

MODEL 8054 MicroPLUS® RF RECEIVER

DoorKing Part Numbers

- 8054-081**
50 Transmitter Codes
- 8054-082**
100 Transmitter Codes
- 8054-083**
250 Transmitter Codes
- 8054-084**
500 Transmitter Codes
- 8054-085**
1000 Transmitter Codes
- 8054-086**
1250 Transmitter Codes

The model 8054 is a **High Security Encrypted "Rotating Code" RF Receiver** that is designed for stand alone applications. The encrypted "Rotating Code" programming in this receiver and the companion MicroPLUS® transmitters prevent copied transmitter codes from being used again to access a controlled entry point. The 8054 receiver includes 10 time zones (eight programmable), a history buffer that can store up to 2800 transactions in its memory. A serial printer can be connected to print the stored transactions or the receiver can be programmed to print transactions in real time mode.

The MicroPLUS® transmitter codes that the receiver will respond to can also be defined by "**Facility Codes**", and "**Transmitter Button Codes**". For example: an 8054 receiver can be programmed to respond to only the first button



P/N 8069-080



P/N 8070-080



P/N 8071-080

Use **ONLY** MicroPLUS® Transmitters

on a multiple button MicroPLUS® transmitter while a second 8054 receiver can be programmed to respond to only the second button of the same multiple button MicroPLUS® transmitter. Thus allowing a single multiple button MicroPLUS® transmitter to activate **two different receivers** without fear of both receivers responding to the same transmitter code. There are three (3) different "**2 Button**" MicroPLUS® transmitter button combinations that each receiver can be programmed to respond to: button-1, button-2 and buttons 1&2 pressed at the same time. There are six (6) different "**3 Button**" MicroPLUS® transmitter button combinations that each receiver can be programmed to respond to: button-1, button-2, button-3, buttons 1&2 pressed at the same time, buttons 2&3 pressed at the same time and buttons 1&3 pressed at the same time.

Installation

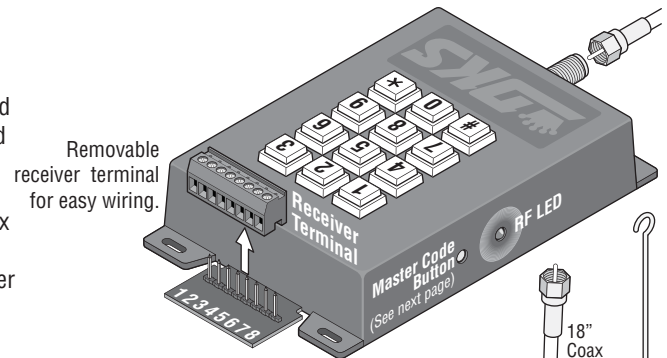
This receiver is **NOT** designed to be installed outdoors without being protected from the weather. An outdoor enclosure is available for the receiver if required (P/N 8057-110 - Metal Outdoor Box).

Install the 8054 receiver in a location so the antenna is **NOT surrounded by metal and is in free air as high as possible above the ground**. A longer Coax Antenna kit is available for the receiver if required (P/N 1514-073 - Includes antenna, mounting "L" bracket and 15 feet of coax cable). An antenna amplifier kit (P/N 8058-080) or a Yagi directional antenna kit (P/N 1514-072) is also available for the receiver if required.

The RF LED on the side of the case will blink as RF energy is received.

If the LED blinks or is on continuously, this indicates that there may be interference on the frequency (318 MHz) and short range may be the result. If this happens, try relocating the receiver or remove the source of interference. An antenna amplifier or a directional antenna may be needed.

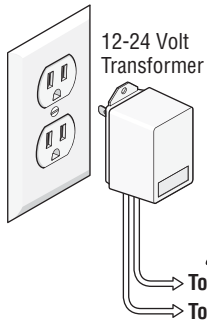
Note: Loop detectors and proximity card readers can cause receiver interference.



Removable receiver terminal for easy wiring.

- #1 - Input Power** 12-24 Volt AC, 12-24 Volt DC (Negative)
 - #2 - Input Power** 12-24 Volt AC, 12-24 Volt DC (Positive)
 - #3 - Relay Contact (Normally Open)**
 - #4 - Relay Contact (Normally Closed)**
 - #5 - Relay Contact (Common)**
 - #6 - Printer Data**
(P1 DoorKing Printer Interface Terminal)
 - #7 - Printer Signal Ground**
(P2 DoorKing Printer Interface Terminal)
 - #8 - Printer Busy**
(P3 DoorKing Printer Interface Terminal)
- Terminals 3-4-5 rated for 30 volt, 1 amp max.

Receiver Terminal Wiring



Stand-Alone Power and Device Wiring :

Connect 12 - 24 Volt AC or DC power to terminals #1 and #2. Use minimum 18 AWG wire to power the receiver.

