mfx	10	##	03	xx		
Kit - Controls	10	##	06	xx		
Kit - Instrument	10	##	1\$	xx	\$ is track	
					TR-6s	TR-8S
			_0		BD	BD
			_1		SD	SD
			_2		LT	LT
			_3		HC	MT
			_4		CH	HT
			_5		OH	RS
			_6			HC
			_7			CH
			_8			OH
			_9			CC
			_A			RC
Kit - Inst Fx	10	##	2\$	xx	\$ as above	
Pattern	2#	##	xx	xx	20 00 pattern 0 20 10 pattern 1 2F 70 pattern 127 LSB is pattern # mod 8 x 10h (count 00-7F, not 1-128) MSB is pattern # / 8 + 20h	
Instrument	30??				Haven't done work here	
					May be other sections for samples, etc.	
Special ?	50	xx	xx	xx	DT to 50 00 00 13 replies with SW version + additional data	

TR-8s / TR-6s Messages

TR-8s / TR-6s Messages
(work in progress)

Section	Item	MSB	M_h	M_l	LSB	Bytes
		M08	M09	M0A	M0B	
▼ Message Format						
Message Format	Prefix				F0	1
Message Format	Roland ID				41	1
Message Format	Device ID				10	1
Message Format	Roland four byte model ID	00	00	00	##	4
Message Format	Data Transmission or Data Request				##	1
Message Format	Data Address	A3	A2	A1	A0	4
Message Format	-- Data Transmission Only				Dn	1+
Message Format	-- Data Request Only	L3	L2	L1	L0	4
Message Format	Checksum				Cs	1
Message Format	Suffix				F7	1
▼ System						
System	Local On / Off	00	02	00	00	1
System	Device ID	00	03	00	00	1
System	Omni Mode	00	03	00	01	1
System	Pattern Channel	00	03	00	02	1
System	Kit Channel	00	03	00	03	
System	BD Note	00	03	00	04	2
System	SD Note	00	03	00	06	2
System	--	00	03	00	--	
System	OH Note (Last - Tr-6S)	00	03	00	0E	2
System	RC Note (Last - Tr-8s)	00	03	00	18	2
System	BD Alt Note	00	03	00	1A	2
System	--	00	03	00	--	
System	OH Alt Note (Last - Tr-6S)	00	03	00	24	2
System	RC Alt Note (Last - Tr-8s)	00	03	00	2E	2
System	USB MIDI Thru	00	03	00	32	1
System	Soft Thru	00	03	00	33	1
System	Tx Prog Chg	00	03	00	34	1
System	Tx Edit Data	00	03	00	36	1
System	Tx Nudge	00	03	00	37	1
System	Rx Prog Chg	00	03	00	39	1
System	Rx Edit Data	00	03	00	3B	1
▼ Names						
Names		00	01	00	00	
▼ General						
General	Kit	01	00	00	00	1
General	Pattern	01	00	00	01	1

TR-8s / TR-6s Messages

Section	Item	MSB	M_h	M_l	LSB	Bytes
		M08	M09	M0A	M0B	
General	Next pattern	01	00	00	02	1
General	??	01	00	00	03	2
General	??	01	00	00	05	2
General	Beat	01	00	00	07	1
General	Run	01	00	00	08	1
General	Scatter ??	01	00	00	09	1
General		01	00	00	0A	
General		01	00	00	0B	
General		01	00	00	0C	
General		01	00	00	0D	
General		01	00	00	0E	
General		01	00	00	0F	
General		01	00	00	10	1
General		01	00	00	11	2
General		01	00	00	13	1
General		01	00	00	14	2
General	Button Action Flag ???	01	00	00	16	1
General	Sub step value	01	00	00	19	2
General	Pattern Chain Bit map	01	00	00	1B	4
General	Tempo	01	00	00	39	4
General	Count In / Out	01	00	00	3D	1
General	Master Fx sw display	01	00	00	40	1
▼ Kit						
Kit	Kit Name	10	##	00	00	16
Kit	Kit Switch				06	1
Kit	Kit Level	10	##	00	10	1
Kit	BD Color	10	##	00	42	1
Kit	SD Color	10	##	00	43	1
Kit	LT	10	##	00	44	1
Kit	HC	10	##	00	45	1
Kit	CH	10	##	00	46	1
Kit	Last color 6s OH	10	##	00	47	1
Kit	Last color 8s RC	10	##	00	4C	1
▼ Kit-Reverb						
Kit-Reverb	Type	10	##	01	00	1
Kit-Reverb	Time	10	##	01	01	2
Kit-Reverb	Level	10	##	01	03	2
Kit-Reverb	Pre-delay	10	##	01	05	1
Kit-Reverb	Low Cut	10	##	01	06	1
Kit-Reverb	High Cut	10	##	01	07	1
Kit-Reverb	Density	10	##	01	08	1
▼ Kit-Delay						
Kit-Delay	Type	10	##	02	00	1
Kit-Delay	Sync	10	##	02	01	1

