

# T9100 & Cancel Panel

Paging System Transmitter

## USER MANUAL



Installation, Warranty and Service Information

# **LRS**

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# THE T9100 Installation:

## Hardware Provided

Each transmitter kit contains the transmitter, Instruction Booklet, two antenna, one 9VAC 1.5A power adaptor, one Staff Name board, and four mounting bracket kits.

## Optional Hardware

The T9100 and T9100 Cancel Panel have the ability to print a server report to a POS Printer. Contact LRS if you wish to purchase a printer.

## Hardware Setup Procedure

1. Remove all items from their packaging.
2. Locate the silver connector on the top of the transmitter. Twist the antenna (about 3" long, BNC, silver bottom) onto the connector.
3. Locate the gold connector on the top of the transmitter. Twist the antenna (about 4" long, SMA, bends at right angle) onto the gold connector.



**Note:** Both antennas must be attached before turning on transmitter. Do not remove either antenna at any time due to risk of damage.

4. Mount the power supply in convenient location with access to 110V power.

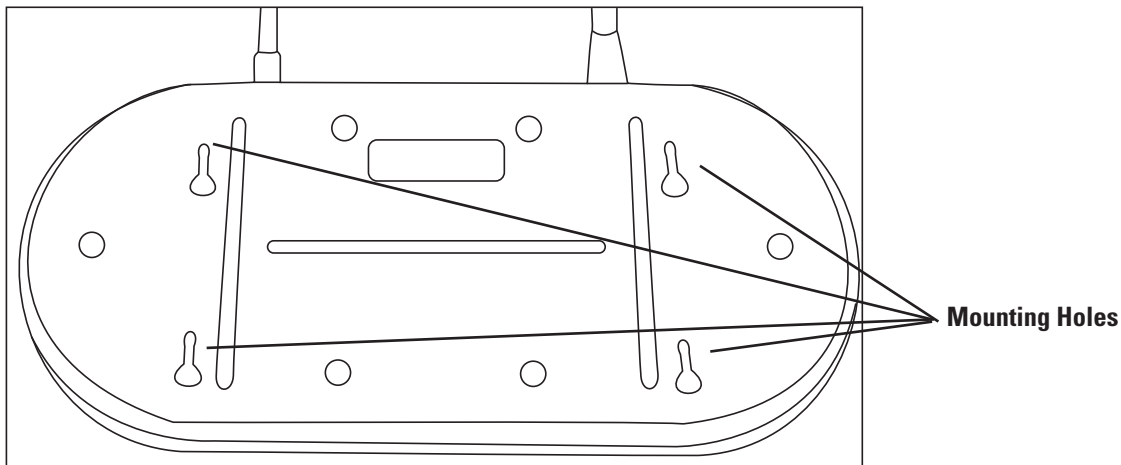
## Mounting the Transmitter

The T9100 is designed to be mounted in various ways to accommodate the kitchen environment: to a horizontal surface (i.e. table, counter, shelf), to a vertical surface, or hanging to a wall or stand.

**Caution:** *Mounting with the antenna near any large metal objects will degrade the operating range.*

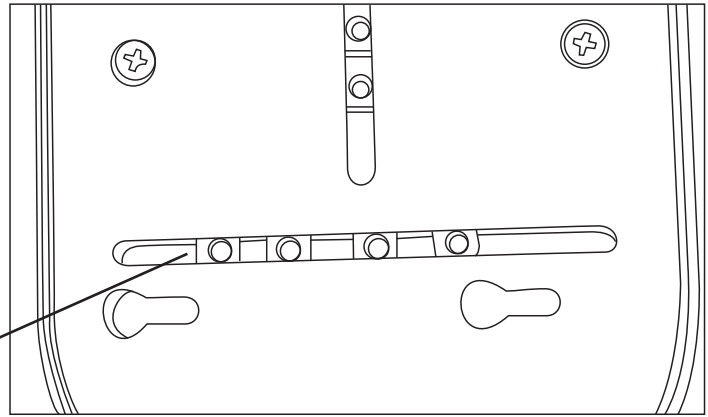
To place on a wall or stand, locate the four slots on the mounting plate. Then align four wall anchors (5mm diameter) into the wall to the mounting plate.

## Panel and Wall Mount



For mounting to surfaces, place the mounting brackets into the captive nuts for either horizontal or vertical mounting. There are two sets of 4 captive nuts for mounting to horizontal surfaces, and one set of captive nuts for mounting to vertical surfaces.

Captive Nuts

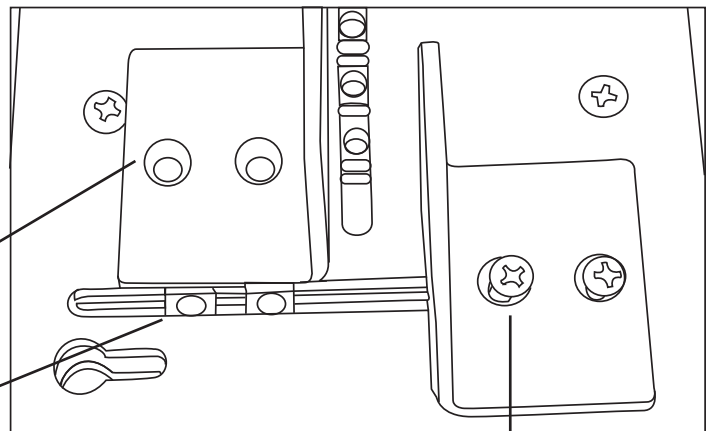


**To attach the clamps:**

1. Align the mounting nuts to the clamps.
2. Use the #10-32 x 3/8" screws to hold the clamps. Do not fully tighten screws.

