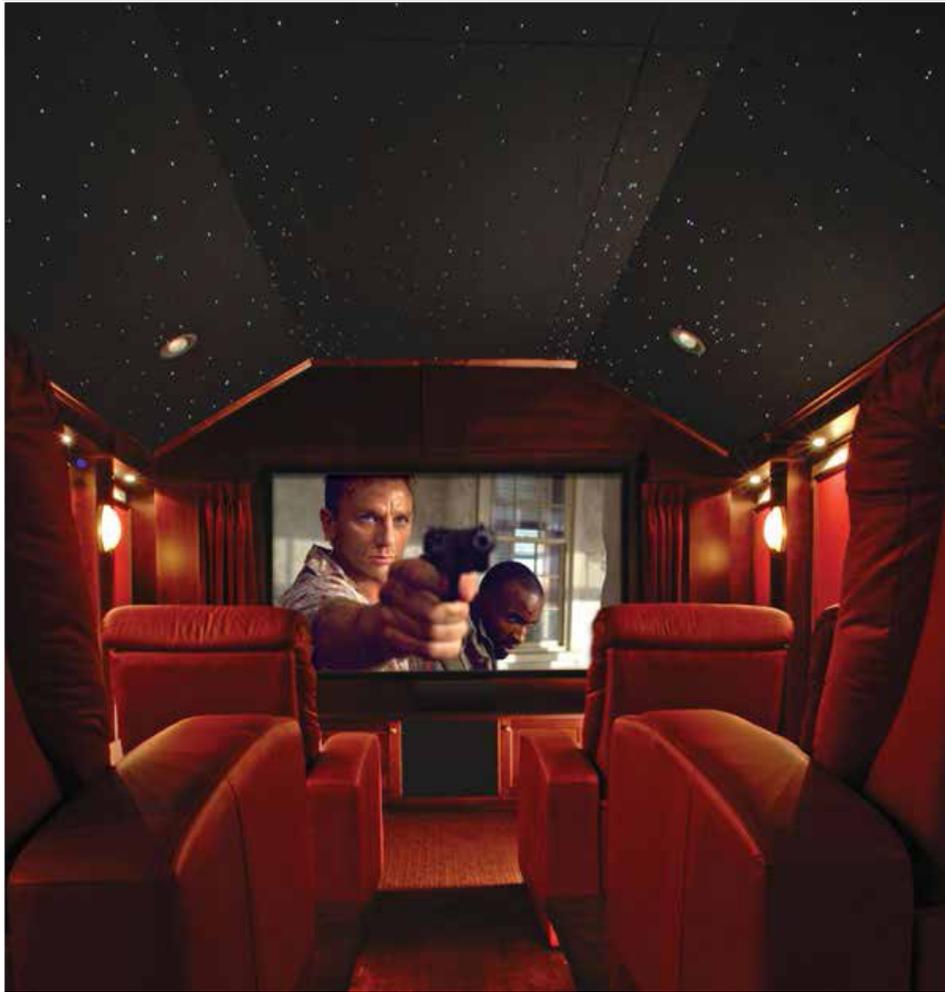


CINESTARTMPANEL



Surface Mount Installation Manual

WELCOME TO THE WORLD OF FIBER OPTIC STAR LIGHTS.

Your package should include the following:

- Acoustical fiber optic panels
- Mounting anchors
- Low voltage jumper cables
- Lead wire(s)
- RCA Lead wire(s) if controlled by RS232, and RCA (serial) jumpers as well if controlled via RS232
- Hex tools – poker tool
- Anchors template
- 12V power supply
- Cove lighting spacers (optional—not always used. Spacers are used with the Thin-glow LED system.)*

** Some installers use spacers for standard installation requiring more room for wires.*

Note: Sometimes there will be more than one lead wire and sometimes the wire(s) will already be attached to the power supply.

POWER SPECIFICATIONS:

Each panel draws 12V and 2.5W, or 0.2 amps max.

Note: Some panels will come with a shooting star, which contain two (2) CineStarPanel™ Board light sources and will increase the panel another 2.5W, for a total of 5W.

TIP: Put latex gloves on to keep panels clean when handling.

INSTALLATION (with 2 people using a stepladder):

Square up the room. A room may look square, but it doesn't mean that it is square. Measure twice since all the panels are aligned off of the first panel. It's alignment in the room is critical. Being just a little out of square with the first panel could result in being way out of square when you get to the end of the room. Take your time squaring up the first panel. Using masking tape, pencil marks, and chalk lines will assist you in keeping the installation square and true. Locate where your first panel will be installed.

RUNNING THE POWER:

Based on site conditions and project design, there will generally be two options for power. The recommended way is to use a Remote Driver and pre-install a CineStarPanel™ Leader Cable, or pre-wire an 18 AWG wire. The second and alternate way is using the Embedded Driver in the ceiling. (As always, check and observe local building codes.)

TIP: After you finish running the power, after lead wires run, test every panel before it goes up, by plugging lead wire to the LED board, located in the center of the panel.

OPTION 1: REMOTE DRIVER (RECOMMENDED METHOD)

The power supply has connectors for a power cable for the input of the line voltage. The selected outlet for powering the Driver should be controlled from a remote switch, or control system. Locate the Driver in a proper equipment area that is accessible and within 50 feet of the first ceiling panel (generally in the center of the ceiling.) At this point, connect the Star Panel Leader Cable and start daisy chaining the panels together, using the supplied Jumper Cables. Your leader cable should not be longer than 50 feet. Consult with a CineStarPanel™ manufacturer if a longer leader cable is required.

OPTION2: EMBEDDED DRIVER

Only a licensed electrician should embed the Driver into the ceiling. It may be necessary to install a Driver into an approved electrical enclosure where the line voltage is already located in the ceiling, and running new low voltage wire is not an option. This may be more common in existing older home and retro fits. The Driver is a line voltage device and will require access to it (according to most electrical codes); therefore, a cut out in the panel will be required to access the Driver. Use the CineStarPanel™ Cut Out Kit (optional) to mark and cut the panel. (Check and observe local building codes.)

TIP: After you finish installation of the power supply and lead wire run, test every panel before it goes up, by plugging lead wire to LED board, located in the center of the panel.

Note: If your system comes with shooting star, a moon, meteor shower etc. Please confirm placement of the effects on the ceiling.

MOUNTING THE FIRST PANEL

TIP: You can use a paint brush extension (available at most hardware stores) to hold the panel in place.

Place the first panel on the ceiling and square in its proper orientation. (This should be performed by at least two people) Push the awl (poker tool) through the center of the round stickers to make an indent in the ceiling. This is done from the finished fabric side of the panel. Once all mounting points are marked on the ceiling, remove the panel. You may use our templates to guide you, please see page 5.

TIP: While installing the panels, keep the plastic covers of the un-installed panels on so dust doesn't get on them (especially in construction areas.)

