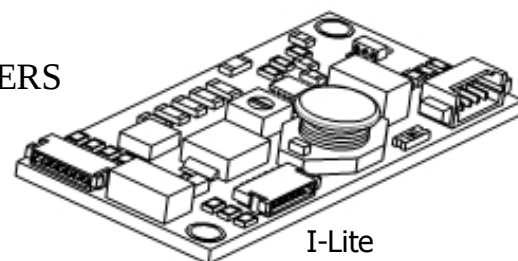


APPLICATION NOTE

01/28/14

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS



1. Identify the Optrex Panel P/N to be driven, from Table 1 below.
2. Use the ACI I-Lite LED Driver specified in Table 1.
3. Using a small flat-head screwdriver, set the position of the S1 Switch on the LED Driver, per the setting shown in Table 1 (Refer to Figure 1 on page 4 for illustration of S1 Switch positions).
4. Connect the LED Driver to the Display per the connection diagram specified in Table 1. Verify if an output cable assembly is required, to connect the driver to the display, per Table 1.
5. Use Input Cable Assembly P/N 27-R0031, to interface with CON1 of LED Driver.
6. Output cable assembly with 10 inch flying leads available (P/N 27-R0070).

Display Specifications				LED Driver Specifications				
Optrex Panel P/N	Size	# of Channels	Vf (V) Max	Current per Channel (mA) Typ.	Switch Setting (S1)	ACI I-Lite LED Driver P/N	Output Cable Assembly (to connect driver to display)	Connection Diagram
4.3 WVGA (800x400)								
T-55226D043J-LW-A-AAN	4.3"	2	16	15	B	ACI-A038010-1885	(1) 27-R0070	Fig. 5, Pg6
				20	C			
5.0 WVGA (800x400)								
T-55290GD050J-LW-A-AAN	5.0"	2	23.4	15	B	ACI-A038010-1885	(1) 27-R0070	Fig. 5, Pg6
				20	C			
T-55382GD050JU-LW-A-AAN	5.0"	2	20	15	B	ACI-A038010-1885	(1) 27-R0070	Fig. 6, Pg7
				20	C			
T-55382GD050JU-LW-A-ABN	5.0"	2	24.5	15	B	ACI-A038010-1885	(1) 27-R0070	Fig. 6, Pg7
				20	C			
T-55423GD050J-LW-A-ABN	5.0"	2	20	15	B	ACI-A038010-1885	(1) 27-R0070	Fig. 6, Pg7
				20	C			
T-55423GD050J-LW-AAN	5.0"	2	23.8	15	B	ACI-A038010-1885	(1) 27-R0070	Fig. 6, Pg7
				20	C			
T-55583GD050J-LW-A-AAN	5.0"	4	24	15	A	ACI-A038010-1885	(2) 27-R0070	Fig. 7, Pg8
				20	D			

TABLE 1. ± Driving Optrex Panels (Part 1 of 3)

APPLICATION NOTE

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DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

Display Specifications				LED Driver Specifications				
Optrex Panel P/N	Size	# of Channels	Vf (V) Max	Current per Channel (mA) Typ.	Switch Setting (SI)	ACI I-Lite LED Driver P/N	Output Cable Assembly (to connect driver to display)	Connection Diagram
5.7 QVGA (320x240)								
T-55265GD057J-LW-ABN	5.7"	3	13.2	60	B	ACI-A038040-1855	Not Required	Fig. 3, Pg5
T-55265GD057J-LW-ACN	5.7"	3	13.2	60	B	ACI-A038040-1855	Not Required	Fig. 3, Pg5
5.7 VGA (640x480)								
T-55265GD057J-LW-AAN	5.7"	3	13.2	60	B	ACI-A038040-1855	Not Required	Fig. 3, Pg5
T-55548GD057JU-LW-ABN	5.7"	2	16	90	B	ACI-A038040-1855	Not Required	Fig. 3, Pg5
6.5 VGA (640x480)								
T-51750GD065J-LW-ANN	6.5"	4	32	35	C	ACI-A038040-1855	Not Required	Fig. 4, Pg5
T-51750GD065J-LW-AON	6.5"	4	32	35	C	ACI-A038040-1855	Not Required	Fig. 4, Pg5
T-51750GD065J-LW-AQN	6.5"	4	32	35	C	ACI-A038040-1855	Not Required	Fig. 4, Pg5
T-55465D065J-LW-A-AAN	6.5"	2	23.7	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55465D065J-LW-A-ABN	6.5"	2	22	90	B	ACI-A038040-1855	(1) 27-R0060	
T-55629D065J-LW-A-AAN	6.5"	2	22	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
8.4 VGA (640x480)								
T-55467D084J-LW-A-AAN	8.4"	2	38	70	C	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
8.4 SVGA (800x600)								
T-55466D084J-LW-A-AAN	8.4"	2	38	70	C	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55466D084J-LW-A-ABN	8.4"	2	38	70	C	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55466D084J-LW-A-ACN	8.4"	2	38	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
8.4 XGA (1024X768)								
T-55549D084J-LW-A-AAN	8.4"	2	38	70	C	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55549D084J-LW-A-ACN	8.4"	2	38	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
9.0 SVGA (800x600)								
T-5561D090J-LW-A-AAN	9.0"	2	32.6	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-5561D090J-LW-A-ABN	9.0"	2	32.6	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55562D090J-LW-A-AAN	9.0"	2	32.3	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55562D090J-LW-A-ABN	9.0"	2	32.3	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5