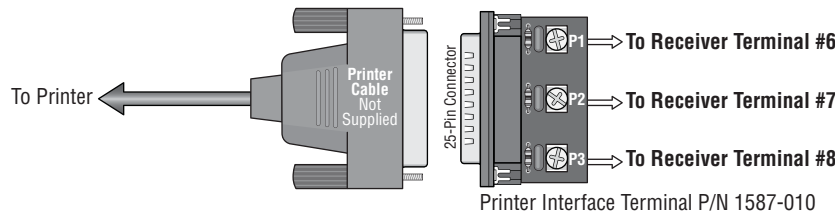
- If DC power is used (Transformer): Terminal #1 is **NEGATIVE** and Terminal #2 is **POSITIVE**.
- Connect the receiver relay contacts to the device to be activated.
 - Receiver Terminal #3 is the relay contact **Normally OPEN** (N.O.)
 - Receiver Terminal #4 is the relay contact Normally **CLOSED** (N.C.)
 - Receiver Terminal #5 is the relay contact **Common** (C).

⚠ DC Polarity Matters!

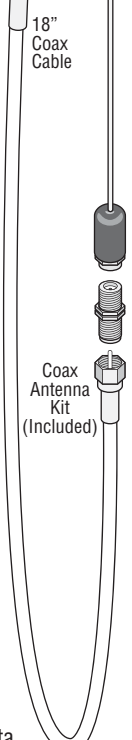
- To Receiver Terminal #1 (Neg.)
- To Receiver Terminal #2 (Pos.)

Printer: Connect receiver directly to a printer using the printer interface terminal as shown.


- Maximum wire run for printer data is 500 ft using Belden 9931, Consolidated 5324-CL or equivalent shielded wire. **DO NOT** use twisted pair wire for printer data.
- Serial printer setting: 9600 baud, 1 start, 8 data, 1 stop.

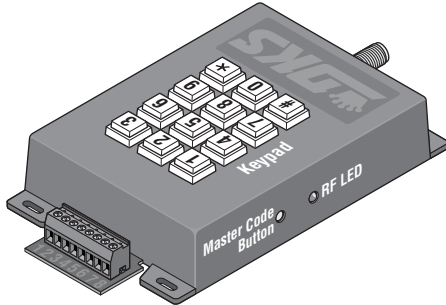


Printer Interface Terminal P/N 1587-010



Programming






Programming BEEPS: The receiver is equipped with a “beeper” to help guide you through the programming steps. When required data has been entered correctly and the  key is pressed, a “BEEP” will be heard. A “BEEEEEEEEEP” indicates programming has ended successfully **OR** there has been **NO** data input for 20 seconds. Four (4) long beeps in a row indicates that an error has occurred (Examples: Data was entered incorrectly, not enough memory to store all transmitters or receiver is in real time printing mode but printer is not connected or not turned on).



Program the Master Code: The master code is the four-digit number required to gain access to the receiver memory for all programming. **You MUST program a MASTER CODE first.**

Write Down Your Master Code			
1st Digit	2nd Digit	3rd Digit	4th Digit


1. Press Master Code Button



2. Choose and enter four-digits on the keypad     then press  “BEEP”

Important Note: Keep this instruction sheet for future reference after writing down the master code. **There is NO way of retrieving the master code after it has been programmed in.** If you forget it, you will have to program in a new master code but all other previously programmed information will remain intact.



Add a Transmitter: Unique codes located on back of transmitter (Five-digit Transmitter Code - Tr) and (Four-digit Facility Code - Fc).


1. Press    and the four-digit Master Code. “BEEP”



2. Enter the two-digit transmitter button number that the receiver is to respond to, then press  “BEEP”

Button 1 -  

3. Enter the four-digit facility code, then press  “BEEP” Note: Valid facility codes are 0000 - 4095.

Button 2 -  

4. Enter the **LOWEST** five-digit transmitter code, then press  “BEEP”

Button 3 -  


5. Enter the **HIGHEST** five-digit transmitter code, then press  “BEEP”

Note: Valid transmitter codes are 00000 - 65407.

If adding a single transmitter, the lowest and highest five-digit number will be the same.


Buttons 1&2 together -  

Buttons 2&3 together -  

6. Enter the single-digit Time Zone number, then press  “BEEP”

Note: Valid Time Zones are 0 - 9.

There are 10 available time zones. Time zones 2 - 9 are programmable (See “Programming Time Zones” programming on next page).



Entering  will **never** allow access to the transmitter(s) being programmed.

Entering  will **always** allow access to the transmitter(s) being programmed.

When programming a block of transmitter numbers, the receiver will “BEEP” every three seconds.

Wait for this beeping to stop before proceeding with any other programming. This may take up to five minutes depending on the memory size and the number of transmitters being programmed.


Buttons 1&3 together -  

7. Repeat steps 2 - 7 to enter an additional transmitter or block of transmitters or press   at the same time or simply wait 20 seconds to end the programming. A “BEEEEEEEEEP” will be heard when finished.



