SURECOM®

Operating Instructions

Cross Band Duplex Repeater Controller

Model No. **SR-628**

Model shown is SR-628.

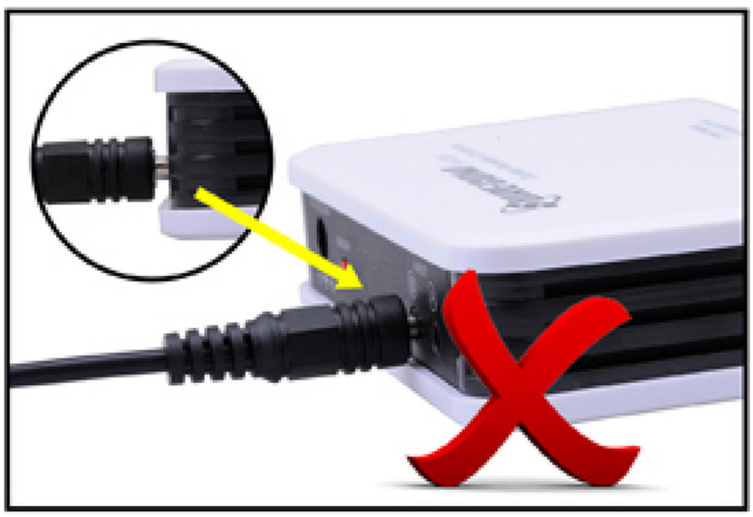
Quick Installation Guide

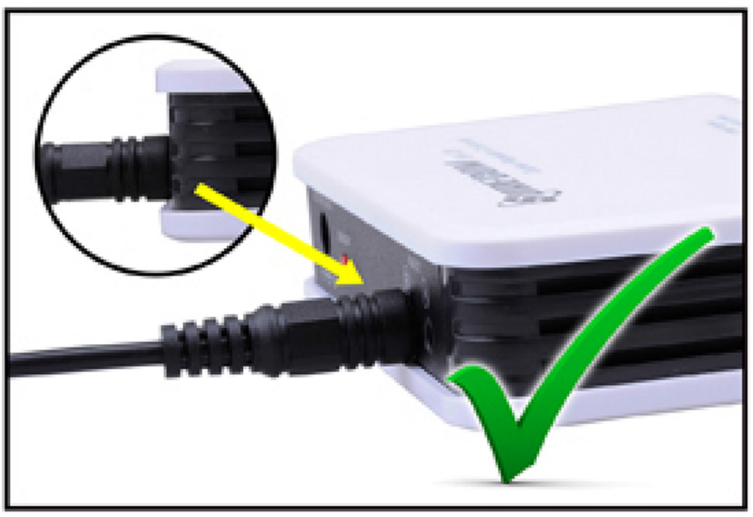
Thanks for purchasing our Cross Band Duplex Repeater Controller with connector Cable.

Please read this manual carefully before use. The information presented herein will help you to derive maximum performance from your repeater controller.

Packing List

- 1 x SR-628 Cross Band Duplex Repeater Controller
- 1 x 100~240V Wall Charger
- 1 x USB Power Cable
- 2 x Repeater Controller Cable (Can change by your request.)
- 1 x This English User's Manual





