

WRAPS™

WIRELESS REMOTE AUDIO PERIMETER SHARING SYSTEM OPERATIONS MANUAL Version: 03/18



Warning:

The Client purchases and uses the WRAPS™ System at his/her own risk. Client must carefully read instructions, safety materials and all other System literature before use; and follow these instructions, procedures and rules. The System is intended for use by individuals properly trained by approved instructors to determine where the System fits into his/her department's rules, regulations, policies and procedures.

Compliance with Local Laws:

It is the Client's responsibility to ensure the purchase, handling and usage of the WRAPS™ System complies with all local, state, and federal laws and regulations.

Product Changes:

Client understands that ETGI may from time to time change the WRAPS™ System's specifications, designs, accessories and/or may add or remove items from the System's product line without prior notice to users.

Support/Sales Information:

Enforcement Technology Group, Inc. (ETGI)

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COMPONENTS



Transceiver Base Station Kit; includes:

- Transceiver Base Station,
- Rechargeable Battery Pack,
- AC Power Adapter/Charger,
- 25 ft. Audio Cable w/ 1/8" (3.5mm) Male Plugs,
- 1/8" (3.5mm) to 1/4" (6.35mm) Adapter and
- 1/8" (3.5mm) to RCA/Composite Adapter

Remote Transceiver Pack Kit; includes:

- Remote Transceiver Pack,
- Rechargeable Battery Pack and
- Single-Cup Headset w/ Boom Microphone*



(2) Spare/Additional Rechargeable Battery Packs



Battery Charge Station (8-bay) with AC Power Adapter

Nylon, Water-Resistant Soft-Shell System Transport/Storage Case



*All WRAPS™ Systems are delivered with a minimum quantity of (2) Remote Transceiver Pack Kits. The actual quantity of Remote Transceiver Pack Kits delivered is determined by WRAPS™ System model purchased. Up to (6) Remote Transceiver Packs may be connected to/used simultaneously with the WRAPS™ System's Transceiver Base Station. Additional Remote Transceiver Pack Kits may be purchased separately by contacting Enforcement Technology Group, Inc. (ETGI) by phone (414-276-4471) or email (info@etgi.us).

INTRODUCTION/OVERVIEW

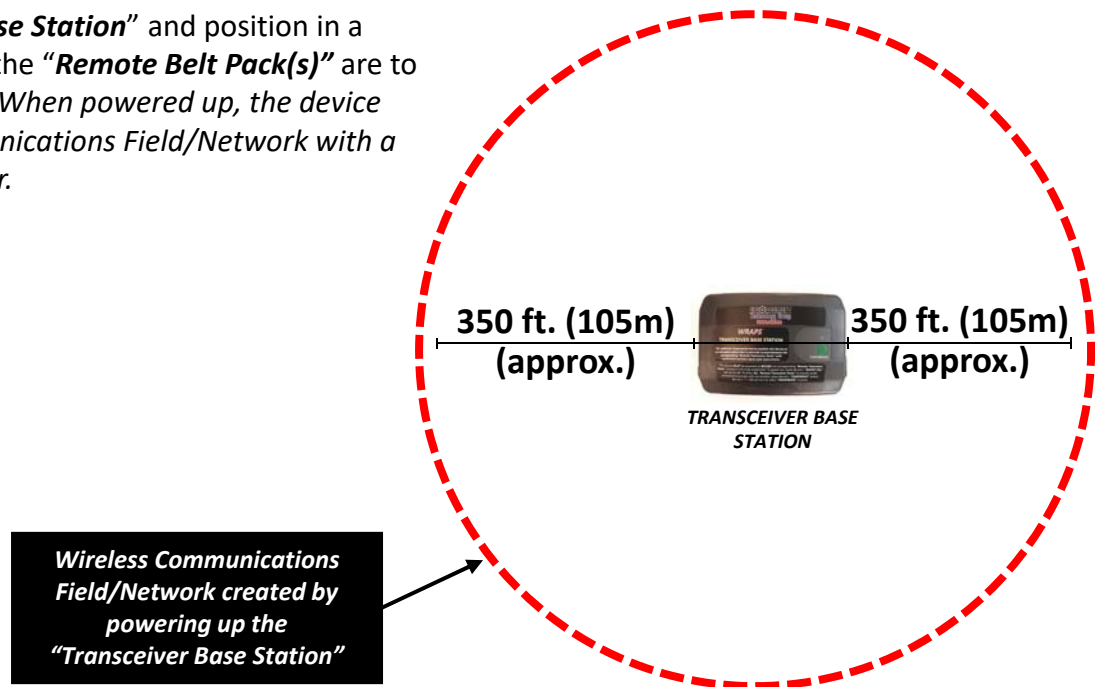
The Wireless Remote Audio Perimeter Sharing (WRAPS™) is a unique, secured and self-contained portable communications System. When the System's Transceiver Base Station is powered on it produces an omni-directional, wireless communications field/network with a diameter of approx. 700 ft.