Delete a Transmitter One at a Time: Unique codes located on back of transmitter (Five-digit Transmitter Code - Tr) and (Four-digit Facility Code - Fc).

1. Press    and the four-digit Master Code. “BEEP”

2. Enter the two-digit transmitter button number to be deleted, then press  “BEEP”

3. Enter the four-digit facility code to be deleted, then press  “BEEP”

4. Enter the five-digit transmitter code to be deleted, then press  “BEEP”

3. Repeat steps 2 - 4 to delete additional transmitters if desired or press   at the same time or simply wait 20 seconds to end the programming. A “BEEEEEEEEEP” will be heard when finished.

Delete ALL Transmitters at Once: WARNING: Deleted transmitters **CANNOT** be retrieved.

1. Press    and the four-digit Master Code. “BEEP”

2. Enter 9999, then press  “BEEP”

3. After approximately 1 1/2 minutes of “BEEPS” every three seconds, one long “BEEEEEEEEEP” will be heard when finished.

Programming Continued

Relay Strike Time: The amount of time the receiver relay activates.

1. Press and the four-digit Master Code. "BEEP"
2. Enter a two-digit number (01-99) for the relay activation in seconds, then press "BEEP"
3. Press TOGETHER to end programming or wait 20 seconds. "BEEEEEEEEEP"

Program Current Time and Day: Current hour and minute, AM or PM, current month, current day and current year.

1. Press and the four-digit Master Code. "BEEP"
2. Enter a four-digit current hour and minute (time example - 7:43 - 0743), then press "BEEP"
3. Enter for AM or for PM, then press "BEEP"
4. Enter a two-digit current month (01 - 12), then press "BEEP"
5. Enter a two-digit current day of the month (01 - 31), then press "BEEP"
6. Enter the last two-digits of the current year, then press "BEEP"
7. Enter a single-digit day of the week (1 = Sunday, 2 = Monday, 3 = Tuesday..... 7 = Saturday), then press "BEEP"
8. Press TOGETHER to end programming or wait 20 seconds. "BEEEEEEEEEP"

Programming Time Zones: Can be used for Step 6 of "Add a Transmitter" on the previous page.

1. Press and the four-digit Master Code. "BEEP"
2. Enter a single-digit time zone to be programmed (ONLY 2 - 9 time zones are valid), then press "BEEP"
3. Enter the **Beginning** time using four-digits for the hours and minutes (time example - 9:45 - 0945), then press "BEEP"
4. Enter for AM or for PM, then press "BEEP"
5. Enter the **Ending** time using four-digits for the hours and minutes (time example - 5:00 - 0500), then press "BEEP"
6. Enter for AM or for PM, then press "BEEP"
7. Enter a seven-digit number for the days of the week that the time zone is active, then press "BEEP"
Use the key to skip days that are not active (1 = Sunday, 2 = Monday, 3 = Tuesday..... 7 = Saturday).
Example 1: If the time zone is active Monday - Friday only, then enter
8. Repeat steps 2 - 7 to program additional time zones or press at the same time or simply wait 20 seconds to end the programming. A "BEEEEEEEEEP" will be heard when finished.

Programming Continued

Print Mode: Turn “Real Time Mode” ON or OFF.

1. Press and the four-digit Master Code. **“BEEP”**
2. Enter to print in **“Real Time Mode”** or enter **NOT** to print in real time mode, then press **“BEEP”**
In either case, the transactions are stored in the receiver’s buffer and can be printed later (See “Print” below).
If programmed for “Real Time Mode”, printer **MUST** be connected and turned **ON**, otherwise the receiver will sound four long beeps.
3. Press **TOGETHER** to end programming or wait 20 seconds. **“BEEEEEEEEEP”**

Print: Print all transactions stored in the receiver’s buffer.

1. Press and the four-digit Master Code. **“BEEP”**
The transactions stored in the receivers buffer will print. The receiver will sound one long **“BEEEEEEEEEP”** when finished.

Print Transactions for a Specific Day ONLY: Used to print only a desired day’s transactions and not the entire buffer.

1. Press and the four-digit Master Code. **“BEEP”**
2. Enter the two-digit specific month desired (01 - 12), then press **“BEEP”**
3. Enter the two-digit specific day of the month desired (01 - 31), then press **“BEEP”**
Only the desired day’s transactions stored in the receiver’s buffer will print. The receiver will sound one long **“BEEEEEEEEEP”** when finished.

Clear Transaction Buffer: WARNING: Deleted transactions **CANNOT** be retrieved. Up to 2800 transactions are stored in buffer.

1. Press and the four-digit Master Code. **“BEEP”**
2. Enter **9999**, then press **“BEEP”**
This sequence will take about 5 minutes of **“BEEPS”** every three seconds, one long **“BEEEEEEEEEP”** will be heard when finished.

This device complies with the FCC Rules Part 15. Operation is subject to the following two conditions:

- 1.) This device may not cause harmful interference.
- 2.) This device must accept and interference received, including interference that may cause undesired operation.

This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.