See Chart A and Chart B

STANDARD PANEL CHART (POWER CHART)

(A)

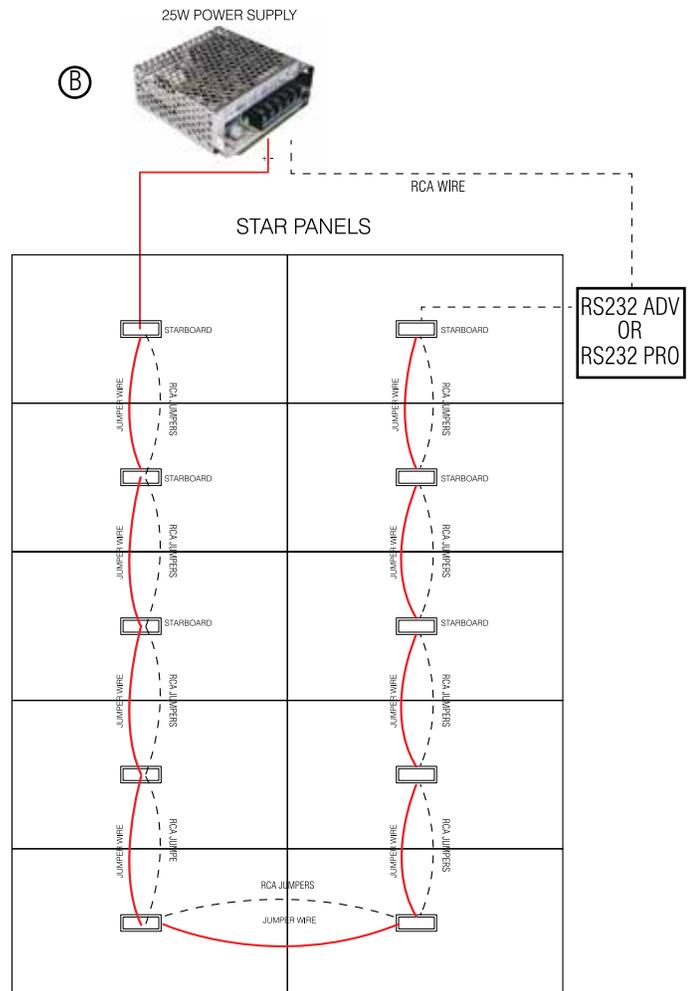
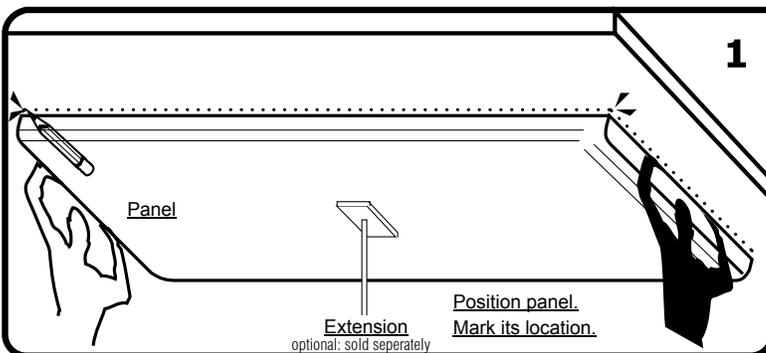
POWER SUPPLY	NO. OF PANELS
25W	10 panels
45W	18 panels
60W	24 panels
80W	32 panels
100W	40 panels
150W	60 panels
200 W	80 panels
250W	100 panels
300W	120 panels

EXAMPLE OF 25W POWER SUPPLY PANEL WIRING

*If you have more than 120 panels, please contact us for assistance.

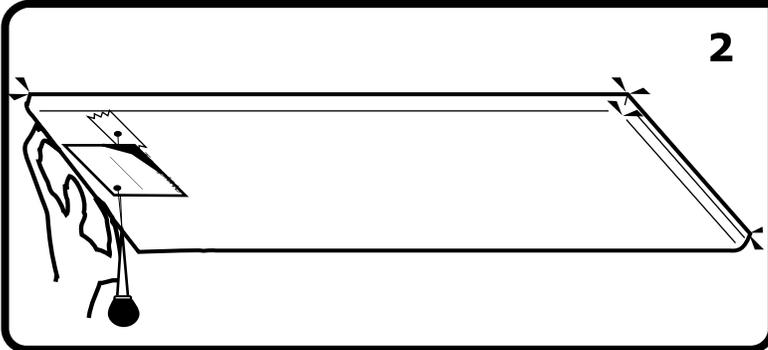
INSTALLATION STEPS:

Step 1. Position panel. Mark its location.



Step 2. Put masking tape on panel face at anchor locations (optional). Position template: push scratch awl (poker tool) through panel at template marking hole. Indent wallboard behind panel.

Note: to mark harder wall material, i.e. concrete block, after marking the panel with the scratch awl, put a common nail in the hole and tap with it.

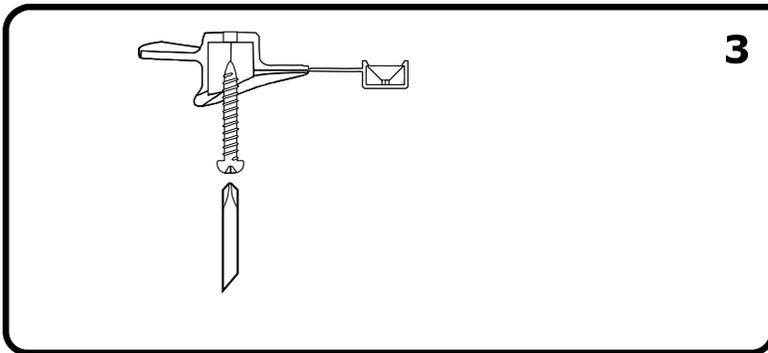


For more details on marking the Star Panel please view page.7

After Step 2, remove panel

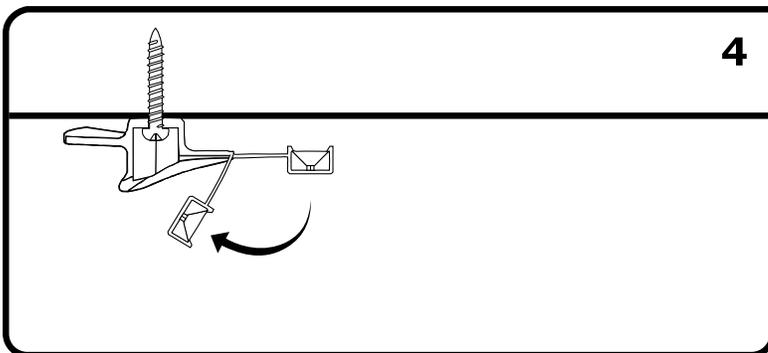
Step 3. Screw panel anchors to wall at pre-marked locations. (Consult manufacturer for recommended fasteners to use with anchors.)

Note: do not over-tighten. Anchors should be hand tight and able to turn on screw shaft.



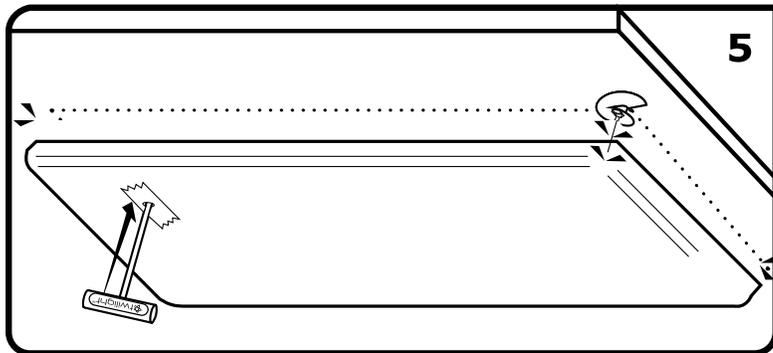
Step 4. Push hex insert firmly into anchor body.