Up to (6) operators equipped with WRAPS™ System's Remote Transceiver Packs positioned within the Transceiver Base Station's wireless communications field/network may use the provided Headsets to simultaneously talk and listen to one another in real-time.

The WRAPS™ System's Transceiver Base Station is also equipped with an "AUDIO IN" jack which allows the device to be connected to an external audio source. When connected to an external audio source (i.e. a Hostage/Crisis Negotiation Throw Phone System's Negotiation Audio Channel), operators equipped with the Remote Transceiver Packs can wirelessly monitor the audio source (i.e. Negotiation Audio Channel) while still having the ability to talk and listen to another.

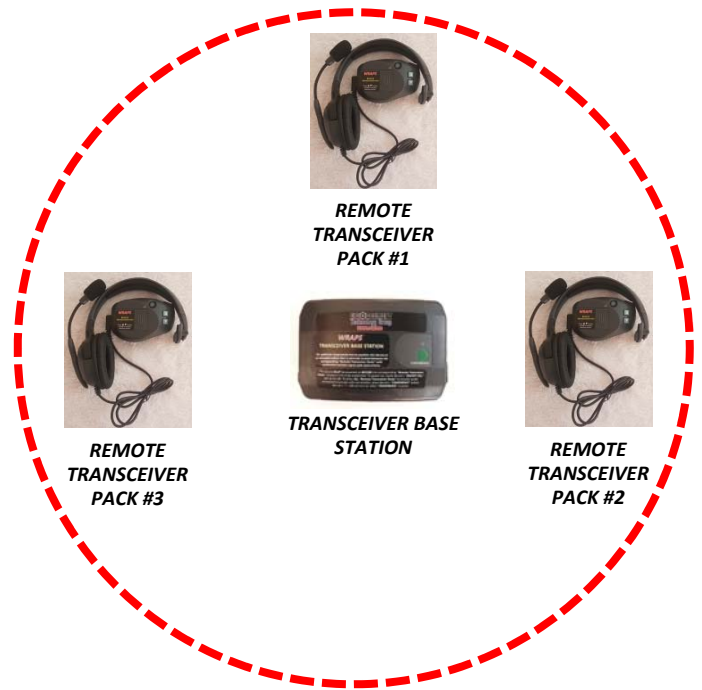
Any communications that take place between the operators equipped with the WRAPS™ System's Remote Transceiver Packs do NOT feedback into the audio source (i.e. Negotiation Audio Channel) that is being monitored. However, due to cross-talk operators may have to wait until there is a break or silence in the audio source that is being monitored to effectively communicate with one another.

1. Power up "**Transceiver Base Station**" and position in a location central to where the "**Remote Belt Pack(s)**" are to be used/deployed. **NOTE:** When powered up, the device creates a Wireless Communications Field/Network with a 700 ft.+ (approx.) diameter.



