



Rotel RDD-1580 RS232 ASCII Controller Command List

Date	Version	Update Description
December 26, 2013	1.00	Original Specification

The RDD-1580 supports an ASCII based RS232 protocol. The RS232 hardware does not support flow control so care needs to be take when sending and receiving data to avoid packet loss.

All commands sent to the attached Rotel device must have a terminating “!” character.

Example Command: power_on!

Note: Do not include any spaces in the command, and do not include a carriage return or line feed after the command, only the “!” terminating character.

Status information from the attached Rotel product with either have a terminating “!” character or a byte count for variable length text data that may include a “!” in the returned message. It is up to the sending/receiving control application to properly parse and process the packets.

Note: The byte count only includes the text data and not the length or “,” character.

Connection Settings

Baud Rate	Parity	Valid Data Bits	Stop Bit Value	Handshaking	Data Type
115200	N	8	1	None	String

Communication Protocol

Command and response messages are included on the following pages.

Section 1: Control Command List

RDD-1580 ASCII	Command Description	Unit Response
POWER COMMANDS		
power_on!	Power On	power=on!
power_off!	Power Off	power=standby!
power_toggle!	Power Toggle	power=on/standby!
SOURCE SELECTION COMMANDS		
coax1!	Source Coax 1	source=coax1!
coax2!	Source Coax 2	source=coax2!
opt1!	Source Optical 1	source=opt1!
opt2!	Source Optical 2	source=opt2!
usb!	Source Front USB	source=usb!
pc_usb!	Source PC-USB	source=pc_usb!
SOURCE CONTROL COMMANDS		
play!	Play Source	play_status=play!
pause!	Pause Source	n/a
track_fwd!	Track Forward/Tune Up	n/a
track_back!	Track Backward/Tune Down	n/a
random!	Random Play Mode Toggle	n/a
repeat!	Repeat Play Mode Toggle	n/a
OTHER COMMANDS		
pcusb_class_1!	Set PC-USB Audio Class to 1.0	pcusb_class=1!
pcusb_class_2!	Set PC-USB Audio Class to 2.0	pcusb_class=2!

Section 2: Feedback Request Command List

Command:	get_product_type!
Description:	Request the product type
Return String:	product_type=##,text
Return Description:	Rotel product type name, must include 2 digit length of text string at beginning followed by "," and text string (no terminating character)
Example:	product_type=08,RDD-1580

Command:	get_product_version!
Description:	Request the main CPU software version
Return String:	product_version=##,text
Return Description:	Rotel main CPU software version, must include 2 digit length of text string at beginning followed by "," and text string (no terminating character)
Example:	product_version=06,V1.1.4

Command:	get_tc_version!
Description:	Request the front USB software version
Return String(s):	tc_version=##,text
Return Description:	Rotel front USB software version, must include 2 digit length of text string at beginning followed by "," and text string (no terminating character)
Example:	product_version=06,V500BT

Command:	get_current_power!
Description:	Request current power status
Return String(s):	power=on! / power=standby!
Return Description:	Current power status
Example:	power=on!

Command:	get_current_source!
Description:	Request current source
Return String(s):	source=coax1! / source=coax2! / source=opt1! / source=opt2! / source=usb! / source=pc_usb!
Return Description:	Current source
Example:	source=pc_usb!

Command:	get_pcusb_class!
Description:	Request current PC-USB class
Return String(s):	pcusb_class=1! / pcusb_class=2!
Return Description:	Current PC-USB class
Example:	pcusb_class=1!

Command:	get_current_freq!
Description:	Request current frequency for digital source input
Return String(s):	freq=off! / freq=32! / freq=44.1! / freq=48! / freq=88.2! / freq=96! / freq=176.4! / freq=192!
Return Description:	Current frequency for digital source input
Example:	freq=48!

Command:	get_play_status!
Description:	Request play status (front USB source only)
Return String(s):	play_status=play! / play_status=stop! / play_status=pause!
Return Description:	Source play status
Example:	play_status=play!