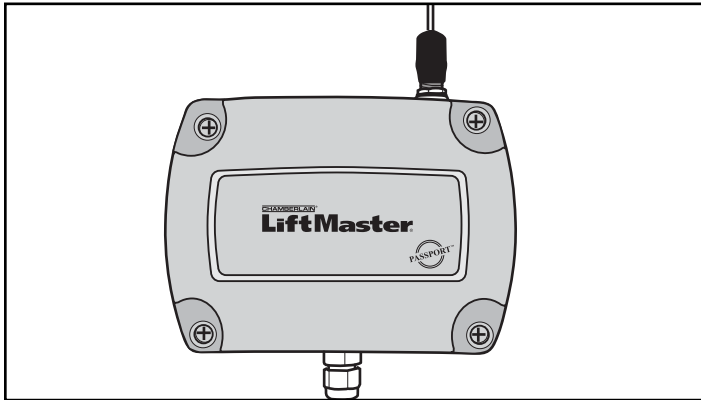


CHAMBERLAIN®

LiftMaster®
PROFESSIONAL

MODEL CPWR

390 MHz Wiegand Receiver with Passport Technology



SPECIFICATIONS

Power: 12VDC, 50 mA

Temperature Rating: -40° to +185° F

Model CPWR3 RF Frequency: 390 MHZ

Accessory Transmitters

Visors: CPT1, CPT2, CPT3, CPT4

Key chains: CPTK1, CPTK3, CPTK1PH, CPTK3PH

OVERVIEW

The Wiegand Receiver (CPWR) is a communication device that transmits an information packet to an access control unit such as a Sentex Telephone Entry System. All receiver units utilize the latest in Chamberlain® rolling code technology.

ACCESS CONTROL COMPATIBILITY

The CPWR outputs a 26-bit or 30-bit Wiegand format compatible with Sentex access control systems.

CARTON INVENTORY

Wiegand Receiver

Antenna

Instructions

PARTS NOT PROVIDED

6 Mounting Hardware

5-conductor shielded cable; 22 AWG wire

Extension Kit (Optional)

WARNING

To prevent possible **SERIOUS INJURY** or **DEATH** from electrocution:

- Be sure power is not connected **BEFORE** installing the receiver.

To prevent possible **SERIOUS INJURY** or **DEATH** from a moving gate or garage door:

- **ALWAYS** keep remote controls out of reach of children. **NEVER** permit children to operate, or play with remote control transmitters.
- Activate gate or door **ONLY** when it can be seen clearly, is properly adjusted, and there are no obstructions to door travel.
- **ALWAYS** keep gate or garage door in sight until completely closed. **NEVER** permit anyone to cross path of moving gate or door.

SETTING THE SWITCHES

Before making changes to any of the DIP switches (Figure 1), power **MUST** be disconnected from the receiver (unplug the terminal block from J2 on the circuit board). Otherwise, your changes will not take effect. Also, when setting the receiver's DIP switches, refer only to the numbers silk screened on the circuit board (not the numbers on the DIP switch itself).

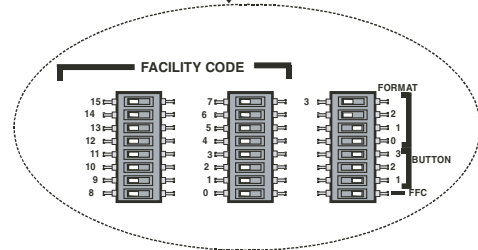
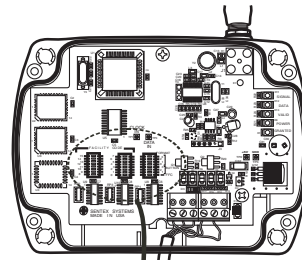


Figure 1

1. Disconnect power to the receiver.
2. Turn screws counterclockwise 1/4 turn and remove front cover.
3. Before or while touching the circuit board, discharge any static electricity:
 - (1) Use a grounding strap OR
 - (2) Touch a cold, grounded, metallic pipe.
4. The output code format switch settings are factory-set for the 30-bit format (Figure 2). To change the settings to 26-bit, refer to Figure 3.