4.1 Push pointed hex driver through panel to engage panel anchors.



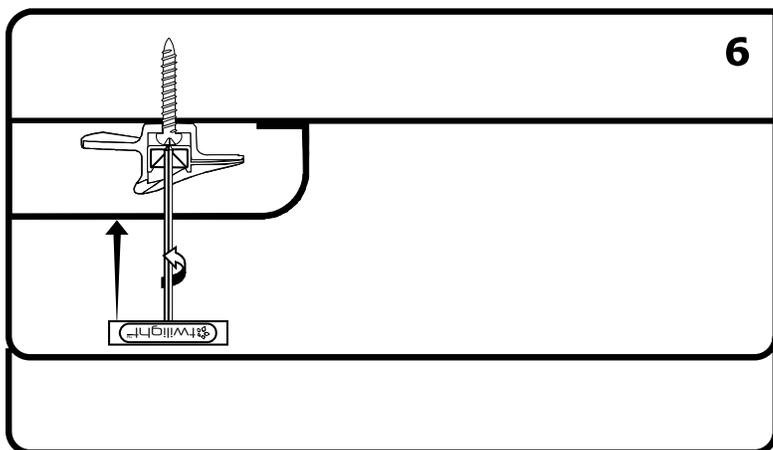
Step 5. Re-position panel. Connect the lead wire to the LED board of the first panel

Note: fully engage hex driver with metal insert before turning.



Step 6. Turn Feature Presentations Star panel anchors counter-clockwise (left) while pushing panel towards wall. Remove masking tape. Lightly rub fabric to hide hole locations.

Note: 1 to 2 turns, do not over-tighten.



Note: Our panel anchors have been tested to have a pullout strength exceeding 45 lb. in standard 6 lb./Ft. 3 fiberglass insulation board.

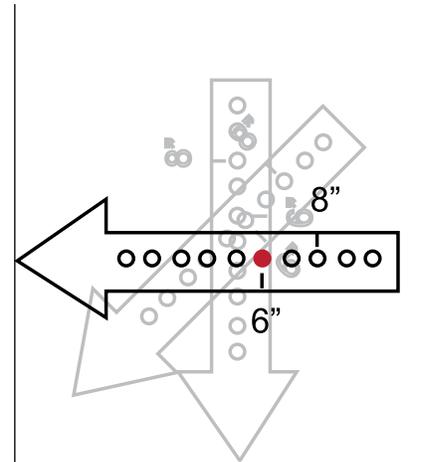
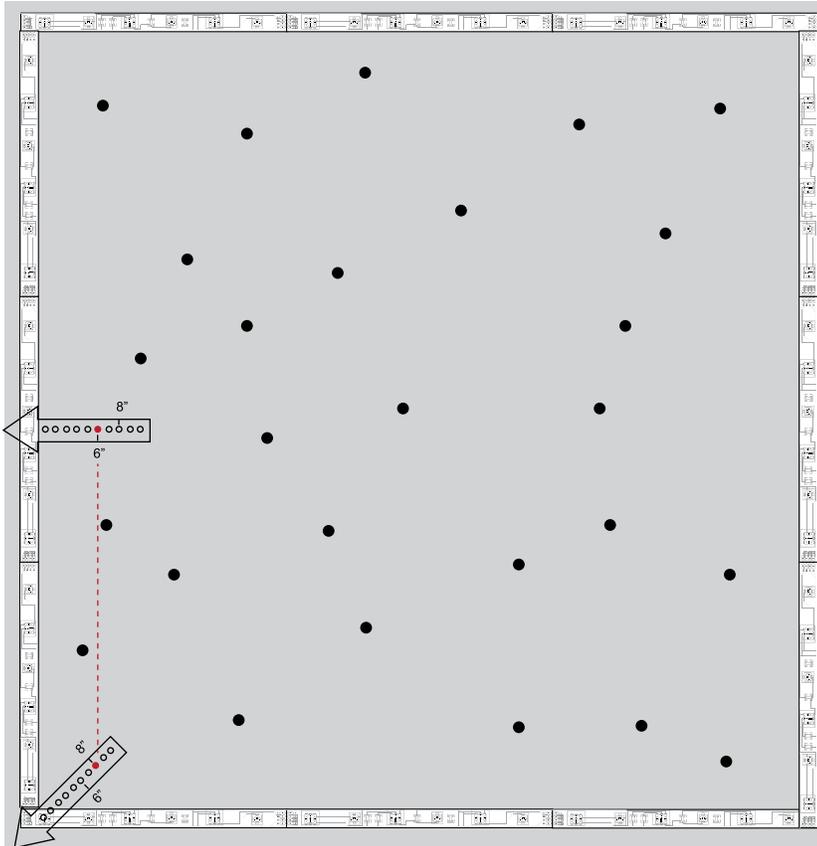
INSTALLING ADDITIONAL PANELS

Leave the jumper hanging off the side of the first panel so you can connect the next panel. Because of the flat design of the Jumper Cable plugs, you can “sandwich” the Jumper Cables between the ceiling and panel, or run them along the 2” light cove on the back of all Surface Mount Panels. You may find that using white gaffers tape, glue dots, or double sided tape helpful in organizing the Jumper Cables during installation.

Up to 12 CineStarPanels™ can be connected together in any configuration per lead wire. If your installation requires more than 12 Star Panels, then add an additional Leader Cable. The total quantity of panel depends on power supply size.

NOTE: See Power Chart on Page 3 for power supply recommendation. Multiple lead wires may be necessary with one power supply (not included in package).

STAR PANEL 8 IN & 6 IN ANCHOR TEMPLATE



MAY BE USED AS A PROTRACTOR ON PANEL.
**IF THERE IS A FIBER OR OBSTRUCTION YOU
MAY GO AROUND IT AND SCREW IN ANCHOR.
USE YOUR JUDGEMENT.**

**Note: Some install anchors at 4 inches away,
please use your discretion.**

STEP 1

- A) Place anchor template on any corner of the Star Panel and mark the area at 8 inch for anchor installation
- B) Place anchor template on any side of the Star Panel and mark the area at 6 inch for anchor installation

STEP 2

Poke a hole with the Poker tool on the marked areas.

STEP 3

Fasten the anchor to the ceiling; use a hex tool to turn anchor to adhere the star panel to the ceiling.

* Used also for marking speaker and downlight light areas on the Star Panel.

IF USING CUT-OUT TEMPLATE (NOT INCLUDED IN STAR CEILING SYSTEM)



This template is a universal marking guide and cut-out stencil used for marking the center of a down-light, vent, speaker, or any hole that needs to be marked and cut in a CineStarPanel™.

Secure the large thumbtack in the center of the Cut-out Template using double-sided tape. Then use double sided tape or thumbtacks to hold the template centered on the ceiling over the opening or area you need to cut out. Properly align the panel and push it up into the thumbtack(s) (Thumbtacks do not come in the package.)

Take the panel down, note the location of the thumbtack mark on the back of the panel.

Mark the location of the hole on the fabric face of the panel. Now flip the panel over so it is fabric side up. Place the template centered over the hole and insert the awl. Now you have the template so that it rotates around the awl.

Note: The circumference of the hole that is required (this hole should be slightly larger than what is required for the fixture opening, but smaller than the fixtures trim ring.) Place the hot knife in the appropriate slot on the template, and slowly rotate the hot knife and template all the way around the cut and cinch the fabric. Remove the awl and template, peel off the fabric circle and use the serrated knife to cut the two inches of insulation. Your perfectly located hole is done.

