QUANSHENG

使用说明书

VHF 调频对讲机

TG-25AT

UHF 调频对讲机

TG-45AT

QUANSHENG CORPORATON

福建南安市泉盛电子有限公司

Fujian Nanan City QuanSheng Electronics Co.,Ltd.

Thanks!

Thanks for purchasing **QUANSHENG** walkie-talkie. we believe the easily used machine will provide you the reliable communication.

This booklet applies to the following machines:

TG-25AT : 99-channel VHF FM TRANSCEIVER.

TG-45AT : 99-channel UHF FM TRANSCEIVER.

Cautions Before Using

- Maintenance can only be undertook by professional technicians.

- Do not use the machine or charge the battery in the environment (such as, gas, dust or vapor).

- Do not turn on the machine while refueling or parking at the gas station.

- Do not refit or revise the machine by any excuse.

- Do not put it in the direct radiate sun for a long time, or put it nearby the heater.

- Do not put it in the extreme dusty, wet or splashed places, or on the unsteady surface.

- Keep it dry. Rainwater or dampness may erode the electron line.

- If find the peculiar smell or mist giving off from the machine, cut off the power supply at once and take out the battery, then contact with **QUANSHENG** distributor.

SAFETY: It is very important for users to know about the common dangerous knowledge of the walkie-talkie.