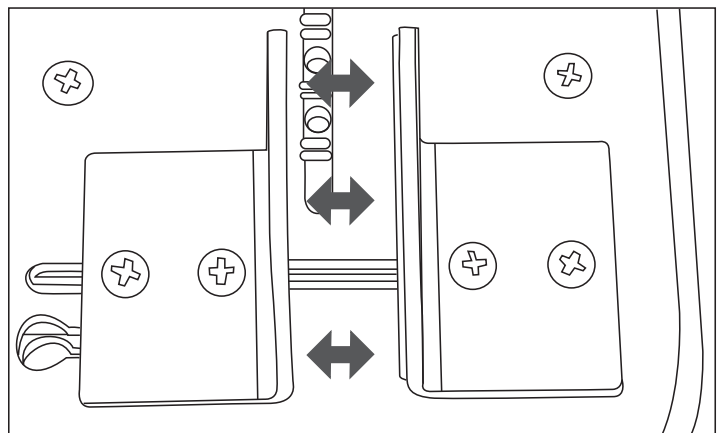
Clamp

Captive Nuts

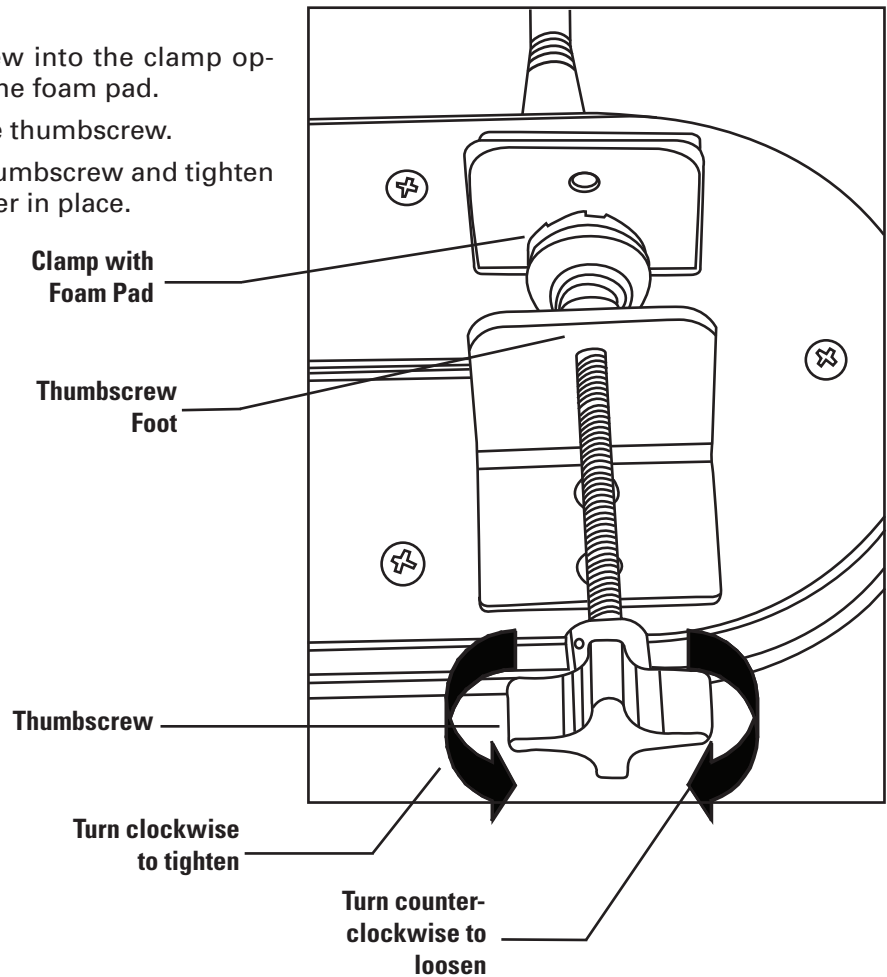


Screws

3. Adjust the distance between clamps until fits to the mounting surface.
4. Tighten screws.

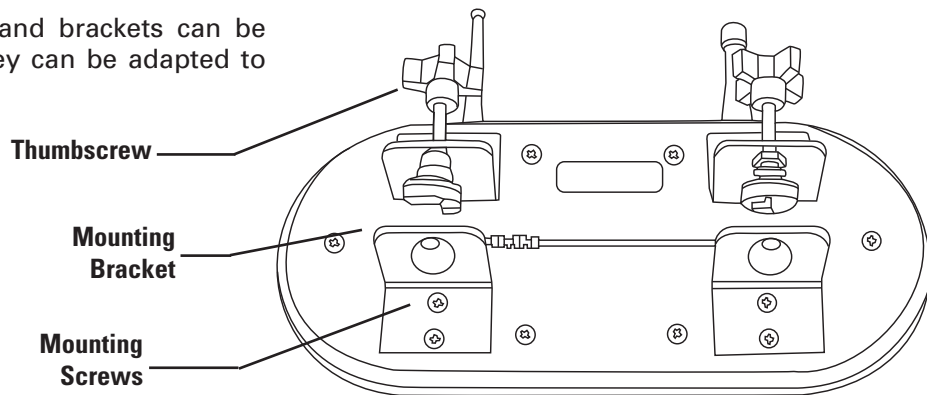


5. Place the thumbscrew into the clamp opposite the one with the foam pad.
6. Attach the foot of the thumbscrew.
7. Adjust position of thumbscrew and tighten to hold the transmitter in place.

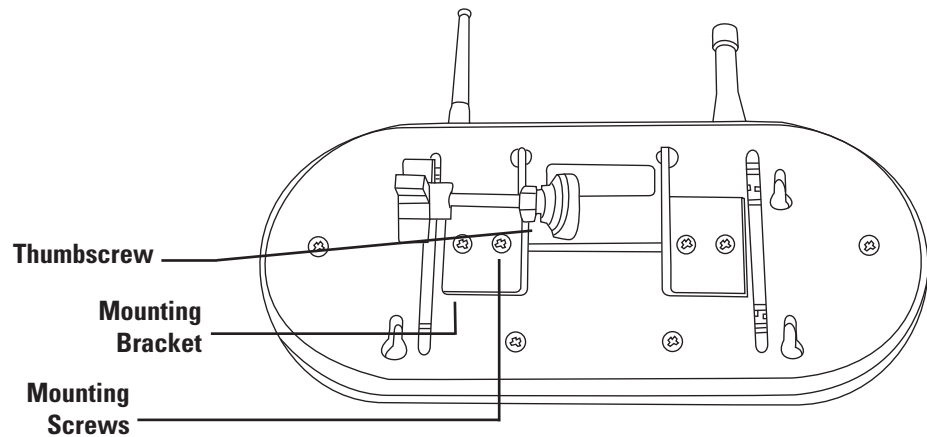


Because the thumbscrews and brackets can be mounted in many ways, they can be adapted to most locations is possible.

### Horizontal Mount



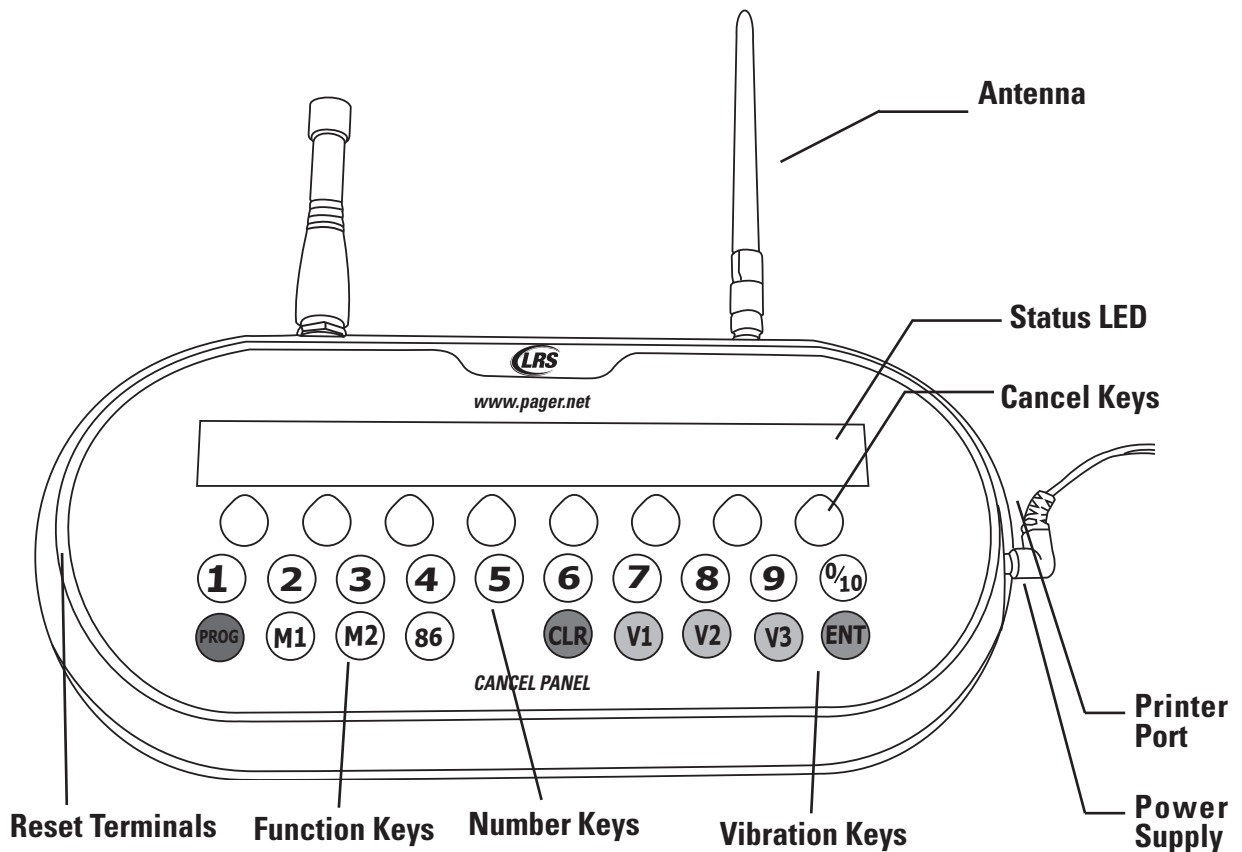
### Vertical Mount



## **Power Connection**

1. Plug the power supply into a standard 110V outlet and the barrel connector end into the jack on the side of the transmitter.
2. Upon completion of the setup, make sure pagers are fully charged.