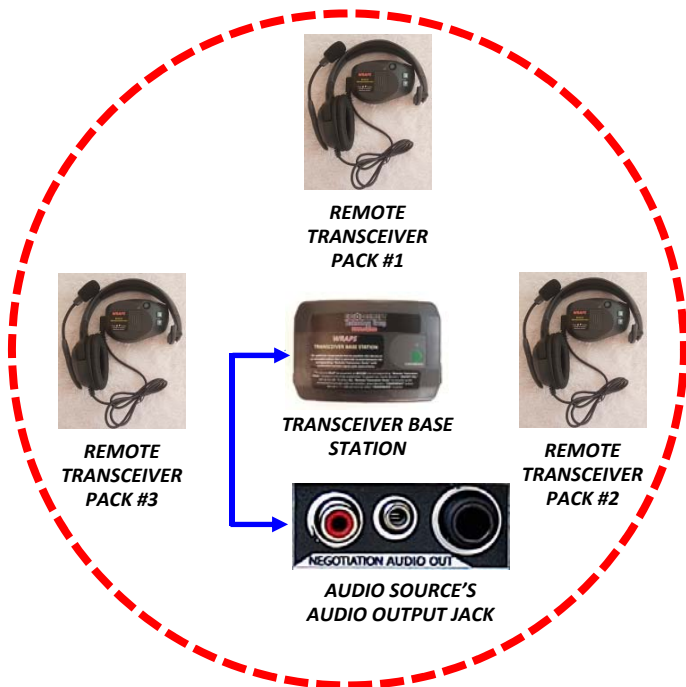
INTRODUCTION/OVERVIEW

2. Power up the “**Remote Transceiver Pack(s)**” and connect each device to “**Single-Cup Headset with Boom Microphone.**” **NOTE:** When positioned within the Wireless Communications Field/Network produced by the “**Transceiver Base Station,**” operators wearing the “**Remote Transceiver Packs**” are able to talk and listen to one another simultaneously over the “**Single-Cup Headset with Boom Microphone**” connected to the device.



3. Use the “**25 ft. Audio Patch Cable**” to connect the “**Transceiver Base Station**” to an audio output jack of the audio source (i.e. Hostage/Crisis Negotiations Throw Phone or other communications system/ equipment) that is be monitored by the operators.

After the “**Transceiver Base Station**” has been connected to the desired audio source (i.e. negotiations/ communications taking place between the Negotiator and subject), operators wearing the “**Remote Transceiver Packs**” positioned within the Wireless Communications Field/Network are now be able to wirelessly monitor the audio source’s signal as well as talk and listen to one another. **NOTE:** Any communications that take place between the operators over the “**Remote Transceiver Packs**” do NOT feed back into the audio source (i.e. the Primary Negotiator and the subject will NOT hear the communications taking place between the operators).



BATTERY CHARGING & MAINTENANCE

The WRAPS™ System's Transceiver Base Station and Remote Transceiver Packs are powered by rechargeable lithium polymer Battery Packs. When fully charged Battery Packs are used, the System may be continuously operated for approx. (6) hours.

To optimize WRAPS™ System performance and run time, it is important for the Battery Packs to be fully charged before and after use as follows:

1. Locate the **"Battery Charge Station"** and **"Battery Charge Station A/C Power Adapter."**
2. Insert the pin end of the **"Battery Charge Station A/C Power Adapter"** into the power port located on the outer/top of the **"Battery Charge Station."**
3. Insert the plug end of the **"Battery Charge Station A/C Power Adapter"** into a 120v wall outlet power supply.
4. Insert a **"Battery Pack"** into any available charging bay located on the **"Battery Charge Station"** checking that battery and bay's contacts (+/-) are properly aligned.
5. Once inserted press the **"Battery Pack"** downwards to secure its position within the charging bay. **NOTE:** When properly inserted, the LED located above the corresponding bay will turn on to indicate the **"Battery Pack"** status.
 - a. A **red** LED indicates that the **"Battery Pack"** is charging. **NOTE:** A fully depleted **"Battery Pack"** may take approx. (3) hours to fully charge.
 - b. A **green** LED indicates that the **"Battery Pack"** is fully charged.
6. Once fully charged, remove the **"Battery Pack"** from the bay by lifting it upwards.



Battery Charge Station & AC Power Adapter



Battery Packs Inserted into Battery Charge Station Bays



SET-UP & OPERATIONS



- The WRAPS™ System's Transceiver Base Station **MUST** be powered on **BEFORE** any of the corresponding Remote Transceiver Packs are powered on to allow a link to be established!
- For optimum range/performance the Transceiver Base Station should be positioned on an elevated surface that is centrally located between the operators equipped with Remote Transceiver Packs with no/minimal signal path obstructions.