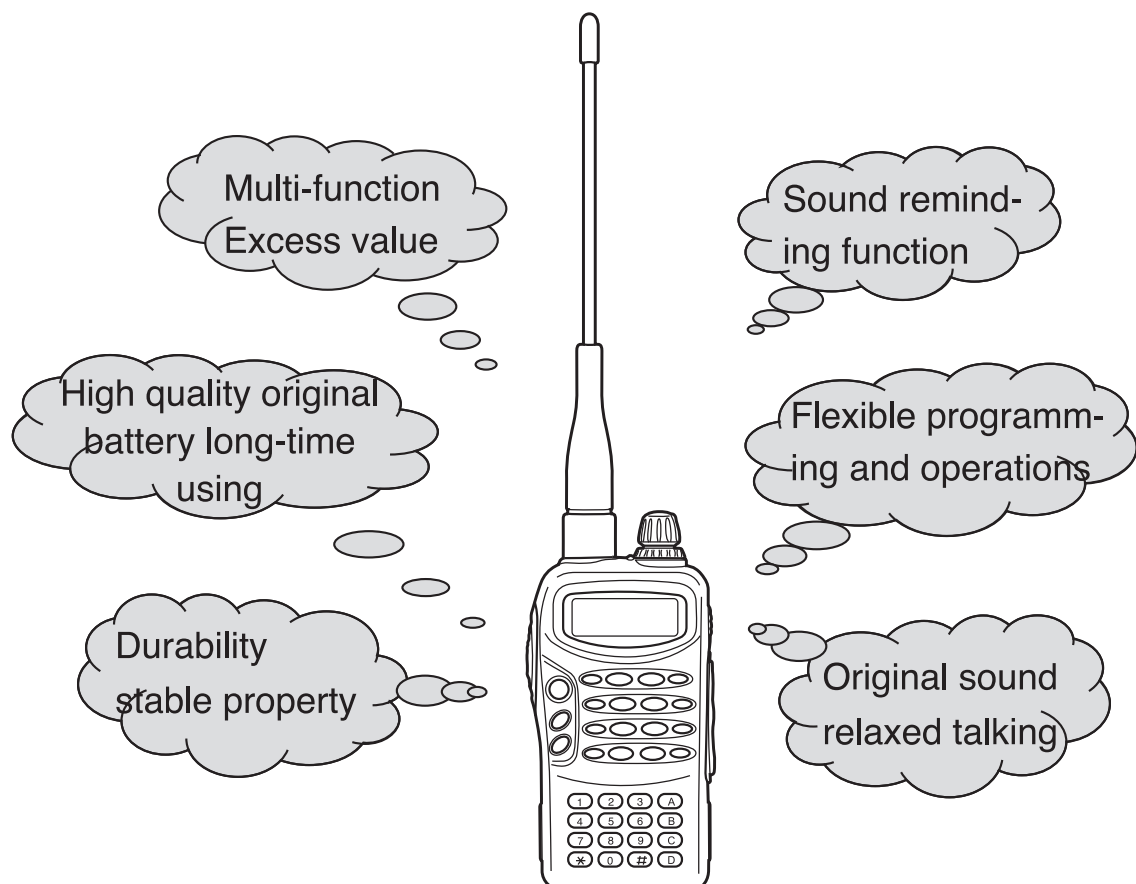> **Warning:** Easily exploded environment (gas, dust and mist, etc)
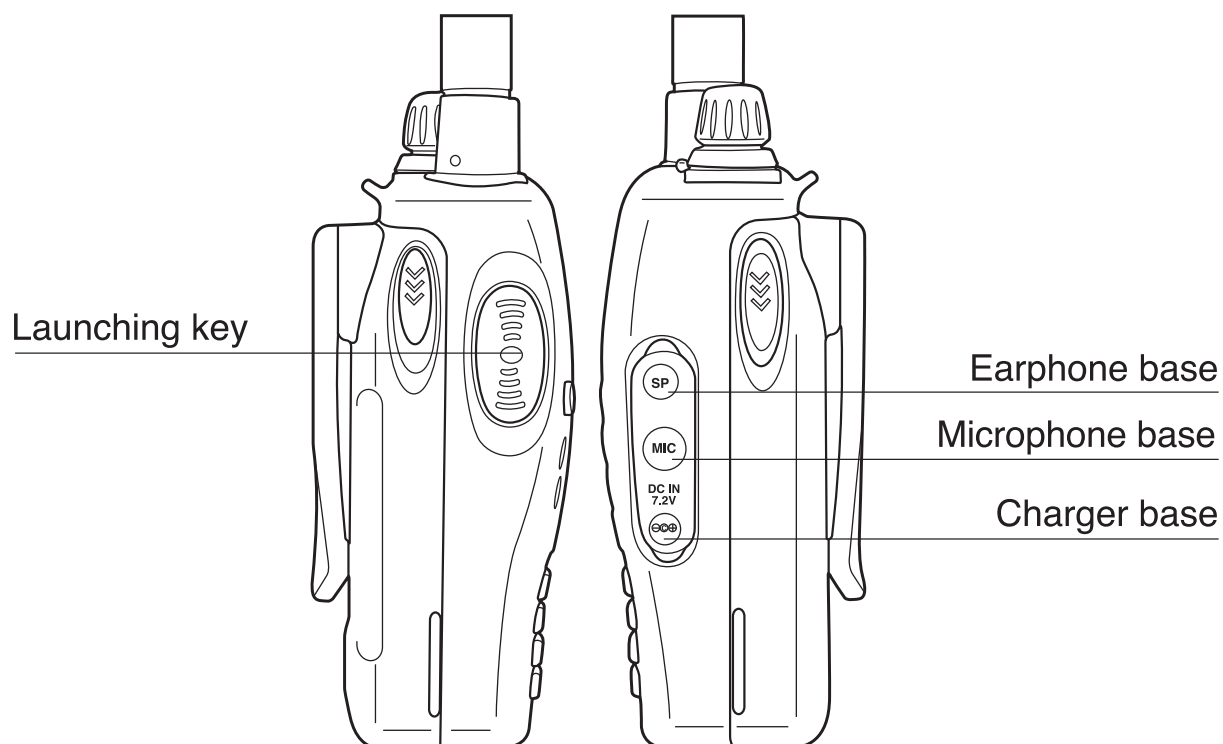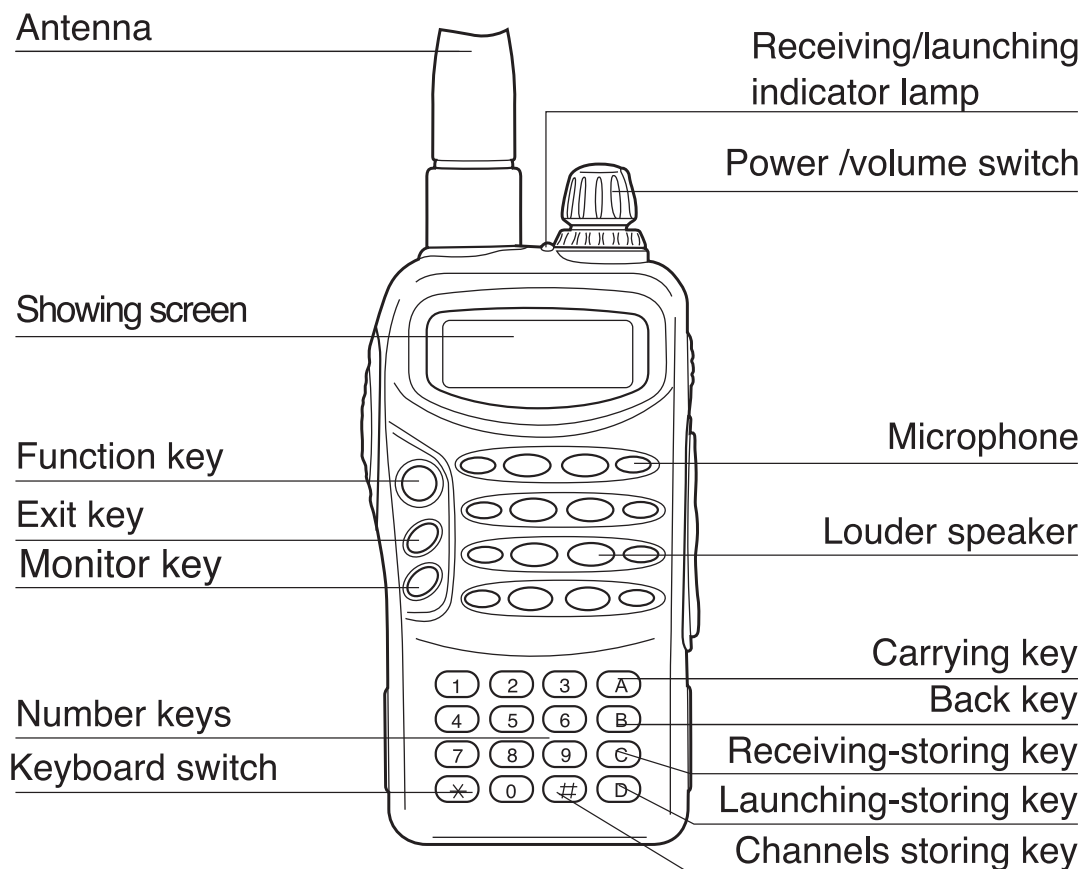> Cut off the power supply while refueling or parking at the gas station.

