renu™

Single Pole (One location) or 3-Way (Multi-location)
Universal Dimmer
Cat. No. REL06, 600W Incandescent, 600VA Magnetic Low Voltage, 300W - LED & CFL
120VAC, 60Hz
INSTALLATION INSTRUCTIONS

LEVITON®

DI-000-REL06-02A

WARNINGS AND CAUTIONS:

- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring!
- **DISCONNECT POWER AT CIRCUIT BREAKER OR FUSE WHEN SERVICING, INSTALLING OR REMOVING FIXTURE.**
- To be installed and/or used in accordance with electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- To avoid overheating and possible damage to this device and other equipment, **do not install to control a receptacle, fluorescent lighting, a motor- or transformer operated appliance with exception to the listed compatible loads.** Refer to **www.leviton.com** for compatible LED and CFL bulbs.
- Renu™ dimmers are **not compatible with standard 3-way or 4-way switches.** They must be used with compatible Renu™ remotes for multi-location dimming.
- Use only one (1) Renu™ dimmer in a multi-location circuit with up to 9 coordinating remotes. The remote(s) will turn the light on at the brightness level selected at the dimmer.

WARNINGS AND CAUTIONS:

- For use with compatible LED and CFL bulbs or fixtures that are marked as dimmable and designed for use with incandescent style phase cut dimmers.
- Do not use to operate dioded lamps (Sylvania Designer 16™ or Philips PAR-16™).
- Total minimum load must exceed 8W.
- Dimmer may feel warm to the touch during normal operation.
- Recommended minimum wall box depth is 2-1/2".
- Maximum wire length from dimmer to all installed remotes cannot exceed 300 ft.
- Use this device **WITH COPPER OR COPPER CLAD WIRE ONLY**.

## TOOLS NEEDED TO INSTALL YOUR DIMMER

Slotted/Phillips Screwdriver	Electrical Tape	Pliers
Pencil	Cutters	Ruler

INSTALLING DIMMER BY ITSELF OR WITH OTHER DEVICES

If installing Dimmer in a single device application, proceed with the **INSTALLING YOUR DIMMER** section. If installing Dimmer in a multi-device application, proceed as follows:

MULTI-DEVICE APPLICATION:

In incandescent and magnetic low voltage multi-dimmer installations, the reduction of the dimmer's capacity is required. Refer to the chart for maximum load per dimmer. No derating is required for use in Dimmable CFL or dimmable LED multi-dimmer installations.
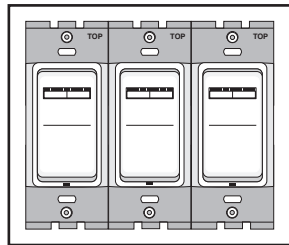

MAXIMUM INCANDESCENT/MAGNETIC LOW VOLTAGE LOAD PER DIMMER FOR MULTI-DEVICE APPLICATION			
Load Type	Single	Two Devices	More than 2 Devices
Incandescent	600W	500W	400W
Magnetic LV	600VA	500VA	400VA

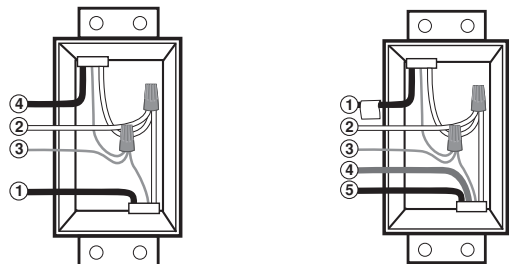## INSTALLING YOUR DIMMER

NOTE: Use check boxes ☑ when Steps are completed.

Step 1

WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER at circuit breaker or fuse and test that power is off before wiring!
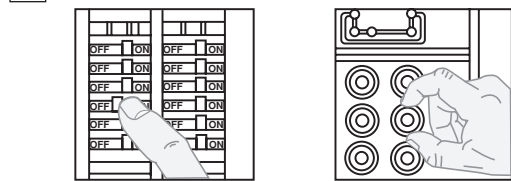
Step 2 — **Identifying your wiring application (most common):**

NOTE: If the wiring in the wall box does not resemble any of these configurations, consult an electrician.

