Mixers With the Word "Lids" in Notes, Sorted by Mixer SN, Config#

Time Stamp	By	Notes

Mixer-Preamp: 197:273/32 http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=197
Config #: 750

Time Stamp	By	Notes
Tue 2010-06-22 09:36:57	JE	Looked at the Osc Data and find no obvious oscillations, but some strange bumps at LO = 239 GHz
Mon 2010-06-07 13:44:36	RG	Measured across an IF of 5-10GHz Histogram Version: 2.3.1 Measured with Preamps Id set to 4.0mA There is a chance that an oscillation may be present with preamp Id set to 4.0mA. This mixer will need to be monitored closely for which cartridge it gets ...
Mon 2010-06-07 08:37:59	JE	False color maps, and the gain slope data, show this mixer meets specs if the single bad point at the measurement restart is ignored: \\cvfiler.cv.nrao.edu\cv-cdl-sis\MxrTstSys\Data\Blk197
Sun 2010-06-06 17:51:04	JE	The first point on the restart at 2010-06-06 12:46 after 2010-06-05 18:21, is an obvious outlier, but all the rest measured so far, through LO = 241 GHz, are fine.
Fri 2010-06-04 16:05:01	RG	New build...First test with modified lids from machine shop to prevent oscillation.
Wed 2010-05-12 10:44:55	ML	Integrated with preamps, ready for testing.
Thu 2010-05-06 16:38:38	ML	Installed chips, ready for preamp pair.
Thu 2010-05-06 16:35:24	ML	Initial entry.

Time Stamp	By	Notes

Mixer-Preamp: **184:200/31**   http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=184

Config #: **688**

Time Stamp	By	Notes
Thu 2010-03-18 10:59:22	RG	John approved Irej. with false color plot. Measured across an IF of 5-10GHz Histogram version: 2.0 Oscillation Test is stored in Misc. File. Preamp (1) Left oscillated as Id1=4.6mA, Id2=5.2mA...Preamp (2) Right oscillated as Id1=5.25mA, Id2=4.50mA
Wed 2010-03-17 16:28:49		Awaiting False color plot from JE to look at the image rejection behavior from 10.5GHz-12GHz IF.
Tue 2010-03-16 09:26:14	RG	Testing after preamp lids were lapped to see if the oscillation disappears.
Tue 2010-03-16 09:24:54	ML	Lapped the preamp lids to see if the oscillation disappears.
Fri 2010-03-12 13:41:34		Mixer #2 Left Oscillates at LO 265GHz. It appears by slightly adjusting the drain current of the second stage on the Preamp Right, the oscillation will disappear.
Tue 2010-03-09 14:30:49	RG	New Built...First Test
Tue 2010-01-19 16:57:04	ML	Integrated with preamps, ready for testing.
Thu 2010-01-14 12:13:27	ML	Installed chips, ready for preamp pair.
Thu 2010-01-14 12:11:48	ML	Passive devices installed, ready for chips.
Thu 2010-01-14 12:10:04	ML	Initial entry.

Report: 'rptMixersWithLidNotes' (Ver: 2010-06-22 13:15:49)   Printed: 2010-06-22 13:27:38   Page 2 of 10

Datasource: 'qryMixersWithLidNotes' (Ver: 2010-06-22 13:09:03)   MS Access File: \\cvfiler\cv-cdl-sis\MxrTstSys\MixerChips.mdb

Time Stamp	By	Notes

Mixer-Preamp: 183:209/30   http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=183

Config #: 686

Time Stamp	By	Notes
Mon 2010-04-05 14:40:23	RG	Measured across an IF of 5-10GHz Histogram Version: 2.1 Mixer Block 183 works great with Id on the preamps set to 4mA. As soon as you increase Id of the preamps on the first two stages to 4.1mA, this device breaks into oscillation. New lids with a single...
Thu 2010-04-01 18:14:19	RG	New Build...First Test
Fri 2010-01-08 16:50:10	ML	Integrated with preamps, ready for testing.
Fri 2010-01-08 11:27:49	ML	Installed chips, ready for preamp pair.
Fri 2010-01-08 11:25:55	ML	Passive devices installed, ready for chips.
Fri 2010-01-08 11:23:58	ML	Initial entry.

