

Keysight Y1245A, Y1246A and Y1247A Single Site Signal Cable

Keysight's Y1245A, Y1246A and Y1247A are the same cable but different lengths; the Y1245A cable is 0.5 meters long, the Y1246A cable is 1 meter long and the Y1247A cable is 2 meters long. These cables contain 60 micro coax lines for 16 channels, 16 PPMU sense, 4 high voltage, and 4 Open Drain lines. 60-Pin Male Edge Rate to Male Edge Rate connectors with squeeze latches are used on the cable. The cables also include an alternate thumb screw hood. One end of this cable plugs onto the M9195A/B front panel connector. The other end is available to connect to your Device Under Test (DUT) or the Keysight Y1253A Evaluation and Prototyping Kit.

Refer to the M9195A Startup Guide and User Guide for detailed information on using the various signal lines.

General Use Recommendations

Keysight recommends that you use one of the following three Samtec¹ 60-pin mating connectors to mate with your Device Under Test (DUT) end connector on the cable:

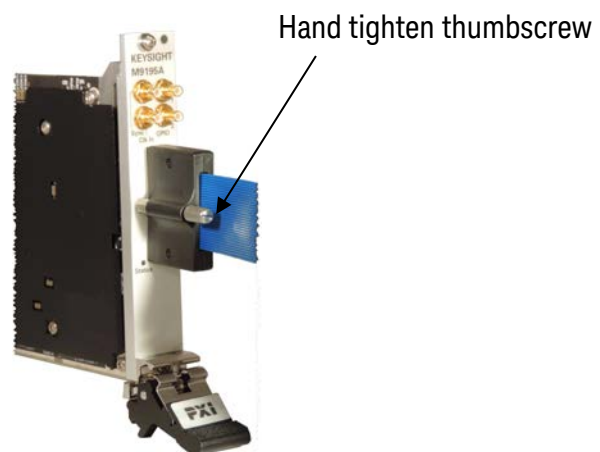
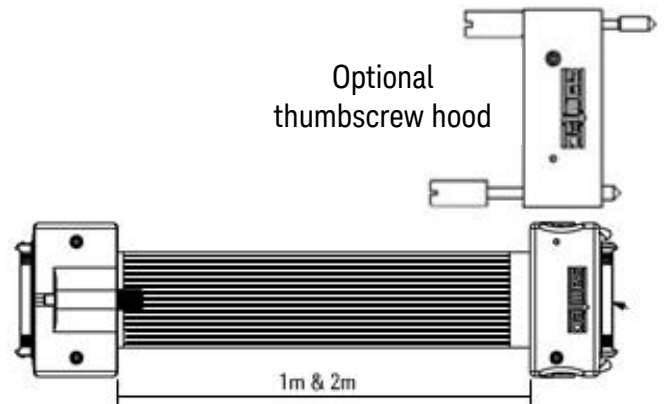
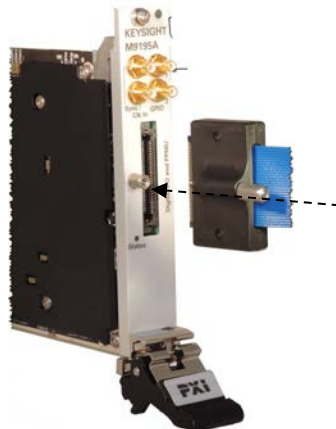
ERF8-030-01-L-D-RA-L-TR (right angle)

ERF8-030-01-L-D-EM2-TR (edge mount, for use on 0.062" thick PC boards)

ERF8-030-05.0-L-DV-L-TR (vertical mount)

Installation and Removal of the Y1246A/Y1247A Cable

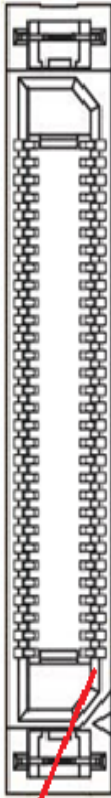
The end of the cable that connects to the M9195A has a single thumb screw on the hood. Connect the cable to the M9195A/B and then hand-tighten the thumb screw to the attached hex standoff on the module. See the following photographs.



¹ Samtec, <http://www.samtec.com>

Pinout of the DUT cable connector

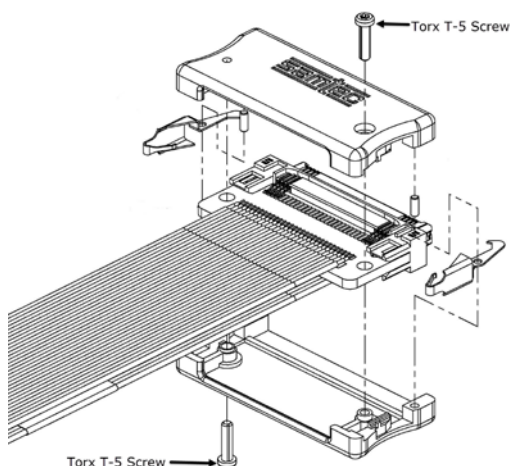
This pinout is the same as the pinout on the M9195A/B DSR module.

