DIGITECH

Model:DC-1120
Compact 5W UHF CB Radio

# Instruction Manual

> ⚠️ **NOTE**
>
> Use of the citizen band radio service is licensed in Australia by ACMA Radio communications (Citizen Band Radio Stations) Class Licence and in New Zealand by MED General User Radio Licence for Citizens Band Radio. Operation is subject to conditions contained in those licences.

Feature

- 80 channels
- 5W output power
- 38 CTCSS and 83 DCS
- VOX function
- Call tone melody (5 songs)
- Rotary volume with power on/off
- LCD back-light function
- Key back-light
- 5 step adjustable and automatic squelch function
- 20 memory store
- Repeater function
- Key lock function
- Key tone function (selectable on/off)
- Roger tone function (selectable on/off)
- Triple watch function
- Scan channel/Memory scan
- Stop watch function (<59'59")

Controls and Indicators

Front View
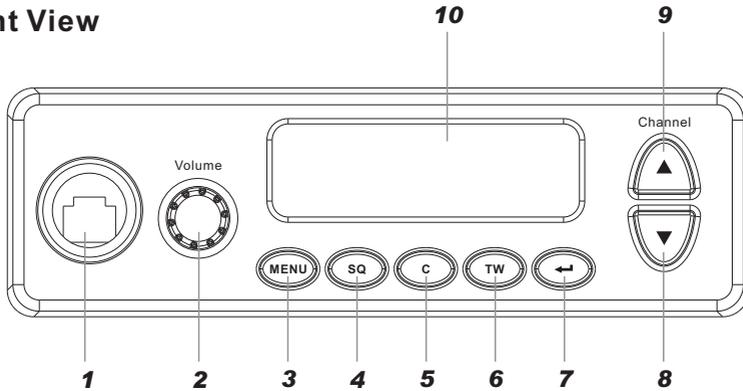
Rear View
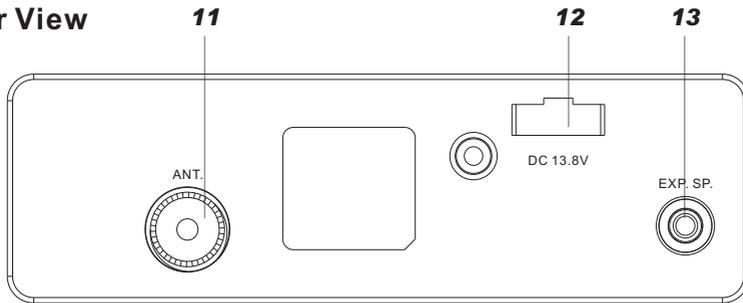
1. Microphone connection
2. Power ON/OFF and Volume Knob
3. MENU button
4. Squelch SQ button
5. Call C button
