### ODEL 8054 Microplus® RF RECEIVER

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.

1250 Transmitter Codes

DoorKing Part Numbers

8054-081









Use ONLY MicroPlus® Transmitters

#### Installation

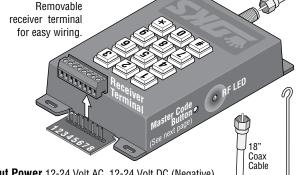
12-24 Volt

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.



Terminals 3-4-5

Coax

Antenna

(Included)

#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)

**Printer Signal Ground** 

(P2 DoorKing Printer Interface Terminal)

#8 - Printer Busy

(P3 DoorKing Printer Interface Terminal)

## **Receiver Terminal Wiring**



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

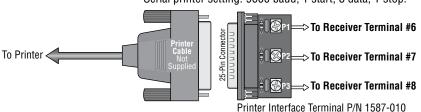
- If DC power is used (Transformer): Terminal #1 is **NEGATIVE** and Terminal #2 is **POSITIVE**.
- · Connect the receiver relay contacts to the device to be activated.
- Receiver Terminal #3 is the relay contact Normally OPEN (N.O.)
- Receiver Terminal #4 is the relay contact Normally CLOSED (N.C.)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





#### **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  $\times$  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 occured (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

any four numbers

Then press #1

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.

dd a Transmitter: Unique codes located on back of transmitter (Five-digit Transmitter Code - Tr) an	d (Four-digit Facility Code - Fc).
. Press 🔀 🗻 📵 and the four-digit Master Code. <b>"BEEP"</b>	
. Enter the two-digit transmitter button number that the receiver is to respond to, then press 😿 "BEE	<b>P"</b> Button 1 - 0 1
. Enter the four-digit facility code, then press 🔀 <b>"BEEP"</b> Note: Valid facility codes are 0000 - 4095.	Button 2 - 0 2
. Enter the <b>LOWEST</b> five-digit transmitter code, then press 😿 <b>"BEEP"</b>	Button 3 - 0 3
Note: Valid transmitter codes are 00000 - 65407.  If adding a single transmitter, the lowest and highset five-digit number will be the same.  Enter the single-digit Time Zone number, then press (**BEEP**)  Note: Valid Time Zones are 0 - 9.	Buttons 1&2 together - 1 2 Buttons 2&3 together - 2 3 Buttons 1&3 together - 1 3
There are 10 available time zones. Time zones 2 - 9 are programmable (See " <b>Programming Time Z</b> o	ones" programming on next page).
Entering owill <b>never</b> allow access to the transmitter(s) being programmed.	
Entering 1 will <b>always</b> allow access to the transmitter(s) being programmed.	
When programming a block of transmitter numbers, the receiver will " <b>BEEP</b> " every three seconds. Wait for this beeping to stop before proceeding with any other programming. This may take up to fiv minitues depending on the memory size and the number of transmitters being programmed.	re

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 "**BEEEEEEEEP**" 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"

**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"
- After approximately 1 1/2 minutes of "BEEPS" every three seconds, one long "BEEEEEEEEP" will be heard when finished.



# **Programming Continued**

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

1.	Press 🗶 0 3 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. "BEEEEEEEEP"
P	rogram 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 o 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. "BEEEEEEEEP"
Pi	rogramming Time Zones: Can be used for Step 6 of "Add a Transmitter" on the previous page.
	Press   3   8   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 <b>Beginning</b> time using four-digits for the hours and minutes (time example - 9:45 - 0945), then press 🔀 "BEEP"
4.	Enter o for AM or for PM, then press ##BEEP"
5.	Enter the <b>Ending</b> time using four-digits for the hours and minutes (time example - 5:00 - 0500), then press 🔀 "BEEP"
6.	Enter o 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 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 2 3 4 5 6 ###
	Example 2: If the time zone is active Monday, Wednesday and Friday only, then enter 2 4 6 #########
8.	Repeat steps 2 - 7 to program additional time zones or press
	to end the programming. A "BEEEEEEEEP" will be heard when finished.



#### **Programming Continued**

Print Mode: Turn "Real Time Mode" ON or OFF.
1. Press 3 5 and the four-digit Master Code. "BEEP"
2. Enter 1 to print in "Real Time Mode" or enter 0 NOT to print in real time mode, then press 3 "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 0 ## TOGETHER to end programming or wait 20 seconds. "BEFFFFFFFFFF"

**Print:** Print all transactions stored in the receiver's buffer.

1. Press (X) 3 7 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 🛪 3 4 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 (10 31)

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

- 1. Press 🔀 3 6 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 "BEEEEEEEEP" 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 Réglement sur le matériel brouilleur du Canada.