TABLE 1. ± Driving Optrex Panels (Part 2 of 3)



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AN-OP1

APPLICATION NOTE

01/28/14

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

Display Specifications				LED Driver Specifications				
Optrex Panel P/N	Size	# of Channels	Vf (V) Max	Current per Channel (mA) Typ.	Switch Setting (SI)	ACI I-Lite LED Driver P/N	Output Cable Assembly (to connect driver to display)	Connection Diagram
10.4 VGA (640x480)								
T-55532D104J-LW-A-AAN	10.4"	2	35.9	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55532D104J-LW-A-ABN	10.4"	2	35.9	90	B	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
10.4 SVGA (800x 600)								
T-55563D104J-LW-A-AAN	10.4"	2	36.0	70	C	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
10.4 XGA (1024x768)								
T-55533D104J-LW-A-AAN	10.4"	2	27	120	A	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
12.1 SVGA (800x600)								
T-55373D121J-LW-A-AAN	12.1"	2	32.8	120	A	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
T-55374D121J-LW-A-AAN	12.1"	2	32.8	120	A	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5
12.1 SGA (1024x768)								
T-55513D121J-LW-A-AAN	12.1"	2	33.6	120	A	ACI-A038040-1855	(1) 27-R0060	Fig. 2, Pg5

TABLE 1. ± Driving Optrex Panels (Part 3 of 3)