# Overview of T9100



## Keypad

### Function Keys

The function keys are located along the bottom row of the T9100.

- **M1 & M2** used to page and program Manager Pagers.
- **86** "All Call" button used to page all pagers.
- **CLR** used to clear an entry or to back up one menu level.
- **PROG** press once to program pagers, press a second time to access the menu functions.
- **ENT** used to enter functions.

### Vibration Keys

V1, V2 and V3 select the number of vibrations a pager will respond with. This button is pressed before paging a pager. Sends message 1, 2 or 3 to Alpha pagers.

### Number Keys

Number keys 1 through 10 located along the center row. Number 10 is also 0 when Programming, using the Menus, or paging pagers greater than 10.



## Cancel Keys

The row of keys located below the display. These keys will cancel a call to the pager number shown on the display immediately above the respective key. The Cancel Keys also are used during menu selection.

## Antenna

The T9100 utilizes 2 antennas when transmitting.

A UHF antenna, located to the user's left, is used to communicate with the LRS pagers.

A 2.4 GHz antenna, located to the user's right, communicates with the T9100 Cancel Panel.

## Reset Terminals

The Reset Terminals are located to the user's left side on the transmitter. These are used to reset a pager for programming.

## Status LED

This LED will light green to indicate that the T9100 is sending information to the pagers or T9100 Cancel Panel.

## System Specifications

**Notice:** Operation is subject to the following:

- This device may not cause interference
- This device will accept any interference including interference that may cause undesired operation of the unit.

|                             |  |
|-----------------------------|--|
| <i>Required Voltage:</i>    | <i>One 110/220V outlet for the T9100 transmitter</i> |
| <i>Operating Frequency:</i> | <i>420-470 MHz</i>                                   |
| <i>Radiated Power:</i>      | <i>&lt; 4900 micro-volts/meter</i>                   |
| <i>Operating Range:</i>     | <i>Dependent upon pagers used</i>                    |

# Using the T9100

## Time and Date

### Initial Power Up

During power up, to enter the time and date:

- At [enter time], enter the hh mm (hour, minute) using the number keys, and then press ENT.
- Press 2 for AM or 10 for PM.
- At [date], enter the mm dd yy (month, day, year) using the number keys, and then press ENT.

### Clock Menu

The time and date can also be set from the Clock menu by:

- Press PROG – PROG – 1 – ENT.
- Press the button under set.
- At [enter time], enter the hh mm (hour, minute) using the number keys, and then press ENT.
- Press the button under AM or PM.
- At [date], enter the mm dd yy (month, day, year) using the number keys, and then press ENT.
- If done, press Yes (button under Yes), if not, press No (button under No.)



**Note:** The transmitter will use a default selection of “Yes” after 30 seconds of inactivity.)

### Send Time

This feature will automatically send the current time and date to the pagers every 15 minutes. The default setting is OFF.

To enable:

- Press PROG – PROG – 1 – ENT.
- Press button under Send.
- At [Auto] select button under ON.
- If done, select Yes (button under Yes), if not, select No (button under No.)

To disable:

- Press PROG – PROG – 1 – ENT.
- Press button under Send.
- At [Auto] Press select button under OFF.
- If done, select Yes (button under Yes), if not, select No (button under No.)

### Paging

To page pagers 1 through 99, enter the 2 digit pager number using the number keys. The 10 key also is used as the 0 key.

### All Call

If all staff pagers need to be called at once, press the 86 key.

### Manager Pagers

To page the managers, press the M1 for the #1 manager pager or M2 for the #2 manager pager.

### Cancel Page

To clear/cancel a pager to the server, press the Cancel Key under the pager number.

# User Preferences

The T9100 will come with factory settings for normal operating use. Some features can change per the user's custom needs.

## Display Current Settings

To view the current settings for the transmitter:

- Press PROG – PROG – 1 – 6 – ENT.
- Press ENT to scroll through each item:
  - Date
  - Restaurant ID Number
  - Station ID Number
  - FM Start point
  - Pre-canned Message
  - Repage interval
  - M1 (Manager 1) information
  - M2 (Manager 2) information
  - Duty Pager information
  - Router Set
  - Cancel Panel set to page (yes or no) (Note: Only seen on Cancel Panel)
  - UHF Master
  - T9100 is set to Master (yes or no)
  - Node ID
  - Pan and Channel ID
  - Channel Scan is on or off
  - Synched on or off
  - Beeper (keytone) is on or off
  - Code Version
  - Error Count
- If done, press 6 for Yes, if not, press 10 for No.

## Antitheft



**Note:** This feature is ONLY for text pagers.

This feature will make a pager beep and/or vibrate continuously if goes beyond the range of the transmitter.

To enable:

- Press PROG – PROG – 4 – ENT.
- At [theft] press button under ON.
- If done, select Yes (button under Yes), if not, select No (button under No.).

To disable:

- Press PROG – PROG – 4 – ENT.
- At [theft] press button under OFF.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Display Clock

The default setting for the clock is ON during normal operation.

To disable:

- Press PROG – PROG – 1 – 0 – ENT.
- Press button under Clock for the Clock sub-menu.
- At [clock] Press button under OFF.
- If done, select Yes (button under Yes), if not, select No (button under No.)

To enable:

- Press PROG – PROG – 1 – 0 – ENT.
- Press button under Clock for the Clock sub-menu.
- At [clock] Press button under ON.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Vibe Level

The default Vibration Level for pagers can be set via:

1. Pressing the V1, V2, or V3 buttons for levels 1, 2, and 3 respectively.
2. From the menus:
  - Press PROG – PROG – 1 – 2 – ENT.
  - Enter a value of 1, 2, or 3 from the keypad
  - If done, select Yes (button under Yes), if not, select No (button under No.)

## Keytone

The transmitter default is for tones to sound with each key press.

To disable:

- Press PROG – PROG – 2 – 2 – ENT.
- At [beeper] press button under OFF.
- If done, select Yes (button under Yes), if not, select No (button under No.)

To enable:

- Press PROG – PROG – 2 – 2 – ENT.
- At [beeper] press button under ON.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Preset Message

The LRS transmitters come with a list of preset messages that can be sent to Alpha Pagers. To edit which message is sent:

- Press PROG – PROG – 1 – 3 – ENT.
- Enter the preferred message from the table, then press ENT.
- If done, select Yes (button under Yes), if not, select No (button under No.)

