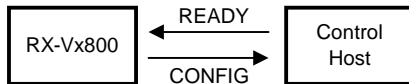


## 2. Start Commands

### 2.1 Starting Communication

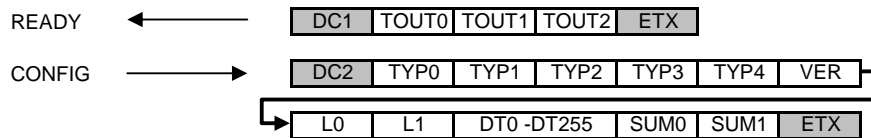


The Ready command is the first command to be sent to the RX-Vx800 at the start of communication. TOUT0 - 2 in the Ready Command sets communication timeout.

RX-Vx800 sends a Configuration command (Model ID, software version and setting data) to the host in reply to the Ready command.

The RX-Vx800 will send a Configuration command within 1 sec. after receiving a Ready command from the host. If not, send a Ready Command again (max 5 times).

If the RX-Vx800 won't send a Configuration command after the fifth retry, cancel the transaction because there may be a problem.



\*TYPx      Model ID = "R0226" (RX-V1800)

Model ID = "R0227" (HTR-6190)

Model ID = "R0225" (RX-V3800)

\*VER      Software Version

\*SUM      The sum of all data except for the header and footer

function name	function	data (ASCII)	range (HEX)
TOUT0 - 2	communication timeout	0 - 9, A - F	0 - 0xFFF

\*timeout between the header and the footer

\*timeout=0 means no timeout

function name	function	data (ASCII)	range (HEX)
TYP0 - 4	model ID	0 - 9, A - F	voluntary
VER	software version	A - Z	voluntary
L0 - 1	data length	0 - 9, A - F	0 - 0xFF
DT0 - 255	data	0 - 9, A - F	0 - 0xF
SUM0	upper 4 bit of SUM	0 - 9, A - F	0 - 0xF
SUM1	lower 4 bit of SUM	0 - 9, A - F	0 - 0xF

## \*Data Structure of Configuration Command

When the power is OFF, only DT0,1,...,9 are sent to the Host.