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

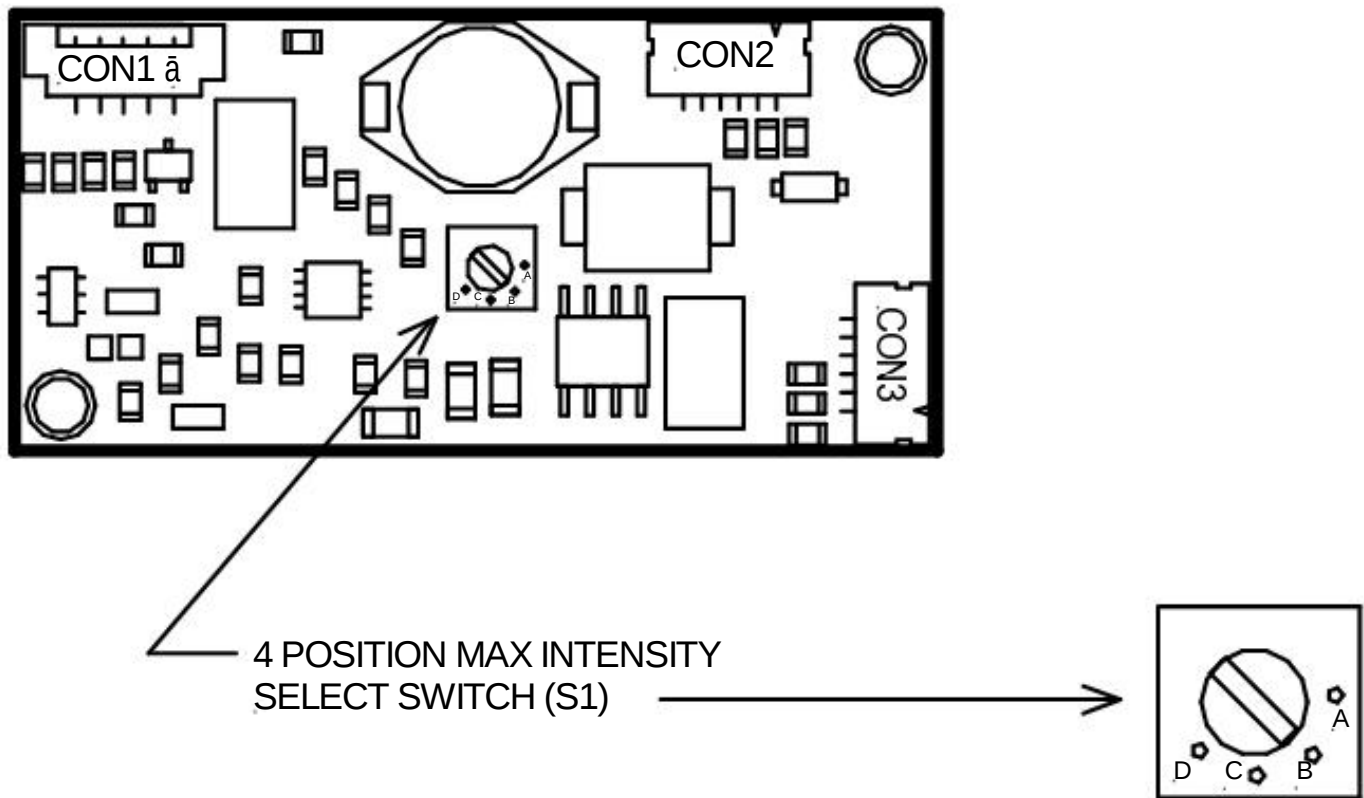


Figure 1. ± Illustration of S1 Switch Positions

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

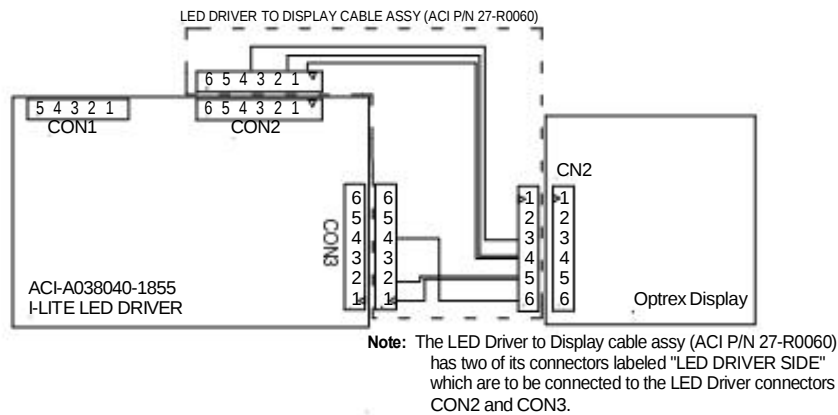


Figure 2. - Connecting LED Driver to Optrex Display

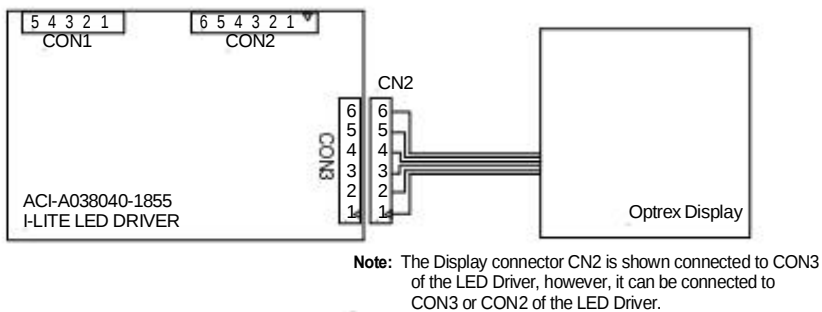