Single-Pole
1. Load
2. Neutral
3. Ground
4. Line (Hot)

3-Way
1. Line or Load *(See important instruction below)*
2. Neutral
3. Ground
4. First Traveler – note color
5. Second Traveler – note color

IMPORTANT: For 3-Way applications, note that one of the screw terminals from the old switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as the common (Line or Load) in both the dimmer wall box and remote wall box.

Step 3 — **Preparing and connecting wires:**
This dimmer can be wired using side wire terminal screws or through backwire openings. Choose appropriate wire stripping specifications accordingly.

Strip Gage (measure bare wire here or use gage on back of the dimmer)
5/8" (1.6 cm)
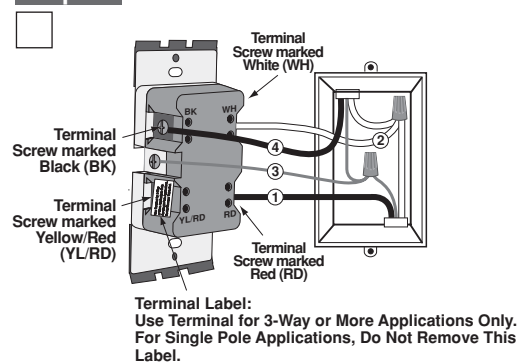
Cut (if necessary)
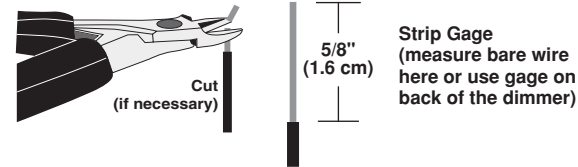
Side Wire Connection
Side wire terminals accept #14-12 AWG **solid copper wire only**.
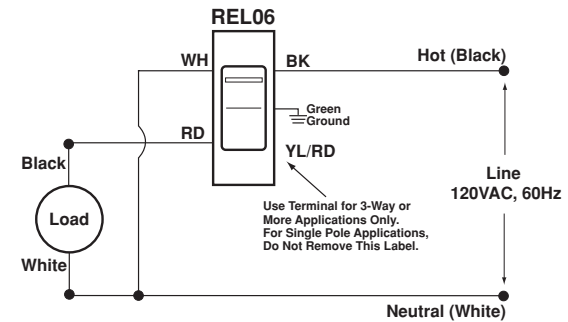
Back Wire (either hole may be used)
Back wire openings use #14-12 AWG **solid copper wire only**.

- Make sure that the ends of the wires from the wall box are **straight (cut if necessary)**.
- Remove insulation from each wire in the wall box as shown.
- **For Single Pole Application, go to Step 4a.**
- **For 3-Way Coordinating Remote (no LEDs) Application, go to Step 4b.**

Step 4a — **Single Pole Wiring Application:**

Terminal Screw marked White (WH)
Terminal Screw marked Black (BK)
Terminal Screw marked Yellow/Red (YL/RD)
Terminal Screw marked Red (RD)

Terminal Label:
Use Terminal for 3-Way or More Applications Only. For Single Pole Applications, Do Not Remove This Label.

Step 4b — **3-Way Wiring Application:**

RE00R / REL06
Terminal Screw marked White (WH)
Terminal Screw marked Black (BK)
Terminal Screw marked Yellow/Red (YL/RD)
Terminal Screw marked Red (RD)

Step 4a cont'd

REL06 — WH, BK, Hot (Black), RD, YL/RD
Black / Load / White
Line 120VAC, 60Hz
Neutral (White)
Green Ground
Use Terminal for 3-Way or More Applications Only. For Single Pole Applications, Do Not Remove This Label.
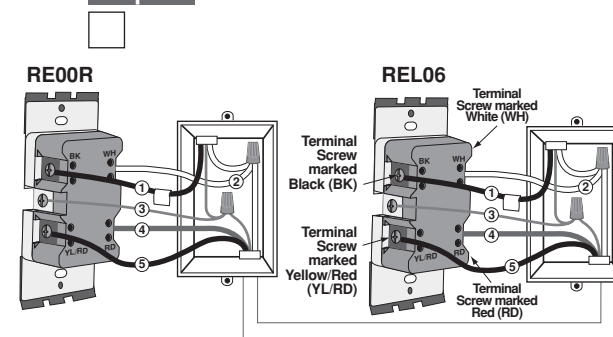
WIRING DIMMER:

Connect wires per WIRING DIAGRAM as follows:

- Green or bare copper wire in wall box to Green terminal screw.
- Line Hot wall box wire to terminal screw marked "BK".
- Line Neutral wall box to terminal screw marked "WH".
- Load wall box wire to terminal screw marked "RD".
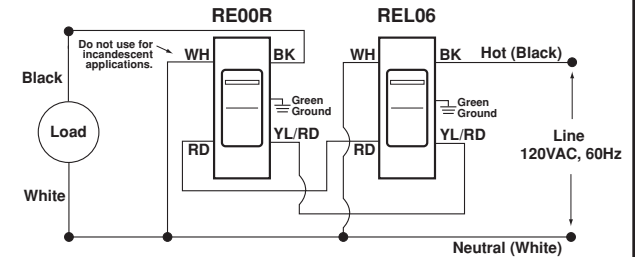- Dimmer terminal screw marked "YL/RD" should have Red insulation label affixed.
  NOTE: If insulating label is not affixed to terminal screw marked "YL/RD", use electrical tape to cover.
- **Proceed to Step 5.**

Step 4b cont'd

RE00R / REL06
Do not use for incandescent applications.
Black / Load / White
WH, BK, Hot (Black), RD, YL/RD
Green Ground
Line 120VAC, 60Hz
Neutral (White)

WIRING DIMMER:

Connect wires per WIRING DIAGRAM as follows:

NOTE: When using the coordinating remote without LEDs, the dimmer can be installed on either the Line or Load side of the 3-way circuit.
NOTE: Maximum wire length from dimmer to all installed remotes cannot exceed 300 ft.

- Green or bare copper wire in wall box to Green terminal screw.
- Common wall box wire identified (tagged) when removing old switch to terminal screw marked "BK".
- Line Neutral wall box to terminal screw marked "WH".
- First Traveler wall box wire to terminal screw marked "RD" **(note wire color)**. This traveler from the dimmer must go to the terminal screw on the remote marked "RD".
- Remove Red insulating label from terminal screw marked "YL/RD".
- Second Traveler wall box wire to terminal screw marked "YL/RD" **(note wire color)**. This traveler from the dimmer must go to the terminal screw on the remote marked "YL/RD".

WIRING COORDINATING REMOTE:

Connect wires per WIRING DIAGRAM as follows:

NOTE: Maximum wire length from dimmer to last remote is 300ft.
- Green or bare copper wire in wall box to Green terminal screw.
- Common wire identified (tagged) when removing old switch to terminal screw marked "BK".
- Line Neutral wall box to terminal screw marked "WH".
- First Traveler wall box wire **(note color as above)** to terminal screw marked "RD". This traveler from the remote must go to the terminal screw on the dimmer marked "RD".
- Second Traveler wall box wire **(note color as above)** to terminal screw marked "YL/RD". This traveler from the remote must go to the terminal screw on the dimmer marked "YL/RD".
- Remote terminal screw marked "WH" should have White insulation label affixed.
  NOTE: If insulating label is not affixed to terminal screw marked "WH", use electrical tape to cover.
- **Proceed to Step 5.**

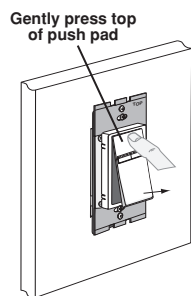## Step 5 — Testing your Dimmer prior to mounting in wall box:
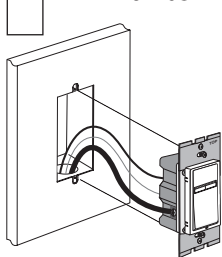
- Position all wires to provide room in outlet wall box for device.
- Ensure that the word "TOP" is facing up on the device strap.
- Partially screw in mounting screws in wall box mounting hole.

NOTE: Dress wires with a bend as shown in diagram in order to relieve stress when mounting device.

- Restore power at circuit breaker or fuse.
- Press pad until locator light is OFF. Lights should turn ON. If lights do not turn ON, press the upper half of DIM/BRIGHT bar until the lights brighten.

  If lights still do not turn ON, refer to the TROUBLESHOOTING section.

- If testing a 3-way installation, also press pad on remote to ensure lights turn ON and OFF.