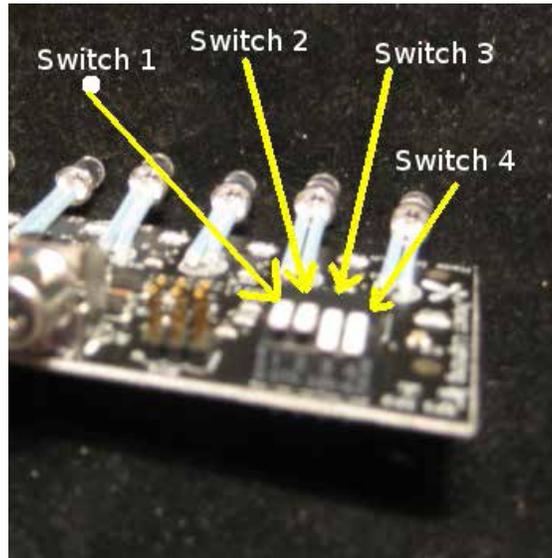
Pulsar Star Board (2400 8 N 1)

Comd.	Mode
ION	Star Boards On
IOFF	Star Boards Off
P0	Scintillation
P1	All on 50%
P2	All On 25%
P3	Meteor Shower
P4	Sparkle
P5	Sparkle Fast
P6	Sparkle Really Fast
P7	Shooting Star Off
P8	Shooting Star 1 Minute
P9	Shooting Star 2 Minutes
P10	Shooting Star 5 Minutes
P11	Shooting Star 10 Minutes
P12	Shooting Star 1 Second
P13	Rain Shower
P14	Random Strobe
P15	All On 100%
!	Shooting Star Trigger
@	Meteor Shower Trigger
P\$	Stop Shooting Star and Meteor Shower
P\$M	Stop only Meteor Shower
P\$\$	Stop Only Shooting Star
P%	Resume Shooting Star and Meteor Shower

PULSAR BOARD RS232 COMMANDS AND DIP SWITCHES

Pulsar_II model allows a variety of effects including Star Effects (sparkle, scitilation, rain,stroke,etc) and special effects (shooting star, meteor shower).

The Dip Switch sets the program (program 3 setting is shown in picture):



PROGRAM:	PROGRAM NUMBER	SWITCH 1	SWITCH 2	SWITCH 3	SWITCH 4
Scintillation	0	DOWN	DOWN	DOWN	DOWN
All on 50%	1	UP	DOWN	DOWN	DOWN
All on 25%	2	DOWN	UP	DOWN	DOWN
Meteor shower	3	UP	UP	DOWN	DOWN
Sparkle	4	DOWN	DOWN	UP	DOWN
Sparkle Fast	5	UP	DOWN	UP	DOWN
Sparkle really Fast	6	DOWN	UP	UP	DOWN
Shooting star Off	7	UP	UP	UP	DOWN
Shooting star (1 minute)	8	DOWN	DOWN	DOWN	UP
Shooting star (2 minutes)	9	UP	DOWN	DOWN	UP
Shooting star (5 minutes)	10	DOWN	UP	DOWN	UP
Shooting star (10 minutes)	11	UP	UP	DOWN	UP
Shooting star (1 second)	12	DOWN	DOWN	UP	UP
Rain shower	13	UP	DOWN	UP	UP
Random strobe	14	DOWN	UP	UP	UP
All on 100%	15	UP	UP	UP	UP

Other program numbers Available from RS-232 (not from dip switch):

Program 16 – return current program to the DIP switch setting

Program 17 – use Individual LEDs set/reset setting (see the '=' and '-' commands)

Program 18 – All Off (note: only affects pulsar boards use "IOFF" instead to turn off all boards)

Note: All commands need to be followed by a carriage return (r) and not a new line.

and return to last program)

Notes: DIP switch can be changed while board is powered.

Use Program 7 (Shooting star off) for downstream boards in shooting star effect

Modes of Operation:

There are three modes of operation based on the DIP switch setting, 2 modes are special effects, and normal mode is Star Effect mode

Special Effects:

Meteor Shower (Program 3)

Shooting star effect (Programs 7 to 12)

Star Effect:

All other programs are star effect mode !

Communications for program number 0 to 15 only affect the boards with the same modes of operation.

That is shooting star programs only affect the boards with the DIP switch set to shooting star (programs 7 to 12). Star effect programs only affect boards not set to special effects. !

To Setup for shooting star effect with multiple boards:

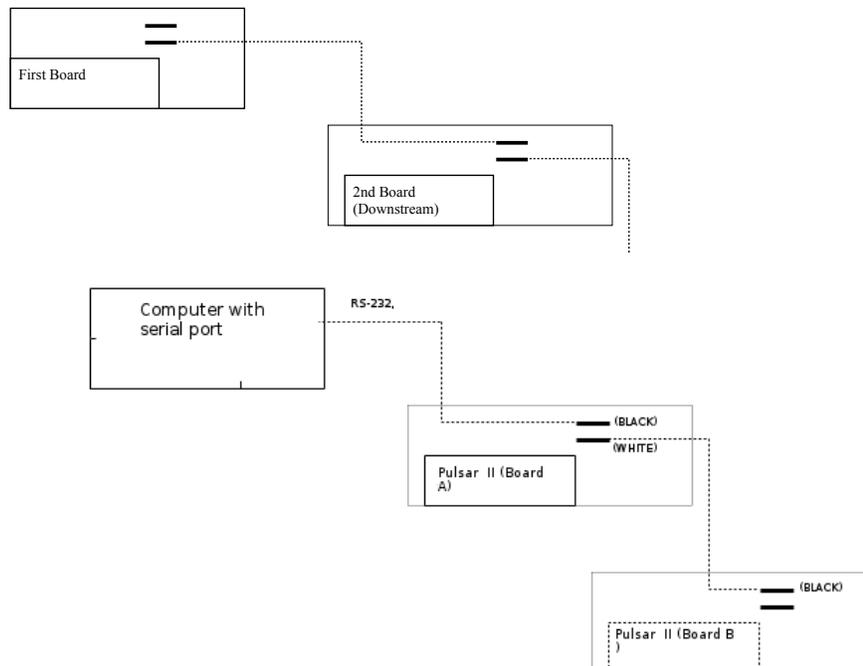
- 1) Set Switch for FIRST shooting star board for shooting star mode (delay between shooting star) as desired. Downstream boards should be set to program 7 (shooting star off - UP UP UP DOWN) as they are controlled from the first board .
- 2) Connect The communications wire as follows: First Board in shooting star "COMM OUT" (White jack) connection connects to second board "COMM IN" (Black Jack) connection, Second board "COMM OUT" (White Jack) connects to "COMM IN" (Black Jack) connection:

Serial Communications

Serial Communications (RS232) is 2400 baud, 8 bits, no parity, 1 stop bit

Computer Pin 3 on DB9 = TX = Center pin on black comm jack on pulsar II

Computer Pin 5 on DB9 = Common = outside(shield) on black comm jack on pulsar II



All commands for pulsar II start with a character 'P' and end with a carriage return (Enter key)

Global commands (ION and OFF) affect both pulsar board AND Thin glow (RGB) on same communications line. Commands can be either global or addressed to a specific board in the string.

Syntax of commands

P(program) <Enter> (this is a global command to all pulsar II boards)

or

P (board)(program) <Enter> (this addresses a specific board)

Where:

(program) is the program number (0-15 see table above)

(board) is the board in the chain (A-Z) in order of connection

<Enter> is a carriage return

Examples of common commands:

To Turn system OFF (*)

This will make all Impact lighting boards turn off(global)

Enter Command: IOFF

To Turn system back ON (*)

This will make all Impact lighting boards turn on to the last mode/program/speed

Enter Command: ION

* - NOTE: these commands will affect all Impact Lighting boards (both pulsar and Thin glow (RGB) boards).

