

## 2 1/4/87 CMI FTC INFOMATION

**TAPE DRIVE PREPARATION.** remove the termination resistors off the emulex cnt card on drive.

make sure switches 1 & 5 ONLY are on

Power up drive .Insert tape into drive using an initialization disk type in <setuptsw> then hit del key.

if the drive fails type in <cleartsw> before starting the next test.

### NEVER POWER UP A DRIVE WITH THE TAPE INSERTED!!!!

DO NOT MOVE ON TO THE NEXT TEST UNLESS IT HAS PASSED  
PREVIOUS TEST

### FREQUENCY RESPONSE AFTER AUDIO HAS BEEN LINED UP

cmds used under cmi .... =file name

<i1> select instrument 1

<i2> " " 2

<sysl...> system load (a collection of sounds)

<sysr> reset system that is loaded

<vs> voice save

<vs m> voice save modification on fx page

<vl...> Voice load

<load...> loads rs page with sequence

<rpl> rs play mode

<rst> rs stop

<s> sample start

<fx> select fx page

<sa> select sample page

<ed> select wave form edit page

<VC ... S> STEREO voice create

<nph..> .. being a no. 1-16 polyphany??

BOOT CMI MAKE SURE CURRENT SYSTEM SOFTWARE IS INSTALLED

To install CMI system software were 2 disk's are supplied

either copy the disks from floppy to hard disk or from master hard disk to current hard disk.

To update master disk set up a cmi then with the new floppy system disk PBACK /F0 /K20 then the same for K21 system to be copied this is master h.d. up date.

To up date system on h.d. in cmi from master h.d.

PBACK /K20 /K0 & PBACK /K21 /K1

To copy from Floppy :

PBACK /F0 /K0 with the right disk then change disk PBACK /F0 /K1

to copy new system on to hard disk from floppy

CMD <pback /f0 /k0> this will be quered answer as desired N to abort Y to over write

After cmi has booted CMD type <dir> hit down arrow then type <safe> followed by the set KEY

\*sysl fred loads in 5 instruments i1 s00 zeroed wave

i2 s50 50hz sample

i3 s1k 1khz sample

i4 s10k 10khz sample

i5 s16k 16khz sample

CMD type in <SYSL FRED> this set's the 5 samples then go to SAMPLE PAGE <SA> select instrument 1 <I1> <ed> <zero> <y>

(instrument 1 has now been zeroed this should now be saved) <VS> <y>

# 1 1/4/87. CMI FTC INFOMATION

Insert cards in slot 27-20

## Using CURRENT diagnostic disk

Power up. Check VDU and alfa key board are working.

CMD type in <CH TEST2> 1 hr.

This checks all cards inserted.

Turn off CMI insert all cards in digital rack

CMD type in <CH TEST> 2hr

when this test has passed 1 or 2 times. proceeded

CMD type in <CH INTENSE;7> 4hr

this check out all CMI -39's

CMD type in <CH CCRDTST> 1hr

this checks out channel cards

After passing all these tests the CMI is ready for audio

## Use of initialization disk floppy os-9

CMI\_INIT. on a previously formated disk

This reformats the hard disk every thing on the disk will be lost.

<cmi\_init>

?<y> if you wish to reformat

?<y> if you wish to read the defectmap for the hard disk

?enter drive type e.g.<ndr1140:xt1140:xt1085> no spaces!!

?enter drive serial no.<the drive no.123>this is for archive perposes

?add more defects (if there are more defects to be added after schecking drive <y> or <n>

enter defects head/cylinder/byte

hit return 2times when complete

?edit defect <hit return if defectmap update is correct else type defect no. return and edit defectmap again>

?<y>

?<Y>

scheck /sc00 check the integeraty of the media formated

if an error is indicated on scheck write the sector number down if there is more than 5 do only the first five then reformat.(cmi\_init)

To translats the sector number to error map infomation type

Error will say something like

**crc error sector 0332bf**

or similar.

#tlat sector number

this will come back with head cylinder byte infomation.

ie #tlat 0332bf

cyl	head	byte
423	7	150

this error can now be included into the error map by adding it to the errormap list in cmi\_init.

## -Tape drive test

**NEVER POWER UP A DRIVE WITH THE TAPE INSERTED!!!!**

Remove the scsi cable from the cmi's tape drive power the drive to be tested by the harddisk power box. connect the tape drive to the scsi terminal at rear of machine.

### 3 1/4/87 CMI FTC INFOMATION

Using the AWA G232 osc:select 50hz @ -13 to -12 dbm connect o/p to the right input of the cmi <sa> <i2>(instrument 2 is now selected )the vu bar on the lhs of screen should be just be above 3/4 of the full level.