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Time Stamp	By	Notes

Mixer-Preamp: 182:183/27   http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=182

Config #: 685

Time Stamp	By	Notes
Thu 2010-04-01 18:21:44	RG	Awaiting new lids
Thu 2010-04-01 15:50:08	RG	Measured across an IF from 5-10GHz Histogram version: 2.1 Mixer block 182 oscillates very easily if Id1 and Id2 of both preamps are set to 4.2mA. It has been suggested to try the lids with absorber and recheck for oscillations. The oscillation data is in...
Thu 2010-03-25 13:27:05	RG	New Build...First Test
Fri 2010-01-08 16:49:17	ML	Integrated with preamps, ready for testing.
Fri 2010-01-08 11:26:15	ML	Installed chips, ready for preamp pair.
Fri 2010-01-08 11:24:33	ML	Passive devices installed, ready for chips.
Fri 2010-01-08 11:23:31	ML	Initial entry.

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Datasource: 'qryMixersWithLidNotes' (Ver: 2010-06-22 13:09:03)   MS Access File: \\cvfiler\cv-cdl-sis\MxrTstSys\MixerChips.mdb

Time Stamp	By	Notes
Mixer-Preamp: **153:195/19**		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=153
Config #: **738**		
Tue 2010-04-27 15:33:08		
Wed 2010-04-21 16:06:00	RG	Approved for use in Monday meeting 0n 4/19 by JEE. Hisogram version 2.1
Mon 2010-04-19 13:10:53	JE	Based on our results for Cartridge 032, I think we should use it in a cartridge at 3 mA drain current.
Wed 2010-04-14 10:57:14	JEE	I don't see any sharp spikes in the false color maps for this mixer: \\cvfiler\cv-cdl-sis\MxrTstSys\Data\Blk153\Blk153Test5\Mxr153FalseColor.pdf Also, I don't really see a single-frequency spike for any of these: so I think this mixer might b...
Wed 2010-04-14 08:46:59	RG	Awaiting Approval for use in Cartridge. This mixer/Preamp was run with the first two preamp stages Id set at 3.8mA.
Thu 2010-04-08 13:01:29	ML	Full absorber installed in preamp lids, ready for retest.
Mixer-Preamp: **153:/**		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=153
Config #: **693**		
Wed 2010-03-31 10:34:43	RG	
Tue 2010-02-23 13:25:33	RG	This is installed in Cartridge B6-021. It was reveiwed by M. Shannon and was found acceptable
Mon 2010-02-22 12:31:30	RG	From: John Effland (66 kB) Sent: Monday, February 22, 2010 12:29 PM To: 'Dave Schmitt' cc: Michael Shannon; 'Michael Reynolds' Subj: RE: Mixer Specs for 128 and 153 Dave, To summarize, both are good. Mixer-Preamp 128 false color maps look ...
Mon 2010-01-25 14:39:55	RG	% Irej. <10dB = LSB: 0.0%, USB: 0.82% % Rt. >83K = LSB: 1.3%, USB: 3.1% Measured across an IF of 5-10GHz Histogram Version: 2.0
Wed 2010-01-20 12:04:29	RG	Replaced Hybrid #086 with #514 for improved image rejection and re-testing purposes.
Mixer-Preamp: **153:/**		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=153
Config #: **574**		

Time Stamp	By	Notes
Fri 2009-12-04 14:28:36	RG	Updated Hisogram to new 1.9 xlsm version, which accounts for gain slope. Results reveal a new hybrid is needed for re-testing purposes.
Wed 2009-09-02 10:29:25	RG	% Irej. <10dB = LSB: 0.0%, USB: 1.83%
		% Rt. >83K = LSB: 1.8%, USB: 4.1%

Mixer-Preamp: 153:/
Config #: 548

http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=153

Time Stamp	By	Notes
Mon 2009-08-31 10:40:43	RG	
Wed 2009-08-19 17:24:44	ML	Already integrated with preamps, ready for testing.
Tue 2009-08-18 11:38:02	ML	Replaced left-side chip with another W04C12L56 chip.
Wed 2009-03-25 15:58:04	RG	Mixer #1 (Left) has 30uA leakage current, but passes Rt at all LO frequencies. However, the Irej. on the USB exceeds the ALMA spec of 10% data points <10dB with 46.75% of data points <10dB. Check out bias tee circuit for mixer #1 Left...strange IV curves.
Mon 2009-03-23 13:51:33	RG	
Fri 2009-03-20 15:34:06	ML	Ready for testing.
Fri 2009-03-20 15:29:58	ML	Replaced right-side chip. Left-side chip is 5 mils longer than the right. To compensate, I installed the left chip so that the IF pad was flush with the tuning network-side of the chip saddle.
Tue 2009-03-03 15:50:05	ML	Cracked the right-side chip during final assembly. Replace.

