

- I. ASSEMBLE PARTS USING MANUFACTURE SPECIFICATIONS.
- 2 APPLY ADHESIVE (ITEM 4) TO APPROPRIATE SIDE OF THE CABLE TEMPLATES (ITEMS 3 AND 6), AND ATTACH TO BOTH SIDES OF CABLE AS SHOWN.
- 3 USE LOCATING FEATURES (NOTCH & TAB) TO ALIGN CABLE AT 90°.
- MARK CABLE WITH PART NUMBER AND REV LETTER WITH A CONTRASTING LABEL OR INDELIBLE INK, USING .12 HIGH CHARACTERS, APPROX. WHERE SHOWN.
- WIRING AND TUBING USED IN THE CABLE ASSEMBLY MUST BE UL RECOGNIZED.
- CONNECTORS AND ALL OTHER COMPONENTS MUST BE UL RECOGNIZED DR MADE OF A UL RECOGNIZED MATERIAL WITH A MINIMUM FLAME RATING OF 94V-2.
- TRACEABILITY OF THE ABOVE MUST BE NAINTAINED BY THE VENDOR AND BE NADE AVAILABLE UPON REQUEST.



WIRING DIAGRAM



6	2	TEMPLATE,	CABLE	ALIGHNENT	NADE FROM	.010	POLYCARE	IONATE	SHEET			
5	2	CONTACT,	RECPT	ACLE COMB						AMP	487547	-1
4	5	.002 ADH	E\$I¥E									
3	2	TEMPLATE,	CABLE	ALIGHNENT	NADE FROM	.010	POLYCARE	ONATE	SHEET			
2	2	10 COND.	CONNE	CTOR, .05	O CL					AMP	487545	- 7
1	AR	ID COND.	CABLE	. FLAT, FI	EX050	С.				PARLEX	PS-1636-	- 0 -
ITEM	QTY				DESCRIPTION					RE	FERENCE	
	BILL OF MATERIALS											
1.00	10.27	E BROCIFICO,	API	PROVALS	DATE			HO	CHIE	N.		
1	생애면 세	-	10.00	SLK	10-22-97	٦.			hoohlen oo	m		
	激狂。	****	CHECKED	HKD	12-15-97	TI TLE						
IL IN CALIFORNIA			ATTRACTO			1	CAB	LE AS	SY, DRAWE	R DMN	RX	
THERE ANDLE PREJECTION		000	712	12-15-97	1	_ PN#	‡ CA	-C403	37A-I	0033		
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					RAL	1:2	CFB FILE	42-	7030 54	er l o f	1	

1. PURPOSE

To provide step by step instructions for hipot and continuity testing of 10-pin flex cables.

2. SCOPE

All ribbon and flexible cables operating at 300V or below using "AMPMODU System 50" Single Row Cable Mount Receptacles. These cables include:

42-7018: Supplier pharmacy drawer cable 42-7030: Rx pharmacy drawer cable 42-8039: Dispenser dispenser cable 42-8040: Dispenser rail cable

3. **DEFINITIONS**

Test Program:	A cable test setup saved in tester memory. Test Program is named after
	the Cable Signature.
Cable Signature:	An 11-digit alphanumeric code consists of 6-digit Connection
	Signature, and 5-digit Parameter Signature separated by a dash (i.e.:
	088BBA-EL0NH).
Connection Signature:	Derived by the tester from: wire pattern of the tested cable, adapter
	used, and installed position of adapter in tester.
Parameter Signature:	Identifies the Test Parameter Setting of the test.
Pin:	Individual contact or terminal in a connector.
Net:	An interconnection between two or more pins in a cable.

4. **REFERENCES**

http://www.amp.com http://www.cirris.com

5. **RESOURCES**

- Cirris Signature 1100H+.
- Installed Custom Adaptor with two Single Row Shrouded Headers in J1 of tester.

6. RECORDS

Rev.	Change Description	Changed by	Approved By	Eff. Date
А	Initial Release	John Sie	Omar Hafez	2/25/2004

7. INSTRUCTIONS

7.1. Setting-Up Tester

- 1. Connect the power supply and power cord together. Then plug the tester into a grounded power outlet.
- 2. Turn on the tester. Main screen should come up after Self Testing.

7.2. Retrieving Test Program: 088BBA-EL0NH

Refer to Appendix A for Test Program Parameters.

The loaded Test Program is always displayed on the main menu identified by "TEST:" followed by the test program file name (in this case would be: "**TEST: 088BBA-EL0NH**"); continue to "Testing Cables" sub-section if the Test Program is already loaded.