6. Triple TW watch button
7. Confirm ← button
8. Down ▼ button (Channel /Menu)
9. Up ▲ button (Channel /Menu)
10. LCD Display
11. UHF Antenna connection
12. Power Input connection (13.8V DC)
13. Ext. Speaker Jack
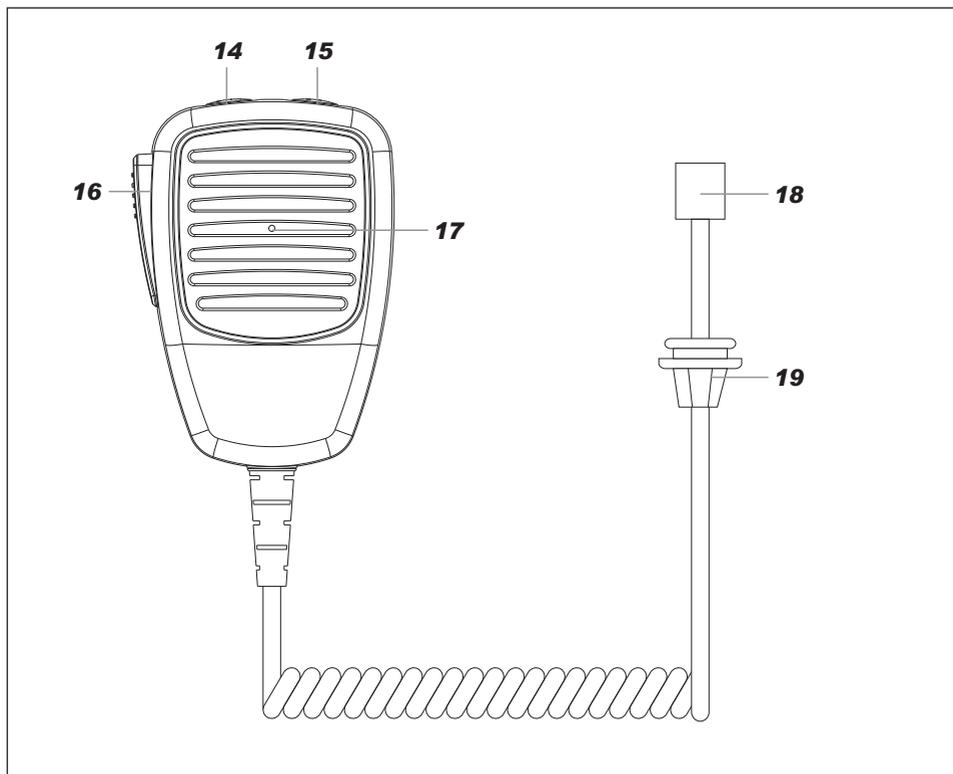
14. Channel Down Button
15. Channel Up Button
16. PTT - Push To Talk Button
17. Microphone
18. RJ45 Type plug
19. MIC Jack cover
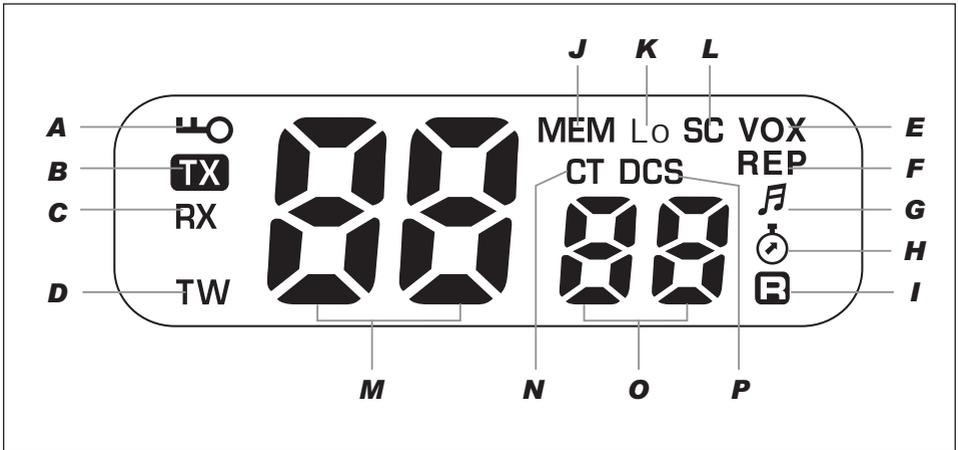
A. Keypad LOCK
B. TX Icon - is lighted when the radio is in transmit mode
C. RX Icon - is lighted when the radio is in receive mode
D. TW Icon - Triple Watch function
E. VOX - Hands-free use
F. REP Icon -is lighted on when repeater function is switched on
G. Keypad Beep Tone
H. Stop Watch function
I.   ⊞ -Roger Beep function
J. MEM - Memory Indicator
K. Lo - indicates low power transmission
L. SC Icon - Automatic channels or CTCSS Code scanning
M. Selected Channel Indication
N. CTCSS - continuous tone coded squelch system
O. CTCSS & DCS code number
P. DCS - digital coded squelch
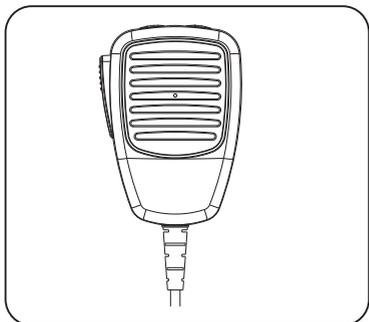
Standard Microphone

