

### **Time operation**

In time operation (TO) mode, the scanner stops when it detects a signal, and after a factory preset time out, it resumes scanning.

### **Carrier operation**

In carrier operation (CO) mode, the scanner stops when it detects a signal, and after a factory preset time with no signal, it resumes scanning.

### **Search operation**

In search operation (SE) mode, the scanner stops when it detects a signal. To resume scanning, please press and hold LAMP key.

### **Countdown timer**

A countdown is a sequence of backward counting to indicate the time remaining before an event is scheduled to occur. There are a lot of different selections. Please do as below:

1. Press menu key to enter the menu.
2. Using arrow keys to navigate between the menu items until you come to NO.6 ALARM.
3. Press Menu key to select.

4. Using arrow keys to select different setting.
5. Press Menu key to save and confirm.
6. Press SOS or PTT button to exit the menu.

### **Selective calling**

Sometimes when you are working with large groups of people using the same channel, things can get very crowded. To minimize this problem, several methods blocking out unwanted transmission on your frequency have developed. In general, there are two forms of selective calling in two-way radio systems: Group calling and individual calling.

Group calling, as the name suggest, is one - to-many form of communication. Every radio in your working group is configured the same way and any radio will make contact with every other radio in the group.

Individual calling, sometimes also known as paging, is one-to-one many form of communication. Every radio is programmed with a unique ID code. And only by sending out a matching code can you get that radio open up to your transmissions.

The Baofeng BF-T1 features three different ways of group calling.

### CTCSS / DCS

#### Tone-burst (1750Hz)



1. Using these features does not mean that others won't be able to listen in on your transmissions.  
They only provide a method to filter out unwanted incoming transmissions.
2. CTCSS/DCS only could be changed via program software.

### 1750Hz Tone-burst

To send out a 1750Hz Tone-burst; press the MONI/VOL key while holding down the PTT. No further configuration required using this feature.



*If you have the keypad lock enabled on your radio, you can still send a 1750Hz tone the regular way without having to unlock your radio.*

### Repeaters

A radio repeater is an automated transceiver in a fixed location. Usually mounted high up on hilltops or on tall buildings, but sometimes they operate within buildings for internal use. A repeater takes one signal and relays it, usually after amplifying it

by orders of magnitude. This could be very handy, as this enables you to use a small low powered hand-held two-way transceiver to reach great distances.

How to activate the relay function.

1. Press menu key to enter the menu.
2. Using arrow keys to navigate between the menu items until you come to NO.9 RELAYM.
3. Press Menu key to select.
4. Using arrow keys to select different setting.
5. Press Menu key to save and confirm.
6. Press SOS or PTT button to exit the menu.



1. The RX and TX frequency only could be programmed by software.
2. Better encoded with CTCSS or DCS, the squelch level should be 5.

### Programming

Memory channels are an easy to store commonly used frequencies so that they can easily be retrieved at a later date.

The BF-T1 features 20 memory channels that each can hold: Receive and transmit frequencies, transmit power, group signaling information, bandwidth.

**Computer programming**

The radio kit doesn't include a programming cable. To attain a data cable, please contact your dealer for it and the software.

**Appendix.A****Troubleshooting**

Symptom	Possible Cause	Solution
•The radio doesn't start.	•The battery is too low. •The battery isn't correctly installed.	•Change or recharge the battery. •Remove the battery and reinstall it
•The battery dies quickly.	•The battery is dead. •The battery isn't fully charged.	•Purchase a new battery. •Recharge the battery.
•The LED indicates reception, •But the speaker is silent.	•Volume is too low. •CTCSS or DCS enabled.	• Turn up the volume. • Change the CTCSS or DCS to match • Those you are trying to communicate. • Turn off your CTCSS or DCS.
•Others can't hear your transmission.	•Their CTCSS or DCS settings •Don't match yours. •You are too far apart.	•Change your CTCSS or DCS •Settings to match your peers. •Move in closer.

## Appendix.B

### Menu definitions

See working the menu system for more info about using the menu-system.

Menu	Name (full name)	Settings	Description
1	SQL-Squelch Level	[0-9] Setting the squelch to 0 will open up the squelch entirely.	Squelch silences the receiver When there is no signal.
2	LIGHT-Display Illumination	OFF/ON/Key	Selection for the LCD backlight
3	BEEP-Keypad Beep Of a key press.	OFF/ON	Allows audible conformation
4	VOX-Voice Operated TX	OFF/1-9	It is not necessary to push the PTT button on the transceiver,When enable it. Adjust the gain level to an appropriate sensitivity to allow smooth transmission
5	VOICE-Voice Prompt	OFF/CHI/EN	Allows audible voice conformation Of a key press.

6	ALARM- Countdown timer	OFF/0.5H/1.0H/.../8.0H	to indicate the time remaining before an event is scheduled to occur.
7	TOT-Transmission Time Out Timer	OFF/30S/60S/.../180S	This feature provides a safety switch that limits transmission time to a programmed value. This will promote battery Conservation by not allowing you to Make excessively long transmissions, And in the event of a stuck PTT switch It can prevent interference to other users As well as battery depletion.
8	SCANM-Scanner Resumed Method	TO/CO/SE	See chapter...
9	RELAYM-Relay Mode	TX/RX/OFF	TX: Synchronize the frequency of TX Base fstation. RX: Synchronize the frequency of RX Base station