- 3. Press: Set Up Test Program
- 4. Press: Load Test
- 5. Select: **088BBA-EL0NH** (scrolling may be required to locate the program); once properly loaded, "TEST: 088BBA-EL0NH" option will be available.

7.3. Testing Cables

- 6. Press TEST: 088BBA-EL0NH
- 7. Attached Cable to be tested.
- 8. Press: **START TEST**
- 9. Inspect test result; red-tag **failed** cable.
- 10. Remove cable and segregate **Passed** and **Failed** cable.
- 11. Repeat Step 7 until all cables are tested.
- 12. Press: Get Test Summary Cnt
- 13. Verify the cable numbers are match with the summary count.
- 14. Switch Tester OFF.

Appendix A – Test Program Parameters

Cable Signature: 088BBA-EL0NH

Cable Description: Ribbon and Flexible Cables operating at 300V or below using AMPMODU System 50 Single Row Cable Mount Receptacles

Adapter:

Custom Adaptor with two Single Row Shrouded Headers in J1 of tester.

Test Parameter Setting

Resistance Threshold Setting Connector Resistance Threshold: =< 1 ohm

Connector Resistance Threshold: =< 1 0hm Component Resistance Threshold: N/A LV Insulation Resistance Threshold: >100kohm

Hipot Setting

Hipot Test: **Standard** High Voltage: **700V** HV Insulation Resistance Threshold: > **10.0Mohm** Duration: **.01 sec.** Apply to: **All Adapter Pins** Max Soak: **0** High Capacitance Shield: **No**

Components Setting Capacitor: OFF Diodes: OFF Resistor: OFF Twisted Pair: OFF

4W Kelvin: OFF

Connections:

Net	Test Point	
1	J1-001	J1-031
2	J1-003	J1-033
3	J1-005	J1-035
4	J1-007	J1-037
5	J1-009	J1-039
6	J1-011	J1-041
7	J1-013	J1-043
8	J1-015	J1-045
9	J1-017	J1-047
10	J1-019	J1-049

(42-7018, 42-7030, 42-8039, 42-8040)

A. PURPOSE

To provide step by step incoming instructions for inspecting and testing 10- pin flex cables used in pharmacy and dispenser modules. These cables are pre-tested at the supplier using an provided Cirris Hipot cable tester to look for opens/shorts, and a 50X magnification microscope to inspect for correct alignment between connector pins and traces.

B. SCOPE

The following cable part numbers are covered by this document:

- 42-7018 Pharmacy Drawer Cable, Supplier
- 42-7030 Pharmacy Drawer Cable, iRx
- 42-8039 Dispenser Dispense Cable
- 42-8040 Dispenser Rail Cable

C. REFERENCES

- MQA-I-02 Instructions for Incoming Inspection

D. RESOURCES

- Cableeye test fixture and computer
- Cableeye connector boards (2) for 10-Pin flex cable
- Microscope (if necessary to verify connector alignment)

E. VISUAL

- 1. Check that the shipment contains the certificate of conformance
- 2. Check that the certificate is completed and states that the cables were hipot tested, and checked by microscope for alignment between connector pins and traces
- 3. Check that the cables have the part number, revision, datecode and vendor initials.



(42-7018, 42-7030, 42-8039, 42-8040)

F. TEST INSTRUCTIONS



Test Instructions for 10-Pin Flex Cables (42-7018, 42-7030, 42-8039, 42-8040)

Recycle Bin CableEye	4.	Double click on the CableEye icon, which is on the desktop.
File Preferences Connectors Maps Window Help Image: Serie of the series of the serie	5.	Click on "Load Cable."

(42-7018, 42-7030, 42-8039, 42-8040)