### Pre Loaded Messages

|                       |                          |                       |                          |
|-----------------------|--------------------------|-----------------------|--------------------------|
| <b>000</b> Phone Call | <b>020</b> Starter       | <b>040</b> Door       | <b>060</b> Car           |
| <b>001</b> Sales Call | <b>021</b> Service drive | <b>041</b> Survey     | <b>061</b> Bus           |
| <b>002</b> Manager    | <b>022</b> Showroom      | <b>042</b> T-nnn Q-mm | <b>062</b> Bay           |
| <b>003</b> Customer   | <b>023</b> Parked Call   | <b>043</b> Break      | <b>063</b> Low battery   |
| <b>004</b> Room       | <b>024</b> Voice Mail    | <b>044</b> Fire       | <b>064</b> Error         |
| <b>005</b> Visitor    | <b>025</b> Dressing room | <b>045</b> Unit       | <b>065</b> Exit          |
| <b>006</b> call Ext   | <b>026</b> Price check   | <b>046</b> Window     | <b>066</b> Fax           |
| <b>007</b> MTG Room   | <b>027</b> Department    | <b>047</b> Nurse      | <b>067</b> host          |
| <b>008</b> Lane       | <b>028</b> Cashier       | <b>048</b> Register   | <b>068</b> Space         |
| <b>009</b> Aisle      | <b>029</b> Office        | <b>049</b> Owner      | <b>069</b> Location      |
| <b>010</b> Void       | <b>030</b> Table         | <b>050</b> Check      | <b>070</b> Nursery       |
| <b>011</b> Stamps     | <b>031</b> Winner        | <b>051</b> Drink      | <b>071</b> Teller        |
| <b>012</b> Change     | <b>032</b> Pickup        | <b>052</b> Food       | <b>072</b> Officer       |
| <b>013</b> Station    | <b>033</b> Dock          | <b>053</b> Service    | <b>073</b> Buffet        |
| <b>014</b> Machine    | <b>034</b> You have mail | <b>054</b> Seat       | <b>074</b> Diaper change |
| <b>015</b> Operator   | <b>035</b> Table ready   | <b>055</b> Booth      | <b>075</b> Child crying  |
| <b>016</b> Emergency  | <b>036</b> No special    | <b>056</b> Lobby      | <b>076</b> To nursery    |
| <b>017</b> XX Minutes | <b>037</b> Hole          | <b>057</b> Help       |                          |
| <b>018</b> Tee        | <b>038</b> Kitchen       | <b>058</b> Restroom   |                          |
| <b>019</b> Pro Shop   | <b>039</b> Bar           | <b>059</b> Valet      |                          |

## Repaging

Repaging sends repeated messages to the pagers.



**Note:** This feature requires use of an associated Cancel Panel to work.

### Server

To set the re-page time for Server pagers:

- Press PROG – PROG – 6 – ENT.
- Press button under Repage.
- At [time] use the number keys to enter as mm ss (minute, seconds), then press ENT. The screen will briefly show the updated re-page time.

- If done, select Yes (button under Yes), if not, select No (button under No.)

## Manager

To set the Manager to be paged once after the third re-page:

- Press PROG – PROG – 6 – ENT.
- Press button under More.
- At [mgr] press button under Mgr.
- Press button On.
- If done, select Yes (button under Yes), if not, select No (button under No.)

To turn Off the Manager to be paged:

- Press PROG – PROG – 6 – ENT.
- Press button under More.
- At [mgr] press button under Mgr.
- Press button under Off.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Repeater Delay

When using a repeater it may be necessary to add a delay between pages when paging multiple pagers to allow the repeater time to repeat the signal and detect the next one. Default setting is OFF.

To add repeat Delay:

- Press PROG – PROG – 6 – ENT.
- Press button under More.
- Press button under repeater.
- At [rPt], press button under ON to enable the Repeat Delay. Press button under OFF to disable Repeat Delay.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Duty Pager

The duty pager is used to remind someone of a periodic repetitive task. To setup:

- Press PROG – PROG – 7 – ENT.
- At [duty] press button under On. (After 10 seconds, the screen will default to Off.)
- Enter the Duty Pager number with the keypad, then press ENT.
- Enter Vibe Level (value of 1, 2, or 3), then press ENT.
- Enter the repage time as mm ss (minutes, seconds), then press ENT.
- Screen will briefly display the new settings.
- If done, select Yes (button under Yes), if not, select No (button under No.)

To disable the Duty Pager:

- Press PROG – PROG – 7 – ENT.
- At [duty] press button under Off.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Restaurant ID

The ID of the Restaurant system. Set if more than one LRS system is in an area to prevent interference. To set:

- Press PROG – PROG – 1 – 4 – ENT.

- At [rest ID], enter a value from 0 to 9, and then press ENT.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Station ID

The station that will be displayed on a pager if more than 1 station is in use. To set:

- Press PROG – PROG – 1 – 1 – ENT.
- At [stn ID], enter a value from 0 to 9, and then press ENT.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## POCSAG (FM) Start

- Press PROG – PROG – 8 – ENT.
- Press button under FM Start (Note: A 10 second delay will default to FM Start).
- Set the start point at value from 00 to 99, and then press ENT.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Edit Manager Pager Number

In the event the Manger's pager numbers are changed, to change the T9100:

- Press PROG – PROG – M1. (or M2)
- At [MGR1 num], enter the new manger number from the keypad (value from 0 to 99), then press ENT.
- Enter the Vibration Level (Value of 1, 2, or 3), then press ENT.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Reset to Factory Default



**Note/Caution:** If you reset the T9100 to factory defaults the system ID, vibration mode, and station ID could be reset and you may have to re-set these to work with your existing pagers. If you still want to proceed with this function, do the following:

- Press PROG – PROG – 2 – 1 – ENT.
- At [reset] press button under Yes. (Select No to keep current settings.)
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Server Statistics

The T9100 can track the daily statistics of the number of times a server was paged, the server's average response time, and the number of times a manager is paged.

To enable Server Statistics:

- Press PROG – PROG – 2 – 3.
- Press ENT.
- At [Stats], press button under ON.
- Enter the start time (example 3 for 3 AM or 3 PM) and then press ENT.
- Press button under AM or PM.
- The transmitter's memory will clear.
- If done, select Yes (button under Yes), if not, select No (button under No.)



**Note:**

- At the set time, the daily report will print to the POS Printer.
- At the set time, the memory will also clear to begin a new set of daily statistics.

To disable the Server Statistics:

- Press PROG – PROG – 2 – 3.

- Press ENT.
- At [Stats], press button under OFF.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Printing Statistics



**Note:** Server Stats needs to be turned ON before stats can be viewed or printed. The transmitter must be set as UHF Master.

The current POS Printer supported for the T9100 is the Star TSP650.

The connection between the transmitter and printer is a “straight-through”. This is achieved with a standard DB9 to DB25 adapter connected to the back of the printer, and a LRS provided serial cable to connect the printer to the transmitter.

If the user attempts to use a “null cable” between the printer and the transmitter, a “null modem” will need to be added in-line to correct the connection.

To print a current view of the Server Statistics:

- Press PROG – PROG – 2 – 4 – ENT.
- Enter a server number and press ENT.
- Press button under PRINT.
- The statistics will now print.
- If done, select Yes (button under Yes), if not, select No (button under No.)



**Note:** The Statistics will also print at the time set in the Stats menu.

### Example Print

Date:  
Time:

**Server Response Report**

| Svr | Pages | A.R.T. | Mgr |
|-----|-------|--------|-----|
| 1   | 5     | 00:44  | 02  |
| 5   | 4     | 00:29  | 01  |
| 12  | 3     | 00:15  | --  |
| 17  | 4     | 00:25  | 01  |

---

Svr = Server  
 Pager = # of pages in last 24 hours  
 A.R.T. = Average Response Time  
 Mgr = # of times manager was paged

## Viewing Statistics

To View the current Server Statistics:

- Press PROG – PROG – 2 – 4.
- Enter a server number and press ENT.
- Press button under VIEW.
- Press ENT to scroll through the list of servers. (The list will start at the number entered and will continue to the end of the list or until CLR is pressed.)
- If done, select Yes (button under Yes), if not, select No (button under No.)



### Example Statistics View:

| Server# | # of Pages in 24 hr Period | Average Response time (mm:ss) | # of Times Manager Paged |
|---------|----------------------------|-------------------------------|--------------------------|
| 1       | 05                         | 00:44                         | 02                       |

## Range Test

This can be used to determine the effective range of the T9100 in your environment. To start the range test:

- Press PROG – PROG – 8 – ENT.
- Press button under Range. The Range Test will begin automatically.
- Stop the Range Test by pressing any button.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Find ID

- Press PROG – PROG – 1 – 0 – ENT.
- Press button under ID. (Note: A 10 second delay will default to ID.)
- To start locating the ID, select Yes. (To not locate the ID, select No.)
- The transmitter will begin by transmitting on ID 0 (zero). If the pager received the page, at the prompt [receive] select Yes. If not, select No. The transmitter will automatically increment to the next ID and page. Repeat this step until the pager receives the page.
- If done, select Yes (button under Yes), if not, select No (button under No.)