10	BCLO-Busy Channel Lock-out	ON/OFF	Disables the [PTT] button on a channel that is in use. The transceiver will sound A beep tone and will not Transmit if the [PTT] button Is pressed when a channel Is already in use.
11	STE-Squelch Tail Elimination	ON/OFF	This function is used Eliminate the squelch tail Noise between radios That are communicating Directly.
12	RXODE-Reception CTCSS/DCS	OFF/CTCSS,DCS see Appendix...	Mutes the speaker of the transceiver in the absence of a specific low-level Signal. If the station you are listening to Does not transmit this specific and Continuous signal, you will not Hear anything.
13	TXODE-Transmit CTCSS/DCS	OFF/CTCSS,DCS see Appendix...	Transmits a specific low-level digital signal to unlock the squelch of a Distant receiver.
14	W/N-Wideband/Narrowband	WIDE/NARROW	Wideband (25KHz bandwidth) Narrowband (12.5KHz bandwidth)

## Appendix.C

### General

Frequency Range	462.5500-462.7250MHz 467.5625-467.7125MHz
Storage Channel	22
Step Frequency	12.5
Rated voltage	DC 3.7V
Frequency Stability	±2.5ppm
Work Temperature	-20 °C to +60°C
Battery Capacity	H-1500m Ah (Li-ion Battery)
Battery Life	About 12 Hours
Antenna Impedance	50Ω
Dimension	108x55x21 mm (Including Antenna)
Weight	120g(Including battery)

## Transmitter

Output Power	0.5W
Modulation Mode(W/N Band)	11KΦF3E
Maximum Frequency Deviation (W/N Band)	≤5KHz / ≤2.5KHz
Spurious Power	≤7.5 μ W
Adjacent channel power	≤-65dB/≤-60dB
Audio Distortion	<5 %
SNR	≥-45dB/≥-40dB
CTSCC/DCS Frequency Deviation(W/N Band)	0.7±0.1KHz (W), 0.4±0.1KHz (N)
Modulation Sensitivity	8-12mV
Transmitting Current	≤1000mA

## Receiver

Sensitivity	<0.25 μ V (12dB SINAD)
Audio Power	1W
Inter modulation Interference Resistance	≥65dB (W), ≥60dB (N)
Adjacent channel?Selectivity (W/N Band)	≥65dB (W), ≥55dB (N)
Audio Distortion	5 %
Receiving Current	≤380m A

This transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between user and the device or its antenna shall be at least 2.5 cm. All qualified end-users of this device must have the knowledge to control their exposure conditions and/or duration to comply with General Population / Uncontrolled Exposure limit and requirements. The highest reported SAR values for Face-held, body-worn conditions are 0.330 W/Kg, 0.336 W/Kg.

## TCSS Table (50)

No	Tone (Hz)	No	Tone (Hz)	No	Tone (Hz)	No	Tone (Hz)	No	Tone (Hz)
1	67.0	11	94.8	21	131.8	31	171.3	41	203.5
2	69.3	12	97.4	22	136.5	32	173.8	42	206.5
3	71.9	13	100.0	23	141.3	33	177.3	43	210.7
4	74.4	14	103.5	24	146.2	34	179.9	44	218.1
5	77.0	15	107.2	25	151.4	35	183.5	45	225.7
6	79.7	16	110.9	26	156.7	36	186.2	46	229.1
7	82.5	17	114.8	27	159.8	37	189.9	47	233.6
8	85.4	18	118.8	28	162.2	38	192.8	48	241.8
9	88.5	19	123.0	29	165.5	39	196.6	49	250.3
10	91.5	20	127.3	30	167.9	40	199.5	50	254.1

## DCS Table (210)

D023N	D025N	D026N	D031N	D032N	D036N	D043N	D047N	D051N	D053N	D054N	D065N
D071N	D072N	D073N	D074N	D114N	D115N	D116N	D122N	D125N	D131N	D132N	D134N
D143N	D145N	D152N	D155N	D156N	D162N	D165N	D172N	D174N	D205N	D212N	D223N
D225N	D226N	D243N	D244N	D245N	D246N	D251N	D252N	D255N	D261N	D263N	D265N
D266N	D271N	D274N	D306N	D311N	D315N	D325N	D331N	D332N	D343N	D346N	D351N
D356N	D364N	D365N	D371N	D411N	D412N	D413N	D423N	D431N	D432N	D445N	D446N
D452N	D454N	D455N	D462N	D464N	D465N	D466N	D503N	D506N	D516N	D523N	D526N
D532N	D546N	D565N	D606N	D612N	D624N	D627N	D631N	D632N	D645N	D654N	D662N
D664N	D703N	D712N	D723N	D731N	D732N	D734N	D743N	D754N			

D023I	D025I	D026I	D031I	D032I	D036I	D043I	D047I	D051I	D053I	D054I	D065I
D071I	D072I	D073I	D074I	D114I	D115I	D116I	D122I	D125I	D131I	D132I	D134I
D143I	D145I	D152I	D155I	D156I	D162I	D165I	D172I	D174I	D205I	D212I	D223I
D225I	D226I	D243I	D244I	D245I	D246I	D251I	D252I	D255I	D261I	D263I	D265I
D266I	D271I	D274I	D306I	D311I	D315I	D325I	D331I	D322I	D343I	D346I	D351I
D356I	D364I	D365I	D371I	D411I	D412I	D413I	D423I	D431I	D432I	D445I	D446I
D452I	D454I	D455I	D462I	D464I	D465I	D466I	D503I	D506I	D516I	D523I	D526I
D532I	D546I	D565I	D606I	D612I	D624I	D627I	D631I	D632I	D645I	D654I	D662I
D664I	D703I	D712I	D723I	D731I	D732I	D734I	D743I	D754I			