30-bit Switch Settings (Default):

- S1, 3 = OFF or 0
- S1, 2 = OFF or 0
- S1, 1 = ON or 1
- S1, 0 = ON or 1

26-bit Switch Settings:

- S1, 3 = OFF or 0
- S1, 2 = OFF or 0
- S1, 1 = ON or 1
- S1, 0 = OFF or 0

Left = OFF or 0
Right = ON or 1

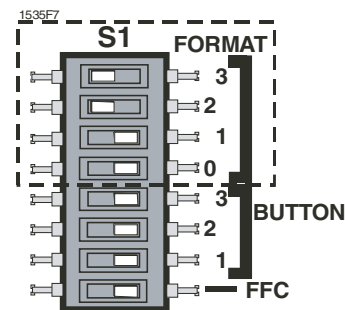


Figure 2: 30-bit DIP Switch Setting

5. Set the transmitter button response(s).
 - There are three DIP switches used to set the transmitter button response(s) (Figures 4 or 5).
 - To disallow receiver response to transmitter buttons, move the DIP switch(es) to the LEFT. All button switches are factory set to ON.

Switch S1, 1 controls Button #1 and Button #4*

Switch S1, 2 controls Button #2

Switch S1, 3 controls Button #3

* If using a CPT4 transmitter, Button #4 reacts to Button #1 settings, but uses a unique identification number and facility code.

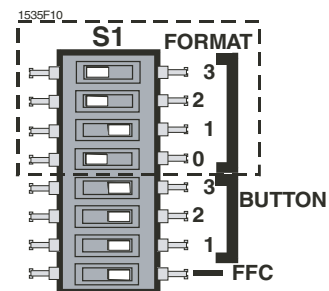


Figure 3: 26-bit DIP Switch Setting

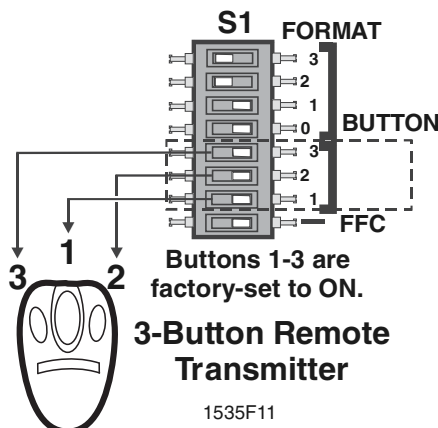


Figure 5: 3-Button Transmitter Button Switches

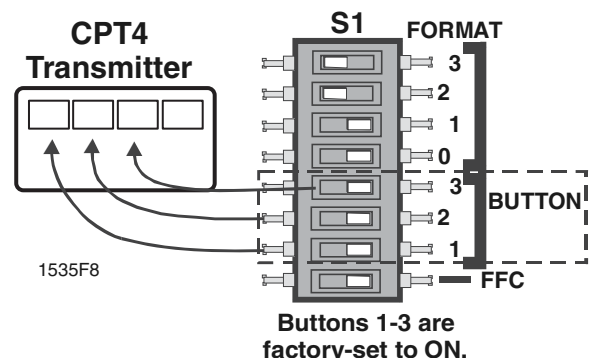


Figure 4: CPT4 Transmitter Button Switches

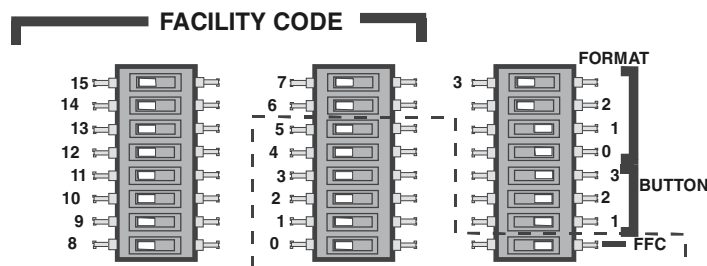
SETTING THE SWITCHES CONTINUED

6. Set a Fixed Facility Code (FFC).

- The FFC switch must be in the ON position (switch set to right).
- Set the receiver's facility code switches (labeled 0-5) to match the facility code of the access control system.