Figure 3. - Connecting LED Driver to Optrex Display

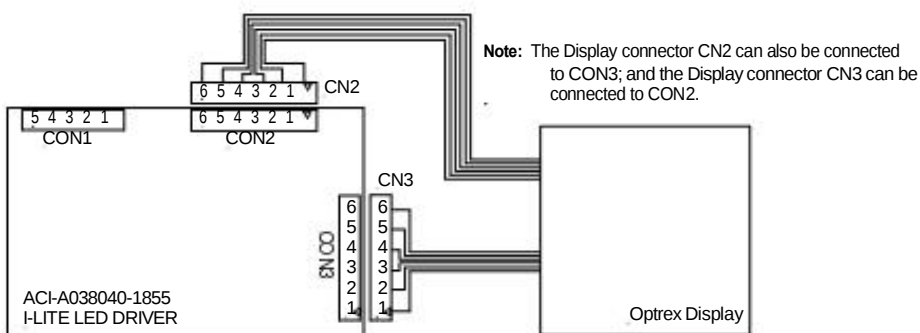


Figure 4. - Connecting LED Driver to Optrex Display

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

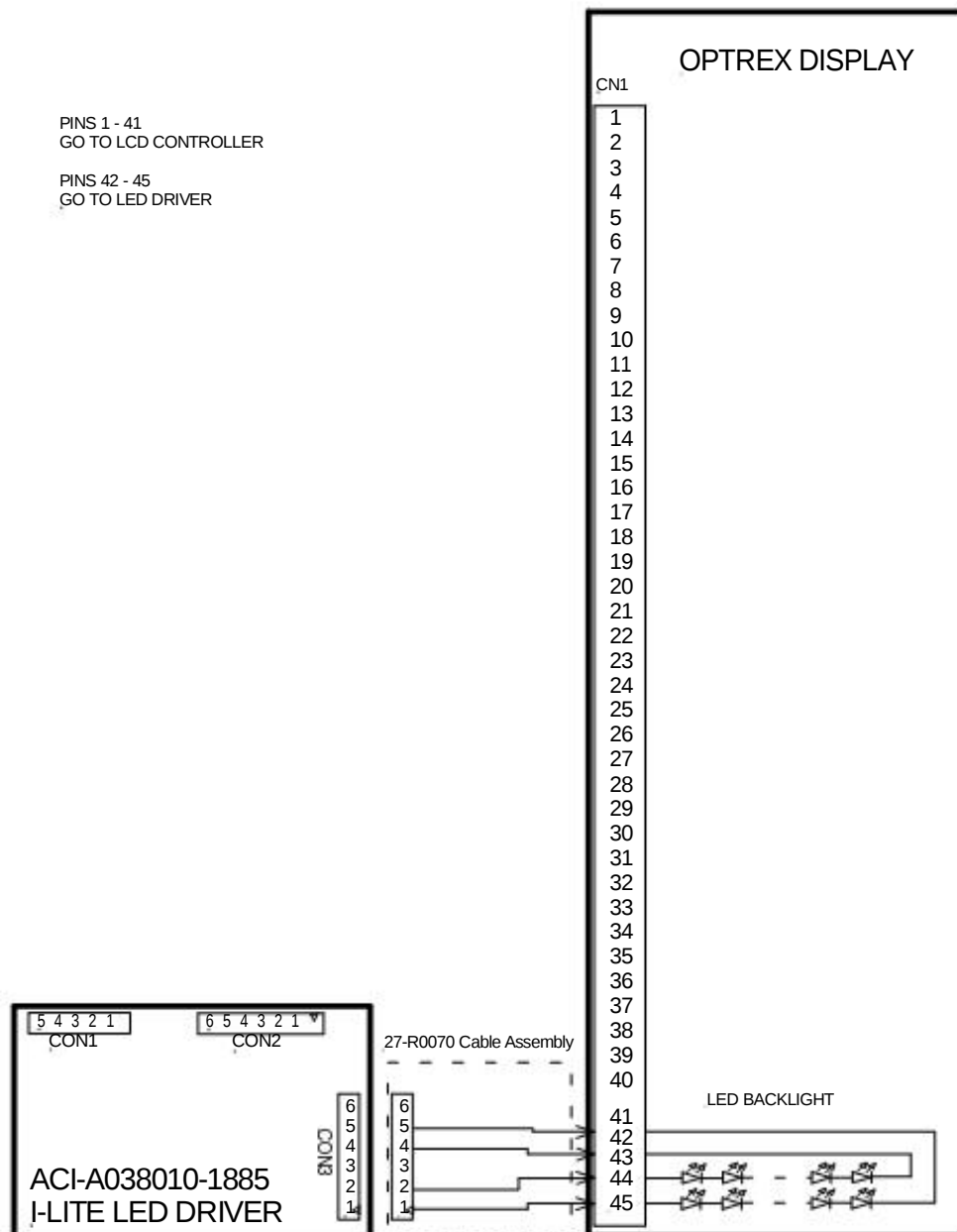


FIGURE 5. - CONNECTING LED DRIVER TO OPTREX DISPLAY

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