data	Report			
DT0	-	Fixed	Baud Rate	Don't care ( '@' )
DT1	-	Fixed	Receive Buffer	Don't care ( 'E' )
DT2	-	Fixed	Receive Buffer	Don't care ( '0' )
DT3	-	Fixed	Command Timeout	Don't care ( '1' )
DT4	-	Fixed	Command Timeout	Don't care ( '9' )
DT5	-	Fixed	Command Timeout	Don't care ( '0' )
DT6	-	Fixed	Handshaking	Don't care ( '0' )
DT7	00	0 / 2	System	0: OK / 1: Busy / 2: Standby
DT8	20	0 - 7	Power	Main Room / Zone2 / Zone3 Power Status (All off , All on, Main on...)
DT9	21	0 - F	Input	Upper 4 bit
DT10		0 - F	Input	Lower 4 bit
DT11	22	0 - 8	Audio Select	0: Auto / 3: COAX/OPT / 4: Analog / 8:HDMI
DT12	23	0 - 1	Audio Mute	0: Off / 1: On
DT13	24	0 - E	Zone2 Input	0: PHONO / 1: CD / 2: TUNER / 3: CD-R / 4: MD/TAPE / 5: DVD / 6: DTV/CBL 9: VCR / A: DVR / C: V-AUX / D: NET/USB* / E:XM** / F: BD/HD DVD *Only RX-V3800 **Only USA & Canada
DT14	25	0 / 1	Zone2 Mute	0: Off / 1: On
DT15	26	0 - F	Master Volume	Upper 4 bit
DT16		0 - F	Master Volume	Lower 4 bit
DT17	27	0 - F	Zone2 Volume	Upper 4 bit
DT18		0 - F	Zone2 Volume	Lower 4 bit
DT19	28	0 - F	Program	Upper 4 bit
DT20		0 - F	Program	Lower 4 bit
DT21	28	0 / 1	Effect	0: Off / 1: On
DT22	2D	0 - 6	Extended Surround	0: Off / 1: EX/ES / 3: Auto / 4: EX / 5: PLIIx Movie / 6: PLIIx Music 7: Neural THX
DT23	2B	1 - 2	Short Message	1: On / 2: Off
DT24	2C	0 - 4	Sleep	0: 120 / 1: 90 / 2: 60 / 4: 30 / 4: OFF
DT25	29	0 - 4	Tuner Preset Page	0: Page A / 1: Page B / 2: Page C / 3: Page D / 4: Page E
DT26	2A	0 - 7	Tuner Preset Number	0: No.1 / 1: No.2 / 2: No.3 / 3: No.4 / 4: No.5 / 5: No.6 / 6: No.7 / 7: No.8
DT27	8B	0 - 2	Night Mode	Upper 4 bit 0: OFF / 1: Cinema / 2: Music
DT28	8B	0 - 2	Night Mode Parameter	Lower 4 bit 0: Low / 1: Mid / 2: High
DT29	2E	0 / 1	Speaker Relay A	0: Off / 1: On
DT30	2F	0 / 1	Speaker Relay B	0: Off / 1: On
DT31	10	0 - F	Format	Upper 4 bit
DT32		0 - F	Format	Lower 4 bit
DT33	11	0 - F	Sampling	Upper 4 bit
DT34		0 - F	Sampling	Lower 4 bit
DT35	12	0 - F	Channel Front/Rear	0: 1+1 / 1: 1/0 / 2: 2/0 / 3: 3/0 / 4: 2/1 / 5: 3/1 / 6: 2/2 / 7: 3/2 / 8: 2/3 / 9: 3/3 A: 2/4 / B: 3/4 / C: MLT / F: ---
DT36	34	0 / 1	Head Phone	0: Off / 1: On
DT37	35	0 / 1	Tuner Band	0: FM / 1: AM
DT38	13	0 - F	Channel LFE	0: 0.1 / 1: 0.2 / F: ---
DT39	36	0 / 1	Trigger1 Output	0: Low / 1: High
DT40	5E	0 - 2	Decoder Mode	0: Auto / 1: DTS / 2: AAC* *Only Japanese Model
DT41	39	0 - 2	Dual Mono	0: Main / 1: Sub / 2: All (Only Japanese Model)
DT42	3A	0 - 3	Trigger1 Control	0: All (Zone1-3) / 1: Main / 2: Zone2 / 3: Zone3
DT43			Don't care	
DT44	3B	0 - 3	Trigger2 Control	0: All (Zone1-3) / 1: Main / 2: Zone2 / 3: Zone3
DT45	3C	0 / 1	Trigger2 Output	0: Low / 1: High
DT46	3D	0 / 1	Speaker B set	0: Main / 1: Zone B
DT47	3E	0 - 3	Zone 2 Amplifier	0: EXT / 1: INT: Speaker[1] / 2: INT: Speaker[2] / 3: INT Both
DT48	40	0 - F	Level Front R	Upper 4 bit
DT49		0 - F	Level Front R	Lower 4 bit
DT50	41	0 - F	Level Front L	Upper 4 bit
DT51		0 - F	Level Front L	Lower 4 bit
DT52	42	0 - F	Level Center	Upper 4 bit
DT53		0 - F	Level Center	Lower 4 bit
DT54	43	0 - F	Level Surround R	Upper 4 bit
DT55		0 - F	Level Surround R	Lower 4 bit
DT56	44	0 - F	Level Surround L	Upper 4 bit
DT57		0 - F	Level Surround L	Lower 4 bit
DT58	45	0 - F	Level Surround Back R	Upper 4 bit
DT59		0 - F	Level Surround Back R	Lower 4 bit
DT60	46	0 - F	Level Surround Back L	Upper 4 bit
DT61		0 - F	Level Surround Back L	Lower 4 bit