Refer to the switch settings chart in the Appendix on page 5 for assistance.

NOTE: For installations that require the facility code of the transmitters to be passed to the access control system, set the FFC switch to the OFF position (set switch to left). Facility codes are set in the transmitter at the factory to avoid code duplication.



Facility code switches 6-15 are not used (must remain in the OFF or left position).

FFC Factory Setting = ON (switch set to right).

Facility Code Factory Setting = All OFF (switches set to left).

INSTALLATION AND WIRING

1. Mount the Receiver.

Mount receiver to surface using #6 hardware (not provided). (Figure 8)

NOTE: Mount receiver with 18" of space above the receiver for the antenna. The receivers should be installed at least 5' apart to avoid "cross-talk".

2. Connect the antenna.

Screw on antenna clockwise and slide rubber boot down to meet o-ring (Figure 7).

3. Connect signal/power wires.

Remove the terminal block from J2 on the circuit board. Connect wires from the CPWR 6-pin connector to the access control system (Figure 8). Then re-insert the terminal block onto J2.

Wire the CPWR to the access control systems' **card reader** port. Refer to the access control system's instructions for appropriate wiring detail. A typical wire connection might resemble the following:

CABLE SIGNALS	WIRE COLOR
LED	BROWN
DATA 1	WHITE
DATA 0	GREEN
+12VDC	RED
COMMON (GND)	BLACK
SHIELD	SHIELD

NOTE: At power up, the CPWR will perform a system check and produce a series of LED flash sequences (this is normal).

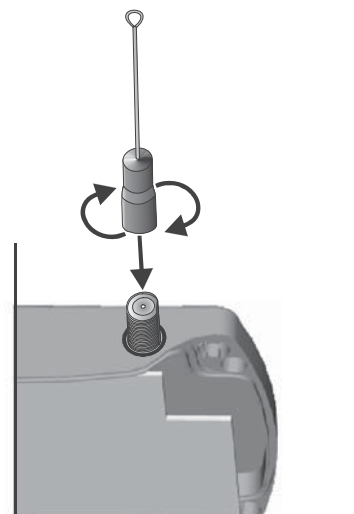


Figure 7

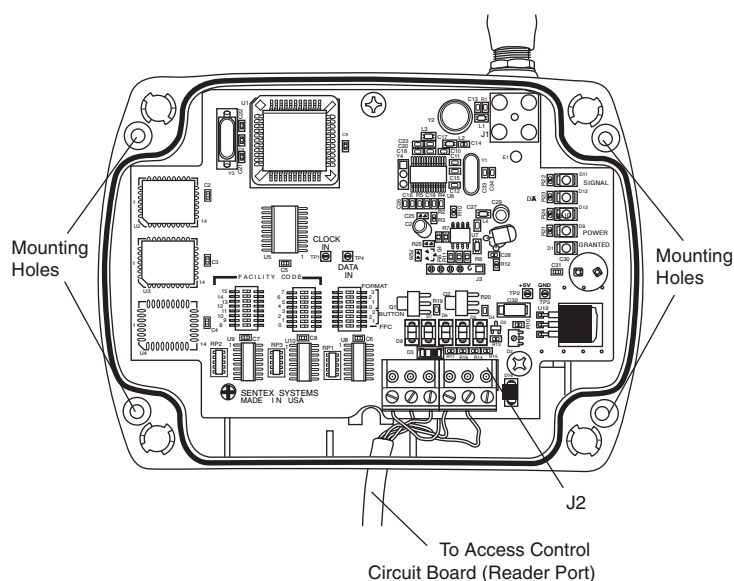


Figure 8

TESTING AND TROUBLESHOOTING

1. Check the power.

Ensure that the red POWER LED is lit (Figure 9). If not, check your power connections and/or source. Voltage reading should be within the range of 9VDC – 18VDC.

2. Check for Receiver operation.

The SIGNAL LED (Figure 9) should be flickering continuously, indicating that the RF receiver circuitry is operating.