1. Install a **"Battery Pack"** into the **"Transceiver Base Station"** as follows:

- Open battery compartment by sliding the tab cover located on the outer/front of the **"Transceiver Base Station"** upwards.
- Insert a **"Battery Pack"** into the compartment so that label is facing upwards and the (2) (+/-) contacts located on the top of the battery are facing away from the tab cover.
- Close the battery compartment by sliding its tab cover downwards.



Transceiver Base Station

2. Power on the **"Transceiver Base Station"** by rotating the **"ON/OFF VOL."** dial located on the outer/front of the device to the left. **NOTE:** When powered on, the **"CONFERENCE"** LED located on the top of the device will flash on then turn off and the **"POWER STATUS"** LED located on the outer/left side will turn on and remain solid.*



Transceiver Base Station Battery Compartment & "POWER ON/OFF VOL." Dial

3. If the WRAPS™ System is to be used to allow for operators to wirelessly monitor an external audio source, connect the **"Transceiver Base Station"** to the source by using the provided **"25 ft. Audio Cable"** as follows:

- Insert either 1/8" (3.5mm) plug of the **"25 ft. Audio Cable"** into the **"AUDIO IN"** jack located on the outer/right of the **"Transceiver Base Station."**
- Insert the remaining plug of the **"25 ft. Audio Cable"** into any available 1/8" (3.5mm) audio out jack located on the external audio source that is to be monitored. **NOTE:** Audio cable adapters have been provided standard to support the connection to an external audio source that is only equipped with a 1/4" (6.35mm) or RCA/Composite audio out jacks.



Transceiver Base Station "AUDIO IN" Jack



Transceiver Base Station Connected to External Audio Source's 1/8" (3.5mm) Audio Out Jack via 25 ft. Audio Cable



1/8" (3.5mm) to 1/4" (6.35mm) Adapter



1/8" (3.5mm) to RCA/Composite Adapter

*The **"Transceiver Base Station"** may also be powered via an external 120v wall outlet power supply as follows:

1. Insert the pin end of the provided **"Transceiver Base Station AC Power Adapter/Charger"** into the power port located on the outer/left of the **"Transceiver Base Station."**
2. Insert the plug end of the **"Transceiver Base Station AC Power Adapter/Charger"** into a 120v electrical outlet. **NOTE:** If a **"Battery Pack"** is installed into the **"Transceiver Base Station"** when it is connected to an external power supply will automatically trickle charge.



SET-UP & OPERATIONS



- The WRAPS™ System's Transceiver Base Station **MUST** be powered on **BEFORE** any of the corresponding Remote Transceiver Packs are powered on to allow a link to be established!
- For optimum range/performance the Transceiver Base Station should be positioned on an elevated surface that is centrally located between the operators equipped with Remote Transceiver Packs with no/minimal signal path obstructions.

4. Install a **"Battery Pack"** into the **"Remote Transceiver Pack"** as follows:
 - a. Open the battery compartment by sliding the tab cover located on the front of the **"Remote Transceiver Pack"** outwards.
 - b. Insert a **"Battery Pack"** into the battery compartment checking that battery and compartment's contacts (+/-) are properly aligned.
 - c. Once inserted press the **"Battery Pack"** downwards to secure it into position and then close the battery compartment by sliding its tab cover inwards.



Remote Transceiver Pack
Battery Compartment

NOTE: When properly inserted, the LED located on the **"Remote Transceiver Pack"** will flash on/off and then remain solid indicate that the device is receiving power and is linked to the **"Transceiver Base Station."**

5. Repeat steps 4a – 4c to install **"Battery Packs"** into the remaining **"Remote Transceiver Packs."**
6. Connect a **"Headset"** to each **"Remote Transceiver Pack,"** by inserting the plugs located on the cable lead wired to the **"Headset"** into the corresponding jacks located on the outer/left of the **"Remote Transceiver Pack."**
7. To allow **ALL** corresponding **"Remote Transceiver Packs"** to simultaneously talk and listen to one another, set the **"Transceiver Base Station"** to **"Conference"** operating mode by pressing the device's **green "CONFERENCE"** button. **NOTE:** The **red LED** located on the front of the **"Transceiver Base Station"** will turn on and remain solid when the device is set to **"Conference"** operating mode. ******