DT62	47	0 - F	Level Presence R	Upper 4 bit	
DT63		0 - F	Level Presence R	Lower 4 bit	
DT64	48	0 - F	Level Presence L	Upper 4 bit	
DT65		0 - F	Level Presence L	Lower 4 bit	
DT66	49	0 - F	Level Subwoofer	Upper 4 bit	
DT67		0 - F	Level Subwoofer	Lower 4 bit	
DT68	90	0 - 4	XM Preset Page	0: Page A / 1: Page B / 2: Page C / 3: Page D / 4: Page E (Only USA & Canada)	
DT69	91	0 - 7	XM Preset Number	(Only USA & Canada)	
DT70	92	0 - 2	XM Search Mode	0: All CH / 1: Category / 2: Preset (Only USA & Canada)	
DT71	93	1 - 3	On Screen	1: 10sec / 2: 30sec / 3: Always	
DT72	94	0 - F	XM Channel Number	Upper 4 bit	(Only USA & Canada)
DT73		0 - F	XM Channel Number	Lower 4 bit	(Only USA & Canada)
DT74	51	0 - F	LFE Level SP	Upper 4 bit	
DT75		0 - F	LFE Level SP	Lower 4 bit	
DT76	52	0 - F	LFE Level HP	Upper 4 bit	
DT77		0 - F	LFE Level HP	Lower 4 bit	
DT78	53	0 - F	Manual Audio Delay	Upper 4 bit	
DT79		0 - F	Manual Audio Delay	Lower 4 bit	
DT80	5B	0 - F	Initial Volume	Upper 4 bit	added to RX-V1800 too
DT81		0 - F	Initial Volume	Lower 4 bit	added to RX-V1800 too
DT82	5A	0 - A	Max Volume	0: -30dB / 1: -25dB / 2: -20dB / 3: -15dB / 4: -10dB / 5: -5dB / 6: 0dB / 7: 5dB / 8: 10dB / 9: 15dB / A: 16.5dB added to RX-V1800 too	
DT83	5F	0 / 1	Decoder Mode Set	0: Auto / 1: Last	
DT84	60	0 / 1	Audio Select Set	0: Auto / 1: Last	
DT85	61	0 - 4	Dimmer	0: -4 / 1: -3 / 2: -2 / 3: -1 / 4: 0	
DT86		Don't care			
DT87	62	0 - A	OSD Shift / GUI position	Upper 4 bit	
DT88		0 - A	OSD Shift / GUI position	Lower 4 bit	
DT89	63	0 / 1	Gray back	0: Off / 1: Auto (Only RX-V1800)	
DT90	69	0 / 1	Video conversion	0: Off / 1: On	
DT91	64	0 - 2	D. Rang SP	0: MAX / 1: STD / 2: MIN	
DT92	65	0 - 2	D. Rang HP	0: MAX / 1: STD / 2: MIN	
DT93	66	0 / 1	Zone2 Volume Out	0: Variable / 1: Fixed	
DT94	6B	0 / 1	Zone3 Volume Out	0: Variable / 1: Fixed	
DT95	68	0 / 1	Memory guard	0: Off / 1: On	
DT96	70	0 - 2	SP set Center	0: Large / 1: Small / 2: None	
DT97	71	0 / 1	Front	0: Large / 1: Small	
DT98	72	0 - 2	Sur. L/R	0: Large / 1: Small / 2: None	
DT99	73	0 - 4	Sur. Back	0: Large x2 / 1: Large x1 / 2: Small x2 / 3: Small x1 / 4: None	