Mixer-Preamp: 153:/
Config #: 544

http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=153

Time Stamp	By	Notes
Tue 2009-03-03 11:37:23	ML	Replaced with a set of W04C12L56 chips.
Fri 2009-02-27 09:28:00	ML	Installed set of preamps. Ready for testing.
Fri 2009-02-27 09:26:22	ML	Replaced mixer chips with W14C12L56, first test for wafer 14.
Thu 2009-02-26 16:17:18	RG	This was the first test of Wafer #14 mixer chips from UVA.
Wed 2009-02-25 15:08:30	RG	
Wed 2009-02-25 11:58:41	ML	Both chips are blown possibly due to ESD. Replace chips.

Mixer-Preamp: 153:/
Config #: 543

http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=153

Time Stamp	By	Notes
Wed 2009-02-25 11:52:05	ML	Installed W04C12L56 chips.
Wed 2009-02-25 11:51:41	ML	Initial entry

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Time Stamp	By	Notes
Mixer-Preamp: 147:197/20		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=147
Config #: **759**		
Fri 2010-06-18 09:34:06	JE	This mixer is currently lost!
Fri 2010-05-21 11:05:16	ML	Replaced the second stage in preamp after trying to double bond the drains. Retest at will.
Mixer-Preamp: 147:197/20		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=147
Config #: **736**		
Wed 2010-04-07 15:33:24	RG	Mixer Block 147 and preamp 203 still oscillates with a drain current of 4.2mA set on Id1. The Longer screws didn't make any change to the oscillation level. On a side note the MTS has a ground loop associated with it that is such when the refrigerator cold...
Tue 2010-04-06 16:00:43	RG	Mixer Block 147 and preamp 203 oscillated with a drain current of 4.2mA set on Id1. The lid was taken off and found that the screws did not have the recess around the pocket, so the screws were to short only biting on 1-2 threads. Longer screws were instal...
Mon 2010-04-05 14:53:59	RG	Testing again with the single (1 Piece)absorber lid checking for oscillations and effect on overall performance.
Mon 2010-04-05 14:51:00	RG	Testing again with the single (1 Piece)absorber lid checking for oscillations and effect on overall performance.
Mon 2010-04-05 11:26:29		Re-attached full-absorber lids, ready for retest.
Mixer-Preamp: 147:197/20		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=147
Config #: **735**		
Wed 2010-03-31 10:30:39	DN	Awaiting new lids
Tue 2010-03-30 08:52:25		With the original preamp lids an oscillation is once again present. This time the Id for the preamps is set to 4.4mA before the device breaks into oscillation. However, previously with the same lids this device broke into oscillation when the Id's were set...
Mon 2010-03-29 14:29:19		It was decided in the Monday meeting to put the original preamp lids back on and check for confirmation that oscillations are indeed present, and if so, another modified set of lids will be tried to get at the fix for the oscillation issues.
Mon 2010-03-29 08:43:03	RG	Awaiting Approval... Measured across an IF of 5-10GHz Histogram Version: 2.0 This device is very stable because changes in preamp Id does not break this device into oscillation. The absorber in the lids appears to have solved the previous oscillation th...
Thu 2010-03-25 15:19:34	RG	The pramps have new lids with pockets milled for absorber to see if the oscillations disappear.
Mon 2010-03-22 11:15:15	RG	Measured across an IF of 5-10GHz Histogram version:2.0 Oscillation levels Mixer/preamp 1 (left) Id1=5.2mA Id2=6.1mA, Mixer 2 (Right) Id1=4.15mA Id2=4.17mA The pramp lids are going to receive new lids with pockets milled for absorber and retested at ...
Fri 2010-03-19 15:54:38	RG	Retesting...looking for oscillations...If none found, this device will undergo complete testing again, and preamp Id changes will be recorded that break this device into oscillation.

Time Stamp	By	Notes
Fri 2010-03-19 14:55:53		Preamp lids lapped, Ready to be retested.