Remote Transceiver Pack
Headset Jacks



Headset



Transceiver Base Station
"CONFERENCE" Button
(Conference Mode Active)

******The WRAPS™ System's Transceiver Base Station features (2) operating mode settings:

- **Dual-Channel**
- **Conference**

The operating mode setting of the **"Transceiver Base Station"** determines which **"Remote Transceiver Packs"** can simultaneously talk and listen to one another.

For complete details, please review the **"TRANSCIVER BASE STATION PROGRAMMING CHANNEL GROUPS & OPERATING MODE SETTINGS"** section of this manual.



HEADSET & REMOTE TRANSCIVER PACK ADJUSTMENTS

Adjusting Headset Listening Volume Levels:

Use the “UP” and “DOWN” arrow buttons located on the WRAPS™ System’s “**Remote Transceiver Pack**” to adjust the listening volume level of the “**Headset**” connected to the device. To increase the listening volume level, press the “UP” arrow button. To decrease the listening volume level, press, “DOWN” arrow button.

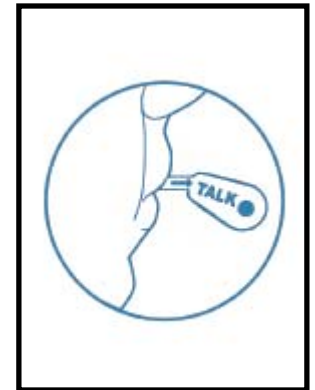
Each time an arrow button is pressed, audible tone is produced within the “**Headset**” to indicate the corresponding listening volume level setting. A double tone indicates that the “**Remote Transceiver Pack**” is set to its maximum or minimum listening volume level setting.



*Remote Transceiver Pack
Listening Volume Level
Adjustment Arrow Buttons*

Positioning the Headset Boom Microphone:

To help ensure best “talk” quality, the side of the boom microphone of the “**Headset**” labeled “TALK” should be positioned approx. one finger width away from the operator’s mouth.

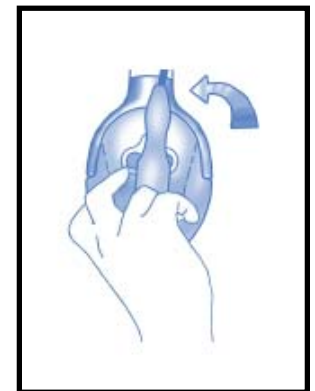


Muting the Headset Boom Microphone:

There are (2) ways in which the boom microphone of the “**Headset**” may be muted.

One way to mute the “**Headset**” microphone is by swiveling the boom microphone’s arm upwards to set it to the “UP” position (parallel to the headband).

The other way to mute the “**Headset**” microphone is to press the “MIC” button located on the outer/top of the “**Remote Transceiver Pack**.” When pressed the “MIC” button will turn red (to indicate the microphone of the connected “**Headset**” is muted). To unmute, press the “MIC” button again (the “MIC” button’s LED will turn off).



*Setting Boom Microphone to
“UP” Position to Mute*



*Remote Transceiver Pack
MIC Button
(MIC Active)*



*Remote Transceiver Pack
MIC Button
(MIC Muted)*

LOW BATTERY WARNING

When a Remote Transceiver Pack's Battery Pack reaches a low power level, a repetitive "beep" tone will sound approx. every 20 seconds over the connected Headset. If this occurs the Battery Pack should be removed, recharged and replaced with a fully charged Battery Pack. Each WRAPS™ System is provided standard with (2) Spare/Additional Rechargeable Battery Packs.

POST OPERATIONS



After operations, power off and remove the Battery Packs from the WRAPS™ System's components so they may be recharged.

To power off the "**Transceiver Base Station**," rotate the "**ON/OFF VOL.**" located on the outer/front of the device to the right until "click" sound is produced and then remove the "**Battery Pack**" from the device. **NOTE:** When powered off the device's "**POWER STATUS**" LED will turn off.

