

## DESCRIPTION

The D-23R "Money Sentry" is a special purpose digitally coded stationary radio transmitter designed to fit inside a cash drawer. A paper money "bait" bill placed under the money clip spring keeps the D-23R turned off and prevents radio transmission (see Figure 1). Removing the money activates a switch, causing the D-23R to transmit a coded radio signal to its associated receiver. This transmitter can be programmed to activate any of Linear's standard digital receivers that are tuned to the same frequency. The D-23R is typically used in wireless/hardwire security systems and is powered by a self-contained 9-volt battery.

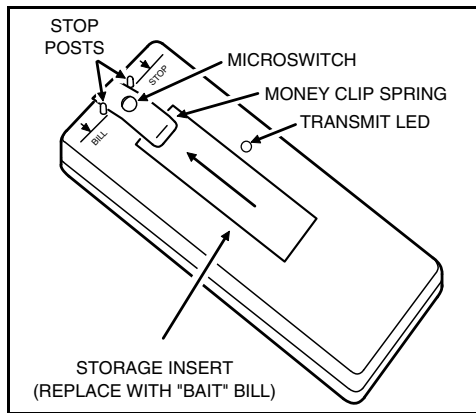


Figure 1. D-23R Money Clip Transmitter

## OPERATION

The D-23R transmits a 1-second signal instantly when the money is removed from the retaining clip. During transmission, the red LED lights if the battery is above 7.5 volts. **As long as the money is removed from the clip, the D-23R will repeat its 1-second transmission every 30 seconds.** Replacing the money will stop the transmissions.

## CODE SWITCH LOCATION

The digital coding switch is attached to the circuit board inside the case. To access the switch, un-screw and remove the back cover as shown in Figure 2.

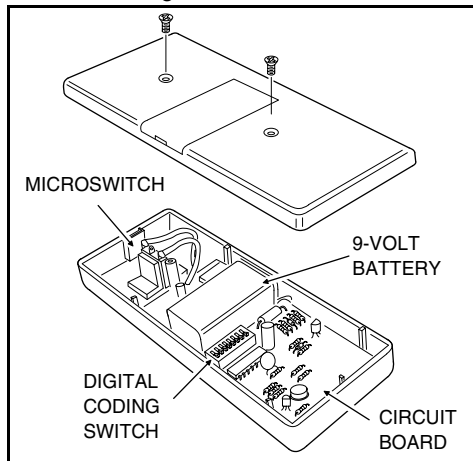


Figure 2. Digital Coding Switch Location

## CODE SETTING

**\* CAUTION! All transmitters and receivers must be re-coded by installer prior to operation. DO NOT USE THE FACTORY SET CODE!**

Among the 256 possible codes, four codes are considered invalid, and should not be used. They are: all keys ON, all keys OFF, and keys set alternating ON/OFF or OFF/ON combinations.

To set a code, select any valid combination of ON and OFF positions for the switch keys numbered 1 through 8.

Use a pointed object (other than a pencil or pen) to set the keys. The ON position is when the top of the switch is down, facing the numbers. The OFF position is when the top of the switch is up and the bottom is down, away from the numbers.

In the example shown in Figure 3, keys 1,4,6 and 8 are ON; keys 2,3,5 and 7 are OFF.

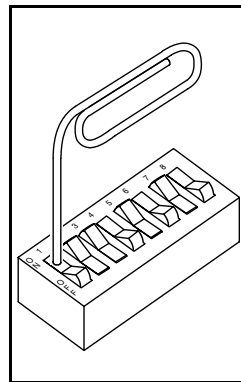


Figure 3. Example Coding Switch

## REPEAT TIMER DISABLE JUMPER

The 30-second transmitter repeat timer may be disabled for applications where a repeating transmitter is not desired (to prevent communicator runaway if the receiver is directly connected to the communicator). The 30-second repeat timer is disabled by installation of a circuit board jumper (see Figure 4).