Mixer-Preamp: 147:197/20

http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=147

Config #: 680

Time Stamp	By	Notes
Fri 2010-03-19 11:37:35	RG	Mixer block 147 was removed from cartridge #016 for oscillations at LO freq's 249,253,261, and 265GHz. Mike Lambeth will lap the lids prior to retesting in the MTS. See Dave S. write up on the previous record for further detailed information.
Mon 2010-03-08 12:44:50		From: John Effland [mailto:jeffland@nrao.edu] Sent: Monday, March 08, 2010 12:39 PM To: Dave Schmitt (dschmitt@nrao.edu) Cc: Matt Morgan (mmorgan2@nrao.edu); Tony Kerr (akerr@NRAO.EDU); Michael Shannon; mlacasse@nrao.edu Subject: Notes on Mixer-Preamp...
Tue 2010-02-23 13:34:29	RG	This is installed in Cartridge B6-016. It was reveiwed by M. Shannon and was found to be acceptable.
Thu 2009-12-17 08:25:49	RG	% Irej. < 10dB = LSB: 0.33%, USB: 0.33% % Rt >83K = LSB: 0.5%, USB: 3.1% Measured across the IF from 5-10GHz. Histogram Version 1.9
Tue 2009-12-15 08:59:29	RG	Replaced hybrid #038 with #507 for retesting purposes.

Mixer-Preamp: 147:197/20

http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=147

Config #: 525

Time Stamp	By	Notes
Mon 2009-12-07 16:02:09	RG	The Histogram reveals High Image rejection that exceeds the ALMA spec's. A new hybrid is needed for re-testing purposes.
Fri 2009-01-16 15:38:04	ML	Entering in final chip resistance
Thu 2009-01-15 13:44:19	ML	should work this time
Thu 2009-01-15 12:38:09	ML	Trying to add chips again:dnagaraj
Thu 2009-01-15 12:34:28	ML	Addidng chips:dnagaraj
Mon 2009-01-12 11:02:57	RG	% Rt > 83K = LSB 1.2%, USB .6% (10% Max.) % Irej < 10dB = LSB .41%, USB 5.8% (10% Max) No image rejection points below 7dB.
Mon 2009-01-12 10:24:46	ML	Added hybrid and cables.
Mon 2009-01-12 10:23:22	ML	Ready for testing.
Mon 2009-01-12 10:08:34	ML	Installed W03C12L56 chips.
Mon 2009-01-12 10:07:38	ML	Initial assembly.
Mon 2009-01-12 10:07:12	ML	Plated.
Mon 2009-01-12 10:06:26	ML	Passed acceptance inspection.
Mon 2009-01-12 10:05:14	FJ	Passed Acceptance inspection.
Mon 2009-01-12 10:04:38	ML	Initial Entry.

Time Stamp	By	Notes

Mixer-Preamp: 120:178/17
http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=120

Config #: **737**

Time Stamp	By	Notes
Thu 2010-04-08 15:28:27	RG	This device has absorber in the preamp lids and it still oscillates with the Id of the first two stages set at 4.0mA. It also oscillates when the Id for both bias supplies of the first two stages are set at 3.8mA.
Wed 2010-04-07 17:24:46	RG	Removed from a cartridge for oscillations. These preamps now have full absorber installed in preamp lids, Ready for retest.
Wed 2010-04-07 13:53:51	ML	Full absorber installed in preamp lids, Ready for retest.

Mixer-Preamp: 120:178/17
http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=120

Config #: **247**

Time Stamp	By	Notes
Wed 2010-03-31 10:35:18	RG	Awaiting Repair
Mon 2009-11-16 17:03:06	ML	Added preamp info

Time Stamp	By	Notes
Mixer-Preamp: **108:226/28** Config #: **739**		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=108
Thu 2010-04-08 13:02:28 ML		Full absorber installed in preamp lids, ready for retest.
Mixer-Preamp: **108:226/28** Config #: **643**		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=108
Wed 2010-03-31 10:38:20 RG		
Tue 2010-02-23 13:42:16 RG		This is installed in Cartridge B6-019. It was reveiwed by M. Shannon and was found to be not acceptable due to a large spike in Mixer Gain and spikes in NT.
Wed 2009-12-02 13:10:12 RG		Updated Hisogram to new 1.9 xlsm version, which accounts for gain slope.
Wed 2009-10-28 08:37:02 RG		Results are from 5-10GHz IF % Irej. <10dB = LSB: 0%, USB: 0.49% % Rt > 83K = LSB: 0%, USB: 4.2%
Tue 2009-10-27 09:28:53 RG		
Thu 2009-10-15 12:04:08 ML		Integrated with preamps, ready for testing.
Thu 2009-10-15 12:03:23 ML		Converted to IN1 tuning network.
Mixer-Preamp: **108:/** Config #: **184**		http://www.cv.nrao.edu/php%2Dinternal/ntc/Tasks3/Config/MxrPreampHome.php?id=108
Tue 2009-11-10 16:23:37		