CMD <s> sample will now proceed when sample is done type <VS> <y> to save  
Now select instrument 3 <I3> <fx> check level is set for 0 not -6 return to <sa> select 1khz on osc DON'T TOUCH THE LEVEL CONTROL sample <s> <VS> <Y> .

Now select <i4> select 10khz on osc <s> <vs><y>

Now select <i5> select 16khz on osc <s> <vs><y>

Samples are now complete and saved .

## ACTUAL RESPONSE

<LOAD X.RS> ON RS PAGE

then load in system	chk1khz	1khz test
	chk50hz	50hz test
	chk10khz	10khz test
	chk16khz	16khz test
	chk0hz	0hz test

results expected;

1khz dist better than 64db

1khz level all the same

50hz level +/-3db

10khz level +/-4db

16khz level better than 3db

0hz level better then -86db

RS page <play>

<sysl chk1khz> when system load is complete check all levels are the same using distortion meter trim any channels which are not perfect.goto the <FX> page set level to <-6> set then save this <vs m>the <sysl chk1khz> check all channels are the same level +/-2db & trim to min. dist. then write them down on freq .response sheet.

Set level back to <0> set on <i16> and on output 16 set reference level to read 0dbm

rel.This now set for doing all level checks do not change any thing on distortion meter.

<sysl chk50hz> check and record all levels ACCURATELY all channels must be similar to each other in response i.e. 50hz - 16khz

<sysl chk10khz> as above

<sysl chk16khz> as above this level should be better than -3dbm

<sysl chk0hz> audio zero change scale on distortion meter to -80dbm scale results should be better than -86 dbm.

If any tests don't meet min. requirements have audio module recaled.

## PHASE TESTING

<sysr> reset system

<vl pulse> load pulse sample

<nph16> 16 note poly sound

<rs> rs page

<load y> rs sequence

<PL>play sequence

get a cro and special canon to rca cable

look at all outputs with the cro it should appear to be a +ve going pules on ALL channels if they vary rectify the problem by reversing the wires to pin 2 & 3 of the audio channel concerned.

### phase testing of sampler

this is to check that there is no phase reversal on the input

<sysr>

<vc fred s> create stereo voice

<ic><vl pulse>

<rs>tab down to instrument no. box and change 1-2 i.e.2 SET

### 3 1/4/87 CMI FTC INFOMATION

Using the AWA G232 osc:select 50hz @ -13 to -12 dbm connect o/p to the right input of the cmi <sa> <i2>(instrument 2 is now selected )the vu bar on the lhs of screen should be just be above 3/4 of the full level.

CMD <s> sample will now proceed when sample is done type <VS> <y> to save  
Now select instrument 3 <I3> <fx> check level is set for 0 not -6 return to <sa> select 1khz on osc DON'T TOUCH THE LEVEL CONTROL sample <s> <VS> <Y> .

Now select <i4> select 10khz on osc <s> <vs><y>

Now select <i5> select 16khz on osc <s> <vs><y>

Samples are now complete and saved .

### ACTUAL RESPONSE

<LOAD X.RS> ON RS PAGE

then load in system	chk1khz	1khz test
	chk50hz	50hz test
	chk10khz	10khz test
	chk16khz	16khz test
	chk0hz	0hz test

results expected;

1khz dist better than 64db

1khz level all the same

50hz level +/-3db

10khz level +/-4db

16khz level better than 3db

0hz level better then -86db

RS page <play>

<sysl chk1khz> when system load is complete check all levels are the same using distortion meter trim any channels which are not perfect.goto the <FX> page set level to <-6> set then save this <vs m>the <sysl chk1khz> check all channels are the same level +/-2db & trim to min. dist. then write them down on freq .response sheet.

Set level back to <0> set on <i16> and on output 16 set reference level to read 0dbm

rel.This now set for doing all level checks do not change any thing on distortion meter.

<sysl chk50hz> check and record all levels ACCURATELY all channels must be similar to each other in response i.e. 50hz - 16khz

<sysl chk10khz> as above

<sysl chk16khz> as above this level should be better than -3dbm

<sysl chk0hz> audio zero change scale on distortion meter to -80dbm scale results should be better than -86 dbm.

If any tests don't meet min. requirements have audio module recaled.

### PHASE TESTING

<sysr> reset system

<vl pulse> load pulse sample

<nph16> 16 note poly sound

<rs> rs page

<load y> rs sequence

<PL>play sequence

get a cro and special canon to rca cable

look at all outputs with the cro it should appear to be a +ve going pules on ALL channels if they vary rectify the problem by reversing the wires to pin 2 & 3 of the audio channel concerned.

### phase testing of sampler

this is to check that there is no phase reversal on the input

<sysr>

<vc fred s> create stereo voice

<ic><vl pulse>

<rs>tab down to instrument no. box and change 1-2 i.e.2 SET