To Change to sparkle mode to fast

This will make all pulsar boards (boards set for scintillation or sparkle) set for go to fast sparkle (shimmer) effect (global)

Enter Command: P6

To Change to scintillation mode

This will make all pulsar boards (boards set for scintillation or sparkle) set for go to scintillation effect (global)

Enter Command: P0

To Change to steady (no sparkle or scintillation)

This will make all pulsar boards (boards with DIP switch set for scintillation or sparkle) set for go to scintillation effect (global)

Enter Command: P2

Trigger shooting star Now

Exclamation point is used to communicate between board in shooting star configuration. This will cause boards to start a shooting star effect as soon as received (and reset timing for next shooting star).

Enter Command: !

Note: This will also trigger boards set to program 7 (shooting star off). If you only want shooting star to be triggered from communications, set all shooting star board DIP switch to program 7 and issue !

When required.

Note: This is a 1 character command (intended to be fast). Carriage return is not required.

Trigger meteor shower Now

This will cause boards to start a meteor effect as soon as received (This allow meteor shower effect to be synchronized between boards.)

Enter Command: @

Note: This is a 1 character command (intended to be fast). Carriage return is not required. !

To Change to shooting star mode to every 1 minute

This will make all pulsar boards (boards with DIP switch set for shooting star) go to shooting star effect.

Enter Command: P8

To Change to shooting star mode to every 10 minutes

This will make all pulsar boards (boards with DIP switch set for shooting star) go to shooting star effect.

Enter Command: P11

To Stop meteor shower AND shooting star

This will make all pulsar boards (boards with DIP switch set for shooting star or meteor effect) to stop effect

Enter Command (dolar sign): P\$

To Stop ONLY meteor shower

This will make all pulsar boards (boards with DIP switch set for shooting star or meteor effect) to stop effect

Enter Command: P\$M

To Stop ONLY shooting star effect

This will make all pulsar boards (boards with DIP switch set for shooting star or meteor effect) to stop effect

Enter Command: P\$\$

To Resume meteor shower and shooting star

This will make all pulsar boards (boards with DIP switch set for shooting star or meteor effect) to resume last effect

Enter Command: P%

Advanced Commands

Sparkle Speed

Sparkle/meteor speed is controlled via Speed command 1-9 9=slowest, 1 = fast (NOTE: this is value is saved in memory and restored when powered up).

The meteor speed controls the time between meteor showers (5 minutes is default)

P#(speed)

This will make the sparkle effect go slow (program 4-6)

Enter: P#1

Meteor Speed

Sparkle/meteor speed is controlled via Speed command 1-9 9=slowest, 1 = fast (NOTE: this is value

is saved in memory and restored when powered up). The meteor speed controls the time between

meteor showers (5 minutes is default) !

P ^ (speed)

This will make the meteor shower happen every 20 minutes minute (up to 250 minutes)

Enter: P ^ 20

Individual LED control

Individual LEDs may be commanded on bright, on dim, or /off when in program 17

Bright LED:

P=xxx

where xxx = decimal value to led to illuminate bright (0 to 255)

Dim LED:

P-xxx

where xxx = decimal value to led to illuminate dim (0 to 255)

Examples:

This will turn off the LEDs

Enter: P17

This will turn on the first LED on bright

Enter: P=1

This will turn on four LEDs on dim (all boards)

Enter: P-15

This will turn on top LED (dim) on first board (Board A)

Enter: PA-128

Specifications:

Power in: DC 8V to 24V DC 0.2 Amp max draw (0.84watt draw typical all LEDs on at 12 volts)
polarity and fuse protected input

Output:

Pulsar (white LEDs) 20 milliamps per LED. (3.2Volts / 0.064 watt per LED, total all LEDs0.512 watts)
RGB – up to 4 amps each output peak (on SV2, SV3).

Communications: Serial 2400 baud, 5V – 12V signaling

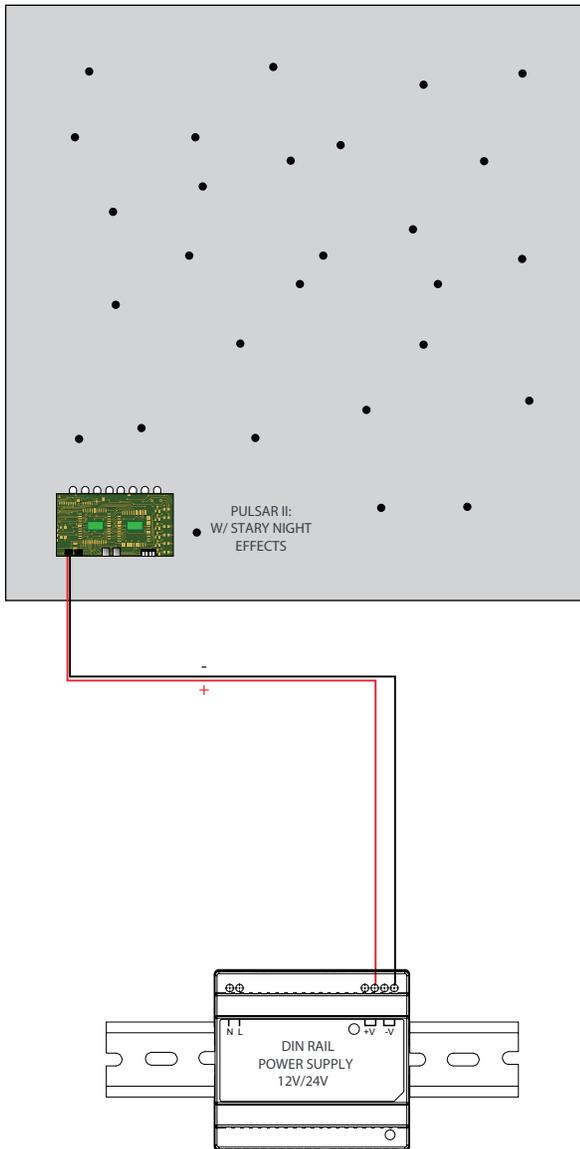
WIRING PANELS (STARS ONLY)