Instruction manual
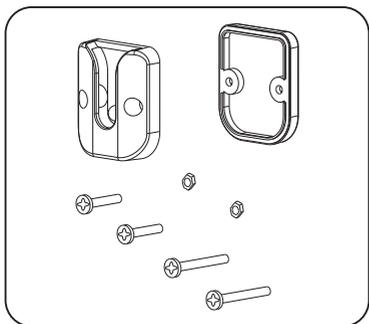
Microphone Hanger,
Screws & Washers
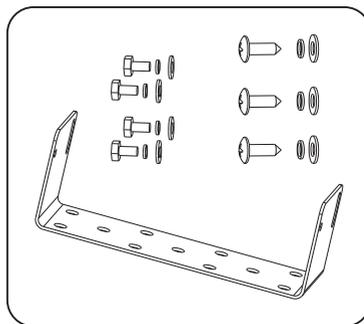
Mounting cradle,
Screws & Washers
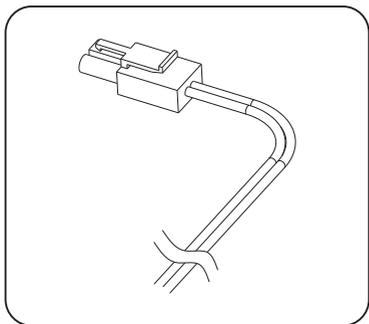
DC Power Cord

Connecting the Microphone

The microphone uses a miniature 6 pin style plug and socket.

To connect the microphone:
1. Push the MIC plug at the end of the microphone cord into the MIC jack until the connection locks into place. Gently tug the MIC cord to test that the connection is locked.
2. Use the MIC Jack cover which is threaded onto the MIC cord to seal the MIC jack entry from dust.

Volume
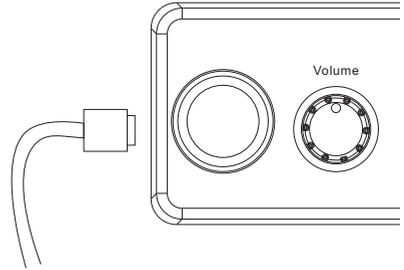
Mounting the Cradle

The cradle can be screwed or bolted in any convenient location in your vehicle (under or above the dash, on the centre console, etc) using the mounting slots provided in the base.
For maximum sound output from the build in speaker, we recommend the cradle be mounted above the radio to minimize any obstruction of the speaker.

Avoid mounting close to heaters or air conditioners. Screw the mounting cradle to a firm surface and put the radio into the cradle from the front until it clicks into place.
Finally, connect the power cord and antenna cable to the sockets provided at the rear of the radio.
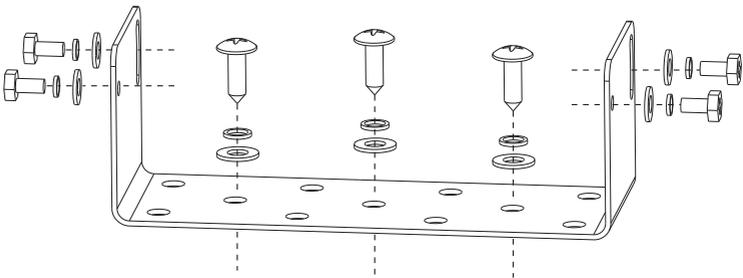
Mounting the MIC Hanger

The Microphone Hanger comes in two parts. How and where you mount the MIC hanger will determine which parts to use.

Conventional Mounting with Screws

Use the front part of the MIC hanger only.
Locate a suitable mounting position, mark
and drill two 3mm holes.
Fix the MIC hanger into place with screws.
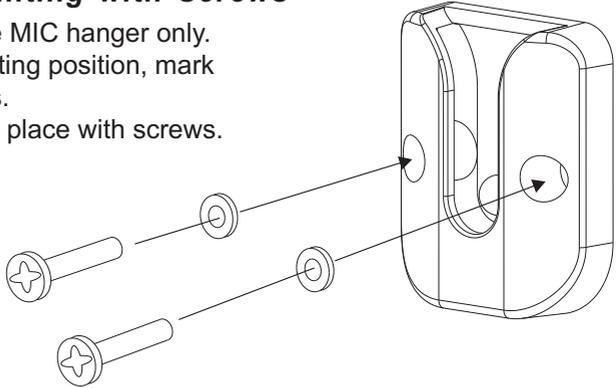
Conventional Mounting with Double Sided Tape (not supplied)