CATALOGUES

Main Specialties

- Sound reminding function.
- 99memory channels, adoption of phrase-lock loop frequency synthesis, micro-computer controller, forthright menu, expedient operation.
- LCD apheliotropic lights of showing screen , facile operation in dark.
- Multi-function, excess value, fashion outline, pettiness, portability, sturdiness, durability, stable property, high quality original battery, long-time using, original sound , relaxed A.
- Electricity sparing functions, prolong using time.
- Earphone/Microphone/Auto- charger rabbet, expedient for talking and charging.

Multi-function
Excess value

Sound remind-
ing function

High quality original
battery long-time
using

Flexible programm-
ing and operations

Durability
stable property

Original sound
relaxed talking

Sketch Map of Machine

Antenna

Receiving/launching indicator lamp

Power /volume switch

Showing screen

Function key

Microphone

Exit key

Louder speaker

Monitor key

Carrying key

Number keys

Back key

Keyboard switch

Receiving-storing key

Launching-storing key

Channels storing key

Launching key

Earphone base

Microphone base

Charger base

SP

MIC

DC IN 7.2V

PREPARATION

Charging The Ni-MH Battery Pack

The battery pack is not charged at the factory; charge it before use. Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal.

⚠️ Cautions

◆ Do not recharge the battery pack if it is already fully charged. Doing so may cause the life of the battery pack to shorten or the battery pack may be damaged.

◆ After recharging the battery pack,disconnect it from the charger.
Charging the battery pack for more than 5 day reduce the battery pack life due to overcharging.

Note:

◆ Always switch OFF the transceiver equipped with a Ni-MH battery pack before charging. Using the transceiver while charging its battery pack will interfere with correct charging.

◆ The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery pack.
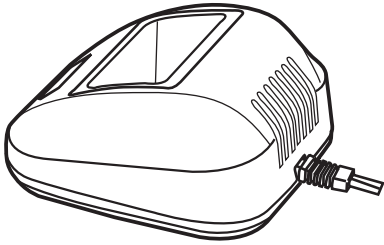
Plug the electric cable of alternating power in 220V.
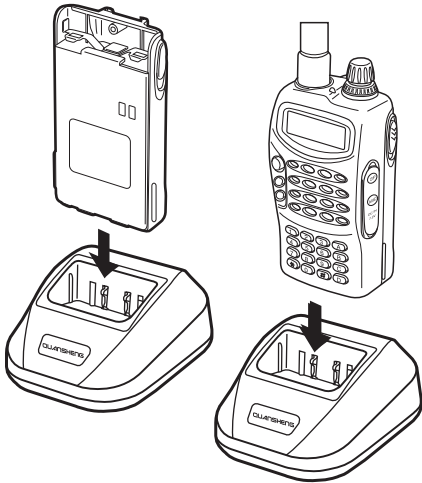
Slide the Ni-MH battery pack or transceiver with a Ni-MH battery pack into the charger.

- Make sure the battery pack contacts are in contact with the charging terminals.
- The charger LED lights and charging begins.

After charging the supplied battery pack for 8 hours, remove it or the transceiver equipped with it form the charger.

- The charger does not turn OFF automatically after charging is completed.