** Please make sure the plug is fully inserted into the socket.*

❶ Charger LED Display

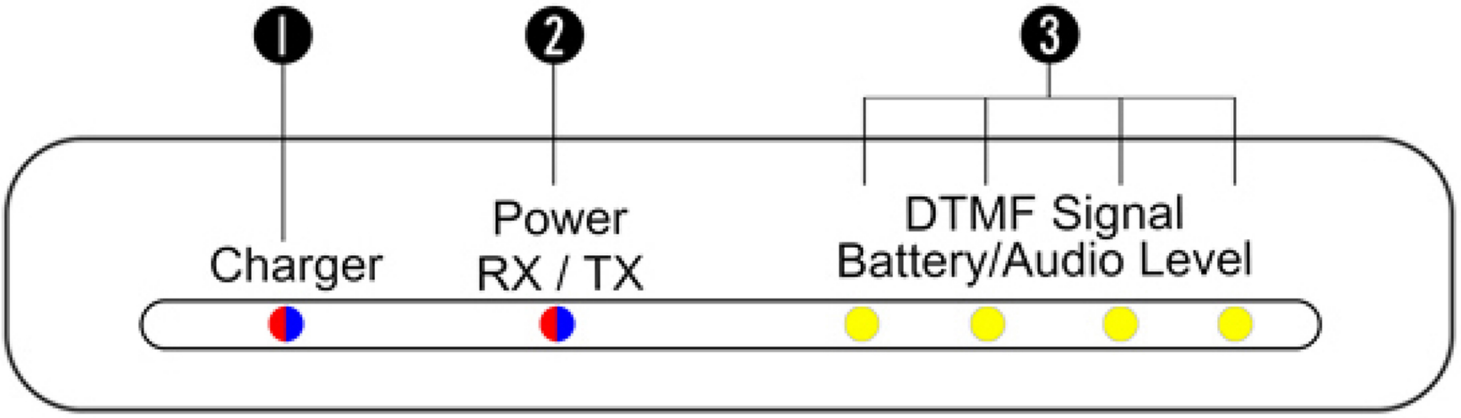
❷ Power (RX / TX) STATUS

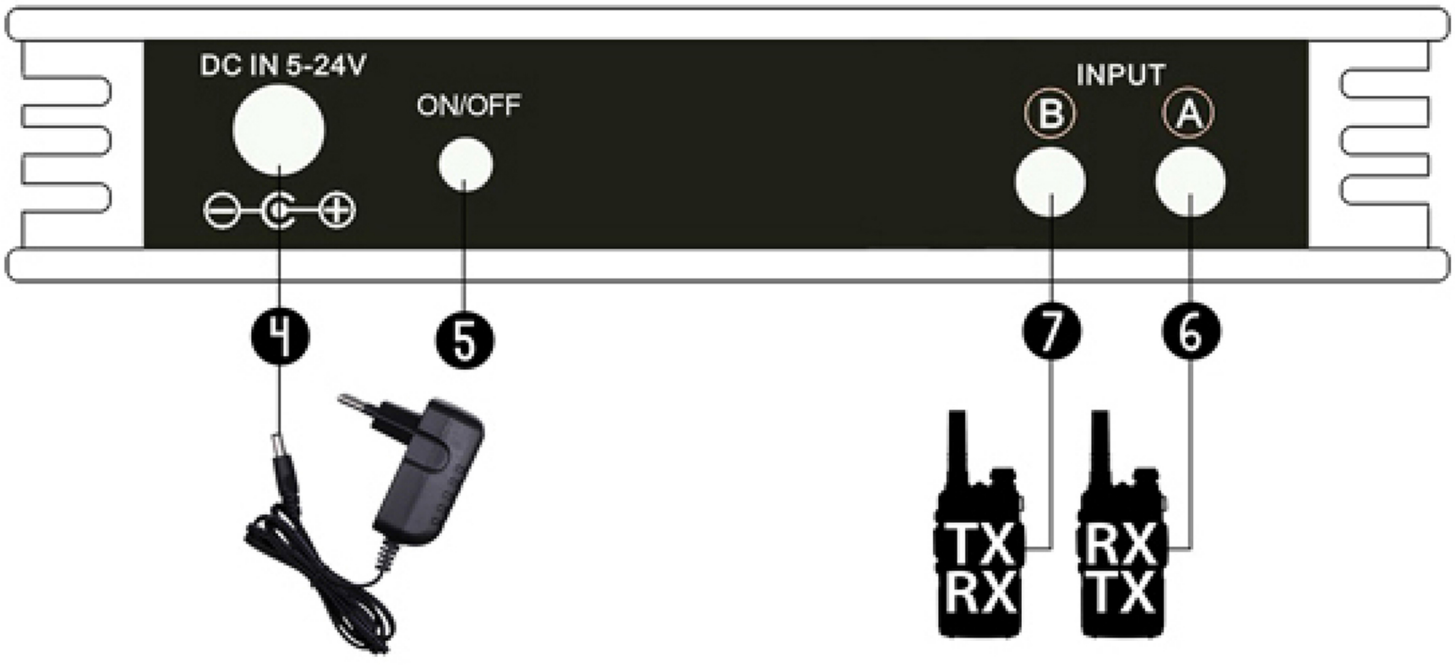
❸ DTMF Signal STATUS
Battery / Audio Level LED Display