Step 6 — Dimmer Mounting:
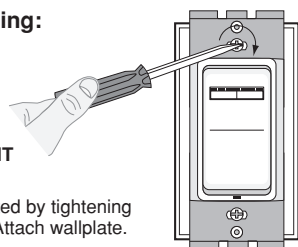
TURN OFF POWER AT CIRCUIT BREAKER OR FUSE.

Installation may now be completed by tightening mounting screws into wall box. Attach wallplate.

Step 7 — Restore Power:

Restore power at circuit breaker or fuse.
Installation is complete.

OPERATION

NOTE: The locator light will illuminate when the load is in the OFF position to facilitate access in the dark.

NOTE: If using the dimmer in a 3-way application, the lights will turn ON at brightness set on dimmer's DIM/BRIGHT bar. The lighting can be controlled from either the dimmer or the remote location.

Push Pad (Default settings)
Turn ON from OFF position:
Tap – Lights turn ON to preset level.
Press and Hold – Lights turn ON to full bright.
Turn OFF from ON position:
Tap – Lights turn OFF.

DIM/BRIGHT Bar
BRIGHTEN:
Press right half of DIM/BRIGHT Bar – Lights brighten to desired level.
DIM:
Press left half of DIM/BRIGHT Bar – Lights dim to desired level.

If you continue to hold the left half of the DIM/BRIGHT Bar, the lights will DIM to minimum level and then turn OFF.

NOTE: The turn on light level can be changed when lights are off using the DIM/BRIGHT Bar. In the event of power outage or interruption, the lights will reset to the last level when power is restored.
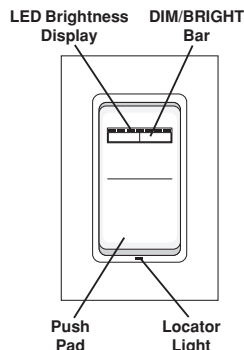
Air-Gap Switch: On the dimmer only, engage the air-gap switch by gently pressing the top of the push pad until the bottom lifts completely out of the frame and a click is heard (**refer to Figure**). LEDs will turn OFF. This will stop power to the fixture to replace the bulb. After servicing is complete, press the push pad back into place for normal operation.

Cleaning: Clean with a damp cloth. **DO NOT** use chemical cleaners.

Gently press top of push pad

CHANGING THE COLOR OF YOUR DEVICE

Your device may include color options. To change color of the face proceed as follows:
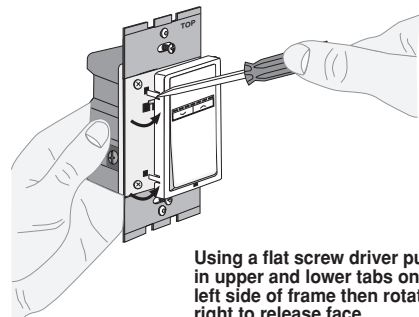
Using a flat screw driver push in upper and lower tabs on left side of frame then rotate right to release face
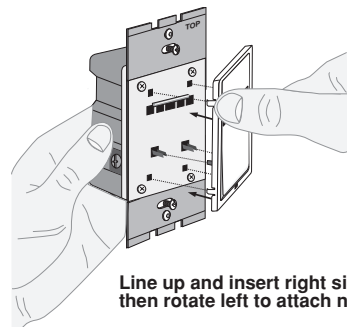
Line up and insert right side tabs, then rotate left to attach new face

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ADVANCED PROGRAMMING FEATURES (OPTIONAL)

Definition of A Modes
A-1) Load Type Selection: Optimizes the dimmer to the selected load
  Mode 0 - Incandescent/Magnetic Low Voltage (default)
  Mode 1 - Dimmable LED
  Mode 2 - Dimmable CFL with Kick Start Feature.
A-2) Energy Save: Sets the maximum brightness level for Incandescent energy savings.
A-3) Minimum Brightness Level: Sets the minimum dimming level.

Definition of B Modes
B-1) ON Fade Rate: Sets the amount of time in seconds it takes the lights to turn ON to maximum brightness.
B-2) OFF Fade Rate: Sets the amount of time in seconds it takes the lights to turn OFF from maximum brightness.
B-3) LED Options: Sets the time period in seconds the Locator LED and Brightness display will stay on before extinguishing.

Definition of C Modes
C) Restore Defaults: Restores the factory default settings.

Definition of LEDs
Leftmost LED = LED 1
Rightmost LED = LED 7

NOTES:
- The device will exit Programming Mode after 3 minutes of inactivity.
- Pressing the Push Pad at any time during Programming will advance the device to the next Programming Mode.