## Three Digit POCSAG Paging

If using the T9100 in an LRS system with Group Programmed POCSAG Pagers, the Group Paging mode will allow the T9100 to page the three digit individual pager number of the POCSAG Pager.

When this mode is turned on, numbers on the keypad and display are treated as +100. (ex: Pressing 22, the LED Display will show 22, pager #122 will be paged.)



**Note:** Turning on this mode will not enable support to page Group Numbers 1-99. The transmitter will only page individual numbers 100-199.

To turn on Group Paging Support:

- Press PROG – PROG – 2 – 0 – ENT
- Press the button under Yes
- If done, select Yes (Button under Yes), if not select No (Button under No)

# Pager Programming

Star and Alpha Pagers can be reprogrammed from the T9100 transmitter. If the pagers need to have their identification code reprogrammed, contact LRS before proceeding. The following is the basic procedure to use:

## **For Server Pagers:**

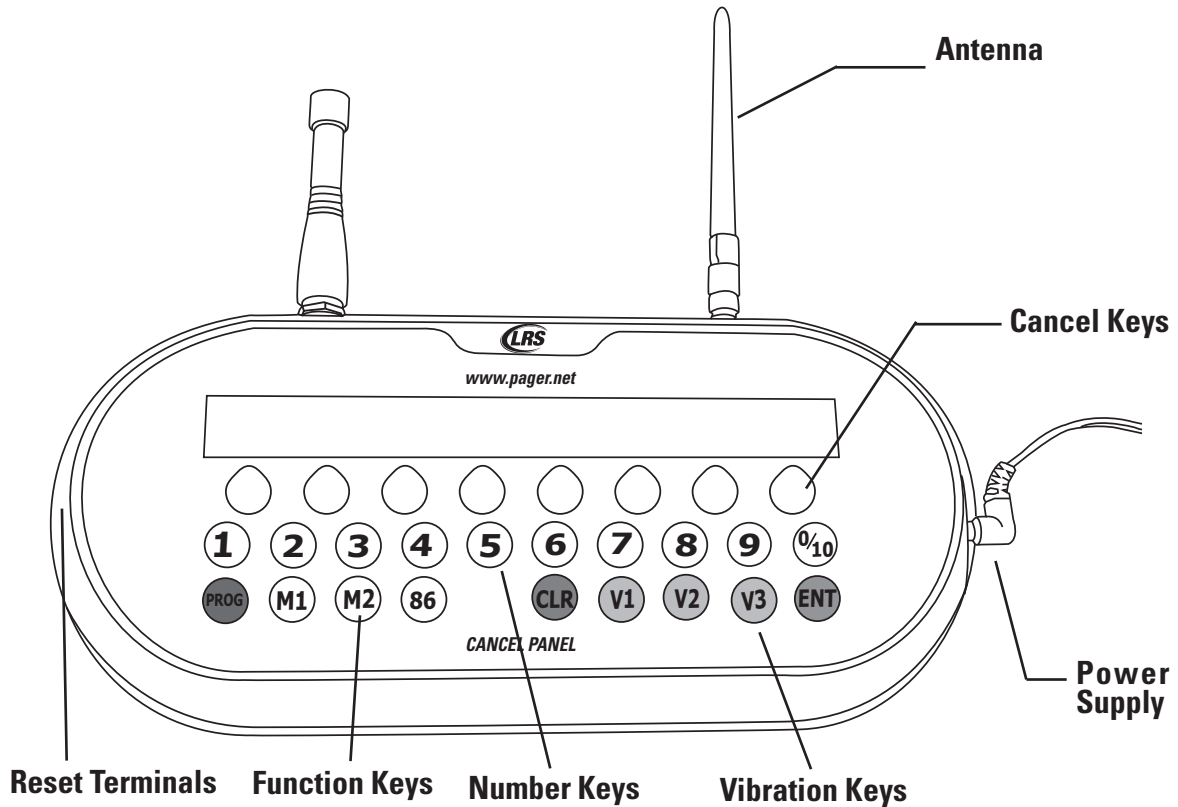
1. Be sure to set the T9100 for the System ID in use.
2. Be sure the POCSAG (FM) start is correct for the pagers in use.
3. Reset the pager:
  - Rechargeable pagers are removed from the charger (or touched to the reset terminals. They stop vibrating when reset is complete.)
  - Battery powered pagers reset when turned off and then back on (or remove and replace battery).
4. Press PROG- # - ENT (# is the pager number 1 through 99).
5. After the pager responds, page it to ensure it programmed okay.
  - Star pagers will do one glow mode cycle.
  - Alpha pagers will beep 4 times.

## **For Manager Pagers:**

1. Be sure to set the T9100 for the System ID in use.
2. Be sure the POCSAG (FM) start is correct for the pagers in use.

# T9100 CANCEL PANEL

## Overview of T9100 Cancel Panel



## Keypad

### Function Keys

The function keys are located along the bottom row of the Cancel Panel.

- **M1 & M2** used to page and program Manager Pagers.
- **86** "All Call" button used to page all pagers.
- **CLR** used to clear an entry or to back up one menu level.
- **PROG** press once to program pagers, press a second time to access the menu functions.
- **ENT** used to enter functions.

### Vibration Keys

V1, V2 and V3 select the number of vibrations a pager will respond with. This button is pressed before paging a pager. Sends message 1, 2 or 3 to Alpha pagers.

### Cancel Keys

The row of keys located below the display. These keys will cancel a call to the pager number shown on the display immediately above the respective key. The Cancel Keys also are used during menu selection.

# Using the T9100 Cancel Panel

## Paging

To page pagers 1 through 99 enter the 2 digit number of the pager.

The transmitter can page up to 16 pagers at one time without using the 86 "all call" button.

When paged, the pager number will show on Cancel Panel display. If not canceled, the pager number will begin to flash after the first re-page time expires. The pager number will flash faster after the second re-page time expires.

## Cancel Page

To Cancel a page, press the Cancel Key immediately under the number of the pager.

If using a Cancel Panel with T9100, the pager number may be canceled from the Cancel Panel or by pressing CLR then the pager number on the T9100.

# User Preferences

The T9100 Cancel Panel operates as a “Slave” to the T9100. Many settings are transmitted to the Cancel Panel via the T9100.

To edit preferences, refer to the User Preferences of the T9100. Note: To enter selections greater than 10, the user will need to enter as two numbers. Example, enter 15 by pressing 1 and then 5.

## Paging from Cancel Panel

This feature enables or disables the Cancel Panel from paging pagers. This feature is only available and only set on the Cancel Panel. The default setting is On to page pagers. To disable:

- Press PROG – PROG – 1 – 7.
- At [CP Paging] press the cancel button under OFF.
- If done, select Yes (button under Yes), if not, select No (button under No.)

To enable

- Press PROG – PROG – 1 – 7 – ENT.
- At [CP Paging] press the cancel button under ON.
- If done, select Yes (button under Yes), if not, select No (button under No.)

# Associating the T9100 Cancel Panel to T9100

1. Apply power to T9100 and allow it to boot up.
2. While T9100 is booting, apply power to the cancel panel and allow it to boot up.
3. The transmitter times should synchronize.

If a Cancel Panel does not synchronize.

1. On T9100, press PROG – PROG – 2 - 9 - ENT to start Associate mode.



**Note:** The T9100 will stay in Associate for 2 minutes.

2. On Cancel Panel, press PROG – PROG – 2 – 9 – ENT to start Associate mode. When the Cancel

Panel associates, it will display:

- Attempt Join
- PAN Found
- Then display channel and Pan ID.

# Changing Transmitters as 2.4 GHz Master

Any T9101, T9100, or T9100 can act as a single coordinator for the 2.4 GHz network, synchronizing most settings and clocks for all transmitters.

To Set a Transmitter as Master:

1. Press PROG-PROG-25 (T9101) or PROG-PROG-2-5 (T9100/CP).
2. Select YES.
3. The transmitter will now restart and display the time and date entry. Enter the time and date.