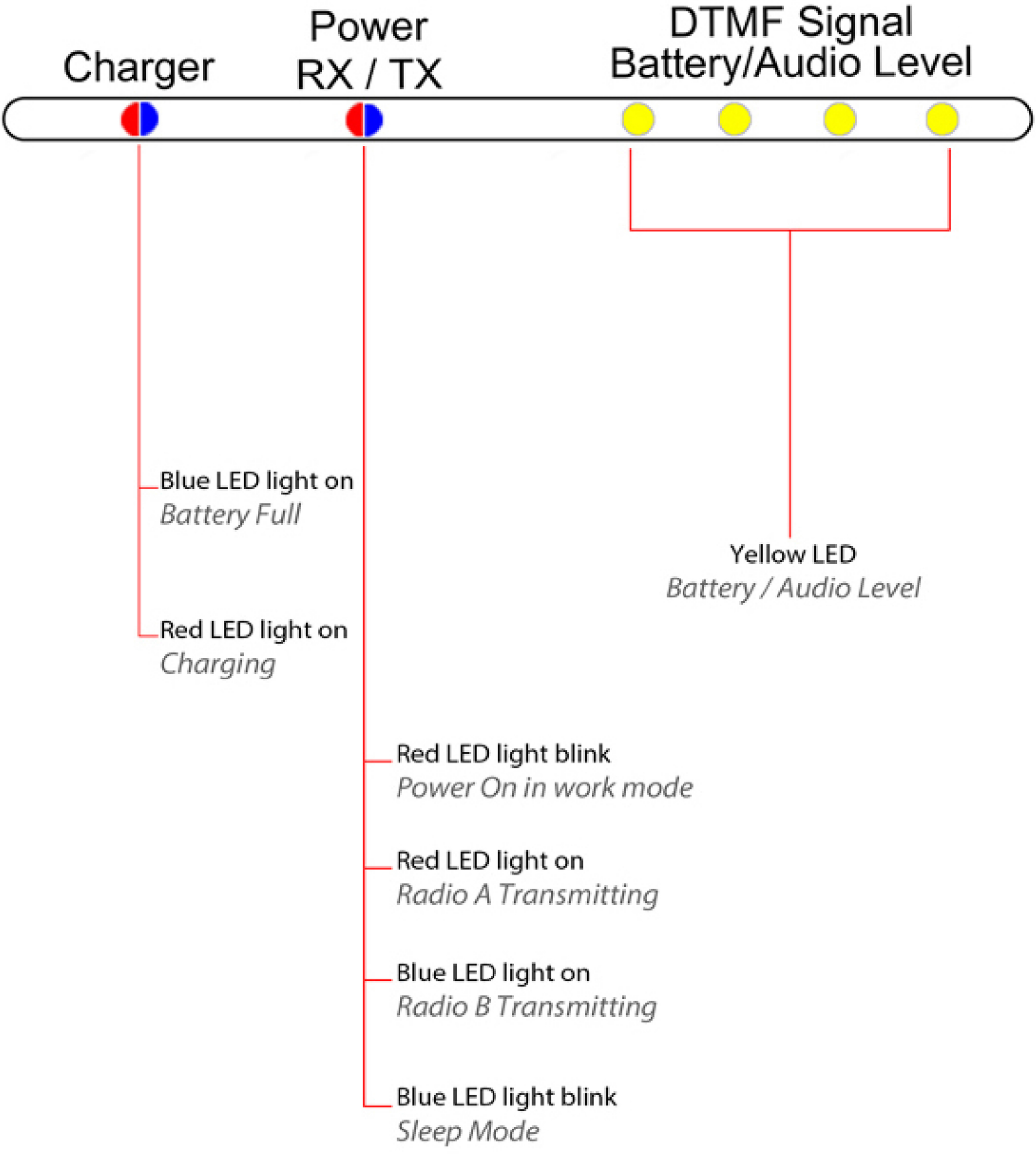
❹ Charging and DC input