1 2 3 4 5 6 7

LED Brightness Display

Program Mode A
To enter Program Mode A:
Press and hold the Push Pad and then the **right** half of the DIM/BRIGHT Bar (∧) simultaneously for 5 seconds until the Locator LED and leftmost LED (LED 1) begin to blink.
A-1) Upon releasing the Push Pad and the **right** half of the DIM/BRIGHT Bar, the Locator LED will continue to blink once per second to display the device is in Program Mode **A-1**. The **leftmost** LED will illuminate to display that the Load Type selected is incandescent load (default load type). To change the load type, use the DIM/BRIGHT Bar to change the corresponding LED to the desired load type according to **Chart A-1**. By tapping the Push Pad this setting will automatically be saved and the device will advance to the next Programming Mode, **A-2**.

Chart A-1
When indicator light is at LED #	Selected load type is
1	Incandescent/MLV
2	LED
3	CFL

A-2) Maximum Brightness Level (Energy Save): **NOTE -** Energy Save Mode can only be used with an incandescent or magnetic low voltage load. The Locator LED will blink 2 times per second to indicate the device is in Program Mode **A-2, Maximum Brightness Level**. The default Energy Save Mode is 100% i.e. full bright. To change the **Energy Save** level, use the DIM/BRIGHT Bar to move the corresponding LED to the desired discreet preset level according to **Chart A-2**. By tapping the Push Pad this setting will automatically be saved and the device will advance to the next Programming Mode, **A-3**.

Chart A-2
When indicator light is at LED #	Light output is at	Energy consumption savings amounts to
7	100%	0%
6	97%	5%
5	95%	8%
4	90%	11%
3	85%	14%
2	80%	17%
1	75%	20%

A-3) Minimum Brightness Level: Sets the minimum dimming level. The Locator LED will blink 3 times per second to indicate the device is in Program Mode **A-3, Minimum Brightness Level**. The default Minimum Brightness Level is LED 2. To change the **Minimum Brightness Level** from 1-50%, use the DIM/BRIGHT Bar. The light output will reflect the minimum brightness level selected.

Program Mode B
To enter Program Mode B:
Press and hold the Push Pad and then the **left** half of the DIM/BRIGHT Bar (∨) for 5 seconds until the Locator LED and rightmost LED (LED 7) begin to blink.
B-1) Upon releasing the Push Pad and the **left** half of the DIM/BRIGHT Bar (∨), the Locator LED will continue to blink once per second indicating the dimmer is in Program Mode **B-1, ON Fade Rate**. To change the **ON Fade Rate**, use the DIM/BRIGHT Bar to move the LED to the desired preset level according to **Chart B-1**. By tapping the Push Pad this setting will automatically be saved and the device will advance to the next Programming Mode, **B-2**.
B-2) The Locator LED will blink 2 times per second to indicate Program Mode **B-2, OFF Fade Rate**. To change the **OFF Fade Rate**, use the DIM/BRIGHT Bar to move the LED to the desired preset level according to **Chart B-1**. By tapping the Push Pad this setting will automatically be saved and the device will advance to the next Programming Mode, **B-3**.

Chart B-1
LED	FADE ON	FADE OFF
LED 1	0 seconds (instant)	0 seconds (instant)
LED 2 (Default)	0.5 seconds	0.5 seconds
LED 3	1.5 seconds	1.5 seconds
LED 4	3.0 seconds	3.0 seconds
LED 5	6.0 seconds	6.0 seconds
LED 6	10 seconds	10 seconds
LED 7	25 seconds	25 seconds

B-3) The Locator LED will blink 3 times per second to indicate Program Mode **B-3, LED Options**. To change the **LED Options** settings, use the DIM/BRIGHT Bar to move the LED to the desired preset setting according to the **Chart B-3**. By tapping the Push Pad this setting will automatically be saved and the device will exit Programming Mode B.

