



CS8

User Manual

December 29, 2022



CS8 Enhancements

1. CS8 is the 8th revision guest pager offered by LRS.
2. Operationally and functionally similar to CS7.
3. CS8 was designed mainly for to circumvent end of life or chip shortage parts of earlier version guest pagers.
4. Enhancements over CS7 include a 3.7v 560 mAh Li ION polymer battery.
5. Shipping disconnect circuitry.
6. Light pipe diffuser
7. SOC radio/microcontroller
8. More memory



Dimension

1. 4.8 oz.
2. 4.25" W x 4.25" L x .75"H

Features

1. Branded Labeling (Optional)
2. Modern, Ergonomic Design
3. Digital Number Readout
4. LED Color Choices: Red, Green, Blue, White, and Rainbow



5. Extra-Wide Shock Bumper

CS8 cleaning and care

1. Made from industrial strength PC/ABS blend of plastics
2. Clean only with Isopropyl Alcohol based cleaners
3. Do not use a chlorine based cleaning product
4. Wipe down with cloth.
5. Do not submerge product in any type liquid.

Charging

1. CS8 employs a Li ION polymer re-chargeable battery.
2. Place pagers on the charger in any orientation and allow 8 hrs or charge before first time usage
3. Pagers should be kept on charge during periods of inactivity.
4. Use only LRS approve 12Vdc smart charging base.

Operation

1. CS8 will do a single red flash every 5 seconds while charging. If the orientation of the CS8 is all the same the charging flash will rise from the bottom to the top. However this is not necessary for charging.
2. Remove pager (CS8) from charger stack, pager will flash and vibrate 3 seconds indicating it is ready to receive.
3. Pager can be paged at any time after initial alive indication.
4. Pager configurations for vibration and flashing time limits are set by the transmitter. Configuration is explained in the transmitter manuals.
5. Colors are configured during manufacture process and should be noted on order information. Colors are Red, Green, Blue, and Rainbow.
6. Any time after a page is received, pagers may be placed back on charging stack to stop any pager notifications in progress.

Troubleshooting

1. Troubleshooting and fixing common problems encountered with the CS8
2. Errors should be noted and returned to an authorized LRS dealer for repair

The errors covered: E001-E009

Error Codes and Explanations

1. E001



This error is caused by an invalid serial number being assigned to the pager. This can be fixed in Wonderment Application in the automatic manufacturing stage by reassigning a serial number.

2. E002

This is caused by the pager thinking its pager type is invalid. There are only three pager types that the pager can “think” it is: CS6, CS7, and AT9. If the pager is somehow assigned something other than one of these three, it will display E002.

If it displays an E002, the solution is to use wonderment to change the pager type. This is an option in manual manufacturing in wonderment.

3. E003-E006

This is caused by some kind of frequency error.

E003 means the radio is not calibrated,

E004 means that the frequency chosen will not work with the hardware of this pager

E005 means that the frequency chosen will not work with the software installed, and

E006 means that the frequency chosen cannot be calibrated.

All of these errors can be fixed in automatic manufacturing mode in Wonderment Application by recalibrating the pager to a usable frequency.

4. E007-E009

These are caused by the system ID, the pager ID, or the type (guest vs staff, **not** CS6 vs CS7 vs CS8) being incorrectly assigned. All of these will be fixed by running the pager through the system building mode of Wonderment.

5. No vibration

One of three things can cause this: the motor is bad, the motor is improperly seated in the case, or the pager has been programmed to not vibrate.

Reprogramming the pager to vibrate will indicate which of these three is the problem and also fixes any that were *programmed* to not vibrate. Any that fail this test most likely have bad motors that need replacement or blocked motors that need the obstructions cleared.

6. Does not accept over the air programming

Some pagers cannot be put to sleep via the transmitter. They will also not respond to over the air programming, paging, or any other signals from the transmitter. This is caused by either a damaged radio in the pager or the pager being improperly calibrated.



If the problem is with the pager, try fully charging the pager. If the problem persists, the pager will need to either be taken apart and repaired or scrapped.

SERVICE QUESTIONS AND ANSWERS

1. Should your paging system ever fail to function properly, refer to the previous troubleshooting section. If you've followed all the steps and requirements and your system is still inoperable, you may submit a support request at support.LRSUS.com or call Long Range Solutions at (800) 437-4996 Monday through Friday 8:30 am to 5:00 pm Central Time. For after hours inquiries, please follow the instructions on the support line. LRS Customer Support will return the call as soon as possible. Please keep in mind that options are limited over the weekend.
2. System Repair After Warranty Expiration Call Long Range Solutions before sending a non-warranty item in for repair.
3. Ordering Additional Pagers Call Long Range Solutions at 800.437.4996 or 214.553.5308 to place your order.
4. Loss Deterrent and Recovery Return address labels on the back of all of your equipment are highly recommended. Should any of your pagers be taken off premise, this will help them find their way back to you. You may order return address labels from LRS or print them yourself.

WARRANTY

1. Long Range Solutions, LLC. warrants this product against any defects that are due to faulty material or workmanship for a one-year period after the original date of consumer purchase of the complete paging system (transmitter, pagers, and charger). This warranty does not include damage to the product resulting from accident, misuse or improper electrical connection. If this product should become defective within the warranty period, we will repair or replace with equivalent product, free of charge. We will return your product, transportation charges prepaid standard FedEx Ground shipping, provided the product is shipped prepaid to:
2. Long Range Solutions, LLC. 9525 Forest View St. Dallas, TX 75243 No return or replacement can be received without prior authorization and the proper RMA# posted to the outside of the shipping container.
3. This warranty gives you specific legal rights and you may also have rights that vary from state to state.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

1. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to



provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

2. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/ TV technician for help.
3. **CAUTION:** Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment

Terms and Conditions

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

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Usage Restriction. Paging technology and other technology built into the Deliverables may at times not work due to interference with signal transmission beyond LRS' control. Purchaser therefore agrees not to use any Deliverable for an application in which a signal or connection failure might cause harm to a person, injury to a property, or a 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 without limitation any "protected health information" (as defined by HIPAA), or billing or financial payment data, from any customer, consumer or user.

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



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Limited Warranty. Unless expressly agreed to in a separate written instrument, 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 or where the defective or non-performance is caused to any extent by accident, misuse, abuse, neglect, fire, water, acts of nature, power surges, improper maintenance, usage not in accordance with instructions or specifications, or usage or storage in unsuitable physical or operating environments.

Disclaimers. LRS 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, either 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 or special 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 disassemble any portion of hardware or decompile any portion of the Software, nor aid or permit anyone else in doing so.

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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 or a separate 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. 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 or that may otherwise be adopted by LRS from time to time.

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 agreement 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 in US Dollars, and you assume all risks associated with any changing value in the currency compared with other currencies, plus Purchaser agrees to pay 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.