If another transmitter in the network does not successfully change from “Master” to “Slave” status on T9101:

1. Press PROG-30 to release from Network.
2. Press 7 for YES. Transmitter will restart and enter Associate Mode.
3. On “Master” of network Press PROG-PROG-29 (T9101) or PROG-PROG-2-9 (T9100/CP) to enter Associate Mode.
4. If T9101 does not initially associate, Press PROG-PROG-29 to enter Associate Mode.

# SERVICE QUESTIONS AND ANSWERS

Should your paging system ever fail or should you need additional paging supplies, call Long Range Systems at (800) 437-4996.

## **Normal Business Hours**

Monday – Friday 8:30 am to 5:00 pm Central Time.

## **Weekend or Night Emergencies:**

- Long Range Systems has 24/7 live technical support available.
- Please keep in mind that replacement options are limited over the weekend.

# LRS PAGERS AVAILABLE FOR THE T9100

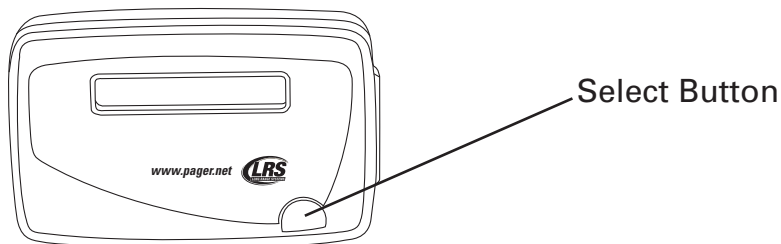
(These pagers are sold separately)

## SP5 Rechargeable Alpha

### LRS Alpha E467

### Star Rechargeable Pager

## USING THE SP5



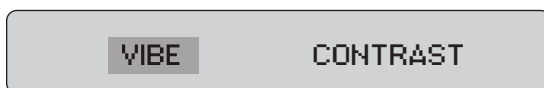
### Charging

Any rechargeable pager will require use of an LRS charger. The SP5 uses the Charger 5 (CH-R5)

1. Place the pager in the charger
2. Allow unit to charge fully overnight.
3. Remove from charger and the pager will vibrate or beep to show it is working.
4. The LCD will show the pager's ID
5. Return the pager to the charger at the end of each day

### Menus

To access the vibrate/contrast menu, simply remove the pager from the charger or use the reset terminal on the T9100. While it is vibrating or beeping, press and hold the Select Button for 8 seconds. The following top level menu will display:



. If you PRESS and RELEASE the Select Button, the menu selector will scroll to the right and will highlight "Contrast"



To exit this menu wait 8 seconds

To re-enter the vibrate/contrast menu at any time, reset the pager, and then hold the SP5 pager button.



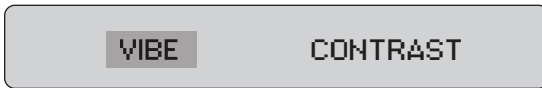
## Vibe

### To set the Vibration Level:

1. Remove the pager from the charger
2. While vibrating or beeping, press and hold the Select Button for 5-8 seconds
3. Highlight the Vibe selection then PRESS and HOLD the Select Button until the screen shows.



4. Press or hold the Select Button until the desired vibration level is selected
5. If holding down on the Select Button, the vibe level will increase to max and then decrease towards the minimum
6. Release the Select Button when desired vibration level has been reached
7. To exit, wait 8 seconds and the pager will go back to the vibe/contrast menu



## Contrast

### To set the Contrast Level

1. Remove the pager from the charger
2. While vibrating or beeping, press and hold the Select Button for 5-8 seconds
3. Highlight the Contrast selection then PRESS and HOLD the Select Button until the screen shows.



4. Press or hold the Select Button until the desired contrast is selected
5. If holding down on the Select Button, the contrast level will increase to Max (NOTE: screen could be dark and hard to read)
6. Release the Select Button and press or hold again to change the level back towards the minimum or until your desired contrast is selected
7. To exit, wait 8 seconds and the pager will go back to the vibe/contrast menu



8. To exit this menu wait 8 additional seconds

## Settings

### To view the current pager settings

1. Remove pager from the charger or reset on the T9601, T9100, or T9101 reset terminals.
2. Press the Select Button repeatedly to scroll through the settings:
  - C1: [System ID number] and Pager ID number
  - C2: [System ID number] and All Page number
  - C3: [System ID number] and System ID number
  - G: Group number
  - Enc: Encryption enabled (128) or none
  - Ver: Current Firmware Version
3. To exit, wait 8 seconds.

## Messages

The pager stores the last 5 received messages.

### To view the messages:

1. At the (blank screen/time & date) menu display, press the Select Button once
2. Messages 2 lines in length will show a > symbol at the end of the first line and a < symbol at the beginning of the second line
3. Messages over 2 lines in length, the middle lines will show "< the next line of the message >"
4. Press the Select Button to continue scrolling forward through the message or messages

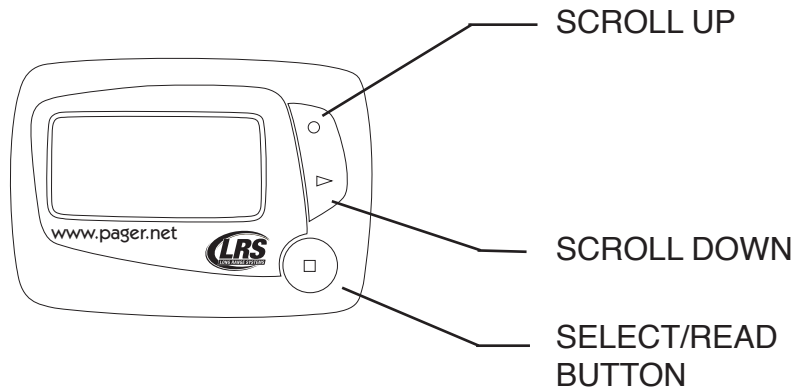
## Time

Pager will display the current time. This feature is automatically updated by the T9100 transmitter. If the time does not appear, a flashing star will appear on the right side of LCD to show pager is operational.

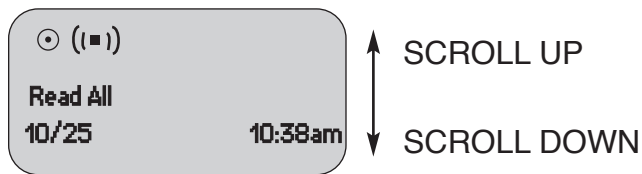
## Reprogramming and Reset

To reset and reprogram the pager, see Pager Programming of this document.

# USING THE LRS ALPHA E467



## Menus



## Selecting functions

1. From Read All screen, press Up (or Down) Scroll button until desired selection displays
2. Press Read/Select button to select item
3. Press Up (or Down) Scroll button to choose/adjust
4. Press Read/Select to confirm/set

## Power On/Off

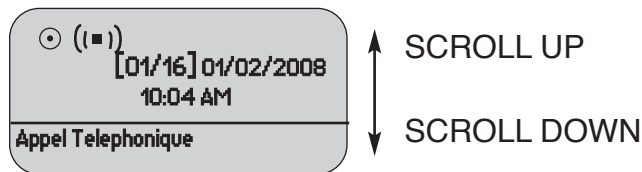
### Set ON (if unit is off)

1. Press and hold Scroll Up until YES/NO shows.
2. At "Power ON?" use Up (or Down) Scroll button to select **YES**
3. Press Read/Select button to set

### Set OFF

1. Using the Up (or Dn) scroll button scroll until display shows "Power OFF?"
2. Press Read/Select button to set power on/off
3. At "Power OFF?" screen, use Up (or Down) Scroll button to select **YES**
4. Press Read/Select button to set

## Read Message



- Messages are displayed upon receipt.
- Press Read/Select to display.