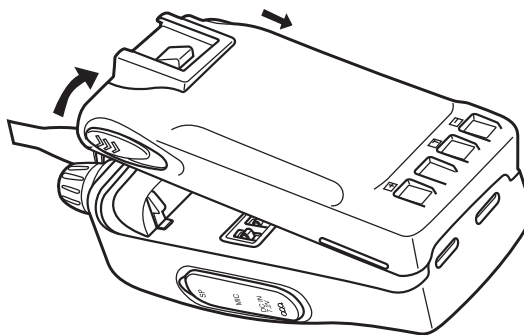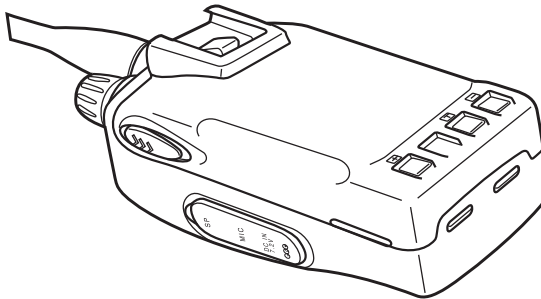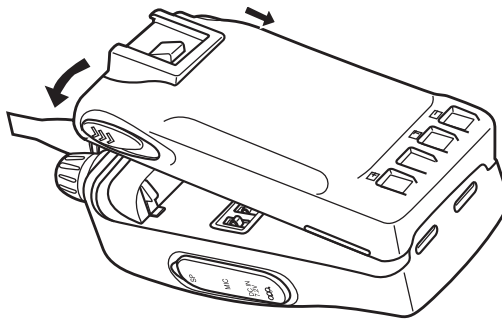## Installing/Removing Battery Pack

The average service time of attached battery pack is 8 hours.
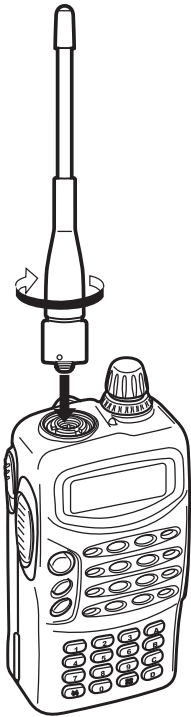The average time is calculated by 5% launching time, 5% receiving time and 90% standby time.

⚠ Cautions

◆ Do not throw short-circuit battery pack terminals or batteries into the fire.

◆ Never attempt to remove the battery casing from the battery pack.

Installing Antenna

Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise.

Note: The antenna is neither a handle, a key ring retainer, nor a speaker/microph-one attachment point. Using the antenna in these ways may damage the antenna and degrade your transceiver's performance.
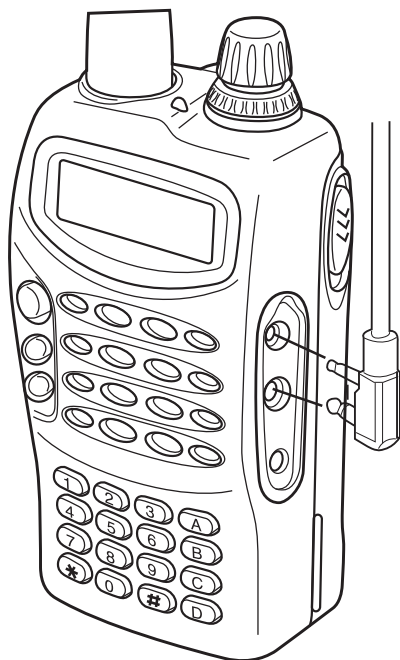
Installing belt clamp
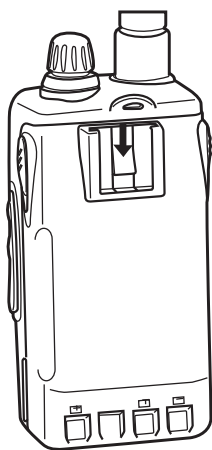
Belt clamp