High quality Double-Sided tape can be found at good retail stores.
Secure the front and back pieces of the MIC Hanger using the supplied binding screws.
Locate a suitable mounting position.
Apply high quality Double-Sided tape onto the flat area of the MIC Hanger back piece and then press firmly to the mounting position.
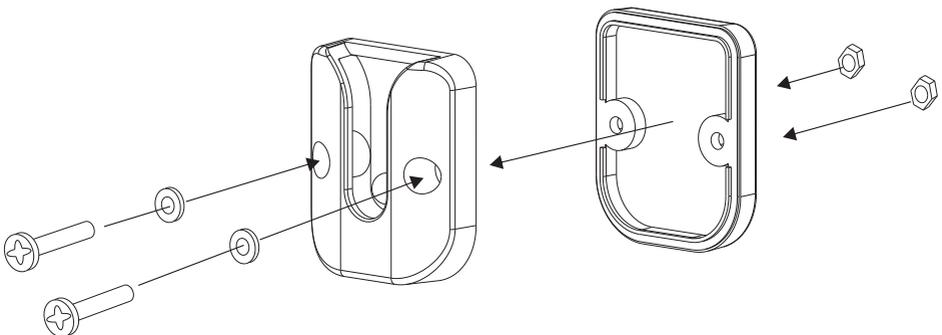
Turning on the radio

Rotate the ON/OFF volume knob clockwise to turn ON and adjust the volume, the radio is then going to self-inspection.
A series of tones will indicate the radio is on and full screen displayed 1 second.
If it is the first time to turn on the radio, the default parameter as below:

Parameter	Default setting
Channels	1
CTCSS privacy codes	0
DCS privacy codes	0
SQ levels	Auto
TX power	5W
VOX on/off	OFF
Call Tone	5
Roger Tone	ON
Key Tone	ON
Lock states	Unlock

Turning off the radio

Rotate the ON/OFF volume knob counterclockwise until a click sound to turn OFF radio.

Channel Selection

Press the ▲ or ▼ button to select the desired channel (1-80).
Press and hold the ▲ or ▼ button, the selection will move quicker.

- Before selecting a channel for transmitting, always listen on it and ensure it is not already being used. Always avoid selecting a busy channel when the unit keeps on receiving signal from unknown party. The icon 'RX' will be displayed.
- Channel 5 and 35 are for emergency calling. Please do not use these channels in non-emergency cases.
- Speech telephony is inhibited on Channel 22 and 23.
- Channel 1-8 and 31-38, 41-48 and 71-78 are used as repeater channels with 750kHz offset. Channels 1-8 and 41-48 are used for mobile reception and channels 31-38 and 71-78 for mobile transmission.

- Only use the repeater function when a long distance communication via the local repeater facility is specifically required. Unless it is necessary, to avoid operation on locally used repeater input channels (channels 31 to 38 and channels 71 to 78) or locally used repeater receiving channels (channels 1 to 8 and channels 41 to 48) is recommended.
- Channel 61, 62 and 63 are reserved for future use. They cannot be activated until approved by the ACMA CBRS Class Licence in Australia.

In Australia,
- Channel 11 is the customary calling channel for establishing communication;
- Channel 40 is the customary road vehicle channel.

Note:

This product is made to the new standard 2011 version.

There are possible operational issues during the changeover from the old version 25kHz to the new verison of 12.5kHz channel spacing. They include the consequences of narrowband (with 2.5kHz deviation) transmissions being received on the old wideband equipment, and wideband (with 5.0kHz deviation) transmissions being received on newer narrowband equipment.

There is a possibility of interference due to the older equipment being operated on channels adjacent to new narrowband channels.

The list of currently authorised channels can be obtained from the ACMA website in Australia and the MED website in New Zealand.

Adjusting Volume
Rotate the volume knob to have the desire volume.

Receiving a signal
The unit is continuously in the RECEIVE mode when the unit is ON and not transmitting.

When you receive a signal on the current channel, the RX icon is appeared on the LCD display

Transmitting
Press and hold the `PTT` button on the hand mic and speak gently to transmit your voice. The TX icon will be displayed on the LCD display.

Time-out Timer
The unit will disable transmitting while the `PTT` button pressed exceed 180 seconds.

Release and Press the `PTT` button again to re-activate transmitting.

Monitor
1. Press and hold the **SQ** button more than 2 seconds to activate the Monitor Function, you will hear background noise and possible weak signal from the unit, when you released less than 5 seconds to return.
2. Press and hold the **SQ** button more than 5 seconds to extended monitor;
3. Press the **SQ** button once to return.

Squelch level setting
1. Press the **SQ** button to set Squelch level,
2. Press the **▲** or **▼** button once to select the desired level (Auto,1,2,3,4,5)
   Press and hold the **▲** or **▼** button, the selection will move quicker.

Triple Watch setting
Triple Watch mode monitors channels 35 and 5 for a signal while you listen to the currently selected channel.
1. Press **TW** button to scanning current channel and channel 35 and 5;
2. Press **TW** button once to return.

