

# System Application Notes for Sales and System Engineers

## Next-Link™ Operating Modes

**note:** Mode must be specified at the time of order.

In all cases specified below, the Nextel unit will always have the inbound priority to activate the Next-Link™ system at any time.

### **Mode 1. Default Mode • Open Connection**

Calls from either side, Nextel or Private radio will be heard on the other system. This mode is most useful where the Next-Link™ is connected to a dedicated base station with a unique code, channel or talk group for the Nextel connection. The Next-Link™ activity timer is set for no time out. Nextel is set for continuous connection. Calls initiated from either system will be heard on the other system. Next-Link™ does not time out.

### **Mode 2. Nextel Priority**

Nextel controls activation of Next-Link™. Nextel unit connected to Next-Link™ is set for time out option. The Nextel hand held must be programmed for “One Touch” mode. Call initiated by a Nextel unit activates the connection to the Private radio base station via Next-Link™. The Nextel times out after no activity for 30 seconds. After the Nextel unit has timed out, the Private radio system cannot initiate a call until a call is placed from a Nextel unit

### **Mode 3. Private Radio Priority**

Private radio access is determined by the base station programming configuration to provide a logic low to the Next-Link™. The private radio base station is programmed for RSL, COR, tone, signaling trunk group etc. The private radio base station controls Next-Link™ with logic low output to activate and reset the activity timer. Private radio unit can initiate a call to Nextel and again resets the Next-Link™ activity timer. Nextel unit is set for continuous connection. Next-Link™ keys Nextel unit, which in turn accesses the Nextel Network. Any Nextel unit monitoring that ID will receive the call. Next-Link™ goes to inactive state after Next-Link™ activity timer times out. After time out, a Nextel unit calling can initiate a call to the Private radio system.

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## **Mode 4. DTMF control in Next-Link™**

A DTMF 4 digit code made up of any combination of 1, 2, 4 and 8 will allow the internal DTMF decoder feature within the Next-Link™ unit to become active. The Private radio unit keys the DTMF activation code “nnnn” to turn on the Next-Link™ via the internal DTMF decoder. Bi-directional connection is now established until the internal activity timer times out after 60 seconds of channel inactivity. Nextel can re-establish connection at any time. The private radio must re-send the DTMF code to reactivate Next-Link™.

**Note: The DTMF Code nnnn is factory programmed at the time of order. Other codes may be requested and can be programmed into the unit at the time of order at no additional charge. Code sequence is 1,2 4 and 8 and is not repeated in the sequence. Example, 1248, 8241, 2418 etc.**

## **Nextel subscriber product recommendation**

American Wireless recommends a basic Nextel subscriber unit be used with only Direct Connect service activated for use with the Next-Link™. Units such as **the i205, i265 and i760 are preferred units**, which have been field-tested in this application.

American Wireless will supply the interface cable and cradle for the unit specified by the customer.

## **Nextel Subscriber Programming**

When interfacing a Nextel subscriber unit to the Next-Link™, the following programming setups need to be performed for Option 2: Set unit for Direct Connect, Assigned Number and Time-out ON.

For this example the i205, 305, 530, 730 operations manual will be referenced. Similar information can be found in other subscriber unit manuals.

1. From Nextel Ready Screen
2. Press Menu
3. Select Settings, press Select
4. Select DC/GC Options, press Select
5. Select One Touch DC, press Select
6. Select Assigned Number, press Select
7. Add #.....
8. For Talk-group, enter #1 for Group 1, #2 for Group 2, etc.(Optional)
9. Press OK
10. Press Hang-up Button (Red Phone)

Subscriber Unit will now be in the default time-out mode (usually 10 to 20 seconds).

Consult the specific subscriber manual for the steps to change this time, if necessary.