⚠️ Cautions

Do not use the glue designed to prevent screw from loosening when installing belt clamp, otherwise it would damage the machine's case.
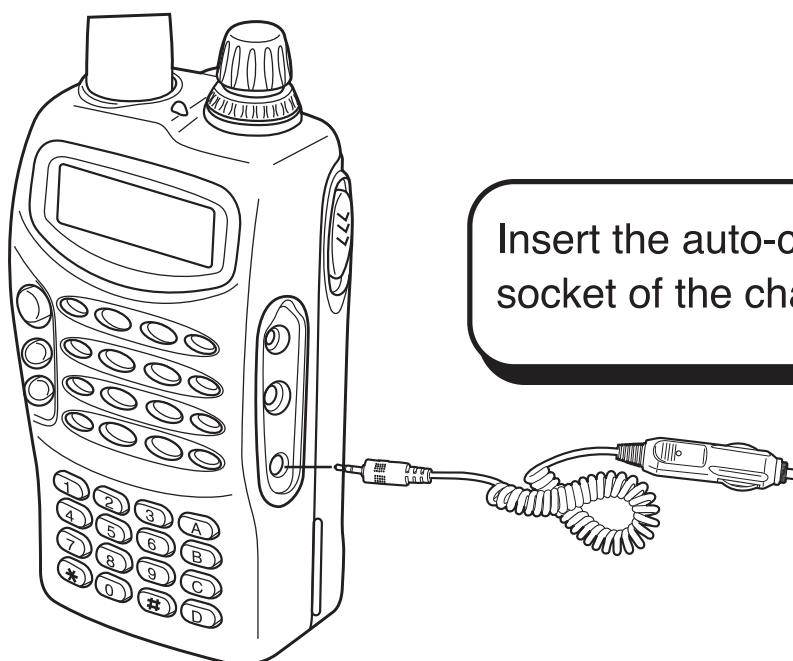The acrylic acid of the glue may harm the machines back shell.

Installing Extra Purchasing Earphone

Insert earphone/speaker plugs into the speaker/microphone jacks.
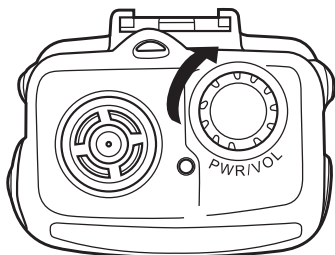
Speaker/Microphone

Installing Extra Purchasing Auto-charger

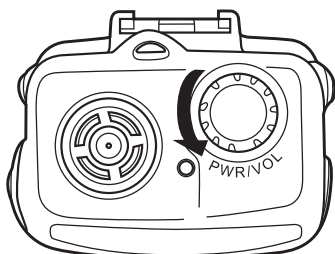Insert the auto-chargers plug into the socket of the charger base.
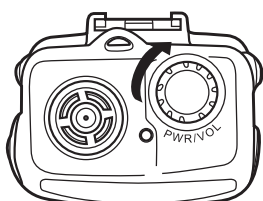
Louder speaker/Auto-charger

Basic Operations

Switch on the transceiver by turning the "Power" switch volume control clockwise.

● A sound reminds "On".

Turn **Power** Switch/**Volume** Controller clockwise to cut off the machine's power supply.

While pressing Monitor key, turn **Power** Switch/**Volume** Controller at the same time to justify the volume.
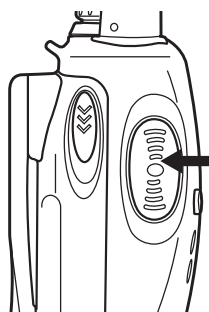
While calling is in progress, press **PTT** switch at the same time,and talk to microphone in a normal speaking voice.

● Keep the space between the mouth and microphone for 3 to 4

Release **PTT** launching key for receiving.

Regulating Volume

In the clockwise order, turn volume switch to turn up the volume; in the counter-clockwise order, turn down the volume.

Sound Switch

Press function key (F), then number key (5), Sound reminding function is off.

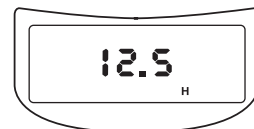Press function key (F), then number key (5), Sound reminding function is on.

Choosing step-in frequency

Press function key [F] , as Picture (1) displays:

Picture (1)

Then number key [4], enter step-in frequency12.5K. as Picture(2) displays:

Picture (2)

Press number key [4] again, enter step-in frequency 10K, as Picture (3) displays:

Picture (3)
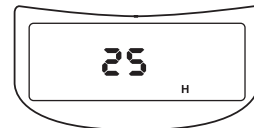
Press number key [4] again, enter step-in frequency5K, as Picture(4) displays:

Picture (4)

Press number key [4] again, enter step-in frequency 25K, as Picture(5) displays:

Picture (5)

Step-in Operations

Press carrying key (A), frequency increases progressively by the set step-in frequency.
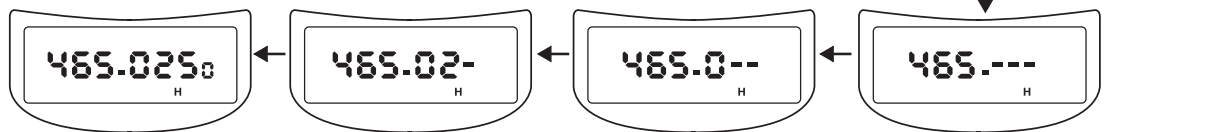
Press back key (B), frequency decreases progressively by the stored step-in frequency.
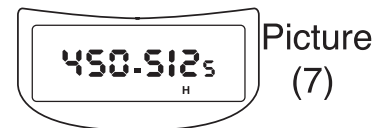
Choosing Frequency

By using number keyboards, in proper order, input the frequency you need.