Repeater function
Repeater facility is a third party facility which is only available in some local areas.
Only use this function for extending your communication range when you know the channel of the repeater facility in your area.
Push and hold the Call key to activate the Repeater function, push and hold the Call key again for release the Repeater function.
Unless it is necessary, to avoid operation on locally used repeater input channels (channels 31 to 38 and channels 71 to 78) or locally used repeater receiving channels (channels 1 to 8 channels 41 to 48) is recommended.

Sending a Call Tone
With the unit in normal mode, press the **C** button.
The microphone will be muted and the unit will transmit the current Call tone to other users with the same channel and CTCSS code.
The **TX** icon will be displayed on the LCD display.
Call tone can only be transmitted once (not more than 3 sec) in any 60 sec period.
It means that the unit will not transmit a call tone more than once no matter how many times you press the **C** button within a minute.

CTCSS code setting
The radio has 38 CTCSS private codes available. Different CTCSS tones may be associated to different channels.
To choose the desired CTCSS code, please proceed as follow.
1. Press `MENU` button one time, the CTCSS code number blinks on the LCD display. The CTCSS code indicates that no CTCSS tone is programmed on that channel.
2. Press the ▲ or ▼ button to select the desired CTCSS code number. Press and hold the ▲ or ▼ button, the selection will move quicker.
Selecting a CTCSS code will enable the CTCSS feature. To communicate between two or more radios, both the channel and CTCSS code selections must be the same.
To communicate with other models and brands of radios, the actual radio frequency and CTCSS frequency must be matched.CTCSS codes on Emergency Channel 5 and 35 are inhibited.

DCS code setting
The radio has 83 DCS private codes available. Different DCS tones may be associated to different channels.
To choose the desired DCS code, please proceed as follow.
1. Press `MENU` button two times, until DCS code number blinks on the LCD display. The DCS code indicates that no DCS tone is programmed on that channel.
2. Press the ▲ or ▼ button to select the desired DCS code number. Press and hold the ▲ or ▼ button, the selection will move quicker.
DCS codes on Emergency Channel 5 and 35 are inhibited.

HI/LOW power setting
This feature permits the selection of the transmitting power level .
Before transmitting a speech to other units, press the `MENU` button three times to select the desired power output 5W.

VOX (Voice activate) setting
In VOX mode, the unit will transmit a signal only when it is activated by your voice or other sounds around you. The unit will transmit for a further for 1 second even if you stop talking.
To set the VOX sensitivity level:
1. Press `MENU` button four times, the **VOX** icon will display and the current VOX level will start blinking on the LCD display.
2. Press the ▲ or ▼ button to select the VOX level sensitivity. The highest sensitiving level is 5.

Memory setting
1. Press `MENU` button five times, until the MEM icon is displayed and channel number is blinking.
2. Press ▲ or ▼ button to select desired channel, then press ↵ button to confirm the channel.
   The most channel you can store 20 channels.

Channel scanning
Channel scan performs searches for active signals in an endless loop from channels.
1. Press `MENU` button six times, the SC, channel number and CTCSS number icons will start blinking on the LCD display.
2. Press the ▲ or ▼ button to activate the channel scan mode.
The channel number on the LCD display changes rapidly until an active signal is detected.
When an active signal is detected, channel scan pauses on the active channel.

CTCSS code scanning
1. Press `MENU` button seven times, until the SC icons displayed and CTCSS code will start blinking.
2. Press ▲ or ▼ button to start the CTCSS code scanning.

DCS code scanning
1. Press `MENU` button eight times, until the SC icons displayed and DCS code will start blinking.
2. Press ▲ or ▼ button to start the DCS code scanning.

Memory scanning
1. Press `MENU` button nine times, until the MEM icon is displayed.
2. Press ▲ or ▼ button to scanning.

Call Tone setting
Call tone can only be transmitted once (not more than 3 sec) in any 60 sec period.
It means that the unit will not transmit a call tone more than once no matter how many times you press the C button within a minute.
The unit is equipped with 5 user selectable Call tone melodies.
1. Press MENU button ten times, until the C indicated and call tone code will start blinking.
2. Press ▲ or ▼ button to set the desired melody, between the 5 available melodies.
3. Press the C button to transmit the Call Tone Melody.