To power off a "**Remote Transceiver Pack**," press and hold down the device's power on/off button for approx. (5) seconds then release and then remove the "**Battery Pack**" from the device. **NOTE:** The LED located on the "**Remote Transceiver Pack**" will turn off to indicate that the device has been powered off.

Follow the instructions contained within the "**BATTERY CHARGING & MAINTENANCE**" section of this manual to charge the "**Battery Packs**" that have been removed.

TRANSCIEVER BASE STATION PROGRAMMING CHANNEL GROUPS & OPERATING MODES

The WRAPS™ System's Transceiver Base Station features (2) Programming Channel Groups:

- **Programming Channel Group #1**
- **Programming Channel Group #2**

Each Programming Channel Group supports the connection of up to (3) Remote Transceiver Packs.

The Remote Transceiver Packs delivered with a WRAPS™ System are preset at the factory to the Transceiver Base Station's Programming Channel Groups as follows:

Remote Transceiver Belt Pack #	Transceiver Base Station Programming Channel Group #
1	1
2	1
3	1
4	2
5	2
6	2

The Transceiver Base Station's operating mode setting determines which Remote Transceiver Packs can communicate with one another.

When the WRAPS™ System's Transceiver Base Station is powered on, it defaults to "**Dual-Channel**" operating mode.

When the Transceiver Base Station is set to "**Dual-Channel**" operating mode, ONLY the Remote Transceiver Packs that are set to the SAME Programming Channel Group (either #1 or #2) can communicate with one another.

To allow ALL Remote Transceiver Packs to communicate with one another, the Transceiver Base Station MUST be set to "**Conference**" operating mode.

To set the Transceiver Base Station to "**Conference**" operating mode, press the device's **green** "**CONFERENCE**" button. **NOTE:** The **red** LED located on the front of the Transceiver Base Station will turn on when the device is set to "**Conference**" operating mode.



*Transceiver Base Station
"CONFERENCE" Button
(Conference Mode Active)*

REMOTE TRANSCEIVER PACK & TRANSCEIVER BASE STATION PROGRAMMING

If at any time a new or additional Remote Transceiver Pack is to be used, one must clear ALL existing Transceiver Base Station Programming Channel Group settings and then program EACH Remote Transceiver Pack to the device.

Clearing All Transceiver Base Station Programming Channel Settings:

1. Check that *ALL* “**Remote Transceiver Packs**” are powered **OFF**.
2. Access the “**Programming Pad**” located behind the clip located on the rear of the “**Transceiver Base Station**” as follows:
 - a. Gently pull the gray tab arm located in the middle behind the clip away from the “**Transceiver Base Station**” to release tension.
 - b. While the gray tab arm is being pulled, slide the clip off the “**Transceiver Base Station**” by pushing it upwards to reveal/provide access to the “**Programming Pad**.”
3. Install a “**Battery Pack**” into the “**Transceiver Base Station**” and power it on by rotating the device’s “**ON-OFF/VOL.**” dial to the left. **NOTE:** *After the device has been powered on both “Programming Pad” LEDs will flash on/off and then turn off.*
4. To clear “**Programming Channel Group #1,**” follow these steps:
 - a. Press and hold down the “**#1 Programming Button**” for approx. (5) seconds until its corresponding LED begins to flash on and off then release.
 - b. While the corresponding LED is flashing on and off, press the “**#1 Programming Button**” (7) consecutive times. **NOTE:** *When this is performed, the corresponding LED will begin to rapidly flash on/off for approx. (10) seconds and will then turn off indicating that all the “Programming Channel Group #1” settings have been cleared.*
5. To clear “**Programming Channel Group #2,**” follow these steps:
 - a. Press and hold down the “**#2 Programming Button**” for approx. (5) seconds until its corresponding LED begins to flash on and off then release.
 - b. While the corresponding LED is flashing on and off, press the “**#2 Programming Button**” (7) consecutive times. **NOTE:** *When this is performed, the corresponding LED will begin to rapidly flash on/off for approx. (10) seconds and will then turn off indicating that all the “Programming Channel Group #2” settings have been cleared.*
6. Power off the “**Transceiver Base Station**” rotating its “**ON/OFF VOL.**” to the right until a “click” sound is produced. **NOTE:** *When powered off the device’s “POWER STATUS” LED will turn off.*



Transceiver Base Station
Clip's Gray Pull Arm



Transceiver Base Station's
Programming Pad
(Clip Removed)

After steps 1-6 have been performed all the Transceiver Base Station Program Channel Group settings have been cleared and the device is now ready to be programmed to the Remote Transceiver Packs.