3. Test the Transmitter/Receiver.

Press the transmitter button previously set in step 4, page 3, within view of the receiver. If the DATA-yellow and VALID-green LEDs do not light, review the Setting the Switches and Connect Signal/Power Wires sections.

NOTE: If the DATA-yellow and VALID-green LEDs flash repeatedly and simultaneously, the format settings may be incorrect (refer to Output Code Format).

If reception of the transmitter's signal is significantly reduced, there may be strong RF interference from other sources. Common sources of interference include fluorescent lights, neon signs, mercury vapor lamps, arc welders, and arcing power lines. Interference due to lighting can be limited by having an electrician wire a noise suppressor into the lamp, light, or sign circuit.

NOTE: It may be required to press the transmitter button twice at first use.

RECEIVER LED REFERENCE

(Figure 9)

SIGNAL – Red

This LED, when lit, indicates that the receiver has detected the presence of RF energy. It is normal for this LED to flicker continuously while the receiver is powered up.

DATA – Yellow

This LED indicates that the receiver recognizes the transmission data as coming from a Chamberlain® transmitter with Passport technology.

VALID – Green

This LED indicates that the receiver is sending a Wiegand format output to the access control system.

POWER – Red

This LED indicates that the receiver has power.

GRANTED – Green

This LED indicates that the access control system has validated the transmitted code and has granted access.

4. Attach the front cover.

Attach front cover of receiver by turning screws clockwise 1/4 turn. *Do not over tighten.*

⚠ WARNING

Call your local power company if interference is due to arcing power lines.

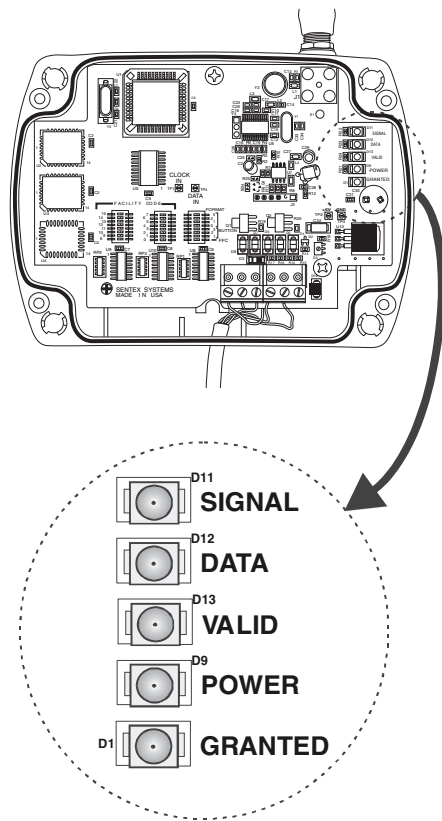


Figure 9

APPENDIX: FACILITY CODE SWITCH SETTINGS

Refer to Figure 1 on page 1 for the facility code DIP switch location. Also, when setting the receiver's DIP switches, refer only to the numbers silk screened on the PC board (not the numbers on the DIP switch itself).

FC	000	001	002	003	004	005	006	007	008	009	010	011	012	013	014	015
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
2	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
FC	016	017	018	019	020	021	022	023	024	025	026	027	028	029	030	031
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
2	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
FC	032	033	034	035	036	037	038	039	040	041	042	043	044	045	046	047
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
2	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
FC	048	049	050	051	052	053	054	055	056	057	058	059	060	061	062	063
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
2	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1

LIMITED WARRANTY

LiftMaster warrants the receiver against original manufacturing defects for a period of three (3) years, measured from the day of initial shipment by LiftMaster. This warranty is conditioned upon LiftMaster being paid in full for all equipment; this warranty is not effective until such payment in full has been received. The warranty period shown above applies only to the LiftMaster receiver with Passport technology). Since this is a manufacturer's warranty, not a dealer's warranty, installation, removal, and freight charges are not part of this warranty, nor shall the installer be held liable in any way for removal, repair or installation of the Passport system unless otherwise stated in a separate dealer's warranty. This warranty does not extend to systems or compartments that show evidence of damage caused by vandalism, acts of God (e.g., lightning, flood), abuse, or unauthorized or improper service.

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