TR-8s / TR-6s Messages

Section	Item	MSB	M_h	M_l	LSB	Bytes
		M08	M09	M0A	M0B	
Kit-Delay	Level	10	##	02	02	2
Kit-Delay	Time	10	##	02	04	2
Kit-Delay	Feedback	10	##	02	06	2
Kit-Delay	Reverb Send	10	##	02	1C	2
▼ Kit-Mfx						
Kit-Mfx	Type	10	##	03	00	1
Kit-Mfx	Switch	10	##	03	01	1
Kit-Mfx	Ctrl Assignment	10	##	03	26	1
Kit-Mfx	First controls	10	##	03	27	2
Kit-Mfx	Side chain source	10	##	04	00	1
Kit-Mfx	Side chain type	10	##	04	01	1
Kit-Mfx	Side chain depth	10	##	04	02	2
Kit-Mfx	Side Chain Gain	10	##	04	04	2
Kit-Mfx	Side Pan	10	##	04	06	2
Kit-Mfx	Side Reverb Send	10	##	04	08	2
Kit-Mfx	Side Delay Send	10	##	04	0A	2
▼ Kit-LFO						
Kit-LFO	Waveform	10	##	05	00	1
Kit-LFO	Rate / Step	10	##	05	01	2
Kit-LFO	Sync?	10	##	05	03	1
▼ Kit-Controls						
Kit-Controls	Kit Ctrl	10	##	06	00	1
Kit-Controls	BD Ctrl	10	##	06	01	1
Kit-Controls	SD Ctrl	10	##	06	02	1
Kit-Controls	Last Ctrl 6s	10	##	06	05	1
Kit-Controls	Last Ctrl 8s	10	##	06	0A	1
Kit-Controls	Mute - BD	10	##	08	00	1
Kit-Controls	Mute - SD	10	##	08	01	1
Kit-Controls	Mute - LT	10	##	08	02	1
Kit-Controls	Mute - HC	10	##	08	03	1
Kit-Controls	Mute - CH	10	##	08	04	1
Kit-Controls	Mute - OH	10	##	08	05	1
▼ Kit - Instrument						
Kit - Instrument	Instrument	10	##	1@	00	4
Kit - Instrument	Tune	10	##	1@	04	2
Kit - Instrument	Decay	10	##	1@	06	2
Kit - Instrument	Inst Level	10	##	1@	08	2
Kit - Instrument	Inst Gain	10	##	1@	0A	2
Kit - Instrument	Pan	10	##	1@	0C	2
Kit - Instrument	Reverb Send	10	##	1@	0E	2
Kit - Instrument	Delay Send	10	##	1@	10	2
Kit - Instrument	LFO Dest	10	##	1@	13	1
Kit - Instrument	LFO Depth	10	##	1@	14	2
Kit - Instrument	Attack	10	##	1@	35	2