Latch/GND	Pin #		Pin #	Latch/GND
Channel 03	60		59	GND
GND	58		57	Channel 00
Channel 01	56		55	GND
GND	54		53	Channel 02
Channel 07	52		51	GND
GND	50		49	Channel 06
Channel 05	48		47	GND
GND	46		45	Channel 04
HV22	44		43	GND
GND	42		41	HV23
HV21	40		39	GND
GND	38		37	HV20
Channel 11	36		35	GND
GND	34		33	Channel 10
Channel 09	32		31	GND
GND	30		29	Channel 08
Channel 13	28		27	GND
GND	26		25	Channel 12
Channel 15	24		23	GND
GND_SENSE	22		21	Channel 14
PPMU_Sense12	20		19	PPMU_Sense14
PPMU_Sense13	18		17	PPMU_Sense15
PPMU_Sense11	16		15	PPMU_Sense10
PPMU_Sense09	14		13	PPMU_Sense08
Open Drain Aux 2	12		11	Open Drain Aux 0
Open Drain Aux 3	10		9	Open Drain Aux 1
PPMU_Sense06	8		7	PPMU_Sense05
PPMU_Sense07	6		5	PPMU_Sense04
PPMU_Sense01	4		3	PPMU_Sense02
PPMU_Sense00	2		1	PPMU_Sense03
Latch/GND				Latch/GND

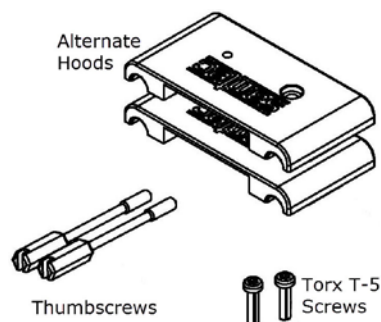
Installation and Removal of the Alternate Thumbscrew Hood

The alternate hood uses thumb screws to retain the cable to the DUT rather than the squeeze latches of the original hood. To use the alternate hood on the DUT end of the cable, the old hood must first be removed (requires Torx T-5 screwdriver). The following graphic shows how to disassemble and remove the original hood. Retain all of the pieces in case you should need to reuse the original hood in the future.

Disassembly of original hood:



The alternate thumb screw hood consists of six pieces:



Assemble the alternate hood over the cable connector:

Lay out the parts. The two hood pieces are interchangeable:



Lay the cable connector on the lower hood piece. Make certain the holes in the connector mate with the holes in the hood.



Place the thumbscrews in the hood piece. Align the upper hood piece to match the lower piece.



Make certain the upper hood piece snaps onto the lower piece. Use the Torx T-5 screws to secure the header pieces (one on top, one on bottom).



Warranty

THE MATERIAL CONTAINED IN THIS DOCUMENT IS PROVIDED "AS IS," AND IS SUBJECT TO BEING CHANGED, WITHOUT NOTICE, IN FUTURE EDITIONS. FURTHER, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, KEYSIGHT DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH REGARD TO THIS MANUAL AND ANY INFORMATION CONTAINED HEREIN, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. KEYSIGHT SHALL NOT BE LIABLE FOR ERRORS OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, USE, OR PERFORMANCE OF THIS DOCUMENT OR OF ANY INFORMATION CONTAINED HEREIN. SHOULD KEYSIGHT AND THE USER HAVE A SEPARATE WRITTEN AGREEMENT WITH WARRANTY TERMS COVERING THE MATERIAL IN THIS DOCUMENT THAT CONFLICT WITH THESE TERMS, THE WARRANTY TERMS IN THE SEPARATE AGREEMENT SHALL CONTROL.

DFARS/Restricted Rights Notices

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as "Commercial computer software" as defined in DFAR 252.227-7014 (June 1995), or as a "commercial item" as defined in FAR 2.101(a) or as "Restricted computer software" as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Keysight Technologies' standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.



This product complies with the WEEE Directive (2002/96/EC) marking requirement. The affixed product label indicates that you must not discard this electrical/electronic product in domestic household waste.

Product Category: With reference to the equipment types in the WEEE directive Annex 1, this product is classified as a "Monitoring and Control instrumentation" product.

Do not dispose in domestic household waste.

To return unwanted products, contact your local Keysight office, or see www.keysight.com/environment/<product> for more information.



This symbol represents the time period during which no hazardous or toxic substance elements are expected to leak or deteriorate during normal use. Forty years is the expected useful life of this product.

This information subject to change without notice.
© Keysight Technologies 2016
First Edition, March 2016
Printed in Malaysia