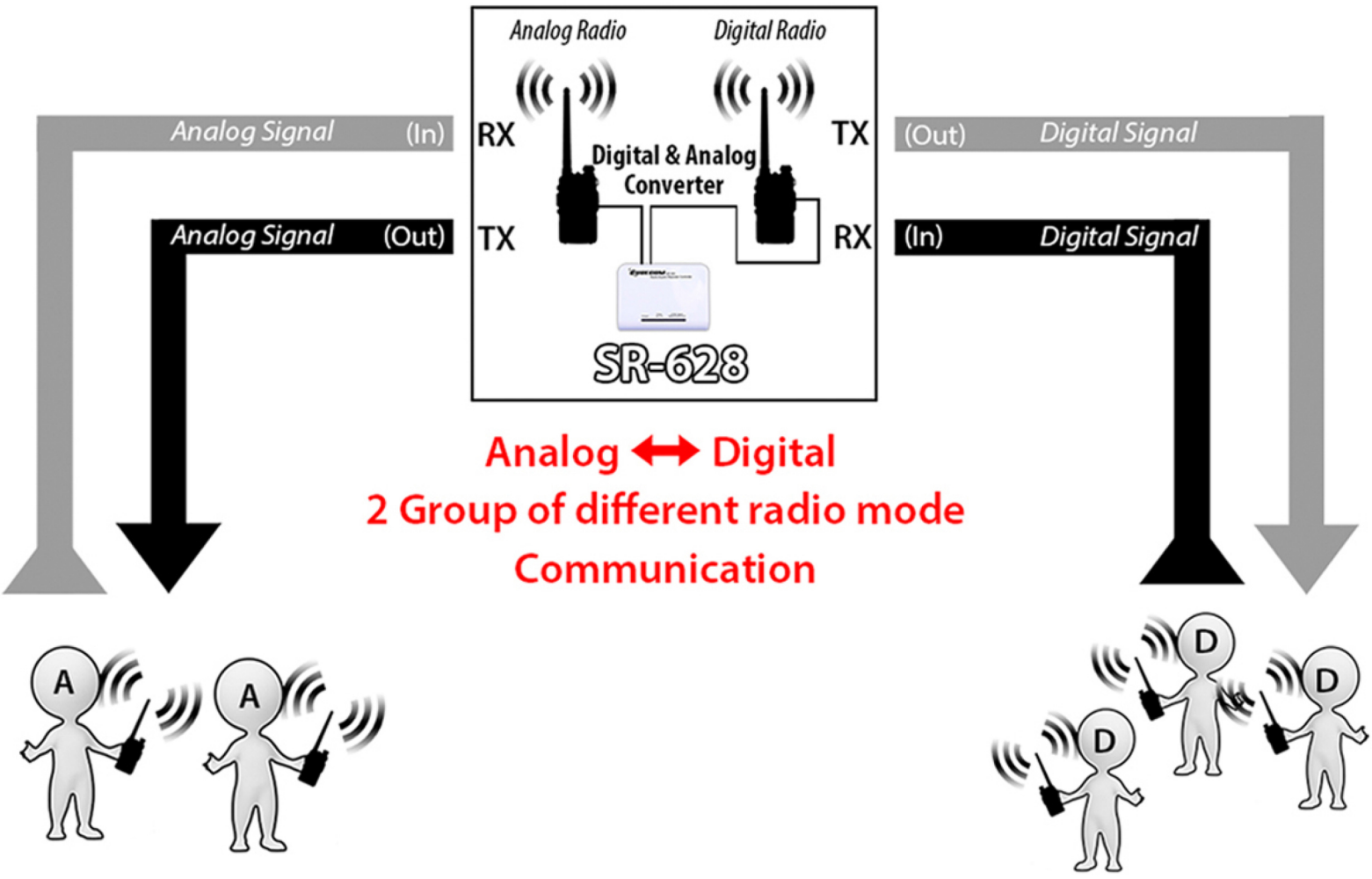
❺ ON/OFF Switch (Factory Reset)

