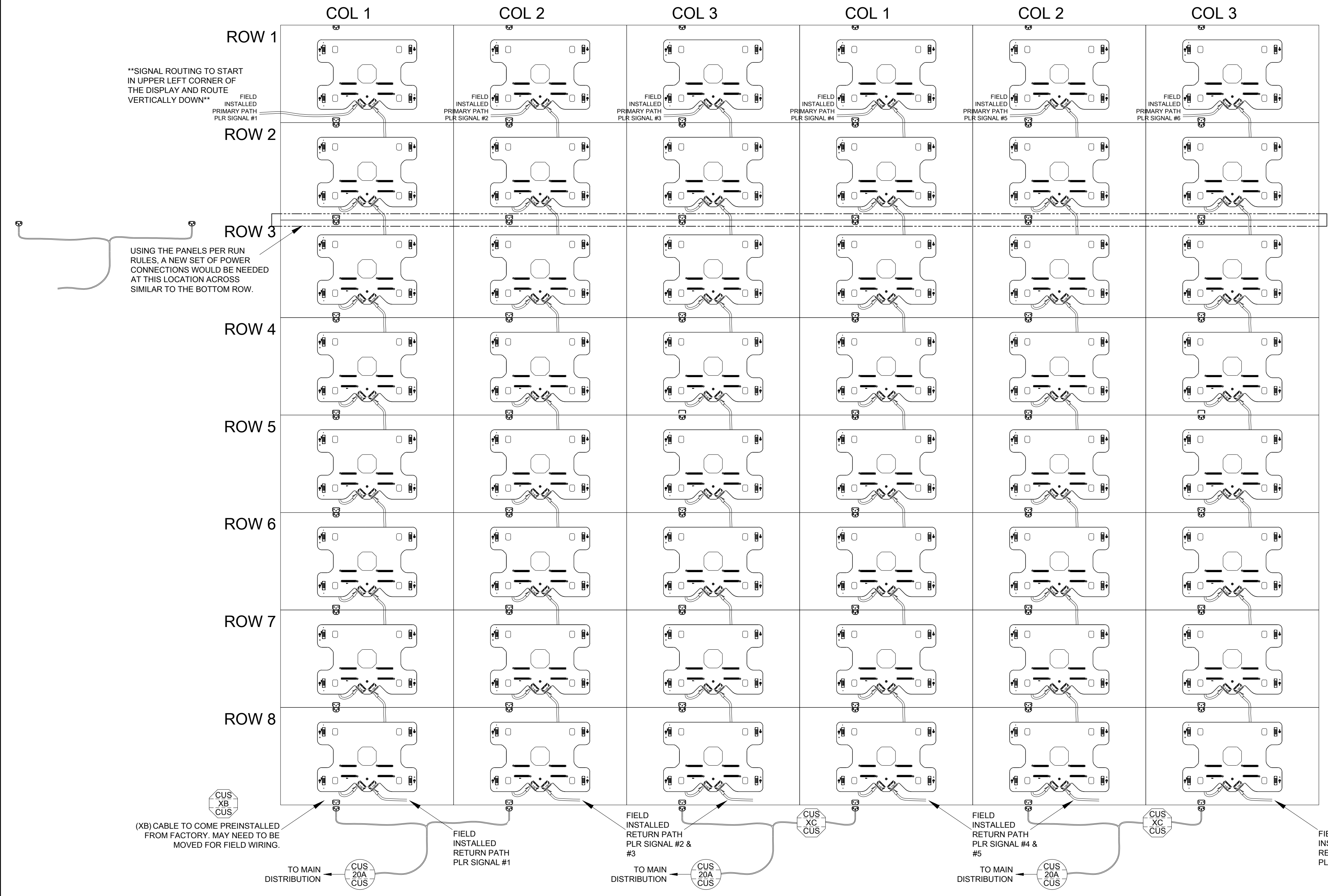


NPN-6200/6400 DOMESTIC DESIGN GUIDE

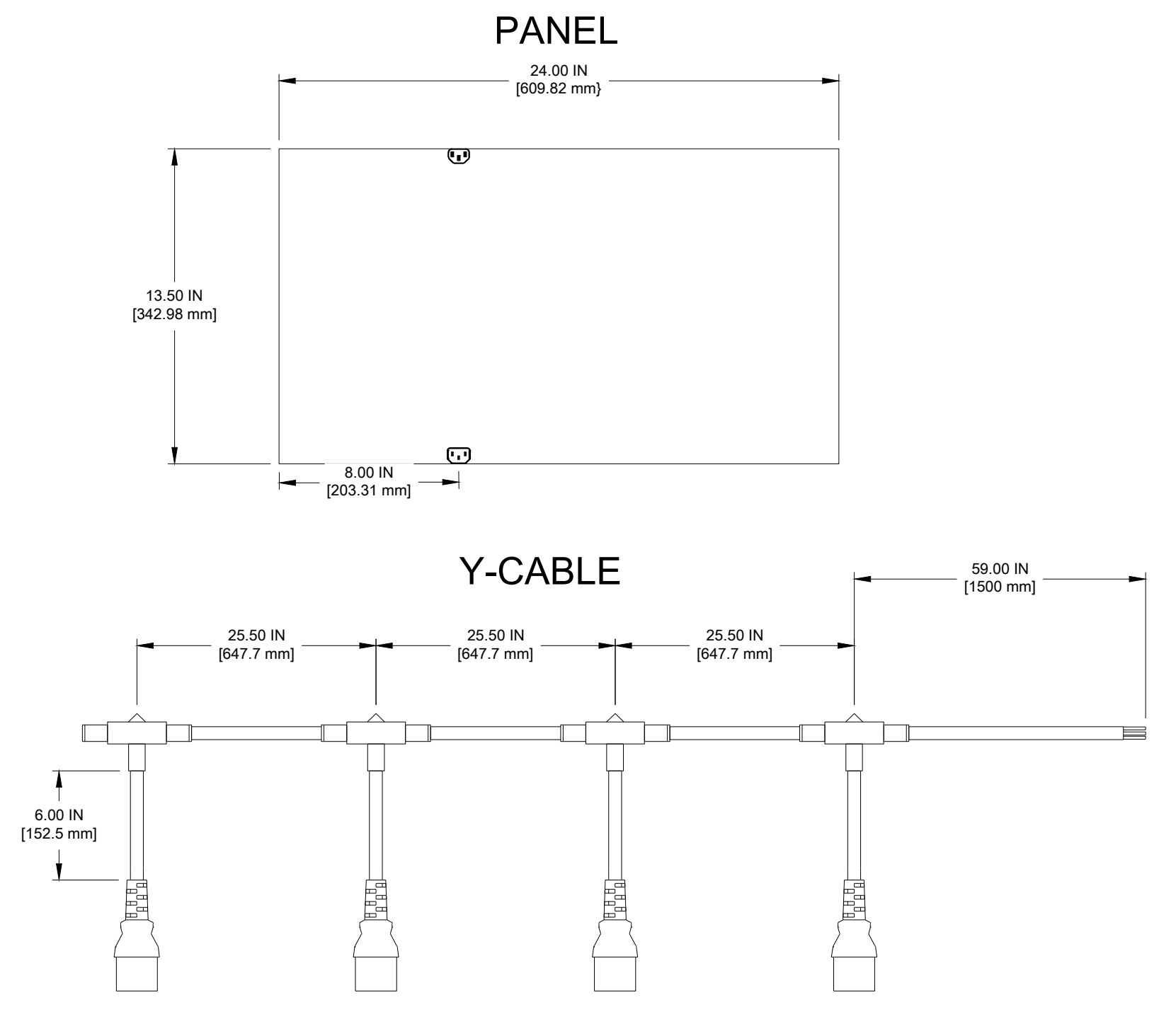


POWER/SIGNAL WIRING LEGEND

LEGEND	DESC.	PN#
XA	SIGNAL; RJ45 HORIZONTAL JUMPER 2'	W-4120534
XB	SIGNAL; RJ45 VERTICAL JUMPER 3'	W-4120535
	SIGNAL; RJ45 OTHER JUMPER 6'	W-4212567
	SIGNAL; RJ45 OTHER JUMPER 10'	W-4212568
	SIGNAL; RJ45 OTHER JUMPER 25'	W-4212570
	SIGNAL; RJ45 OTHER JUMPER 50'	W-4212576

