1116 Wireless Relay Output

Description

The 1116 Wireless Relay Output provides a Form C (SPDT) dry relay contact rated for 1 Amp @ 30VDC. Regardless of the state of the relay, the 1116 operates on constant minimal standby current. The 1116 relay can be controlled from a DMP panel output programmed to respond to a variety of conditions such as armed area annunciation, ambush alarm, burglary alarm, exit timer, entry timer, schedules, or communication failure. The 1116 is designed to operate on one CR123A battery or connect to an optional 12VDC power supply.

Compatibility

All DMP 1100 Series Wireless Receivers and Panels

What is Included

The 1116 includes the following:

- One 1116 Wireless Relay Output
- One 3V Lithium CR123A battery
- Hardware pack

Optional items available:

- Model 376L DC Power Supply
- Model 505-12 12VDC Power Supply

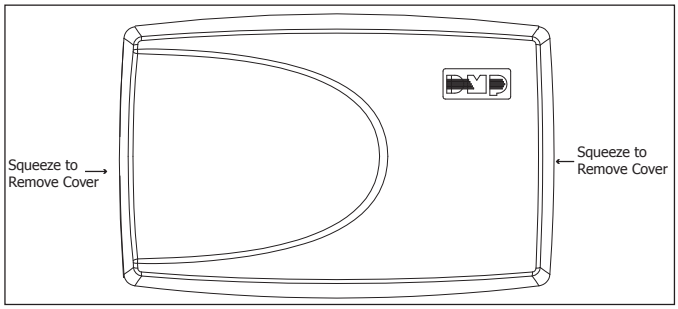

Figure 1: 1116 Wireless Relay Output

Programming the 1116 in the Panel

Specific output numbers are available for wireless devices. In Output Information, enter the output number, output name, eight-digit serial number, and supervision time. Refer to the panel programming guide as needed.

To indicate whether the wireless device responds within 15 seconds to trip the output (slow response):

- For **XTLplus** (LT-1434) use panel output numbers 51-54
- For **XR150/XR550** (LT-1232), **XR100** (LT-0896), and **XR500** (LT-0679) Series, use panel output numbers 450-474
- For **XT30/XT50** (LT-0981) Series, the **XTLC** (LT-1108), and **XTLN/XTLN-WIFI** (LT-1221), use panel output numbers 31-34

To indicate whether the wireless device responds within 1 second to trip the output (fast response):

- For **XTLplus** (LT-1434) Series use panel output numbers 61-64
- For **XR150/XR550** (LT-1232), **XR100** (LT-0896), and **XR500** (LT-0679) Series, use panel output numbers 480-499
- For **XT30/XT50** (LT-0981) and **XTLC/XTLN/XTLN-WIFI (LT-1221)** Series panel output numbers 41-44

Note: When a receiver is installed, powered down and powered up, the panel is reset, or programming is complete, the supervision time is reset. If the receiver has been powered down for more than one hour, the 1116 may take up to an additional hour to send a supervision message unless tripped, tampered, or powered up. This operation extends battery life. A missing message may display on the keypad until the supervision message is sent.

Selecting the Proper Location (LED Survey Operation)

The 1116 provides a survey capability to allow one person to confirm communication with the receiver while the cover is removed. The 1116 PCB Red Survey LED (See Figure 2) turns on whenever data is sent to the receiver then immediately turns off when the receiver acknowledgement is received. Pressing the tamper switch is a convenient way to send data to the receiver to confirm operation. When the 1116 does not receive an acknowledgement from the receiver the survey LED remains on for about 8 seconds to let you know communication is not established. Communication is also faulty when the LED flashes multiple times in quick succession. Relocate the 1116 or receiver until the LED immediately turns off indicating the 1116 and receiver are communicating properly. Proper communication between the 1116 and receiver is verified when for each press or release of the tamper switch, the LED blinks immediately on and immediately off. Repeat this test to confirm five separate consecutive LED blinks. Any indication otherwise means proper communication has not been established.

1116 Relay Output Annunciation

The following table shows the 1116 annunciation operation options.