DT100	3F	0 - 3	Zone3 Amplifier	0: EXT / 1: INT: Speaker[1] / 2: INT: Speaker[2] / 3: INT Both	
DT101	74	0 / 1	SP set Presence	0: Yes / 1: None	
DT102	75	0 - 2	LFE/BASS	0: SWFR / 1: Front / 2: Both	
DT103	76	0 / 1	Subwoofer Phase	Upper 4 bit : Phase 0: Normal / 1: Reverse	
DT104			Subwoofer Phase	Lower 4 bit	Don't Care
DT105	80	0 / 1	Test mode	0: OFF / 1: ON	
DT106	A7	0 - 2	EQ Select	0: Auto PEQ / 1: GEQ / 2: Off (Only RX-V1800)	
DT107	58	0 - F	Wall Paper	0: Yes / E: Gray / F: None (Only RX-V3800)	
DT108		Don't care			
DT109		Don't care			
DT110		Don't care			
DT111	8F	0 / 1	HDMI Support Audio	0: RX-V3800 or RX-V1800 or HTR-6190 / 1: Other	
DT112	85	0 / 1	Component I/P	0: Off / 1: On	
DT113	86	0 / 1	HDMI IP	0: Off / 1: On (Only RX-V1800) Deletion	
DT114	B6	0 - 5	GUI Language	0: English / 1: Japanese / 2: French / 3: German / 4: Spanish / 5: Russian (Only RX-V3800)	
DT115	87	0 - 4	HDMI Up-Scaling	0: Through / 1: 480p(576p) / 2: 1080i / 3: 720p / 4: 1080p added to RX-V1800 too	
DT116	88	0 - 2	HDMI Aspect	0: Through / 1: 16: 9 Normal / 2: Smart Zoom added to RX-V1800 too	
DT117	8A	0 - 2	THX SB Speaker Distance	0: under 1ft(0.3m) / 1: 1-4ft(0.3-1.2m) / 2: over 4ft(1.2m)	
DT118	6C	0 - 2	Zone OSD	0: Off / 1: Zone2 / 2: Zone2 & Zone3 (Only RX-V3800)	
DT119	6E	0 - 9	Decoder Select	0: Pro Logic / 1: PLIIx Movie / 2: PLIIx Music / 3: PLIIx Game / 4: Neo: 6 Cinema / 5: Neo: 6 Music / 6: CSII Cinema* / 7: CSII Music* / 9: Neural Sur. *Only Japanese Model	
DT120	B5	0 / 1	Remote ID Tuner	0: ID1 / 1: ID2	
DT121	B0	0 / 1	Advanced Setup	0: Off / 1: On	
DT122	B1	0 / 1	Remote ID AMP	0: ID1 / 1: ID2	
DT123	B2	0 / 1	Fan Control Mode	0: Auto / 1: Cont	
DT124	B3	0 / 1	Speaker Impedance	0: 8 ohm / 1: 6 ohm (Except Japanese Model)	
DT125	B4	0 / 1	Tuner Setup	0: AM10/FM100 / 1: AM9/FM50 (Only Destination R & L)	
DT126	8C	0 / 1	Pure Direct	0: Off / 1: On	
DT127	A0	0 - E	Zone3 Input	0: PHONO / 1: CD / 2: TUNER / 3: CD-R / 4: MD/TAPE / 5: DVD / 6: DTV/CBL 9: VCR / A: DVR / C: V-AUX / D: NET/USB* / E: XM** / F: BD/HD DVD *Only RX-V3800 **Only USA & Canada	

