



Rotel T14 RS232 ASCII Controller Command List

Date	Version	Update Description
November 3, 2016	1.00	Original Specification

The T14 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. station 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
115200	N	8	1	None	String

Play-Fi Control Settings

As of this writing, the T14 will only accept and respond to the Play, Pause and Track transport control commands for Play-Fi. However, Stop and FF/FB may be implemented in a later firmware release so they are included in this documentation. The unit does not currently provide any feedback other than source when in Play-Fi mode.

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

T14 ASCII	Command Description	Unit Response
POWER COMMANDS		
power_on!	Power On	power=on\$
power_off!	Power Off	power=off\$
power_toggle!	Power Toggle	power=on/off\$
SOURCE SELECTION COMMANDS		
fm!	Source FM	source=fm\$
dab!	Source DAB	source=dab\$
playfi!	Source PlayFi	source=playfi\$
TUNER CONTROL COMMANDS		
tune_up!	Tune Up	n/a
tune_down!	Tune Down	n/a
preset_up!	Preset Up	n/a
preset_down!	Preset Down	n/a
enter!	Enter Key (for Preset selection)	n/a
fm_mono!	Set FM Mono Mode	fm_mono=mono\$
fm_stereo!	Set FM Stereo Mode	fm_mono=stereo\$
fm_rds!	Toggle through FM RDS or DAB Station Information	fm_rds=text\$\$
set_fm_nn!	Save current FM station to preset nn (01 – 30)	n/a
set_dab_nn!	Save current DAB station to preset nn (01 – 30)	n/a
fm_nn!	Load FM preset nn (01 – 30)	n/a
dab_nn!	Load DAB preset nn (01 – 30)	n/a
PLAYFI TRANSPORT CONTROL COMMANDS		
play!	Play Source	n/a
stop!	Stop Source	n/a
pause!	Pause Source	n/a
trkf!	Track Forward	n/a
trkb!	Track Backward	n/a
ff!	Fast Forward	n/a
fb!	Fast Backward	n/a
OTHER COMMANDS		
dimmer!	Toggle display dimmer	dimmer=#\$
dimmer_0!	Set display to brightest setting	dimmer=0\$
dimmer_1!	Set display to dimmer level 1	dimmer=1\$
dimmer_2!	Set display to dimmer level 2	dimmer=2\$
dimmer_3!	Set display to dimmer level 3	dimmer=3\$
dimmer_4!	Set display to dimmer level 4	dimmer=4\$
dimmer_5!	Set display to dimmer level 5	dimmer=5\$
dimmer_6!	Set display to dimmest setting	dimmer=6\$

T14 ASCII	Command Description	Unit Response
RS232 FEEDBACK COMMANDS		
rs232_update_on!	Set RS232 Update to Auto (On)	n/a
rs232_update_off!	Set RS232 Update to Manual (Off)	n/a

Section 2: Feedback Request Command List

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

Command:	source?
Description:	Request current source
Return String(s):	source=fm\$ / source=dab\$ / source=playfi\$
Return Description:	Current source
Example:	source=dab\$

Command:	fm?
Description:	Request current FM preset number (00 – 30)
Return String(s):	fm_##\$
Return Description:	2 digit current FM preset number. (00 = current station is not a preset)
Example:	fm_02\$

Command:	dab?
Description:	Request current DAB preset number (00 – 30)
Return String(s):	dab_##\$
Return Description:	2 digit current DAB preset number. (00 = current station is not a preset)
Example:	dab_03\$

Command:	fm_mono?
Description:	Request current FM mono/stereo status
Return String(s):	fm_mono=mono\$ / fm_mono=stereo\$
Return Description:	Current FM mono/stereo status
Example:	fm_mono=mono\$

Command:	fm_freq?
Description:	Request current FM frequency
Return String(s):	fm_freq= ##.##\$ / fm_freq=###.##\$
Return Description:	Current FM frequency. For 2 digit frequencies unit will leave 1 space before the frequency number (i.e. fm_freq= ##.#).
Example:	fm_freq=102.50\$ / fm_freq= 99.15\$

Command:	fm_rds?
Description:	Request current FM RDS or DAB station text
Return String(s):	fm_rds=text\$\$
Return Description:	Current FM RDS or DAB station text. DAB stations will report signal strength as a percentage here.
Example:	fm_rds=Sample text\$\$ / fm_rds=RF STRENGTH: 28%\$\$

Command:	dab_station?
Description:	Request current DAB station information
Return String(s):	dab_station=text\$\$
Return Description:	Current DAB station data text
Example:	dab_station=talkRADIO \$\$

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=1.25\$

Command:	mac?
Description:	Request the MAC address of the product (A14 only)
Return String:	mac=#####\$
Return Description:	MAC address (uppercase characters)
Example:	mac=0CEFAF90125E\$

Command:	model?
Description:	Request the model number
Return String:	model=text\$
Return Description:	Rotel model number
Example:	model=t14\$