### To review stored messages:

1. Select "Read All?"
2. Press Read/Select to display messages and time stamps
3. Use the Up (or Down) Scroll button to scroll through messages

## Delete Messages

1. Using the Up (or Down) scroll button, scroll until display shows "Delete All?"
2. Press Read/Select
3. Use the Up (or Down) scroll button to select **Yes** or **No**
4. Press Read/Select button to confirm

## Time/Date Set

1. Using the Up (or Down) scroll button scroll until display shows "Set Time/Date"
2. Press Read/Select to set time/date
3. Press Up (or Down) scroll button to set each time or date segment and press Read/Select to move through the segments

## Set Contrast

1. Using the Up (or Down) scroll button scroll until display shows "Set Contrast"
2. Press Read/Select
3. Use the Up (or Down) scroll button to adjust
4. Press Read/Select to confirm

## Auto ON/OFF

1. Using the Up (or Down) scroll button scroll until display shows "Auto ON/OFF"
2. Press Read/Select to set auto on/off
3. Use the Up (or Down) scroll button to select **On** or **Off**
4. Press Up (or Down) scroll button to set on/off time and press Read/Select to move through the segments

## Set Key Tone On/Off

1. Using the Up (or Down) scroll button scroll until display shows "Set Key Tone"
2. Press Read/Select to set key tone on/off
3. Use the Up (or Down) scroll button to select **On** or **Off**
4. Press Read/Select to set

## Select Alert

1. Using the Up (or Down) scroll button scroll until display shows "Set Alert Mode"
2. Use the Up (or Down) scroll button to select Beep/Vibe Off
3. Press Read/Select to set:

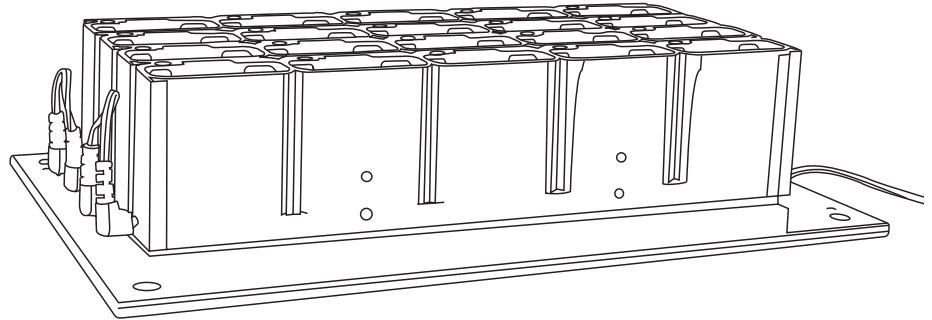
Beep - Use the Up (orDown) scroll button to select:

- Select Loud or Soft and press Read/Select to set
- Select Duration (seconds) and press Read/Select to set

Vibe Off - Use the Up (or Down) scroll button to select

- Press Read/Select to set

# Using the Star Pager



## Charging

Any rechargeable pager will require use of an LRS charger. The Star Pager (SP4) uses the Charger 9 (CH-R9)

1. Place the pager in the charger
2. Allow unit to charge fully overnight (at least 24 hours)
3. Remove from charger, and pager will vibrate, beep, and light
4. Replace the pager in the charger at the end of each day

## Messages

The pager can vibrate, beep, and light up message lights.

- Star pagers are intended to vibrate the number of times determined by the Vibe mode selected. On the T9100 this is done by choosing the V1, V2 or V3 button. This can be a way to send additional information or to identify 1 of 3 stations.
- On the front of the pager are four lights 1 through 4. In normal operation each “station” or T9100 would be set for different STATION ID’s (e.g. kitchen is station 1, etc.) Each station will also send different messages (example 1st light for station 1, 2nd light for station 2, 4th and 1st light for station 5, etc.). So if they were paged they can look down at the pager to see which station sent the message (which light was lit). As an option you can also send the message as a V1 for a station one message, or V2 for station 2, or V3 for station 3. This will enable the person being paged to avoid having to look down to see the lights.

# Cleaning & Charging Instructions For LRS Paging Equipment

## Cleaning:

LRS pagers are made from industrial-strength, polycarbonate material. However, this material is susceptible to hairline cracking if non-approved cleaners are used. When cleaning LRS pagers, we recommend only using ISOPROPYL ALCOHOL-BASED CLEANERS.

To clean the equipment:

1. Take a clean rag and an isopropyl-alcohol based cleaner
2. Soak the clean rag with the isopropyl alcohol cleaner
3. Wipe down the pagers or equipment.

Cleaning equipment with any other non-approved cleaners can weaken plastic and cause hairline cracks. Pagers and equipment that are cleaned with unapproved cleaners and suffer cracking will not be covered under warranty.

Do not submerge any LRS paging equipment in any type of liquid as this will also damage the equipment and is not covered under the standard warranty.

## Charging:

Place rechargeable pagers on the charger and let them charge for 8 hours prior to first use.

Rechargeable pagers should be kept on charge even during extremely long periods of inactivity.

Only 12 VDC power supplies should be used with LRS chargers and transmitters. DC power supplies will cause damage to equipment that is not covered under the standard warranty.

Should you have any questions, please contact the LRS Customer Service Department at 800.437.4996.

# Warranty

Long Range Systems, LLC permits a one-year manufacturer's warranty following the original consumer purchase date of any LRS system. Any individual components or products purchased will receive a 30-day manufacture warranty. This warranty covers any defects due to faulty material or workmanship, but does not include damage to the product resulting from accident, misuse or improper electrical connection. If the product or system should become defective within the warranty period, we will repair or replace with equivalent equipment, free of charge. We will pay transportation charges to return your product via standard FedEx Ground shipping, provided the product is shipped prepaid to:

**Long Range Systems, LLC  
4550 Excel Pkwy, Suite 200  
Addison, TX 75001**

No return or replacement can be received without prior authorization from the LRS Customer Support department or without the proper RMA# posted on the outside of the shipping container. Contact Customer Support at 800.437.4996 or www.pager.net. This warranty gives you specific legal rights and you may also have rights that vary by state.

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## **EU DECLARATION OF CONFORMITY**

We, Long Range Systems hereby declare under our sole responsibility that the T9100 and T9100CP paging transmitters and on-site pagers comply with the essential requirements in the European RE&TTE Directive 1999/5/EC of the European Parliament of the Council of 9 March 1999 on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity. The following standards were utilized:

**ETS 300 224: 1998**

**EN 301 489-2: 2002**

**EN61000-3-2: 1998**

**EN 61000-3-3: 1995**

**EN 60950: 1992 with A1, A2, & A3**



# Terms & Conditions

## GENERAL TERMS AND CONDITIONS FOR LONG RANGE SYSTEMS, LLC (FOR PURCHASERS)

These general terms and conditions (“General Terms and Conditions”) govern all persons (“Purchasers”) that purchase or license equipment, software, firmware, and/or services (collectively “Deliverables”) from Long Range Systems, LLC (“LRS”).

**Limited Software Use License.** All software and firmware (collectively “Software”) is licensed for use only by Purchaser and, in the case of Software for paging receivers, by customers of Purchasers. The Software is not sold.

**Usage Restriction.** Paging technology may at times not work due to structural and other types of interference with signal transmission and due to other reasons. Purchaser therefore agrees not to use any Deliverable for an application in which a paging failure might cause harm to a person, injury to a property, or a substantial business loss. Purchaser also agrees to abide by and strictly adhere to any rules, regulations and guidelines related to the use of any portion of any Deliverable to collect, store or transmit personally-identifiable information, including any “protected health information” (as defined by HIPAA), or billing or financial payment data, from any customer or other consumer.