DT128	A1	0 / 1	Zone3 Mute	0: Off / 1: On	
DT129	A2	0 - F	Zone3 Volume	Upper 4 bit	
DT130		0 - F		Lower 4 bit	
DT131	B9	0 / 1	Remote Sensor	0: On / 1: Off	
DT132	7B	0 - C	Multi CH Select	0: 6ch / 2: 8ch CD / 3: 8ch CD-R / 4: 8ch MD/TAPE / 5: 8ch DVD / 6: 8ch DTV/CBL / 9: 8ch VCR / A: 8ch DVR / C: 8ch V-AUX / F: 8ch BD/HD DVD	
DT133	BA	0 / 1	Remote ID XM	0: ID1 / 1: ID2 (Only USA & Canada)	
DT134	BB	0 / 1	Bi - AMP	0: On / 1: Off	
DT135	7E	0 - 8	Subwoofer Crossover	0: 40Hz / 1: 60Hz / 2: 80Hz / 3: 90Hz / 4: 100Hz / 5: 110Hz / 6: 120Hz / 7: 160Hz / 8: 200Hz	
DT136	BC	0 / 1	TV Format	0: PAL / 1: NTSC (Only RX-V3800)	
DT137	7D	0 / 1	PR/SB Priority	0: Presence / 1: Surround Back	
DT138			Don't care		
DT139	4B	0 - F	Zone2 Tone Control Bass	Upper 4 bit	
DT140		0 - F		Lower 4 bit	
DT141	4C	0 - F	Zone2 Tone Control Treble	Upper 4 bit	
DT142		0 - F		Lower 4 bit	
DT143	A8	0 / 1	Tone Bypass	0: Auto / 1: Off	
DT144	BD	0 / 1	Wake on RS-232C Access	0: No / 1: Yes	
DT145	14	0 - F	Bit Rate	Upper 4 bit	
DT146		0 - F	Bit Rate	Lower 4 bit	
DT147	15	0 - F	Dialog	Upper 4 bit	
DT148		0 - F	Dialog	Lower 4 bit	
DT149	67	0 - 1	FL Scroll	0: Continue / 1: Once	
DT150	6F	0 - C	Multi CH BGV	0: Off / 1: Last / 5: DVD / 6: DTV/CBL / 9: VCR / A: DVR / C: V-AUX / F: BD/HD DVD	
DT151	96	0 - 1	iPod Charge on Standby	0: Off / 1: Auto	
DT152	97	0 - 2	iPod Repeat	0: Off / 1: One / 2: All	
DT153	98	0 - 2	iPod Shuffle	0: Off / 1: Songs / 2: Albums	
DT154	99	0 - 2	NET/USB Repeat	0: Off / 1: Single / 2: All (Only RX-V3800)	
DT155	9A	0 - 1	NET/USB Shuffle	0: Off / 1: On (Only RX-V3800)	
DT156	A9	0 - A	Zone2 Max Volume	0: -30dB / 1: -25dB / 2: -20dB / 3: -15dB / 4: -10dB / 5: -5dB / 6: 0dB / 7: 5dB / 8: 10dB / 9: 15dB / A: 16.5dB	added to RX-V1800 too
DT157	AB	0 - F	Zone2 Initial Volume	Upper 4 bit	added to RX-V1800 too
DT158		0 - F	Zone2 Initial Volume	Lower 4 bit	added to RX-V1800 too
DT159	AD	0 - F	Zone2 Balance	Upper 4 bit	
DT160		0 - F	Zone2 Balance	Lower 4 bit	
DT161	AA	0 - A	Zone3 Max Volume	0: -30dB / 1: -25dB / 2: -20dB / 3: -15dB / 4: -10dB / 5: -5dB / 6: 0dB / 7: 5dB / 8: 10dB / 9: 15dB / A: 16.5dB	added to RX-V1800 too
DT162	AC	0 - F	Zone3 Initial Volume	Upper 4 bit	added to RX-V1800 too
DT163		0 - F	Zone3 Initial Volume	Lower 4 bit	added to RX-V1800 too
DT164	AE	0 - F	Zone3 Balance	Upper 4 bit	
DT165		0 - F	Zone3 Balance	Lower 4 bit	
DT166	9B	0 - 2	NET/USB Source Select	0: PC/MCX / 1: NET Radio / 2: USB (Only RX-V3800)	
DT167	BF	0 - 1	Monitor Check	0: Skip / 1: Yes	added to RX-V1800 too
DT168	4D	0 - F	Zone3 Tone Control Bass	Upper 4 bit	
DT169		0 - F		Lower 4 bit	
DT170	4E	0 - F	Zone3 Tone Control Treble	Upper 4 bit	
DT171		0 - F		Lower 4 bit	
DT172	16	0 - F	Flag	Upper 4 bit	
DT173		0 - F		Lower 4 bit	

\*OSD = On Screen Display