STANDARD CONFIGURATION
STAR PANEL

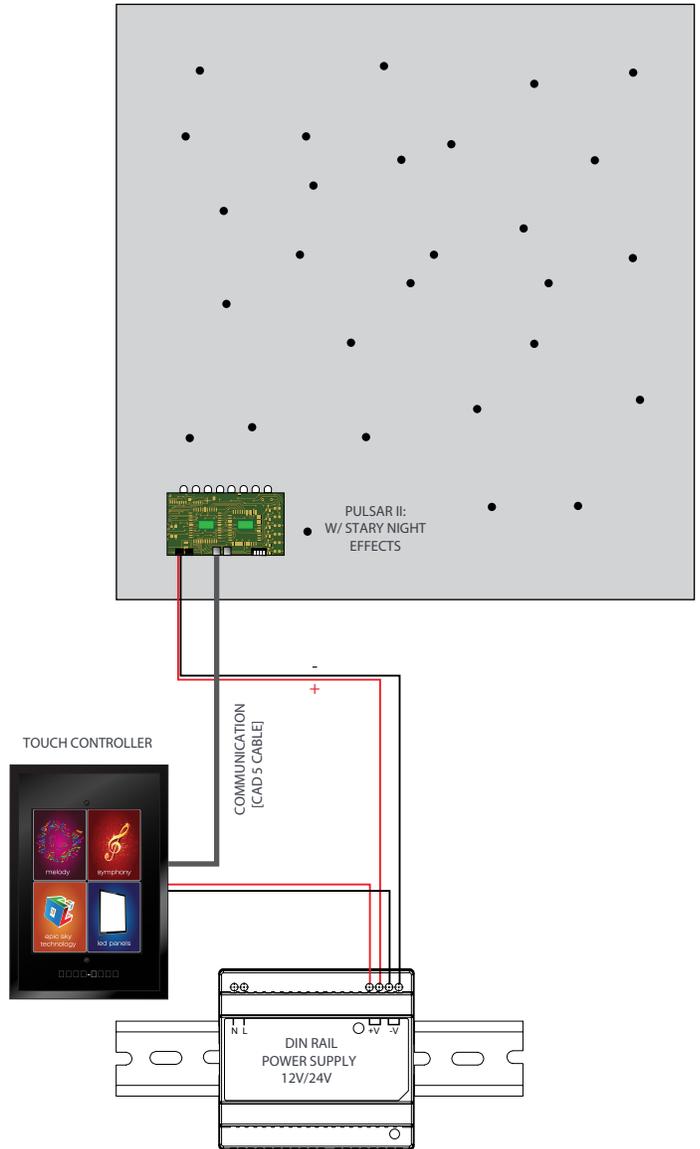
STAR PANELS

- 2ft. x 2ft. Panel
- 2ft. x 4ft. Panel
- 4ft. x 4ft. Panel
- 4ft. x 8ft. Panel

OPTION 1A: STANDARD STAR PANEL

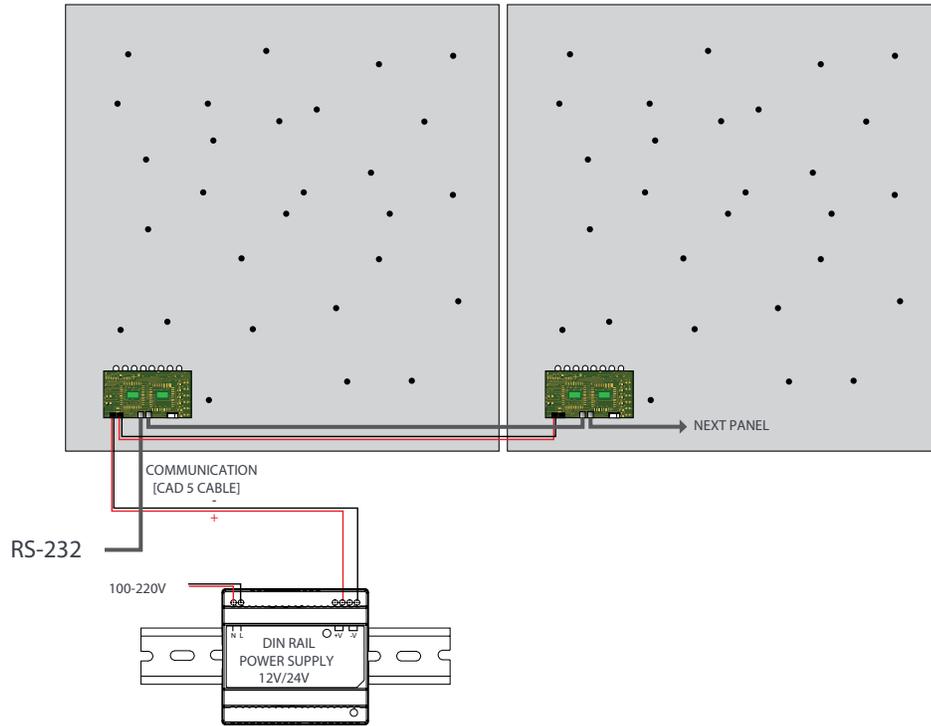


OPTION 1B: STANDARD STAR PANEL WITH TOUCH CONTROLLER

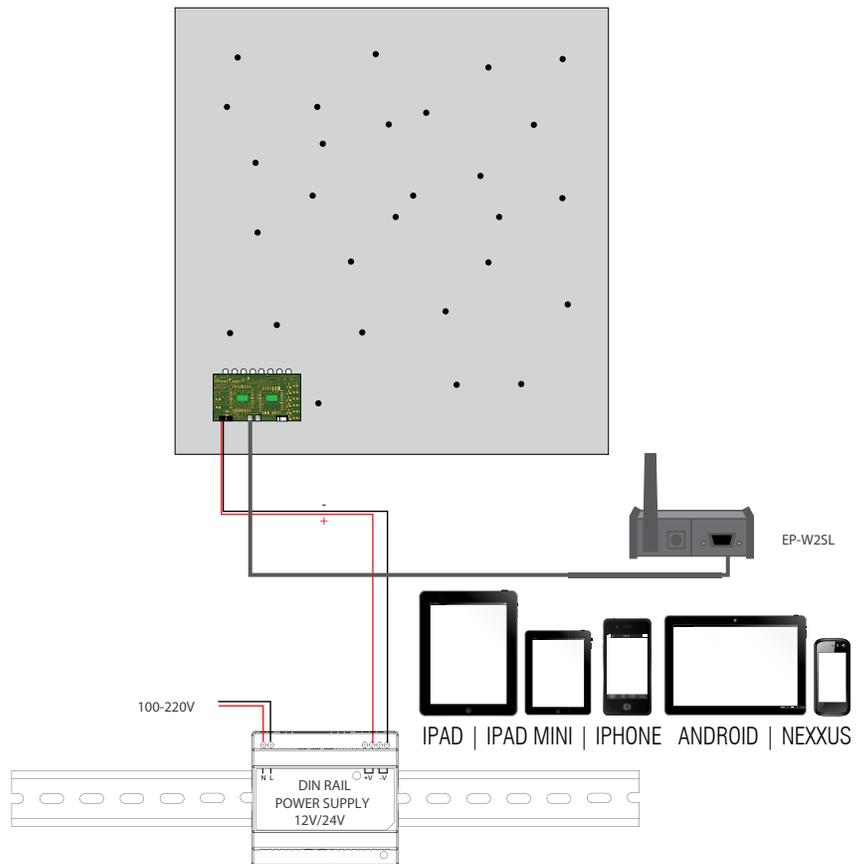


WIRING PANELS (STARS)