Panel Programmed Action	Annunciation
STEADY	Relay output turns on and remains on
PULSE	Relay output alternates one second on, one second off
MOMENTARY	Relay output turns on once for one second
TEMPORAL (XR500 and XR100 Series only)	Relay output repeats the following sequence: • on 1/2 second, off 1/2 second, • on 1/2 second, off 1/2 second • on 1/2 second, off 1-1/2 second

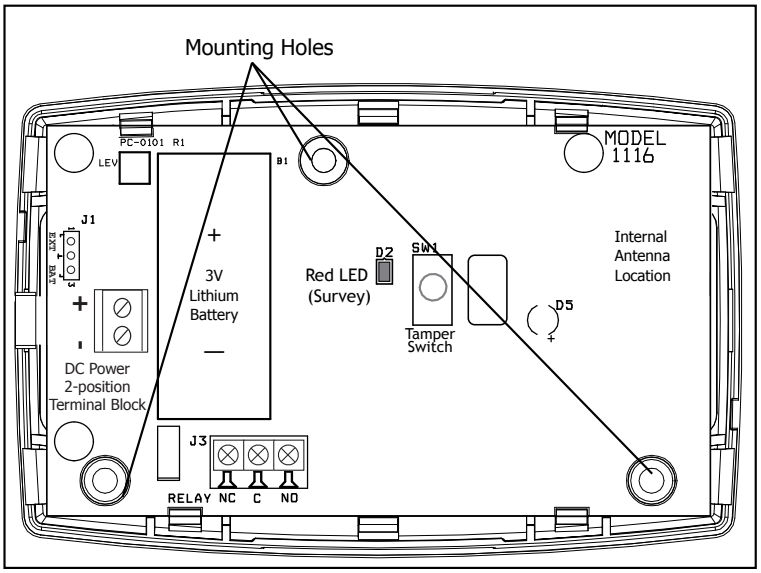

Figure 2: 1116 Relay Output PCB

Installing the 1116

Locate the 1116 on a flat surface such as a wall or single-gang box. When using the optional Model 376L plug-in power supply, mount the 1116 near a wall outlet. See Figure 2 for mounting hole locations.

1116 Relay Wiring

Use 22 or 18 AWG wire to connect the relay output. The Form C relay can be connected to operate as Normally Closed (NC) or Normally Open (NO).

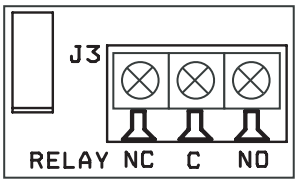

Figure 3: 1116 Relay Connector

Powering the 1116

The 1116 transmitter can be powered by:

- CR123A 3V Lithium battery
- Model 376L plug-in power supply
- 12VDC Power Supply

Note: When setting up a wireless system, it is recommended to program outputs and connect the receiver before installing batteries in the 1116 or connecting an optional power supply.

Battery Power

Observe polarity when installing the battery. Use only 3V Lithium batteries, DMP Model CR123, or the equivalent battery from a local retail outlet. Do not connect the power supply adaptor when operating using battery power.

1. Squeeze the cover left and right sides together to remove. See Figure 1.
2. Install the supplied jumper on the two J1 pins next to BAT to enable battery operation.

   Note: Battery operation is not enabled if the jumper is on the J1 pins next to EXT.
3. If replacing the battery, remove the old battery and dispose of it properly.
4. Place the 3V Lithium battery in the holder and press into place. See Figure 2 for Battery location.
5. Snap the cover back into place.

Caution: Properly dispose of used batteries. Do not recharge, disassemble, heat above 212˚F (100˚C), or incinerate. Risk of fire, explosion, and burns.

Battery Life Expectancy

Typical battery life expectancy for the 1116 is two months when programmed as a fast response output and five years when programmed as a slow response output. DMP wireless equipment uses two-way communication to extend battery life. Refer to the panel programming guides as needed.

The following situation can extend battery life expectancy:

- Extend supervision time in panel programming.
- Program the relay as a slow response output in panel programming.
- Minimal relay on/off operations.

The following situations can reduce battery life expectancy:

- Multiple relay on/off operations.
- If a receiver is unplugged, too far away, or not installed.

Note: Transmitters continue to send supervision messages until a receiver returns an acknowledgement. After an hour the transmitter only attempts a supervision message every 60 minutes.

- When installed in extreme hot or cold environments.