REMOTE TRANSCEIVER PACK & TRANSCEIVER BASE STATION PROGRAMMING

After the “**Clearing All Transceiver Base Station Programming Channel Settings**” have been completed, the Remote Transceiver Packs are ready to be programmed to the Transceiver Base Station.

Programming Remote Transceiver Packs to the Transceiver Base Station:

1. Check that ALL “**Remote Transceiver Belt Packs**” are powered OFF.
2. Power on the “**Transceiver Base Station**” by rotating the device’s “**ON-OFF/VOL.**” dial to the left. **NOTE:** *After the device has been powered on both “**Programming Pad**” LEDs will flash on/off multiple times and then turn off.*
3. To program a “**Remote Transceiver Pack**” to “**Programming Channel Group #1,**” follow these steps:
 - a. Press and hold down the “**#1 Programming Button**” located on the rear of the “**Transceiver Base Station**” for approx. (5) seconds until its corresponding LED begins to flash on and off then release.
 - b. Install a “**Battery Pack**” into the “**Remote Transceiver Pack**” that is to be programmed to “**Programming Channel Group #1**”
 - c. Press the “**DOWN**” arrow button located on the “**Remote Transceiver Pack**” that programmed (3) consecutive and immediately afterwards press and hold down the device’s “**UP**” arrow button.
 - d. Continue to hold down the device’s “**UP**” arrow button until the device’s LED turns solid then release to initiate the programming process. **NOTE:** *Once initiated the programming process can take between (5) to (30) seconds to complete. When the process is complete; both the “**Remote Transceiver Pack**” and the “**#1 Programming Button**” LEDs will remain solid.*
4. After the programming process is complete, power off the “**Remote Transceiver Pack**” by pressing and holding down the device’s “**POWER ON/OFF**” button. **NOTE:** *When powered off both the “**Remote Transceiver Belt Pack**” and the “**#1 Programming Button**” LEDs will turn off.*
5. Repeat steps 3 and 4 to program up to (2) additional “**Remote Transceiver Packs**” to “**Programming Channel Group #1.**”
6. To program a “**Remote Transceiver Pack**” to “**Programming Channel Group #2,**” follow these steps:
 - a. Press and hold down the “**#2 Programming Button**” located on the rear of the “**Transceiver Base Station**” for approx. (5) seconds until its corresponding LED begins to flash on and off then release.
 - b. Install a “**Battery Pack**” into the “**Remote Transceiver Pack**” that is to be programmed to “**Programming Channel Group #2**”
 - c. Press the “**DOWN**” arrow button located on the “**Remote Transceiver Pack**” that programmed (3) consecutive and immediately afterwards press and hold down the device’s “**UP**” arrow button.
 - d. Continue to hold down the device’s “**UP**” arrow button until the device’s LED turns solid then release to initiate the programming process. **NOTE:** *Once initiated the programming process can take between (5) to (30) seconds to complete. When the process is complete; both the “**Remote Transceiver Pack**” and the “**#2 Programming Button**” LEDs will remain solid.*
7. After the programming process is complete, power off the “**Remote Transceiver Pack**” by pressing and holding down the device’s “**POWER ON/OFF**” button. **NOTE:** *When powered off both the “**Remote Transceiver Belt Pack**” and the “**#2 Programming Button**” LEDs will turn off.*
8. Repeat steps 6 and 7 to program up to (2) additional “**Remote Transceiver Packs**” to “**Programming Channel Group #2.**”
9. After the “**Remote Transceiver Packs**” have been programmed, replace the clip to the “**Transceiver Base Station**” to cover the device’s “**Programming Pad.**”