



860 DSPi Home Certification Testing

This Application Note describes the requirements for home certification utilizing your 860DSPi.

Macros

Macros are a tool that allow a technician to run multiple tests with minimal button pushing or with one named icon, and then compare the results to a pre-determined limit sets.

Macro1 – Macro consists of any number of a possible 16 steps. This example shows 4 steps listed in no specific order:

- **Full Channel Scan** – based on a consolidated plan within your meter that consists of 22+ channels
- **MER** – Test MER on digital channels pre-selected in your consolidated channel plan
- **Carrier to Noise (C/N)** – Test C/N on analog channels pre-selected in your consolidated channel plan
- **DOCSIS Test** – Upstream, Downstream, MER & BER (CM Stat)

<u>EXAMPLE LIMIT SETS</u>	
Channel Scan	
Min Video Level	0 dBmV
Max Video Level	15 dBmV
Min V/A Delta	10 dBmV
Max V/A Delta	17 dBmV
Min Digital Level	-8 dBmV
Max Digital Level	10 dBmV
Max Video Delta	20 dBmV
Max Adjacent Video	10 dBmV
MER	
	> 33 dB
C/N	
	> 46 dB
DOCSIS	
Min Launch Level	32 dBmV
Max Launch Level	53 dBmV
Min Receive Level	-8 dBmV
Max Receive Level	10 dBmV

Macro2 – Macro consists of 1 step:

- **Upstream spectrum test** from 5 to 45 MHz with peak hold for ten seconds

Tasks

Function that allows user to store field tests and link this data to a specific account

1. Power on your 860 DSPi
2. Select the **TASKS** icon
3. Press the first soft key for **New**
4. Enter the account number
5. Repeat steps 2-4 for each work order assigned
6. Power down meter



Process while on site

Steps to follow to complete home certification while at customers location for trouble call, install, or change of service. **Prior to running any home certification macros - use your Trilithic 860 DSPi to troubleshoot and install using the methods learned in your company's technical training program. Ensure that all services are working properly prior to initiating home certification macros.**

For Additional Help Contact
 Trilithic Applications Engineering
 1-800-344-2412 or 317-895-3600
support@trilithic.com or
www.trilithic.com

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Downstream Testing

1. Power on meter
2. Select appropriate user if necessary
3. Select **Auto Test** icon
4. Using up/down arrows select the **Macro1.mac** macro
5. Press the third soft key to start test (test could take 2-4 minutes to complete)
6. Once macro completes, use the up/down arrow keys to select the correct account number/task for the job that you are on
7. Press **Ent**. This will automatically name the file
8. Press **Ent** again
9. This completes the Macro1 test for this outlet

**Upstream Testing**

This test can be completed anytime you are at the tap or ground block at any point during the job

1. Access either GB or tap (tap is preferred)
2. Disconnect drop
3. If you are at the tap, attach customer drop to meter input
4. If you are at the GB, attach jumper from meter input to GB
5. Power on meter
6. Press **Auto Test** icon
7. Using up/down arrow keys highlight **Macro2.mac**
8. Press the third soft key to start test
9. Once macro completes, use the up/down arrow keys to select the correct account number for the job that you are on
10. Press **Ent**. This will automatically name the file
11. Press **Ent** again



***Note* If any of the tests fail, use troubleshooting methods learned in tech training to isolate and eliminate cause for failure then rerun macro**

Closing Tasks

1. Press **TASKS** icon
2. Use the up/down arrow keys to highlight task that you have completed
3. Press the second soft key to close this job
4. The pop up will ask if you want to stop data being linked to this task
5. Press **Ent** to close this job

**Uploading tasks to server – Uploading associated task files to the TDM server**

1. Connect your meter to appropriate internet interface (RF/Ethernet)
2. Press the icon for **WWW** (this will obtain an IP address)
3. Using the left/right arrow keys, highlight **TDM** and press enter (this will take you to the TDM home page)
4. Using your left right arrow keys, select **One-Step Send/Recv** and press enter
5. Using your left right arrow keys, highlight **Proceed** and press enter
6. Meter will confirm files were sent
7. Home certification is now complete for this job



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