LEGEND	DESC.	PN#
XC	CABLE ASSY; AC BARE TO C13@2; 1.5M; NPN	W-4137602
XD	CABLE ASSY; AC BARE TO C13@3; 1.5M; NPN	W-4137603
XE	CABLE ASSY; AC BARE TO C13@4; 1.5M; NPN	W-4137604

FRONT VIEW DIMENSION INFORMATION



NOTE: A DISPLAY WITH A "-SR" NOMENCLATURE WILL NOT USE A RETURN PATH TO A1 AND WILL ONLY HAVE THE INPUT PATH TO A2. A DISPLAY WITH "-MR" WILL USE A2 AS AN INPUT AND A1 AS A RETURN AS SHOWN.

*SHOWN IS 4:1 CABLE BUT WOULD BE SIMILAR FOR 2:1, 3:1 CABLES. CONNECTORS TO PANELS ARE IEC C13 ENDS AND SOURCE END IS A BARE WIRE END TO BE TERMINATED ON-SITE BY INSTALLER.

PER PANEL TOTAL POWER REQUIREMENTS:

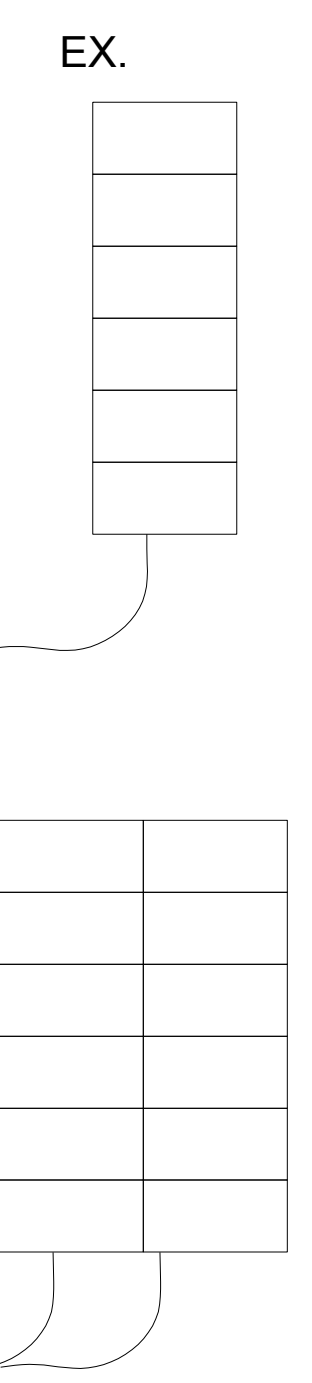
SYSTEM VOLTAGE	
120-240V	2 WIRES + GND
NUMBER OF POLES	1
MAXIMUM WATTS	159
AMPERES PER LINE	0.67-1.33

**MIN. 20A CIRCUIT REQUIRED AND USE OF A "D" CURVE OR HIGH MAGNETIC BREAKER. IEC C13/C14 CONNECTOR ON PANELS LIMITED TO 10 AMPS. ONE STRING OF PANELS IS LIMITED TO:

- 6 PANELS @120V OR
- 12 PANELS @208V OR
- 12 PANELS @240V

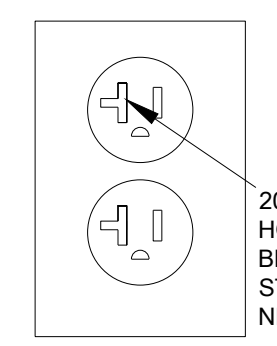
USING THE EXTERNAL Y-CABLES, A TOTAL CIRCUIT MAY BE LOADED UP TO 20A I.E. USING 2:1 CABLE. TWO VERTICAL COLUMNS OF 6 CONNECTED WITH Y-CABLE WOULD BE 12 TOTAL PANELS BUT ONLY 6 PANELS WOULD BE ON EACH 10A CONNECTOR STRING WHEN USING 120V.

