



# Technical Note 50

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## RKFA-200 Commands

The RKFA-200 is the remote control device for the RKD line of Tucor controllers. It allows the user to turn on and off Schedules and Decoders via a handheld radio transmitter. The RKFA-200 operates in the 150 MHz range and requires no FCC licensing. Control commands are simplified, and no voice feedback from the controller is necessary. All responses from the controller are in the form of “beep” tones, where two beeps indicates a successful command, and one beep indicates an error (i.e., the command was not accepted). To initiate functions, the following key transmission sequences are entered.

### *System Mode Commands*

System mode commands stop all operations. They are used with this format:

**##Command##**

Command	Intention
00	Stop everything
10	Stop all Schedules
11	Stop all Decoders

### *Decoder Commands*

Decoder commands affect decoder operations. They are used with this format:

**##Command#DecoderNumber#Time##**

Command	Decoder	Time (minutes)	Intention
21	1 to 60	1 to 999	Activate Decoder
22	1 to 60	0	Stop Decoder

### *Schedule Commands*

Schedule commands affect Schedule operations. They are used with this format:

**##Command#Schedule##**

Command	Schedule	Intention
31	1 to 4	Activate Schedule
32	1 to 4	Stop Schedule
33	1 to 4, 0	Pause Schedule, or all if 0
34	1 to 4, 0	Resume Schedule, or all if 0

Examples:

Start decoder 6 for 15 minutes: ##21#6#15##  
Stop decoder 55 ##22#55#0##  
Stop all decoders: ##11##  
Start Schedule 4: ##31#4##  
Resume all Schedules: ##34#0##  
Stop everything: ##00##

Note that:

- The # (pound) key is simply that key on the handheld transmitter.
- Sequences start and end with the double pound command (##).
- Responses are two beeps for success, one beep for an error (command not accepted or completed).
- Entering #\* at any time will reset the command string received by the controller. That is, if you make a mistake while entering the commands, just press #\* to start over.
- Multiple Schedules and Decoders can be run simultaneously. The controller does not keep track of nor limit the number of decoders running at the same time, so care must be taken not to overload the system, both electrically and hydraulically.
- The controller must be in Manual or Auto Mode to use the remote. If the RK is in any other mode, all commands will result in an error (one beep).
- The radio works in a line-of-sight fashion between transmitter and receiver. Upon entering a command, if no response is heard (either 1 or 2 beeps), verify that the controller is on and that you are within the operating range of the handheld/receiver. High-gain and directional antennas are optional for extended reception or difficult terrain.
- If any Schedules are running in Auto, the Schedule and System Commands will still affect them. Use caution when using the Stop All commands.