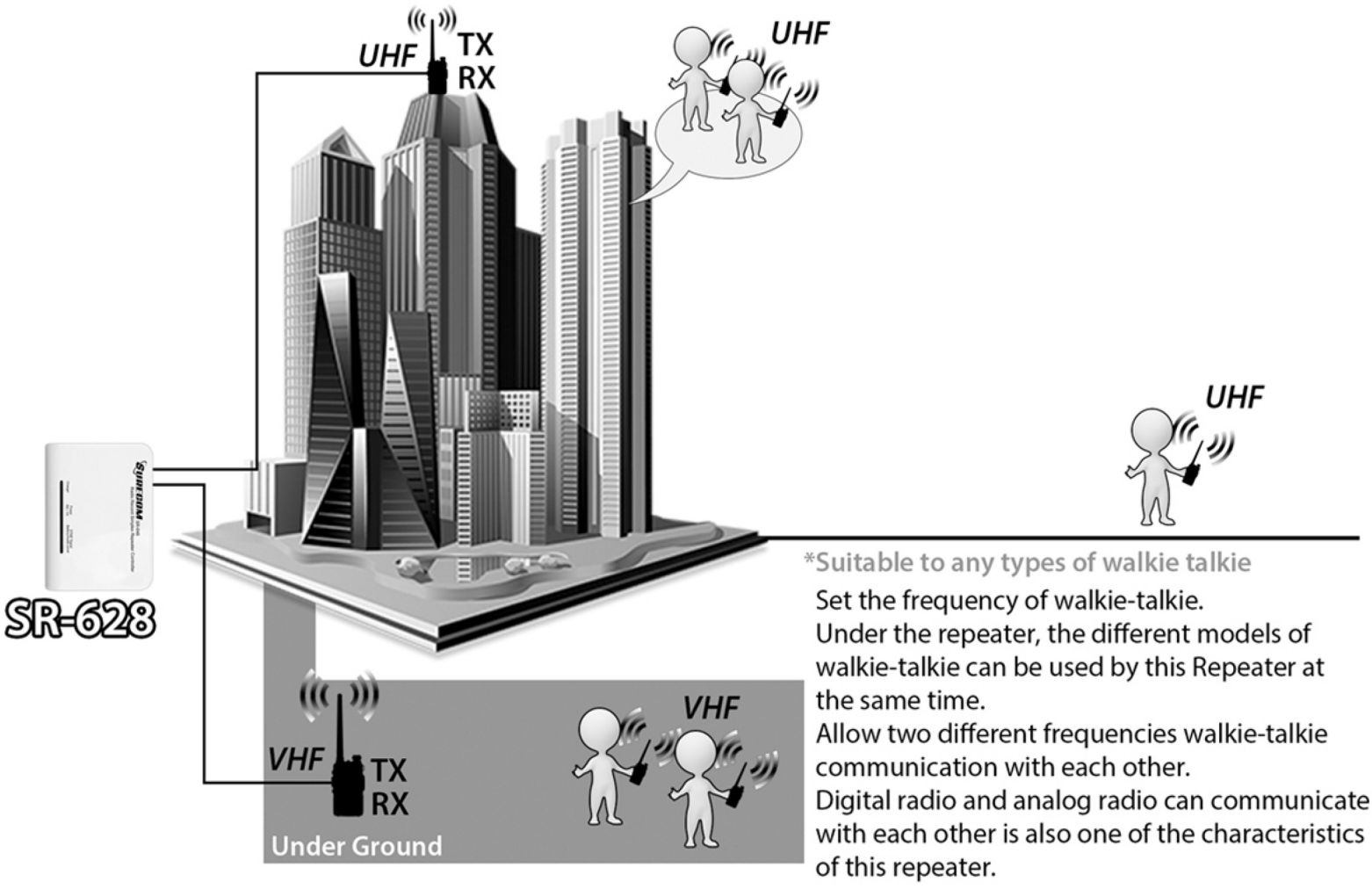
❻/❼ Connect Radio
(SP/MIC/PTT out)






Charger
Power
RX / TX
DTMF Signal
Battery/Audio Level
Blue LED light on
Battery Full
Red LED light on
Charging
Yellow LED
Battery / Audio Level
Red LED light blink
Power On in work mode
Red LED light on
Radio A Transmitting
Blue LED light on
Radio B Transmitting
Blue LED light blink
Sleep Mode