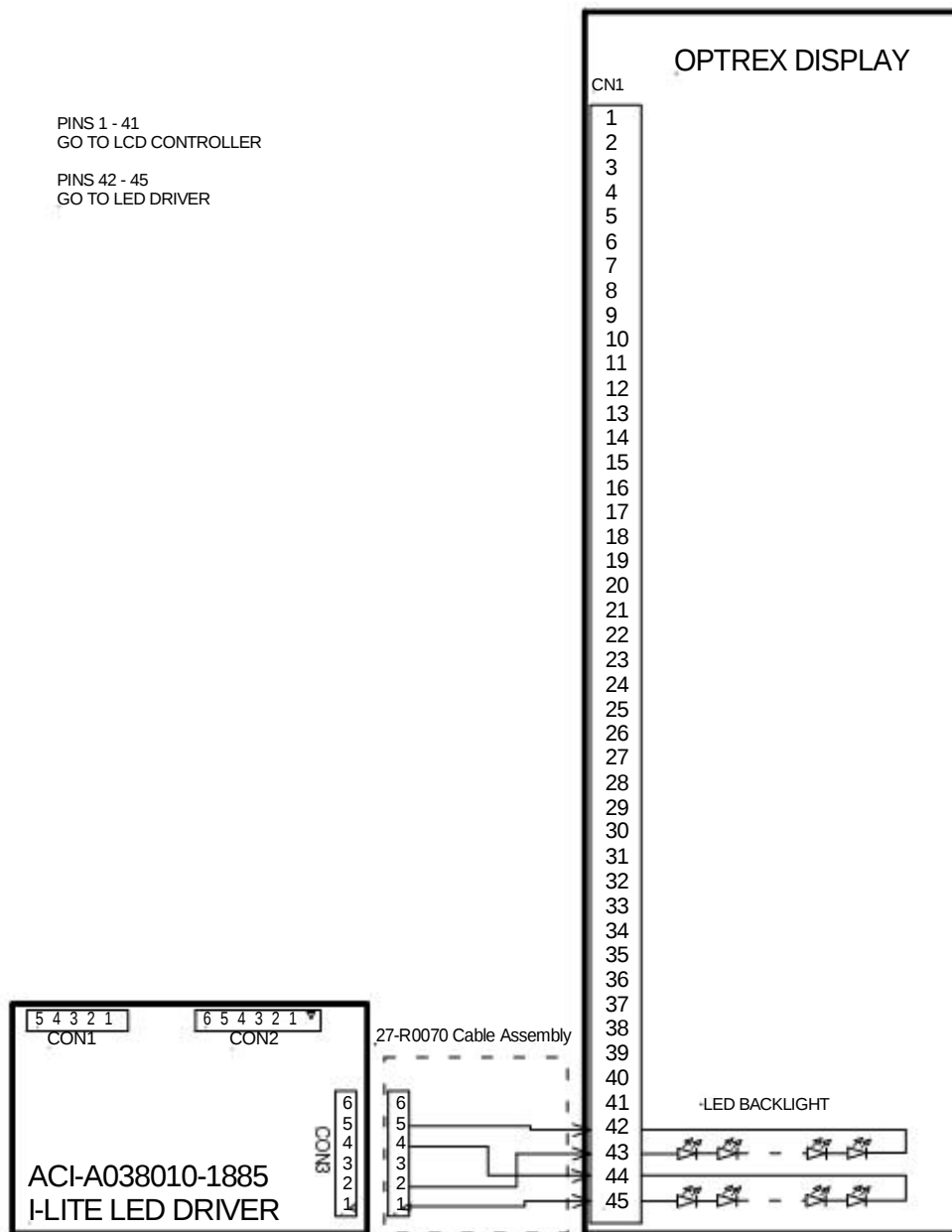


FIGURE 6. - CONNECTING LED DRIVER TO OPTREX DISPLAY

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

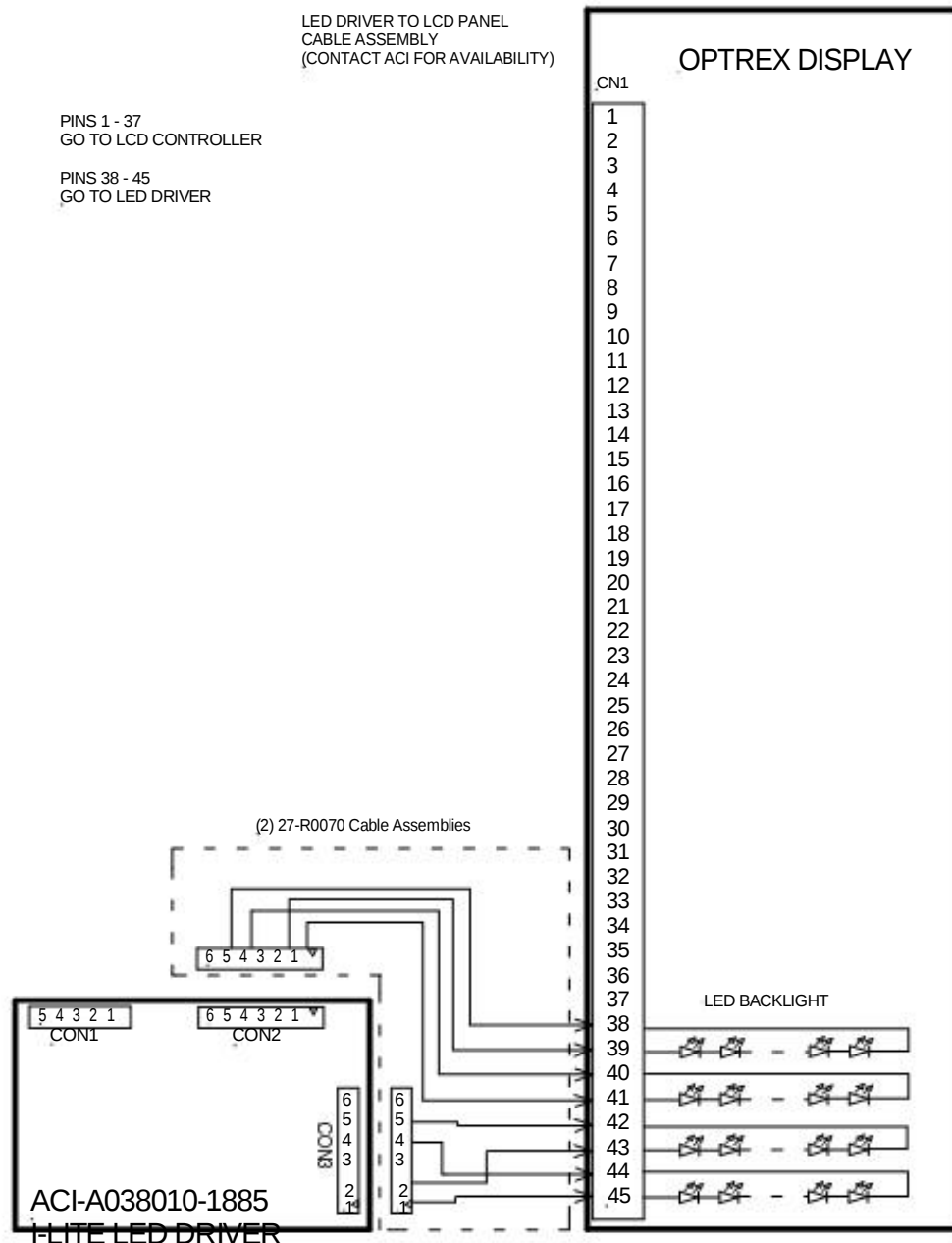


FIGURE 7. - CONNECTING LED DRIVER TO OPTREX DISPLAY

DRIVING OPTREX PANELS WITH ACI I-LITE LED DRIVERS

1. If Enable (PIN 3) is not being used, it can be left electrically floating.
2. If no dimming is required, connect Intensity CNTL (PIN 4) to +3.3V REF OUT (PIN 5).
3. If dimming is required, the +3.3V REF OUT (PIN 5) can be used for high-side of Intensity Control Potentiometer. A 10K Ohm Potentiometer is recommended.

Connecting 10K Ohm Potentiometer used for Dimming

