

1. General Introduction

The SCH-470 cellular phone functions as only digital cellular phone working in CDMA (Code Division Multiple Access) mode. CDMA type digital mode applies DSSS (Direct Sequential Spread spectrum) mode which first came to be used in the military.

The DSSS reduces channel cross talk and allow to use one frequency channel by multiple users in the same specific area, resulting in increase of channel capacity to about ten times compared to that of analog mode currently used.

Soft/Softer Handoff, Hard Handoff, and Dynamic RF Power Control technologies are combined into this phone to reduce the call drop while usage.

CDMA digital cellular network consists of MSO (Mobile Switching Office), BSC (Base Station Controller), BTS (Base Station Transmission System), and MS (Mobile Station). MS meets the specifications of the below:

¶TIS-95A : Mobile Station-Base Station Compatibility Standard for Dual-Mode Wideband Spread Spectrum Cellular System

¶TIS-96A : Speech Service Option 1 Standard for Dual-Mode Wideband Spread Spectrum Cellular Systems

¶TIS-98A : Standards for Dual-Mode Wideband Spread Spectrum Cellular Mobile Station

¶TIS-126 : Mobile Station Loopback Service Options Standard

SCH-470 is composed of main handset, rapid charger, cradle, two batteries.

1.1 General

¶ Frequency Range		U
Transmitter	: 824.64 ~ 848.37 MHz	
Receiver	: 869.64 ~ 893.37 MHz	
¶ Channel Spacing	: 1.23 MHz	U
¶ Number of Channels	: 20 FA	U
¶ Duplex Spacing	: 45 MHz	U

° MSC Transmitter Frequency

FA NO.	CH. NO.	CENTER FREQUENCY	FA NO.	CH. NO.	CENTER FREQUENCY
1	1011	824.640MHz	11	404	837.120MHz
2	29	825.870MHz	12	445	838.350MHz
3	70	827.100MHz	13	486	839.580MHz
4	111	828.330MHz	14	527	840.810MHz
5	152	829.560MHz	15	568	842.040MHz
6	193	830.790MHz	16	609	843.270MHz
7	234	832.020MHz	17	650	844.270MHz
8	275	833.250MHz	18	697	845.910MHz
9	316	834.480MHz	19	738	847.140MHz
10	363	835.890MHz	20	779	848.370MHz

° MSC Receiver Frequency

FA NO.	CH. NO.	CENTER FREQUENCY	FA NO.	CH. NO.	CENTER FREQUENCY
1	1011	869.640MHz	11	404	882.120MHz
2	29	870.870MHz	12	445	883.350MHz
3	70	872.100MHz	13	486	884.580MHz
4	111	873.330MHz	14	527	885.810MHz
5	152	874.560MHz	15	568	887.040MHz
6	193	875.790MHz	16	609	888.270MHz
7	234	877.020MHz	17	650	889.270MHz
8	275	878.250MHz	18	697	890.910MHz
9	316	879.480MHz	19	738	892.140MHz
10	363	880.890MHz	20	779	893.370MHz