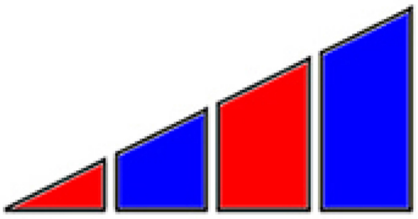


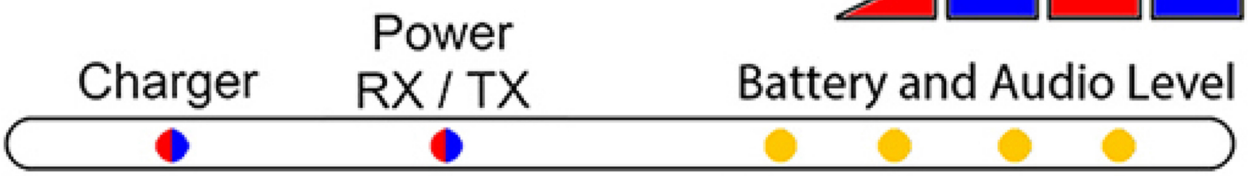


*Suitable to any types of walkie talkie

Set the frequency of walkie-talkie.
Under the repeater, the different models of walkie-talkie can be used by this Repeater at the same time.
Allow two different frequencies walkie-talkie communication with each other.
Digital radio and analog radio can communicate with each other is also one of the characteristics of this repeater.

Level





Battery Level (Table 1)

Description	Battery Level
> 4.0 V	● ● ● ●
3.7 - 4.0 V	● ● ● ○
3.3 - 3.7 V	● ● ○ ○
3.0 - 3.3 V	● ○ ○ ○
< 3.0 V	Light Blink ○ ○ ○

*Battery voltage level Display when Power On.
(Without charger connect.)*

Audio in Level (Table 2)

Description	Audio Level
> 1.8 Vrms	● ● ● ●
> 1.4 Vrms	● ● ● ○
> 0.8 Vrms (*The best Audio Level.)	● ● ○ ○
> 0.2 Vrms	● ○ ○ ○
< 0.2 Vrms	○ ○ ○ ○

Audio input level Display for Radio Recevied.

DTMF Signal Display

Table 3 (* Press # # 0 first , then press another key.)

Description	LD 1	LD 2	LD 3	LD 4
1	○	●	○	○
2	●	○	○	○
3	●	●	○	○
4	○	○	○	●
5	○	●	○	●
6	●	○	○	●
7	●	●	○	●
8	○	○	●	○
9	○	●	●	○
0	●	○	●	○
*	●	●	●	○
#	○	○	●	●

DTMF Remote Control Function

Table 4

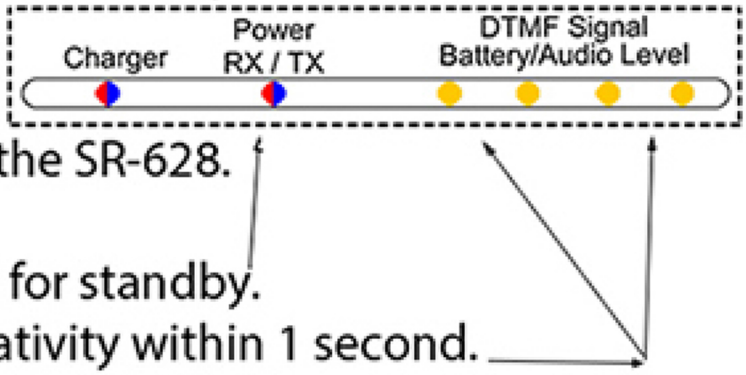
Code	Sub-menu
##0	Test DTMF, display DTMF signal(see Table 3)
##1+8888	Enable Record Function(Standby mode) **Factory P/W 8888*
##2+8888	Disable Record Function(sleep mode)
##3+8888+1234	Change Password-step 1 of 2
##4+1234	Change Password-step 2 of 2
##55+n	SQL Level Control, n=1-9 (Default n=5)
##612 A ⟹ B	(Change to SR-328) if sucess LD3 Blink 4 times
##613 A ⟺ B	(Default Change to SR628) if sucess LD4 Blink 4 times

Reset Device

- Pressing the Power Button until 4 LED light on and then wait for 2 seconds,release the button. Device will reset.