Load Match Data Name 13w3MALE-13w3FEM 3w3MALE-13w3FEM 3w3MALE-3w3FEM 42-7018: 42-7030 5w5MALE-5w5FEM BNCWF-BNCVF-NS10D CN24M-CN24F-523X CN24M-CN24F-523X CN24M-CN24F-523X CN24M-CN24F-524D CN36M-CN36F-514S CN36M-CN36F-514S CN36M-CN36F-536D CN36M-CN36F-536D CN36M-CN36F-536D CN36M-CN36F-536D CN36M-CN36F-536D CN36M-DB25M-S14X CN36M-DB25M-514X2	Description CB16 EXAMPLE CABLE CB16 EXAMPLE CABLE CB16 EXAMPLE CABLE Pharmacy cables CB16 EXAMPLE CABLE THINNET, RGB MONITOR CB16 EXAMPLE CABLE IEEE 488 EXTENSION IEEE 488 EXTENSION IEEE 488 EXTENSION CA CENTRONICS PIN REVER CENTRONICS EXTENSION CENTRONICS EXTENSION CENTRONICS PRINTER t IMAGEWRITER to APPLE CENTRONICS PRINTER t IMAGEWRITER to APPLE CENTRONICS PRINTER t	CAMI ID CAMI ID 803 804 805 512 806 624 009 007 0035 041 008 010 312 637 302 303	6.	After clicking on "Load Cable," select the "42-7018; 42-7030" cable from the list then click "OK."
CableEye - File Preferences Connectors Serial Port Connectors Wring Display Print Options Print Options Resistance Control Labels AutoBuild 10 F 1:1 Load Cable Lex	tors Maps Window H atabase Save 8; 42-7030 8; 42-7030 R; 42-7030 8; 42-7050 8; 42-7050 8; 42-7050 8; 42-7050 8; 42-7050 8; 42-7050 8; 42-7	elp Test D:	7.	Click on "Preferences," then scroll down and select "Resistance."

(42-7018, 42-7030, 42-8039, 42-8040)

ferences Image: Serial Port Connectors Wiring Display Print Options Resistance Limits Control Labels AutoBuild Single Threshold Single Measurement, 0.5 sec Typical Measurement Time 500 Ohms Permissable Range: 0.5 Ohm to 10M Ohms Same Threshold as CableEye Model M2 Image: Dual Threshold Two Measurements, 1 sec Typical Measurement Time Maximum Conductor Resistance Permitted: 2 Ohms Permissable Range: 0.5 Ohm to Min Isolation Minimum Isolation Resistance Permitted: 0.5 Ohms Permissable Range: 0.5 Ohm to Min Isolation	8.	Verify that "Dual Threshold," is checked, that the "Maximum Conductor Resistance Permitted" is 2 Ohms and the "Minimum Isolation Resistance Permitted" is 1.0 M Ohms. If correct, click "Cancel."
I.0 M Ohms Permissable Range: Max Cond to 10M Ohms I.0 M Ohms Permissable Range: Max Cond to 10M Ohms Recommended Thresholds for General Applications Recommended Thresholds for Power Cables (Current > 500ma) Recommended Thresholds for High-Voltage Cables (Voltage > 100v) Custom Thresholds (Enter Above) Tolerance when Measuring Embedded Resistors: (100 Ohms to 1M Ohm) Less than Spec: Less than Spec: 5 % G Recommended Tolerances for General Applications 5 % OK Cancel Apply Help		
ableEye Preferences Connectors Maps Window Help Test Data Image: Connector state Image: Conne Image: Connector state	9.	Click on both "Display Match Data Wiring" buttons, which should bring up a diagram of the wiring.

Test Instructions for 10-Pin Flex Cables (42-7018, 42-7030, 42-8039, 42-8040)

10. The ready screen should appear, Text Data Wining Display with the master cable shown in the Ш lower half. . 20M* | 110.2 kuy | 125 ku | Detail, Thee huluh. 2.Q 11. To test a cable, plug in one connector of the cable to the left connector board, and the other connector to the right connector board.

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Test Instructions for 10-Pin Flex Cables (42-7018, 42-7030, 42-8039, 42-8040)



(42-7018, 42-7030, 42-8039, 42-8040)

Create Log File ? × Save jn: Logs Image: Save jn: Image: Save	 15. Once the Create Log File screen appears, create a name for the file, then click save. The format should include the cable part number and the date tested, ex: 42-7030_2004-05-24.log
Macro Sequence C:\Program Files\CableEye\Software03\Logs\5-2 4-2004 40-7030.LOG already exists. Append Cancel In Exiption Lognumue 3 WAIT FOR PB Le a "Log" file Test CABLE	16. If you want to append to a file that is already open, select the file and click "Append."
Phi Phi CableBye Rector Board Call Call Cable Eye Fe-Based Cable Fort System	17. When the third step, "Wait for PB" is highlighted, place your cables into the connector boards, then press the "Test" button.

Test Instructions for 10-Pin Flex Cables (42-7018, 42-7030, 42-8039, 42-8040)



(42-7018, 42-7030, 42-8039, 42-8040)



G. DISPOSITION

1. Follow instructions in <u>MQA-I-2: Instruction for Incoming Inspection</u> regarding the disposition of test results and material.

H. REVISION HISTORY

Rev.	Change Description	Approved By	Eff. Date
Α	Initial Release	Omar Hafez	5/25/2004