MAX PANELS ON 20A CIRCUIT (AND ACCOUNTING FOR INRUSH):
 12 PANELS @120V OR
 17 PANELS @208V
 12 PANELS @240V



PLUG CONNECTED DETAIL

IF CONNECTING WITH A PLUG, INSTALLER TO MAKE SURE BOTH OUTLET AND PLUG ARE RATED FOR 20A. NOTE HORIZONTAL BLADE CONNECTION ON 20A OUTLET.



EXAMPLE PLUG MIGHT BE LEVITON 5366-CA. NOTE THAT BECAUSE OF THE BLADE CONFIGURATION, CABLE MAY NEED TO COME OUT TOP OR BOTTOM OF CONNECTOR. INSTALLER TO PROVIDE PLUG THAT WOULD ACCOMMODATE CORRECT WIRE ROUTING ORIENTATION.

INSTALLER MAY USE RECESSED 2-GANG BOX TO RUN POWER AND SIGNAL TO LOCATIONS. TYPICAL RECESSED 2-GANG BOX DIMENSIONS EXAMPLE 6"H X 6.75"W X 4"D. INSTALLER TO PROVIDE JBOXES THAT COORDINATE WITH WIRING METHOD.

SIGNAL DETAILS (SYSTEM CAN BE SET UP AS PL8 OR NOVASTAR)

MINI PLR WILL BE INSTALLED IN PANELS AS THE STANDARD WHEN USING PL8. PANELS WITH PLRS WILL BE LABELED AS NOT ALL PANELS WILL GET A PLR INSTALLED. PANELS THAT HAVE 1/2 HUB BOARDS WILL HAVE JUMPERS INSTALLED ON THE PLR IN ORDER TO MAKE CONNECTIONS WITHOUT HAVING TO REMOVE THE HUB BOARD TO GET AT THE PLR. PANELS THAT HAVE FULL HUB BOARDS THE PLR IS ACCESSIBLE WITHOUT REMOVING ANY PARTS.

EXTERNAL PLR ENCLOSURES WILL BE AN OPTION BUT NOT THE STANDARD OFFERING. NOVASTAR WILL HAVE RJ45 RUNS INTO THE DISPLAYS

Pixel Pitch	Rows	Cols	Pixels Per Panel	Max Pixels on PLR output pair	Max Panels on PLR output pair SDR	Max Panels on PLR output pair HDR
NPN-X200 2.5mm	135	240	32400	648000	20	15
NPN-X200 2.0mm	164	292	47888	622544	13	10
NPN-X200 1.9mm	180	320	57600	633600	11	9
NPN-X200 1.6mm	204	364	74256	594048	8	6
NPN-X200 1.5mm	216	384	82944	580608	7	6
NPN-X200 1.3mm	248	440	109120	545600	5	4
NPN-X200 1.2mm	270	480	129600	518400	4	3
NPN-x400 1.5mm	216	384	82944	580608	7	6
NPN-x400 1.2mm	270	480	129600	518400	4	3
NPN-X400 0.9mm	360	640	230400	576000	2	1
NPN-X400 0.7mm	475	844	400900	801800	1	1

*SEE DWG-04851746 FOR 4200/5200 PIXEL LIMITS AND SIGNAL WIRING.

DISCLAIMER
 POWER AND SIGNAL WIRING METHODS SHOWN ARE DESIGN GUIDELINES ONLY. INSTALLER TO FOLLOW ALL LOCAL AND NATIONAL ELECTRICAL CODES.

REV	DATE	DESCRIPTION	BY
04	31 AUG 23	ON10155 ADDED NOTES FOR MINI PLR	JZF
03	23 MAR 22	ADD HDR COLUMNS TO TOTAL PANELS CONTROLLED TABLE	JAW
02	08 MAR 22	ADDED SR AND MR NOTE ABOUT RETURN PATH	JAW
01	28 JUN 21	ADDED X400 PIXEL PITCHES	JAW

PROJECT	TITLE	SCALE	DATE	DESIGNER	CHECKER	DATE	DATE	DATE	DATE
NPN DT	DESIGN GUIDE: NPN-6200/6400 EXT. PWR/SIG WIRING	DO NOT SCALE DRAWING	05 OCT 20	JWOODRA	JWOODRA	05 OCT 20	05 OCT 20	05 OCT 20	05 OCT 20