TR-8s / TR-6s Messages

Section	Item	MSB	M_h	M_l	LSB	Bytes
		M08	M09	M0A	M0B	
▼ Kit - Inst Fx						
Kit - Inst Fx	Inst Fx	10	##	2@	00	1
Kit - Inst Fx	Parameter 1	10	##	2@	09	2
▼ Pattern						
Pattern	Pattern Name	2x	xx	00	00	16
Pattern	Kit	2x	xx	00	14	2
Pattern	Scale	2x	xx	00	16	1
Pattern	Shuffle	2x	xx	00	23	2
Pattern	Tempo	2x	xx	00	39	4
Pattern		2x	xx	00	40	
Pattern	Variation	2x	xx	00	41	2
Pattern	Last step A	2x	xx	00	43	1
Pattern	Last step B	2x	xx	00	44	1
Pattern	Last step C	2x	xx	00	45	1
Pattern	Last step D	2x	xx	00	46	1
Pattern	Last step E	2x	xx	00	47	1
Pattern	Last step F	2x	xx	00	48	1
Pattern	Last step G	2x	xx	00	49	1
Pattern	Last step H	2x	xx	00	4A	1
Pattern		2x	xx	00	4B	
Pattern	Flam spacing	2x	xx	00	5B	1
Pattern	Scatter Type	2x	xx	00	5C	1
Pattern	Scatter Depth	2x	xx	00	5D	1
Pattern	Auto fill	2x	xx	00	7E	1
Pattern	Fill cycle	2x	xx	00	7F	1
Pattern	Fill pattern	2x	xx	01	00	1
Pattern	Last step 1	2x	xx	01	01	1
Pattern	Last step 2	2x	xx	01	02	1
Pattern	Accent Level	2x	xx	01	04	2
Pattern	Load Kit Switch	2x	xx	01	06	1
Pattern	Master Prob	2x	xx	01	07	2
▼ Pattern - Variation						
Pattern - Variation	Accent + ?	2x	x1	00	00	
Pattern - Variation	Instrument Report 1	2x	x1	00	08	8
Pattern - Variation		2x	x1		10	8
Pattern - Variation		2x	x1		18	
Pattern - Variation		2x	x1			
Pattern - Variation		2x	x1			
Pattern - Variation	Instrument Report 2	2x	x1	0C	08	
Pattern - Variation						
Pattern - Variation	Track Report 1	2x	x1	17	08	
Pattern - Variation	Track Report 2	2x	x1	18	00	
▼ ? 30 xx						
? 30 xx		30	xx	00	00	

TR-8s / TR-6s Messages

	Section	Item	MSB	M_h	M_l	LSB	Bytes
			M08	M09	M0A	M0B	
▼	Unique						
	Unique		50	00	00	13	8
	Unique		50	00	00	15	1

TR-8s / TR-6s Messages

Section	Item	Note
▼ Message Format		
Message Format	Prefix	
Message Format	Roland ID	Roland ID,
Message Format	Device ID	10-1F = 17-32
Message Format	Roland four byte model ID	8s - 45 6s - 6D
Message Format	Data Transmission or Data Request	12 - Data Transmission 11 - Data Request
Message Format	Data Address	Data address
Message Format	-- Data Transmission Only	1 to 256 bytes
Message Format	-- Data Request Only	Length requested (always four bytes)
Message Format	Checksum	Includes all address and data bytes - Sum data and address bytes - Mod 80h - Subtract from 80h - Mod 80h
Message Format	Suffix	
▼ System		
System	Local On / Off	0 = Off, 1 = on, 2 = surface
System	Device ID	
System	Omni Mode	
System	Pattern Channel	
System	Kit Channel	
System	BD Note	
System	SD Note	
System	--	
System	OH Note (Last - Tr-6S)	
System	RC Note (Last - Tr-8s)	
System	BD Alt Note	
System	--	
System	OH Alt Note (Last - Tr-6S)	
System	RC Alt Note (Last - Tr-8s)	
System	USB MIDI Thru	
System	Soft Thru	
System	Tx Prog Chg	
System	Tx Edit Data	Recurs when editor active
System	Tx Nudge	
System	Rx Prog Chg	
System	Rx Edit Data	Recurs when editor active
▼ Names		
Names		Holds names User 01 - 32
▼ General		
General	Kit	Not captured by load? Ptn Chg
General	Pattern	Ptn Chg

TR-8s / TR-6s Messages

Section	Item	Note
General	Next pattern	Ptn Chg
General	??	0F 0F some sound volume?, not var #
General	??	0F 0F, not var #
General	Beat	During run, 0-F
General	Run	Appears on run
General	Scatter ??	Appears on run
General		Valid - F
General		Valid - 0
General		
General		
General		
General		
General		0F 0F
General		Substep (0,1), accent (0)
General		
General	Button Action Flag ???	Appears on run & button action
General	Sub step value	0-3 = 1/2, 1/3, 1/4, Flam
General	Pattern Chain Bit map	0x 0x 0x 0x, x = nnnn, Ptn 1 is LSB, Ptn Chg
General	Tempo	40-300 * 10 -> Rn, Ptn Chg
General	Count In / Out	Appears on remote run or stop, Ptn Chg
General	Master Fx sw display	0-1, follows kit Mfx
▼ Kit		
Kit	Kit Name	## is kit number 00 - 7F (1-128)
Kit	Kit Switch	
Kit	Kit Level	-Inf to +10.0, non-linear
Kit	BD Color	00-0A
Kit	SD Color	
Kit	LT	
Kit	HC	
Kit	CH	
Kit	Last color 6s OH	
Kit	Last color 8s RC	
▼ Kit-Reverb		
Kit-Reverb	Type	
Kit-Reverb	Time	0 - 255
Kit-Reverb	Level	0 - 255
Kit-Reverb	Pre-delay	0 - 100
Kit-Reverb	Low Cut	
Kit-Reverb	High Cut	
Kit-Reverb	Density	
▼ Kit-Delay		
Kit-Delay	Type	
Kit-Delay	Sync	