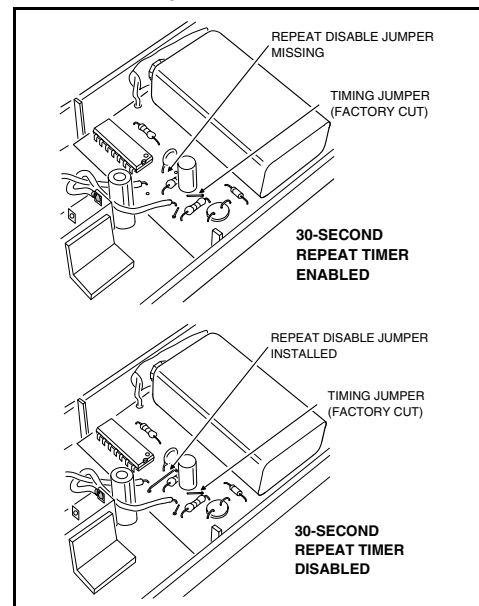


Figure 4. 30-second Repeat Jumper

## INSTALLATION

To install the transmitter, replace the back cover and proceed as follows:

- STEP 1:** Select a cash drawer slot for the transmitter.
- STEP 2:** Remove the protective backing from one side of the supplied Velcro™ fastener and stick it in the center of the cash drawer slot.
- STEP 3:** Remove the other protective backing strip and stick the D-23R transmitter to the Velcro™ fastener.
- STEP 4:** Remove the paper storage insert and insert a real “bait” bill under the retaining clip.

\* **IMPORTANT! Do not place more than one “bait” bill under the money clip.**

## CHECKOUT AND TEST

After installation, the transmitter and receiver should be checked out as a system.

Activate the transmitter by removing the “bait” bill. Verify that the LED lights when the sensor is triggered. Receiver activation indicates that the transmitter is operating properly, and that the transmitter’s digital code is correctly matched to the code set in the receiver. Leave the “bait” bill out of the clip and verify that the transmitter repeats its operation every 30 seconds.

## CAUSES FOR NON-OPERATION

If the transmitter fails to activate the receiver, first check the coding switches to see that the switch keys in the transmitter and the receiver are correctly matched. Next, check the battery and replace it if it’s weak.

If the code is set correctly, the battery is good, and the LED lights but the receiver doesn’t activate, check for hidden metal obstacles or large metal appliances between the transmitter and receiver that may be blocking the radio signal. Try activating the transmitter right next to the receiver to verify proper operation. Re-location of the transmitter or receiver may be necessary.

\* **CAUTION: The manufacturer strongly recommends that you test security equipment frequently. From the time of installation, it is absolutely necessary to test the system at least once a week. Although the 9-volt battery should last about a year, it is good practice to change the battery every six months.**

## LINEAR LIMITED WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. The Warranty Expiration Date is labeled on the product. This warranty extends only to wholesale customers who buy direct from Linear or through Linear’s normal distribution channels. **Linear does not warrant this product to consumers.** Consumers should inquire from their selling dealer as to the nature of the dealer’s warranty, if any. **There are no obligations or liabilities on the part of Linear Corporation for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation.** All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until Warranty Expiration Date as labeled on the product. **This Linear Corporation Warranty is in lieu of all other warranties express or implied.**

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.

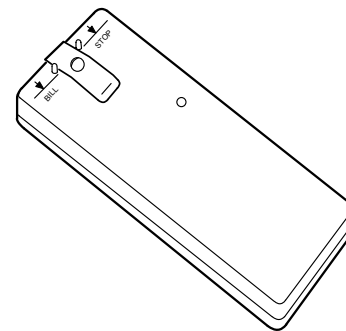
## IMPORTANT !!!

Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

- \* For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 Radio Control devices. As such, they have limited transmitter power and therefore limited range.
- \* A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- \* Changes or modifications to the device may void FCC compliance.
- \* Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- \* A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.

# D-23R

## “Money Sentry” Cash Drawer Transmitter



## Code Setting and Installation Instructions

# Linear®

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