# RC8650 Application Note



## **Engineering Support Services**

### **Using Multiple Dictionaries With the RC8650**

Exception dictionaries allow you to modify the RC8650's behavior by redefining how it interprets character strings it receives. Only one dictionary can be loaded in the RC8650 at any given time, however. The purpose of this application note is to show how two dictionaries can coexist, and how to switch between them.

#### Introduction

An exception dictionary is composed of two sections; one for Text mode, and one for Character mode. Each section is completely independent of the other (see "Character Mode Exceptions" in the *RC8650 User's Manual* for a description of how the sections are divided). When the operating mode is switched between Text and Character modes, dictionary sections are automatically switched also. By leveraging this behavior, dictionaries for two completely different applications, or even two languages, can be implemented.

#### **Implementation**

The following simple example redefines the sequence "abc" two different ways:

```
(abc)=\0121& \014&
C
(abc)=h eh l ow
```

The first section, which is used in Text mode, plays sound files 21 and 4 for the character sequence "abc" ( $\0$ 1 is the representation for the command character, CTRL+A = 0x01). In Character mode, however, "abc" will say the word "hello."

It is important to remember to re-enable the dictionary with the U command any time the operating mode is changed, because the dictionary is disabled whenever the mode is changed. To activate the first section of the dictionary, issue the T and U commands; for the second section, C and U. To use Text and Character modes normally (with the dictionary effectively turned off), simply omit the U command.