



Rotel CD14 RS232 ASCII Controller Command List

Date	Version	Update Description
August 26, 2016	1.00	Original Specification

The CD14 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 will have a terminating “\$” character for fixed lenth options. Variable-length strings (i.e. CD disc/track metadata) will be terminated with a double character ‘\$\$’ instead. It is up to the sending/receiving control application to properly parse and process the packets.

Connection Settings

Baud Rate	Parity	Valid Data Bits	Stop Bit Value	Handshaking	Data Type
57600	N	8	1	None	String

Communication Protocol

Command and response messages are included on the following pages. Automatic status update information can be enabled/disabled using the “rs232_update_on” and “rs232_update_off” commands.

With RS232 update set to ON, any status changes to the unit will be transmitted via RS232. With RS232 update set to OFF, the unit will not send any feedback unless polled by the controller.

Section 1: Control Command List

CD14 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\$
CD TRANSPORT COMMANDS		
play!	Play	status=play\$
stop!	Stop	status=pause/stop\$
pause!	Pause Toggle	status=pause/play\$
trkf!	Track Forward	track=###\$
trkb!	Track Backward	track=###\$
ff!	Fast Forward	n/a
fb!	Fast Backward	n/a
rnd!	Random Play Mode Toggle	rnd=on/off\$
rpt!	Repeat Play Mode Toggle	rpt=track/disc/off\$
NUMERIC KEY COMMANDS		
1!	Number Key 1	n/a
2!	Number Key 2	n/a
3!	Number Key 3	n/a
4!	Number Key 4	n/a
5!	Number Key 5	n/a
6!	Number Key 6	n/a
7!	Number Key 7	n/a
8!	Number Key 8	n/a
9!	Number Key 9	n/a
0!	Number Key 0	n/a
OTHER COMMANDS		
eject!	Eject CD	tray_status=open/close\$
time!	Toggle CD Time Display	n/a
dimmer!	Toggle Display Dimmer	dimmer_#\$
dimmer_0!	Set Display to 0 (Brightest)	dimmer=0\$
dimmer_1!	Set Display to 1	dimmer=1\$
dimmer_2!	Set Display to 2	dimmer=2\$
dimmer_3!	Set Display to 3	dimmer=3\$
dimmer_4!	Set Display to 4	dimmer=4\$
dimmer_5!	Set Display to 5	dimmer=5\$
dimmer_6!	Set Display to 6 (Dimmest)	dimmer=6\$
RS232 FEEDBACK COMMANDS		
rs232_update_on!	Set RS232 Update to Auto (On)	update_mode=auto\$
rs232_update_off!	Set RS232 Update to Manual (Off)	update_mode>manual\$

Section 2: Feedback Request Command List

Command:	power?
Description:	Request current power status
Return String(s):	power=on\$ / power=standby\$
Return Description:	Current power status
Example:	power=on\$

Command:	status?
Description:	Request CD play status
Return String(s):	status=play\$ / status=stop\$ / status=pause\$
Return Description:	CD Play Status
Example:	status=pause\$

Command:	track?
Description:	Request current CD track number
Return String(s):	track=###\$
Return Description:	Current CD track
Example:	track=002\$

Command:	track_name?
Description:	Request current CD track name
Return String(s):	track_name=text\$\$
Return Description:	Current CD track name. (UTF-8 text encoding)
Example:	track_name=Sample Track Name\$\$

Command:	tray_status?
Description:	Request current CD mechanism status
Return String(s):	tray_status=open\$ / tray_status=close\$ / tray_status=load\$
Return Description:	Current CD tray status
Example:	tray_status=close\$

Command:	rnd?
Description:	Request current random play mode
Return String(s):	rnd=on\$ / rnd=off\$
Return Description:	Random play mode
Example:	rnd=on\$

Command:	rpt?
Description:	Request current repeat play mode
Return String(s):	rpt=track\$ / rpt=disc\$ / rpt=off\$
Return Description:	Repeat play mode
Example:	rpt=track\$

Command:	time?
Description:	Request current CD track time
Return String(s):	time=#:##:##\$\$
Return Description:	Text string of time, depending on which time display mode has been set (track time elapsed or remaining, disc time elapsed or remaining)
Example:	time=0:02:45\$\$ / time=1:10:32\$\$

Command:	disc_name?
Description:	Request current CD name
Return String(s):	disc_name=text\$\$
Return Description:	Current CD name. (UTF-8 text encoding)
Example:	disc_name=Sample CD Name\$\$

Command:	disc_type?
Description:	Request type of loaded CD
Return String(s):	disc_type=None\$\$ / disc_type=CD-DA\$\$ / disc_type=HDCD\$\$ / disc_type=MP3\$\$ / disc_type=WMA\$\$
Return Description:	Disc type
Example:	disc_type=CD-DA\$\$

Command:	dimmer?
Description:	Request current front display dimmer level
Return String(s):	dimmer=0\$ / dimmer=1\$ / dimmer=2\$ / dimmer=3\$ / dimmer=4\$ / dimmer=5\$ / dimmer=6\$
Return Description:	Current front display dimmer level
Example:	dimmer=3\$

Command:	version?
Description:	Request the main CPU software version
Return String:	version=#.##\$
Return Description:	Rotel main CPU software version
Example:	version=1.22\$

Command:	model?
Description:	Request the model number
Return String:	model=text\$
Return Description:	Rotel model number
Example:	model=cd14\$