SR-628 Cross Band Duplex Repeater Controller suitable to any types of walkie talkies. *(Analog/Digital can work with each other.)*Set the frequency of walkie-talkie. Any two of these different frequencies *(VV, UU, VU)* also can work at the same time.
Under the repeater, the different models of walkie-talkie can be used by this Repeater at the same time.Allow two different frequencies walkie-talkie communication with each other.
Digital radio and analog radio can communicate with each other is also one of the characteristics of this repeater

Normal operation with build-in battery



- **"ON/OFF"**

This switch is used to turn ON/OFF the SR-628.

- *Power ON*

The Power Led Blink with Red color for standby.

Battery Level Leds with indicate relativity within 1 second.

- *Power OFF*

Push this switch until all lights off.

- **"To Radio"**

This terminal is used to connect a radio tranceiver unit.

- **"DC IN 5-24V"**

This indicator is used to indicate the battery charging and external DC input status. *(5.5/2.1mm, plug center pole is DC+.)*

(This terminal is used to connect an external DC+5-24V power supply.)

- **Sleeping Mode**

- Turn ON the power of the radio receiver unit.
- Push and hold the PTT switch of any radio unit with DTMF function.

Press # # 2 (Mode) + 8 8 8 8 (Password) *then turn to Sleeping Mode.*

- **Working Mode** *(By Password)*

- Push and hold the PTT switch of any radio unit with DTMF function.

Press # # 1 (Mode) + 8 8 8 8 (Password) *then turn to Working Mode.*

Setup a new Password

- Turn ON the power of the radio receiver unit.
- Turn ON the power of the SR-628. The Status Indicator of the SR-628 will BLINK with RED COLOR
- Push and hold the PTT switch of any radio unit with DTMF function (Besides the radio receiver units installed with the SR-628.).
- It need 2 steps to Change the Password.

Step 1: (for example)

#	#	3	+	8	8	8	8	+	1	2	3	4
(Mode)			+	*(Factory password)*				+	*(New pasword)*			

Step 2: (for example)

#	#	4	+	1	2	3	4
(Mode)			+	*(New pasword)*			

SPECIFICATION

Power Supply	:	Build-in 3.7V 900mAh Li-Ion Battery (14500)
Charging & External Power Supply	:	DC +5V-24V
DTMF Remote Control Protection	:	User define 4-digit Password Protection
StandbyTime	:	180 hours
Indicators	:	Status LED and External Power Supply Input LED
Dimensions	:	110 x 80 x 25 mm
Weight	:	84g (Body without accessory.)

OPTIONAL ACCESSORIES

46-GM
• for Motorola GM300

46-K
• for Kenwood

46-M
• for Motorola GP300

46-MU

46-MT
• for Motorola Talkabout

46-S
• for ICOM

46-S2
• for Midland

46-Y
• for Yaesu

46-Y7

48-K1
• repeater K (cable) for Kenwood Mobile

48-T1
• repeater T (cable) for TYT Mobile

48-Y1
• repeater Y (cable) for Yaesu Mobile

AC USB PSU
US Plug

AC USB PSU
EURO Plug

USB Power
Cable

Protected Battery
TR14500 800MAH

Trouble Shooting

** To connection controller, test your wireless TX from your radio. Please connecting controller after you test.*

PROBLEM	SOLUTION
No System LED	Confirm that you have +5V-24V DC power connected to the correct pins. Be sure that the power to the controller is stable and Repeaer Controller is on. If the unit has adequate voltage, and the system ON/OFF is on, there may be some type of hardware failure.
TX and RX Error	**Radio get more noise :** Please set CTCSS or DCS for repeater operation. **Radio get noise after setting DCS/CTCSS :** Please set #55+n SQL Level to 6-9. (Table 4)
Insufficient Charge	Battery charger or Battery maybe defective, you need to be replaced.
Battery Life Too Short When It Full Charge	Battery is defective or has been damaged and need replacing.
Repeater Controller No Reaction	Radio problem or Radio Volume is too low.
No Response	If the radio received a non-member response, turn Radio to another channel or swtich on Radio CTCSS / DCS to improve reaction errors.
DTMF No Reaction	Radio without DTMF Function. Radio Audio Out Level is too low or too high.
No Reaction of DTMF Key	Audio Out Level is too low or too high. Please testing your mode of DTMF.
Receive Distance Too short	Radio RF power is too low, increase the power, or use higher output power transceiver.