For example: If you need to input 465.025MHz, input 4,6,5,0,25, as Picture (6) displays.

Pay attention to the input time within 10 seconds.

Picture (6)

Picture (7)

If you need to input 450.5125MHz, first choose step-in frequency 12.5K, then input 4, 5, 0, 5, 1, 2, as Picture (7) displays:

Channels Store

Keep the machine in working mode of all channels.

For example: If need to input Channel1 (different frequency)

465.250NHz(receiving frequency)

455.250MHz (launching frequency)

Channel2 (same frequency)

460.025MHz(receiving frequency)

460.025MHz(launching frequency)

First store channel 1:

Input frequency 465.250MHz, as Picture (8) displays:

Press storing key (#), the channel number shines, as Picture(9) displays:

Press carrying key (A) or back key (B), choose the channel number 01, as Picture (10) displays:

Picture (8)

Picture (9)

Picture (10)

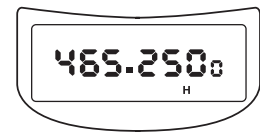Press receiving-storing key , the channel
number does not show .
Receiving frequency has been stored in
channel 1, as Picture(11) displays:
Input frequency 455.250MHz, as Picture
(12) displays:
Press # key, channel number 01 shines,
as Picture(13) displays:
Press launching-storing key(D), the
channel number does not show.
Launching frequency has been stored
in channel 1, as Picture(14) displays:

Picture (11)

Picture (12)

Picture (13)

Picture (14)

Then input channel 2:

Input frequency 460.025MHz, as Picture
(15) displays:
Press storing key (#), the channel number
shines, as Picture (16) displays:
Press carrying key (A), choose the channel
number 02, as picture (17) displays:
Press receiving-storing key (C), the channel
number does not show. Receiving
frequency has been stored in channel 2,
as Picture(18) displays:

Picture (15)

Picture (16)

Picture (17)

Picture (18)

Since receiving and launching are of the same frequency, once
receiving frequency is stored, launching frequency would be
also stored in channel 2. The machine has 99 channels for you
to store the frequency. Users repeat the operations above, set
up the frequencies you use is the channels. Take note to the
frequency using range of the machine. Over the frequency
range, communication results will ber effected.

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Frequency Difference Installation

As for receiving or launching are of different frequency use
frequency difference to set up. It can store the receiving
and launching frequency in the channel together.
For example: Channel 1 (different frequency)
465.250MHz (receiving frequency)
455.250MHz (launching frequency)
Channel 3 (different frequency)
454.775MHz (receiving frequency)
464.775MHz (launching frequency)

Store channel 1:

Input frequency 465.250MHz, as Picture

(19) displays:

Picture (19)

Press function key [F], then number key[6],

it shows signal "-" to decrease frequency,

as Picture(20) displays:

Picture (20)

Press function key [F], then number key [7]

it shows initiative frequency difference, now

the first number shines, as Picture(21) displays:

Picture (21)

Since (receiving frequency) 465.250MHz -10MHz =455.250MHz

(launching frequency)
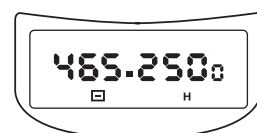
Press number 1,0,0,0, the number does

not shine. Frequency difference is successfully

set up, as Picture(22) displays:

Picture (22)

Press Exit key (EXIT), as Picture (23) displays:

Picture (23)

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Press storing key (#), then carrying key (A)or back key (B), choose the channel 01, as Picture (24) displays:

Picture (24)

Press receiving-storing key(C),the channel does not show, as Picture (25) displays: Channel frequency is already set up.

Picture (25)

Begin to store channel 3:

Input frequency 454.775MHz, as Picture (26) displays:

Picture (26)

Press function key (F), then number key(6), it shows signal "+" to increase frequency , as Picture(27) displays:

Picture (27)

Press function key (F), then number key (7), the first number shines, as Picture(28) displays:

Picture (28)

Since (receiving frequency) 454.775MHz + 9.3MHz =464.075MHz (launching frequency)

Press number 0,9,3,0, the number does not shine, frequency difference 9.30Mhz is well set up, as Picture(29) displays:

Picture (29)

Press Exit key (Exit), as Picture(30) displays:

Picture (30)

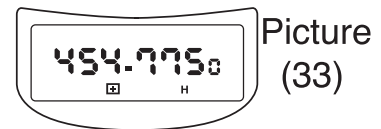Press storing key (#), it shows channel shining, as Picture(31) displays:

Picture (31)

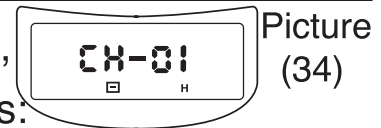Press carrying key (A), choose the channel number 03, as Picture(32) displays:

Picture (32)

Press receiving-storing key (C), the
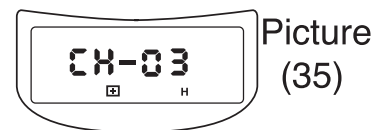channel does not show, as Picture
(33) displays:

Picture
(33)

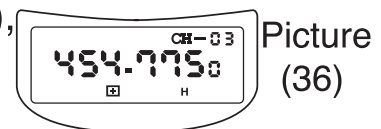## Showing Storing Channel/Storing Frequency

Press function key (F), then number key (1),
the channel shows , as Picture(34) displays:

Picture
(34)

Press carrying key (A)/ back key (B),
the number of frequency channel adds/
decreases, as Picture (35) displays:

Picture
(35)

Press function key (F), then number key(1),
channel and frequency show,
as picture(36) displays:

Picture
(36)

Press carrying key (A) or back key(B), you
can find channel1 and frequency
465.250MHz, as you stored Picture (37) displays:

Picture
(37)

Press function key (F), then number key (1),
enter working mode of all channels.
You may store frequency from beginning,
as Picture (38) displays:

Picture
(38)

Scan:

Frequency scanning

Keep the machine in working mode of all channels, press
function key (F), then key (D), begin to scan downward.
Press function key (F), then key (C), begin to scan upward.

Channel scanning

With channel storing mode, press function key (F), then key (D),
channel begins to scan downward. Press function key (F), then
key (C) to scan upward.

Notice: press any key, scanning stops at once. When receiving same frequency signal, scanning stops too, and stays on the frequency signal.If the user does not answer, 8 seconds later, scanning goes on.
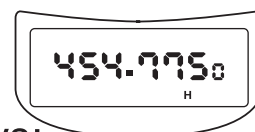
Press Key Lock:

Press function key (F), then (*) key,

Keyboard locked, as Picture (39) displays:
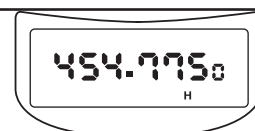
Picture (39)

Press function key (F), then (*) key,

Keyboard releases, as Picture (40) displays:

Picture (40)

High Power/Low Power Installation:
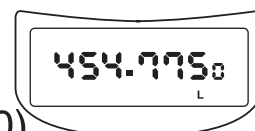
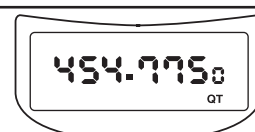Press function key (F), then number key (0), "H" shows for High Power (4W), as Picture (41) displays:

Picture (41)

Press function key (F), then number key (0), "L" shows for Low Power(1w), as Picture (42)displays:

Picture (42)

Sub-audio Frequency Installation

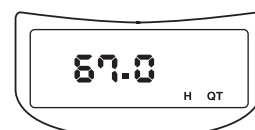Press function key (F), then number key (2), "QT" shows on the screen, which means a working model of CTCSS setting, as Picture (43) displays:

Picture (43)

Press function key (F), then number key (3), CTCSS frequency shows, as Picture (44) displays:

Picture (44)

Press carrying key (A) or back key (B) to decide on the CTCSS frequency you need.

As CTCSS frequencies are standard, and not allowed to be set up arbitrarily.

The receiving-storing frequency in a channel can set up different CTCSS frequencies and can also set up receiving or aluaching CTCSS frequency.

Attentions: when receiving frequency is set up CTCSS frequency (QT shows), you need to receive the same frequency as receiving frequency and CTCSS frequency, then start to talk.

For example: channel 2 (same frequency)

  460.025MHz, CTCSS 71.9Hz receiving frequency
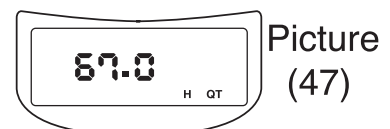
  460.025MHz, CTCSS 71.9Hz launching frequency

First, keep the machine in working mode of all channels, as Picture(45) displays:

Picture (45)

`460.025` `H`
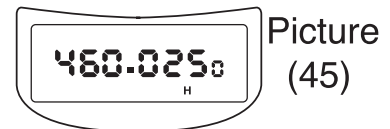
Press function key (F), then number key (2), QT shows, as Picture (46) displays:

Picture (46)

`460.025` `H  QT`

Press function key (F), then number key (3), CTCSS frequency shows, as Picture (47) displays:

Picture (47)