Roger Beep Tone setting
The radio is equipped with a user selectable Roger Beep Tone feature, which enables you to send a Beep Tone at the end of each transmission after every release of the PTT Key.
This will prompt any receiving unit that your transmission has ended.
1. Press MENU button eleven times, until the 🔲 icon and the ON or OFF indications will start blinking on the LCD display.
2. Press ▲ or ▼ button to set the desired selection ON (Roger Beep tone enabled) or OFF(Roger Beep tone disabled). If the Roger Beep function is enabled, a beep tone is heard to confirm the selection.
   When the Roger Beep tone is enabled, the tone 🔲 icon appears on the LCD display.

Key Tone setting
When a key is pressed, a beep tone is heard to confirm your command. The user many enable or disable this key tone.
1. Press MENU button twelve times, until the ♬ icon and the ON or OFF indications will start blinking on the LCD display.
2. Press ▲ or ▼ button to set the desired selection ON (Key tone enabled) or OFF(Key tone disabled). If the Key tone function is enabled, a beep tone is heard to confirm the selection.
3. When the Roger Beep tone is enabled, the tone ♬ icon appears on the LCD display.

Stop Watch Setting

Press **MENU** button thirteen times, until 00:00 indications and
the ⏱ icon will start blinking on the LCD display.
1. Press ▲ button to start the timer.
2. Press ▼ button to stop the timer
3. Press ▼ button again to re-start.

Key Lock

Press and hold the ⊶ button for 2 seconds to activate/deactivate the Key
Lock feature, the ⊶ icon will appear/disappear on the LCD display.

Channel Table

Channel Number	Frequency (MHZ)	Channel Number	Frequency (MHZ)	Channel Number	Frequency (MHZ)
1*	476.4250	28	477.1000	55	476.7875
2*	476.4500	29	477.1250	56	476.8125
3*	476.4750	30	477.1500	57	476.8375
4*	476.5000	31*	477.1750	58	476.8625
5*	476.5250	32*	477.2000	59	476.8875
6*	476.5500	33*	477.2250	60	476.9125
7*	476.5750	34*	477.2500	61++	–
8*	476.6000	35*	477.2750	62++	–
9	476.6250	36*	477.3000	63++	–
10	476.6500	37*	477.3250	64	477.0125
11	476.6750	38*	477.3500	65	477.0375
12	476.7000	39	477.3750	66	477.0625
13	476.7250	40	477.4000	67	477.0875
14	476.7500	41*	476.4375	68	477.1125
15	476.7750	42*	476.4625	69	477.1375
16	476.8000	43*	476.4875	70	477.1625
17	476.8250	44*	476.5125	71*	477.1875
18	476.8500	45*	476.5375	72*	477.2125
19	476.8750	46*	476.5625	73*	477.2375
20	476.9000	47*	476.5875	74*	477.2625
21	476.9250	48*	476.6125	75*	477.2875
22+	476.9500	49	476.6375	76*	477.3125
23+	476.9750	50	476.6625	77*	477.3375
24	477.0000	51	476.6875	78*	477.3625
25	477.0250	52	476.7125	79	477.3875
26	477.0500	53	476.7375	80	477.4125
27	477.0750	54	476.7625		

* Channel 5 and 35 are for emergency calling. Please do not use these sub-channels in non-emergency cases.
+ Speech telephony is inhibited on Channel 22 and 23.
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CTCSS Frequency Table

Sub Channel	Frequency (MHZ)	Sub Channel	Frequency (MHZ)	Sub Channel	Frequency (MHZ)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
13	103.5	26	162.2		

DCS Frequency Table

Channel Number	Octal Code	Channel Number	Octal Code	Channel Number	Octal Code	Channel Number	Octal Code
1	023	22	143	43	315	64	532
2	025	23	152	44	331	65	546
3	026	24	155	45	343	66	565
4	031	25	156	46	346	67	606
5	032	26	162	47	351	68	612
6	043	27	165	48	364	69	624
7	047	28	172	49	365	70	627
8	051	29	174	50	371	71	631
9	054	30	205	51	411	72	632
10	065	31	223	52	412	73	654
11	071	32	226	53	413	74	662
12	072	33	243	54	423	75	664
13	073	34	244	55	431	76	703
14	074	35	245	56	432	77	712
15	114	36	251	57	445	78	723
16	115	37	261	58	464	79	731
17	116	38	263	59	465	80	732
18	125	39	265	60	466	81	734
19	131	40	271	61	503	82	743
20	132	41	306	62	506	83	754
21	134	42	311	63	516		