Chart B-3
LED	LOCATOR LED TIMEOUT	LED BRIGHTNESS DISPLAY OPTIONS
LED 1	Active	Active
LED 2	Active	Turns off 5 sec. after use
LED 3	Turns off 5 sec. after use	Active
LED 4	Turns off 5 sec. after use	Turns off 5 sec. after use
LED 5	N/A	N/A
LED 6	N/A	N/A
LED 7	N/A	N/A

Program Mode C
To enter Program Mode C:
Engage the air-gap switch by gently pressing the top of the Push Pad until the bottom lifts completely out of the frame and a click is heard. All LEDs will extinguish.
C) Press Push Pad back into the frame and hold for 7 seconds until the LED Brightness Display starts bidirectional strobing to indicate Program Mode **C, Restore Default**. To **Restore Default** settings, release the Push Pad. This will exit Programming Mode C.

Gently press top of push pad
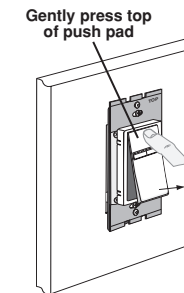
TROUBLESHOOTING

- **Lights Flickering**
  - Lamp has a bad connection.
  - Wires not secured firmly under terminal screws of dimmer and/or remote.
  - Refer to **www.leviton.com** for compatible LED and CFL bulbs.
- **Light does not turn ON and Locator LED does not turn ON**
  - Circuit breaker or fuse has tripped.
  - Lamp is burned out.
  - Lamp Neutral connection is not wired.
- **Intermittent dimmer operation**
  - Minimum load is under 8W.
- **Remote does not operate lights**
  - Ensure that total wire length does not exceed 300 ft.

For additional information, contact Leviton's Techline at 1-800-824-3005 or visit Leviton's website at www.leviton.com

FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to 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 of the device.
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 the 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.

FCC CAUTION
Any changes or modifications not expressly approved by Leviton Manufacturing Co., Inc., could void the user's authority to operate the equipment.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320**.

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LED Brightness Display   DIM/BRIGHT Bar

Push Pad   Locator Light

ARTWORK PRINT SPECIFICATIONS

LEVITON®

PART NUMBER	DI-000-REL06-02A	REV		DESCRIPTION	Instruction sheet

SPECIFICATIONS :

★ **Thickness:** 20 lb.

★ **Material:** Offset

★ **Finish:** _____

: _____

★ **For manuals - designates cover specifications**

★ **Color(s):** 1 **over** 1

1: Black ✓ **Spot**
2: _____
3: _____
4: _____ ☐ **CMYK**

★ **Fonts:**

1: Helvetica
2: _____
3: _____
4: _____

Die Line Key: – ·· – Perforate

――― Die Cut   - - - - Fold Line   ―··―·· Kiss Cut   ········· Cellophane   ≡≡≡ Glue

MANUAL INTERIORS / BINDERY / FOLD SCHEME :

Body Material: _____

Thickness: _____

Bindery

☐ **Die cut**   ✓ **Fold**   ☐ **Saddle Stitch**

☐ **Perfect Bind**   ☐ **Drill**   ☐ **Trim**

Color(s): _____ **over** _____

1: _____
2: _____   ☐ **Spot**
3: _____
4: _____   ☐ **CMYK**

Fonts:

1: _____
2: _____
3: _____
4: _____

DIMENSIONS / FOLD SCHEME / BINDERY DIAGRAM

―――― Die Cut   - - - - Fold Line   ● Punch/Drill Hole

16.5"   9.0"   Part No. (This panel)   1.375"   3.00"   Part No. (This panel)

PROCESS :

✓ **Offset**   ☐ **Flexo**

☐ **Other** _____

Line Screen: _____

Angle: _____

Resolution: _____
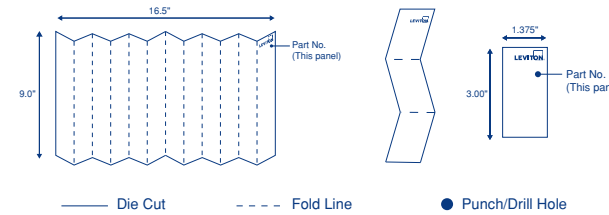
COMMENTS :

_____

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☐ **Mktg** _____   ✓ **Eng** K. Cohen   ✓ **S & A** R. Demera

☐ **Cust** _____   ✓ **Other** V. LoNigro   ☐ **Other** _____

PN-ARN: RS0139-3942   **ECR Number:** _____   **Pilot Rev:** _____

Artist: D. Hunt   **Released Artwork Format:** Production PDF   **Artwork Release Date:** 6/16/14

Notes: _____