OPTION 2: RS-232 TO STAR PANEL

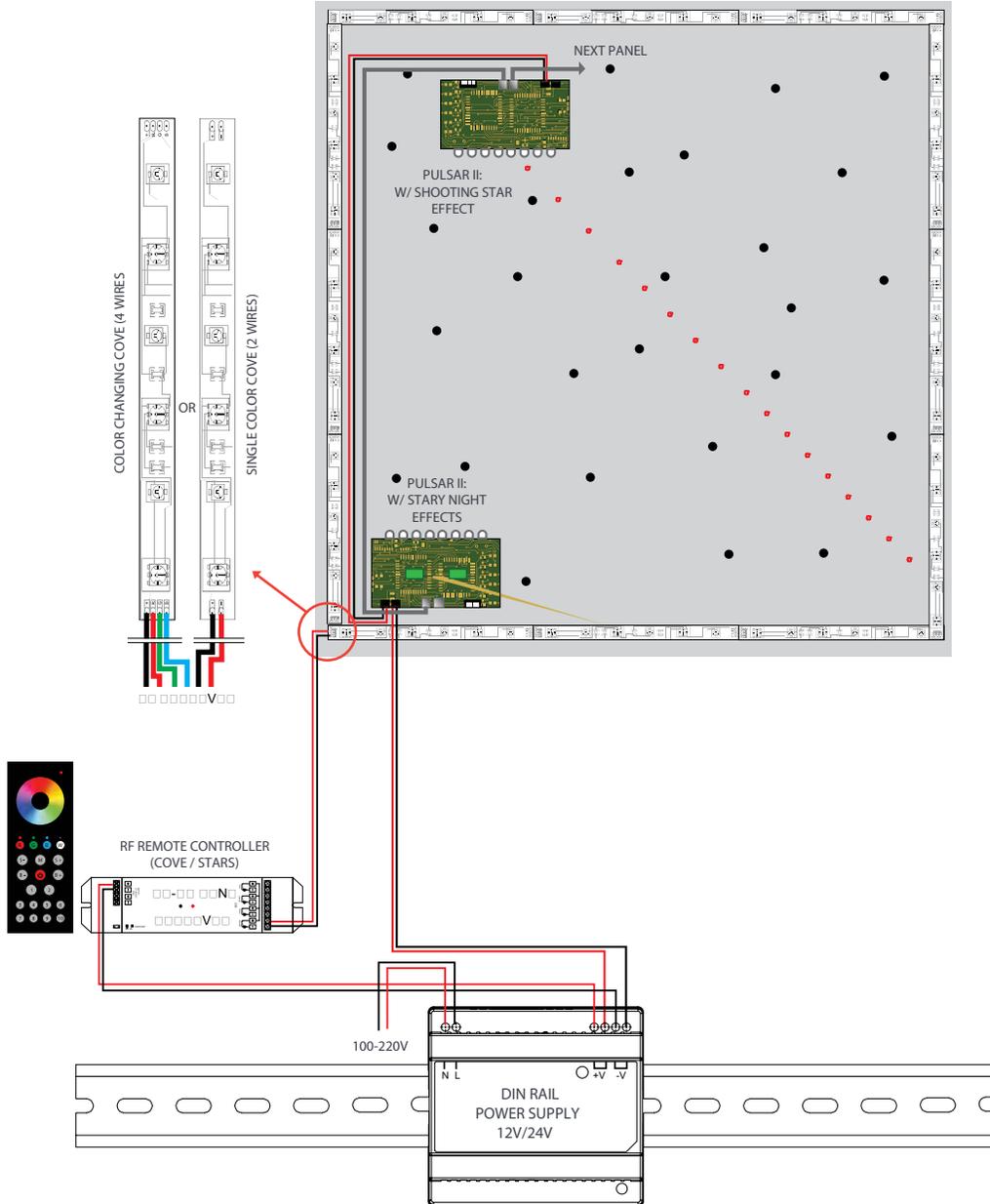


OPTION 3: TABLETS (APPLE OR ANDROID) TO STAR PANEL



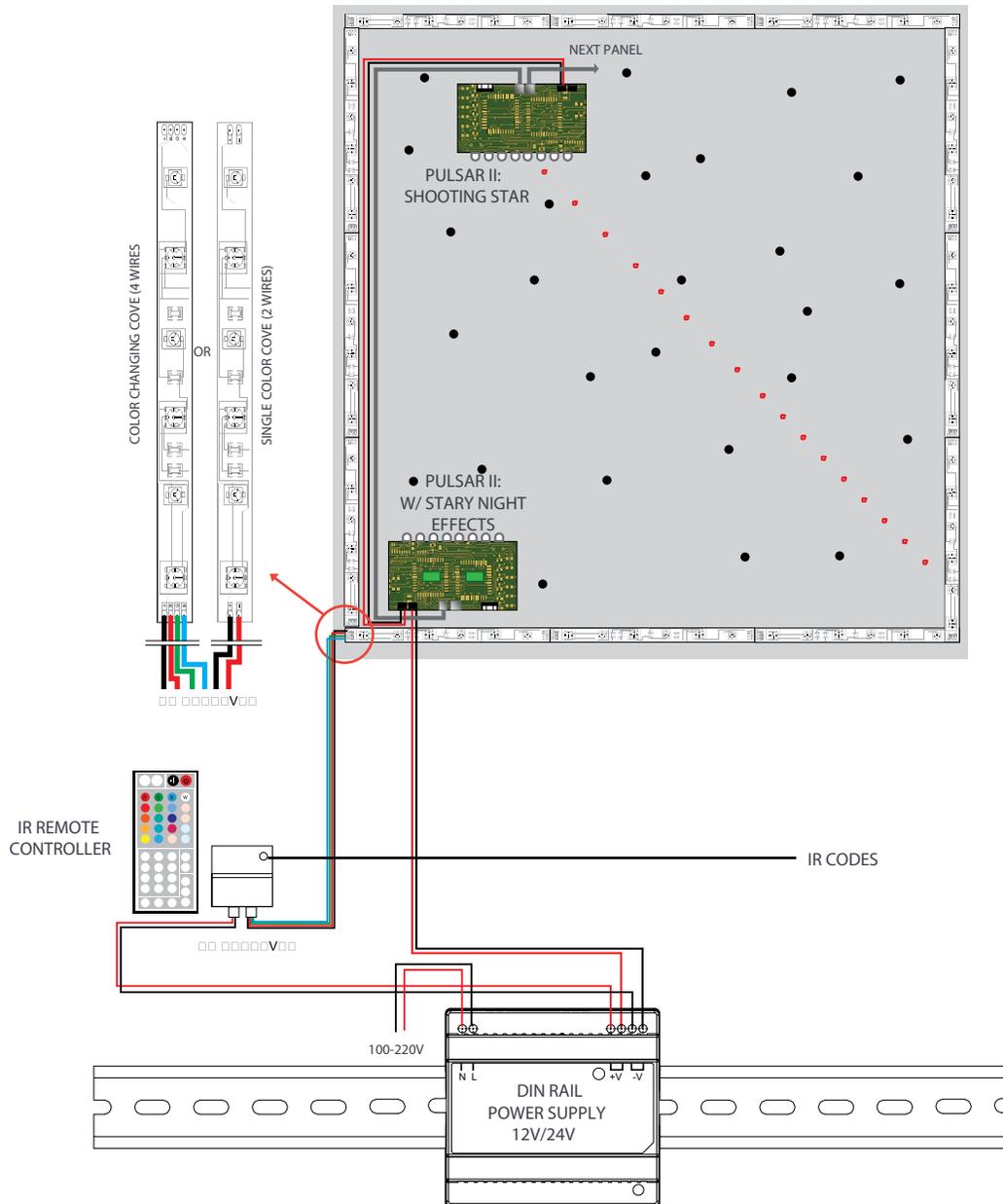
WIRING PANELS VIA RF CONTROLLER WITH STARS AND COVE EFFECTS

OPTION 1: RF REMOTE, SHOOTING STAR W/ COVE EFFECT



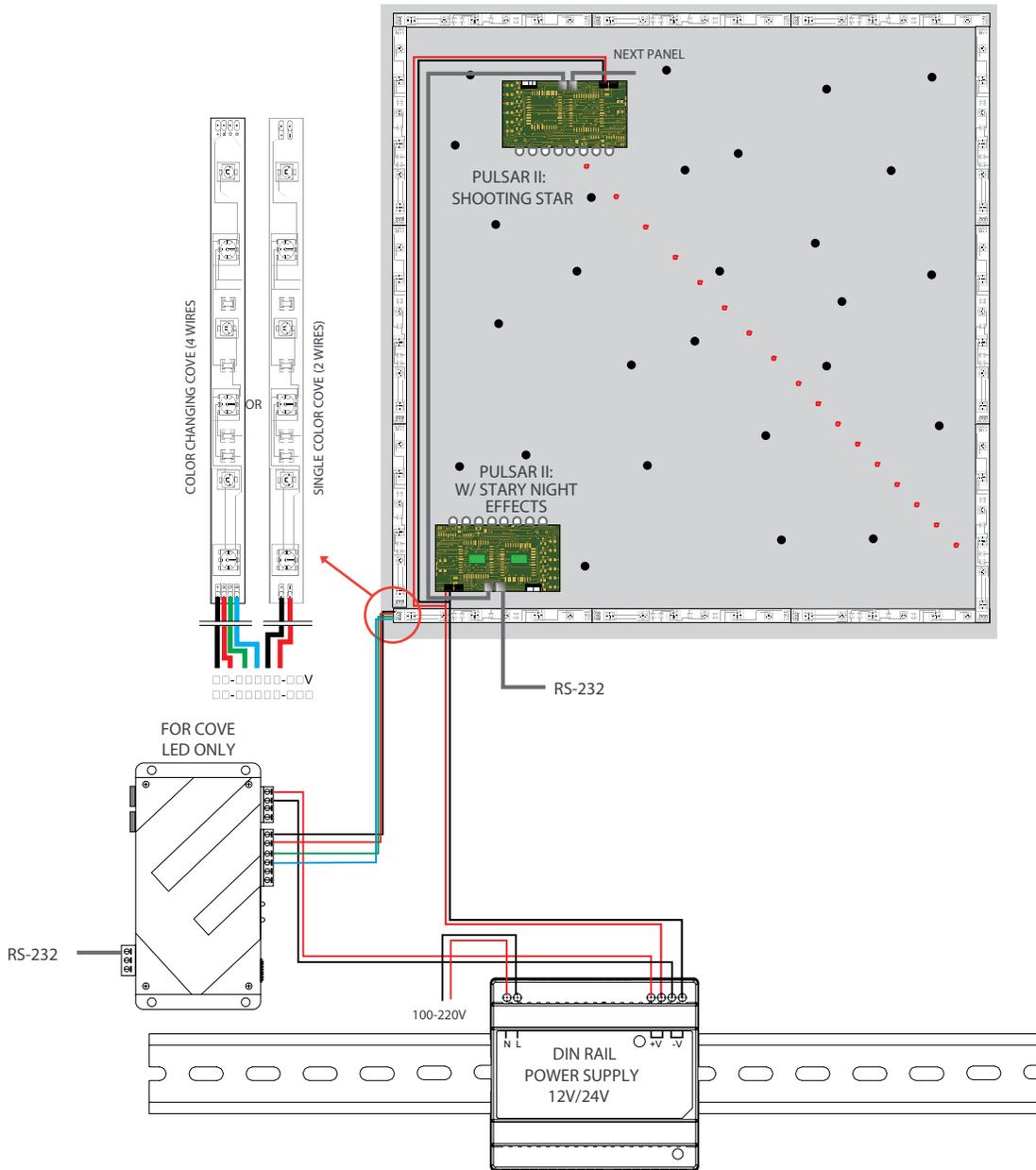
WIRING PANELS VIA IR CONTROLLER