**Data Collection.** In connection with the Deliverables, data provided by Purchaser and its customers may be collected in connection with surveys, consultations, and uses of the Deliverables, including email addresses, telephone numbers, locations of users (which may utilize geo-location technology), times of usage, times of paging, times of responses to paging, devices used, configuration preferences, cookies, and social network information. In order to provide LRS’s customers with enhanced comparative benchmarking services with respect to customer industries, among other services, Purchaser hereby grants to LRS a royalty-free, perpetual, irrevocable license to use and distribute this data and results obtained through Purchaser’s use of the Deliverables for any and all purposes; provided that LRS shall not identify any Purchaser, or distribute to third parties any “protected health information” (as defined by HIPAA) or billing or financial payment data of any customer or consumer of Purchaser, without the express prior consent of such Purchaser. Purchaser warrants that Purchaser has the right to disclose, transfer or otherwise make available any Protected Health Information (as defined in 45 C.F.R. § 160.103) or other personally identifiable information that is made available to LRS by Purchaser or by Purchaser’s customers in connection with the Software or other Deliverables. Without limiting the foregoing, Purchaser shall obtain all authorizations, consents or other permissions from Purchaser’s customers (or the customer’s authorized personal representative) for the disclosure of customers’ personally identifiable information to LRS that are required by federal, state or local law, including, without limitation, the administrative simplification section of the Health Insurance Portability and Accountability Act of 1996 and its implementing regulations.

**Limited Warranty.** LRS warrants to only Purchaser that the Deliverables will perform in accordance with specifications for them that LRS has published prior to their delivery for a period of time as specified in the purchase agreement or purchase order relating to such Deliverables. This limited warranty shall be voided if any Deliverable is modified or serviced by someone other than LRS.

**Disclaimers.** LRS HEREBY DISCLAIMS ALL IMPLIED WARRANTIES CONCERNING THE DELIVERABLES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY IMPLIED WARRANTY OF NON-INFRINGEMENT. PURCHASER ACCEPTS THE DELIVERABLES “AS IS,” EXCEPT FOR THE EXPRESS LIMITED WARRANTY MADE HEREIN.

**Limitation of Remedies.** In the event of any breach of any express warranty made herein, LRS may at its option repair or replace any defective Deliverable or refund the money that Purchaser paid for it. LRS's total liability for any defect in any Deliverable or for any other breach of any of its duties and obligations to Purchaser shall be limited to the amount of money that was paid for the defective Deliverable or the other duty or obligation. LRS will in no event be liable for any lost profit or any other type of consequential damage.

**Confidentiality.** The Deliverables and all computer systems that deliver any portion of them contain confidential trade secret information. Purchaser shall not attempt to reverse engineer any portion of the Deliverables or such computer systems, such as to decompile any portion of the Software, nor aid anyone else in doing so.

**Intellectual Property.** No portion of any intellectual property right in the Deliverables is being transferred to the Purchaser or to its customers. Purchaser may not copy or modify any portion of the Deliverables, nor permit or aid anyone else in doing so. Notwithstanding, Purchaser may use the Deliverables as they are intended to be used, as expressed in written materials published by LRS.

**Operational Authority and Licensing Requirements.** Non-Federal government Purchasers may operate the Deliverables within the United States under the licensing authority issued to LRS by the Federal Communications Commission (FCC), provided, however, that such operation is: (a) subject to LRS's control, (b) conducted on a non-profit, cost shared basis with costs apportioned as part of the price for such Deliverable, (c) in accordance method of operation set forth in the manual for the deliverable, available for download at <http://lrsus.com/support> and (d) limited to the term of this Agreement, the term of LRS's authority, or a term otherwise specified by LRS, whichever expires earlier. Notwithstanding the provision below entitled "No Third Party Beneficiary," users of any Deliverables acquired from Purchasers or other entities may contact LRS to determine if they may be eligible to operate under LRS's authority. Alternatively, Purchasers and users may obtain their own licensing authority; the FCC posts a list of licensing coordinators at [http://wireless.fcc.gov/services/index.htm?job=licensing\\_3&id=industrial\\_business](http://wireless.fcc.gov/services/index.htm?job=licensing_3&id=industrial_business). Purchasers and eligible users of any Deliverable agree to abide by and strictly adhere to any rules, regulations and guidelines, including the FCC's rules, governing the operation of the Deliverable. Changes or modifications to any portion of any Deliverable may void the Purchaser's or user's authority to operate the Deliverable and should not be made without the express approval of LRS. Moreover, use of any portion of any Deliverable outside the United States is subject to the rules and regulations of other countries and may be prohibited. Use of any Deliverable constitutes Purchaser's and user's acceptance of and agreement to these General Terms and Conditions, including any revisions to these General Terms and Conditions that may be required to reflect changes in the regulatory or other obligations imposed upon LRS.

**Governing Law and Venue.** These General Terms and Conditions and any agreement relating to them shall be construed in accordance with and governed by the laws of the State of Texas (without regard to its conflicts of laws). Any dispute relating to these General Terms and Conditions and any agreement relating to them may only be heard and resolved by a court in Dallas County in the State of Texas. Purchaser consents to the personal jurisdiction of such courts over it. If any action at law or in equity is necessary to enforce or interpret any of the rights or obligations of the parties to these General Terms and Conditions, the prevailing party shall be entitled to reasonable attorneys' fees, costs, and necessary disbursements, in addition to any other relief to which it may be entitled.

**No Assignment or Transfer.** The rights and benefits provided under these General Terms and Conditions, as well as under any agreement that incorporates them, shall not be assigned without the express written permission of LRS. Similarly, the Deliverables may not be transferred to any other person, without the express written permission of LRS. Notwithstanding, Purchaser may temporarily loan its customers paging receivers. Purchaser may also transfer the Deliverables, as well as the rights and benefits under these General Terms and Conditions and any agreement that incorporates them, as an ancillary part of a sale of its business or substantially all of its assets. Following any assignment or transfer, Purchaser shall remain bound by all of the duties and obligations that are set forth in these General Terms and Conditions and any agree-

ment that incorporates them.

**No Third Party Beneficiary.** Except as otherwise expressly provided in this Agreement, these General Terms and Conditions, as well as any agreement that incorporates them, are solely for the benefit of Purchaser. Neither the customers of Purchaser, nor any other person is an intended beneficiary of these General Terms and Conditions or any agreement that incorporates them, nor shall any such person have the right to any benefit that is provided under these General Terms and Conditions or any agreement that incorporates them.

**Merger.** Except as otherwise specifically set forth herein, these General Terms and Conditions, and any agreement that incorporates them, supersede any oral or other representation that may have been made about these General Terms and Conditions, any agreement that incorporates them, or any of the Deliverables. These General Terms and Conditions, and any agreement that incorporates them, may not be modified or superseded, except by a written agreement or a written amendment that is signed by LRS. In the event of any inconsistency between these General Terms and Conditions or any agreement that incorporates them and any form or other document supplied by Purchaser, such as a purchase order, the terms of these General Terms and Conditions or any agreement that incorporates will prevail

**Severability.** In the event that any portion of these General Terms and Conditions or any agreement that incorporates them is found to be invalid or unenforceable for any reason, the remaining portions shall continue to be in full force and effect.

**Fees & Payment.** Purchaser agrees to pay all Service and Deliverable fees, plus any applicable taxes, in accordance with the terms and payment method set forth in this agreement. Purchaser is responsible for providing accurate billing and contact information to LRS. LRS retains the right to suspend or terminate services if fees become past due. LRS reserves the right to change Service rates by providing Customer at least 30 days' notice prior to billing.

**Term & Termination.** Purchaser has the option of purchasing Monthly or Annual service plans which are non-refundable and not available for proration except as required by law. Monthly agreements will auto-renew on a month-to-month basis until such time that a formal termination notice has been received by LRS. Prepaid Annual agreements will automatically renew at the end of each annual term unless Purchaser has given cancellation notice 30 days in advance of renewal term. Monthly-billed Annual agreements will auto-renew on a perpetual month-to-month basis upon completion of the initial annual term until cancellation notice is received by LRS. In the event that any agreement incorporating these General Terms and Conditions is terminated for any reason, all of the duties and obligations that the agreement and these General Terms and Conditions impose upon Purchaser shall continue in full force and effect, except any obligation to make payment for a Deliverable prior to its delivery.