Optional External DC Plug-in Power Supply

When using the optional Model 376L plug-in DC power supply, mount the 1116 near a wall outlet. Do not install a battery when operating using the plug-in power supply. The power supply does not charge the battery.

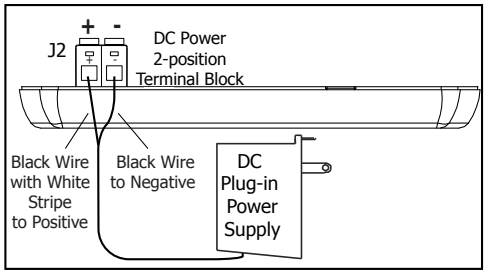

Figure 4: 1116 Side View

Use the following steps to connect the plug-in power supply:

1. Squeeze the left and right cover sides together to remove. See Figure 1.
2. Install the supplied jumper on the two J1 pins next to EXT to enable power supply operation.

   Note: Power supply operation is not enabled if the jumper is on the J1 pins next to BAT.
3. Wire the power supply to the J2 terminal block. Connect the Black wire with the White stripe to the positive terminal and the Black wire to the negative terminal. See Figure 4.
4. Snap the cover back into place.
5. Plug the power supply into a 110VAC outlet.

Optional External 12VDC Power Supply

The 1116 can also be powered from a 12VDC power supply such as a DMP Model 505-12. Do not install a battery when operating using the external power supply. The power supply does not charge the battery.

Use the following steps to connect the power supply:

1. Squeeze the left and right cover sides together to remove. See Figure 1.
2. Install the supplied jumper on the two J1 pins next to EXT to enable power supply operation.

   Note: Power supply operation is not enabled if the jumper is on the J1 pins next to BAT.
3. Using 22 AWG wire, connect the J2 terminal block to the J6 terminal on the 505-12 power supply PCB. See Figure 5.
4. Observe positive and negative polarity on all connections.
5. Snap the cover back into place.

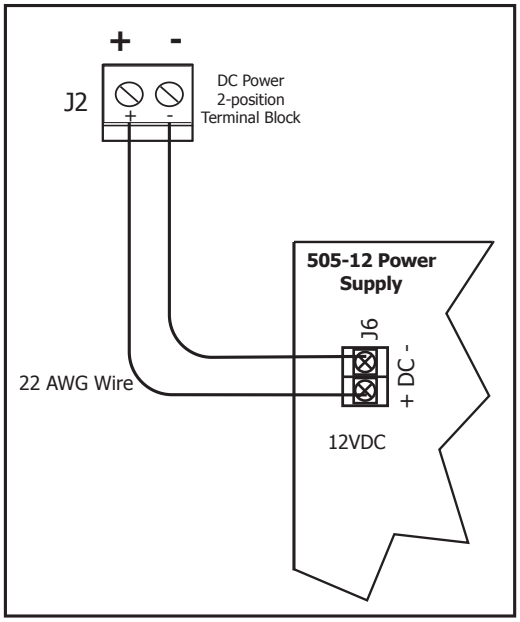

Figure 5: Power Supply Connection

FCC Information

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

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

The antenna used must be installed to provide a separation distance of at least 20 cm (7.874 in.) from all persons. It must not be co-located or operated in conjunction with any other antenna.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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. 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.

Specifications

Battery	
Life Expectancy	2 months (Fast Response) 5 years (Slow Response)
Type	3V Lithium CR123A
See Battery Life Expectancy for full details.	
Frequency Range	905-924 MHz
Dimensions	4.65" L x 3.1" W x 1.4" H
Color	White
Housing Material	Flame retardant ABS

Accessories

CR123	DMP 3V Lithium Battery
376L	DC Plug-in Power Supply
505-12	12VDC Power Supply

Compatibility

The 1116 Wireless Relay Output is compatible with:

1100D Series Wireless Receiver Version 105 or higher
1100X Series Wireless Receiver Version 105 or higher
XT50 Series panels with integrated wireless receiver
XTLplus Series panels with integrated wireless receiver
XTLC Series panels with integrated wireless receiver
XTLN/XTLN-WIFI Series panels with integrated wireless receiver

Patents

U. S. Patent No. 7,239,236

Certifications

FCC Part 15 Registration ID CCKPC0101

IC Registration ID 5251A-PC0101

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