OPTION 2: IR CONTROLLER, STAR PANELS & COVE LIGHTING



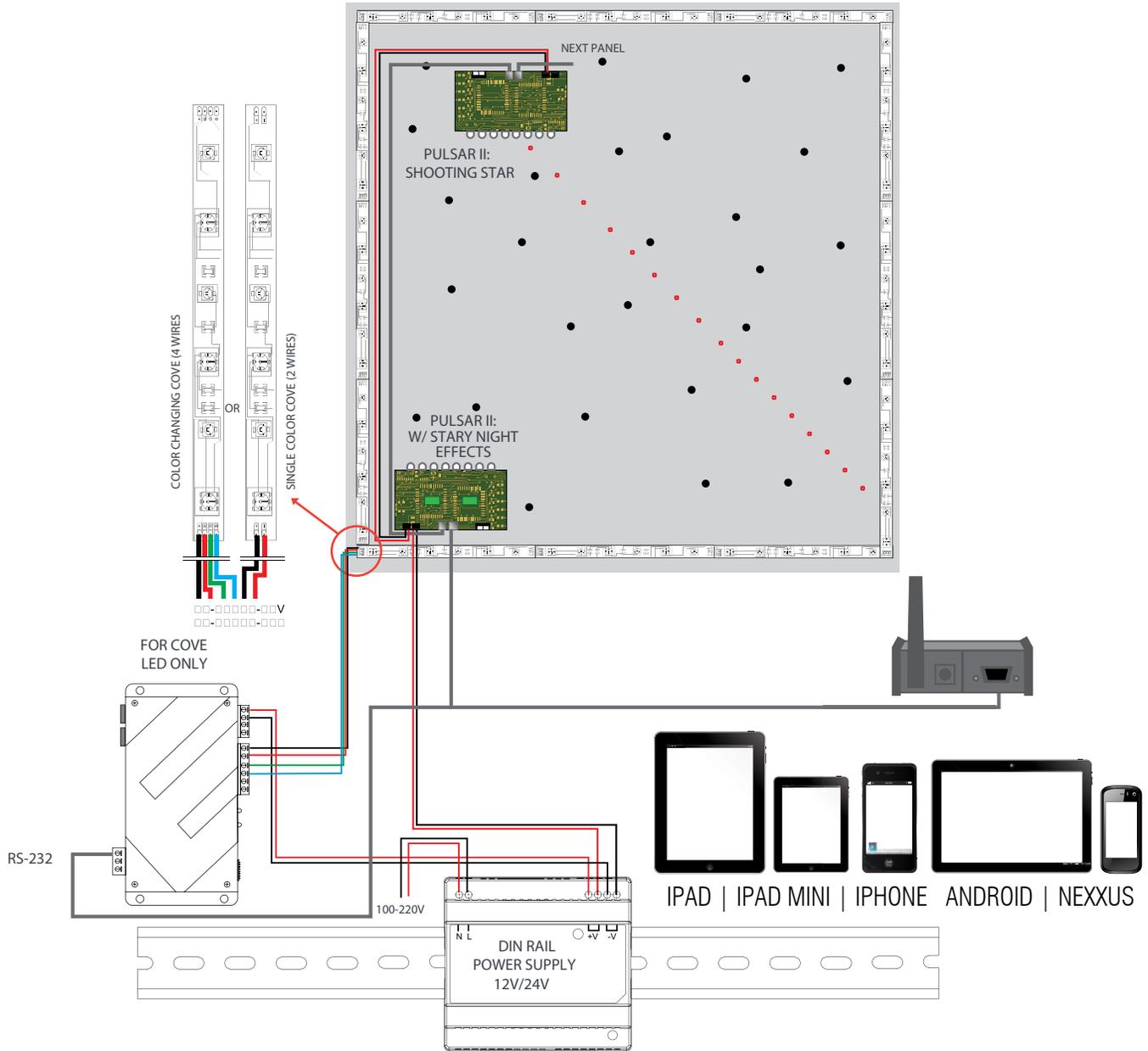
WIRING PANELS VIA RS232 CONTROLLER

OPTION 3: RS-232 CONTROLLER, STAR PANELS & COVE LIGHTING



WIRING PANELS VIA TABLETS

OPTION 4: TABLETS CONTROLLER, STAR PANELS & COVE LIGHTING



WIRING PANELS VIA EP-TOUCH

OPTION 5: EP-TOUCH, RS-232 CONTROLLER, STAR PANELS & COVE LIGHTING