`67.0` `H  QT`

Press carrying key (A), choose 71.9Hz, as Picture (48) displays:

Picture (48)

`71.9` `H  QT`
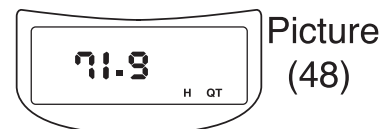
Press Exit key (Exit), as Picture (49) displays:

Picture (49)

`460.025` `H  QT`

Press storing key (#), then carrying key (A), choose the channel number 02, as Picture (50) displays:

Picture (50)

`460.025` `02` `H  QT`

Press receiving-storing key (C), channel does not show, as Picture(51) displays:

Picture (51)

`460.025` `H  QT`

Instructions: If launching CTCSS frequencies are different or useless, keep the different frequencies in the launching storing.

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Sub-audio Frequency Form(Hz)

1	67.0	11	94.8	21	131.8	31	186.2
2	69.3	12	97.4	22	136.5	32	192.8
3	71.9	13	100.0	23	141.3	33	203.5
4	74.4	14	103.5	24	146.2	34	210.7
5	77.0	15	107.2	25	151.4	35	218.1
6	79.7	16	110.9	26	156.7	36	225.7
7	82.5	17	114.8	27	162.2	37	233.6
8	85.4	18	118.8	28	167.9	38	241.8
9	88.5	19	123.0	29	173.8	39	250.3
10	91.5	20	127.3	30	179.9		

Clear:

Press Exit key (Exit), switch on the power
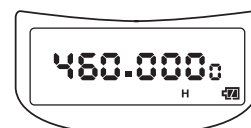at the same time ,as Picture (52) displays:
Release the key, memories are cleared,
as Picture (53) displays:

Picture (52)

Picture (53)

Low Voltage Alarm

Battery sign shows low voltage, as
Picture (54) displays:
Lower than 5.5V, first it has a reminding
sound, then power off, as Picture
(55) displays:

Picture (54)

Picture (55)

Unity Fittings

Please take out the machines from the packing case cautiously. You are suggested to make sure you have the following articles before discard packing materials. If any article lost or damaged in carrying and transporting, please summit the claim application to delivery persons at once.

Form of Attached Fittings

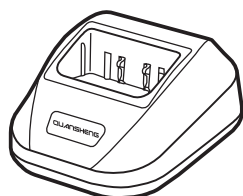| Fitting	Quantity
Walkie-talkie	1
Inductively loaded antenna	1
Nickel hydrogen re-chargeable battery pack	1
Battery charger	1
Belt clamp	1
User's manual	1
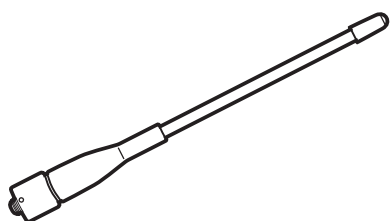
Antenna
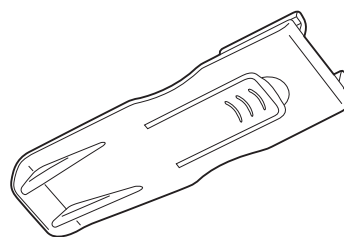
Belt clamp

Battery charger
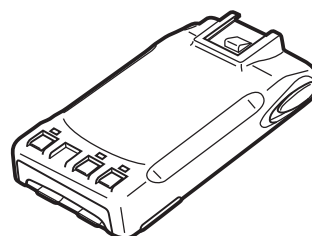
Battery pack

Technology Indices

Unity Section		
Frequency range	TG-25AT(1)	136.000~150.000MHz
	TG-25AT(2)	150.000~174.000MHz
	TG-25AT	136.000~174.000MHz
	TG-45AT(1)	400.000~420.000MHz
	TG-45AT(2)	450.000~470.000MHz
	TG-45AT	400.000~470.000MHz
Rated Voltage		DC 7.2V(6 chargeable nickel hydrogen battery)
Memory channel		99channnels
Antenna disposition		inductively loaded antenna
Antenna impedance		50Ω
Working manner		same frequency single operation or different frequency single operation
Ground method		negative pole
Volume		80x50x28mm
Launching Parts		
Output power		≤5W
Modulation mode		frequency modulation
Maximum frequency deviation		≤±5KHz
Remanent radiation		<-60dB
Preemphasis character		per fold frequency patch 6dB
Emission current		≤1600mA
Receiving Parts		
Sensitivity		<0.16μV (12dB SINAD)
Silent sensitivity		<0.2μV
Intel modulation anti-interference		50dB
Audio frequency power		≥300mW
Receiving current		≤100mA
Silent waiting		20mA

Specifications are subject to change for improvements without notice.