TR-8s / TR-6s Messages

Section	Item	Note
Kit-Delay	Level	
Kit-Delay	Time	
Kit-Delay	Feedback	
Kit-Delay	Reverb Send	
▼ Kit-Mfx		
Kit-Mfx	Type	Always sends full report
Kit-Mfx	Switch	0-1
Kit-Mfx	Ctrl Assignment	
Kit-Mfx	First controls	
Kit-Mfx	Side chain source	
Kit-Mfx	Side chain type	
Kit-Mfx	Side chain depth	0-255
Kit-Mfx	Side Chain Gain	-40 - + 40
Kit-Mfx	Side Pan	
Kit-Mfx	Side Reverb Send	
Kit-Mfx	Side Delay Send	
▼ Kit-LFO		
Kit-LFO	Waveform	Waveform
Kit-LFO	Rate / Step	
Kit-LFO	Sync?	
▼ Kit-Controls		
Kit-Controls	Kit Ctrl	
Kit-Controls	BD Ctrl	
Kit-Controls	SD Ctrl	
Kit-Controls	Last Ctrl 6s	
Kit-Controls	Last Ctrl 8s	
Kit-Controls	Mute - BD	Kit
Kit-Controls	Mute - SD	Kit
Kit-Controls	Mute - LT	Kit
Kit-Controls	Mute - HC	Kit
Kit-Controls	Mute - CH	Kit
Kit-Controls	Mute - OH	Kit
▼ Kit - Instrument		
Kit - Instrument	Instrument	@ is track, see mem map
Kit - Instrument	Tune	-128 - + 127
Kit - Instrument	Decay	0 - 255
Kit - Instrument	Inst Level	0 - 255, Ptn Chg
Kit - Instrument	Inst Gain	Inf, -40 to +40 (max 0A0A)
Kit - Instrument	Pan	L127 - R127
Kit - Instrument	Reverb Send	0-255
Kit - Instrument	Delay Send	0-255
Kit - Instrument	LFO Dest	
Kit - Instrument	LFO Depth	
Kit - Instrument	Attack	

TR-8s / TR-6s Messages

Section	Item	Note
▼ Kit - Inst Fx		
Kit - Inst Fx	Inst Fx	Always sends full report
Kit - Inst Fx	Parameter 1	
▼ Pattern		
Pattern	Pattern Name	x xx see memory map
Pattern	Kit	00 01 - 08 00
Pattern	Scale	0-3: 8(t), 16(t), 16, 32
Pattern	Shuffle	Centered on 08 08
Pattern	Tempo	
Pattern		
Pattern	Variation	0F 0F, A is LSB
Pattern	Last step A	0-F
Pattern	Last step B	
Pattern	Last step C	
Pattern	Last step D	
Pattern	Last step E	
Pattern	Last step F	
Pattern	Last step G	
Pattern	Last step H	0-F
Pattern		
Pattern	Flam spacing	
Pattern	Scatter Type	
Pattern	Scatter Depth	
Pattern	Auto fill	0-1
Pattern	Fill cycle	0-5 = 32, 16, 12, 8, 4, 2
Pattern	Fill pattern	0-9 = A-H, 1, 2
Pattern	Last step 1	0-F
Pattern	Last step 2	0-F
Pattern	Accent Level	0F-0F
Pattern	Load Kit Switch	0-1
Pattern	Master Prob	00 01 - 07 0C
▼ Pattern - Variation		
Pattern - Variation	Accent + ?	
Pattern - Variation	Instrument Report 1	BD Step 1, Variation 1
Pattern - Variation		BD Step 2, Variation 1
Pattern - Variation		
Pattern - Variation		
Pattern - Variation		BD Step 16, Variation 1
Pattern - Variation	Instrument Report 2	BD Step 1, Variation 1
Pattern - Variation		
Pattern - Variation	Track Report 1	Step 1, Variation 1
Pattern - Variation	Track Report 2	Step 1, Variation 1
▼ ? 30 xx		
? 30 xx		in basic editor Counts by 1 00 00 to 37 7F - 1024 instances

TR-8s / TR-6s Messages

Section	Item	Note
▼ Unique		
Unique		Initial editor connect Version, add'l data, 8 bytes
Unique		Force Rx data on