Meridian G68

GENERAL INFORMATION

SIMPLWINDOWS FILE NAME:	C3 Meridian G68 processor V1.02.umc
CATEGORY:	Receiver / Processor
CURRENT VERSION:	1.02
PROGRAMMER:	GO
SUMMARY:	Full control of main zone, copy zone & dsp with full feedback
SYSTEMBUILDER COMPATIBLE	Yes
GENERAL NOTES:	This module will control all functions on a Meridian G68 processor. It has been designed in such a way as to extract as much feedback information as it can from the processor. Functions that can be controlled from this module include: • Main source selection by way of analog input • Main volume & mute control • Main source dsp fuctions by way of analog input • Zone source selection by way of analog input • Zone volume & mute control* • OSD, setup & menu functions *Note: There is no "un-mute" command for the G68 zone output. However this module gets round this and provide standard mute / un-mute & toggle functions in a similar manner to the main zone. This also means that muting the copy zone does not kill the copy zone source feedback as is the case on other modules for controlling this device. There is an option on the module to determine how the copy mute function operates. This is discussed later in this document. All C3 modules use analogs for source selection. This module uses the following values to set the sources and dsp functions: **Sources:**

Sources:

Source	Main	Copy	Notes
CD	1d	1d	
Tuner	2d	2d	
Aux	3d	3d	
DVD	4d	4d	
Cable	5d	5d	
TV	6d	6d	
Satellite	7d	7d	
VCR1	8d	8d	
VCR2	9d	9d	
Tape	10d	10d	
Game	11d	11d	
Disc	12d	12d	
Main Source	NA	13d	Will cause copy to follow main
Copy mute	NA	14d	Not required if using the built-in mute functions
Off	65535d	65535d	Default 'power off value' parameter

Assigning any valid source to an input will switch on the main or copy zone circuits automatically. Once powered up the main or copy zone will adjust the volume as set by the 'default volume' parameter. Any analog source can be forced off by setting the value = 'power off value' parameter. The default is 65535d.

Using analog source values enables all C3 audio/video modules to be dropped into existing programs where a PAD8 or BiPad may be used. This allows for greater programming flexibility.

The dsp functions will be covered on the next page

DSP:

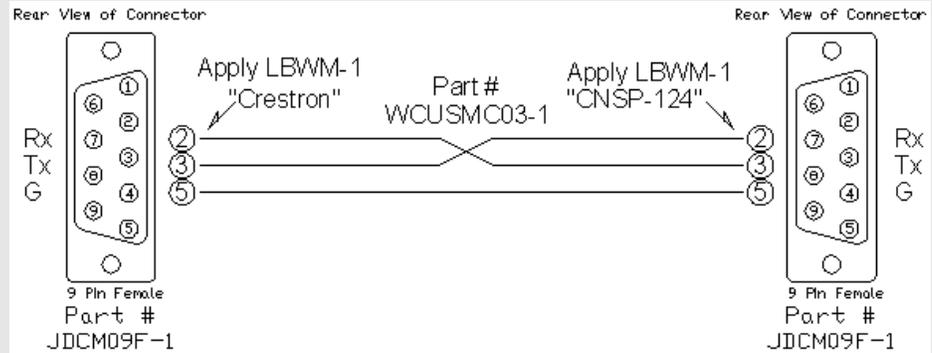| Name	Value	Comment
Direct	1d	Front left / right only
Music	2d	Recommended for recordings made with spaced omnidirectional microphones, or using a mono-surround technique
Trifield	3d	Recommended for well-made recordings and stereo television broadcasts that are not Dolby Surround encoded
Ambisonics	4d	Decode UHJ format, the two-channel stereo-compatible encoding found on Ambisonically recorded discs and broadcasts
Super	5d	Uses the ambisonic decoder. Recommended for true coincident microphone techniques & multi-tracked or multi-miked recordings
Stereo	6d	Front left/right mono & subs are also used
MusicLogic	7d	Based on Pro Logic II with user-adjustable steering, to provide an exciting experience with many types of studio-produced music
Mono	8d	You all know how this one works
TV Logic	9d	Logic preset based on Pro Logic IIx with the addition of user-adjustable steering for TV broadcasts
Pro logic IIx music	10d	Uses the Pro Logic IIx DSP processing mode to decode music sources
Pro logic IIx movie	11d	Recommended for Dolby surround encoded material. Can give good results with two-channel sources not specifically encoded for Dolby Surround, including two-channel Dolby Digital sources
Pro logic IIx THX	12d	Recommended for Dolby surround encoded material. Can give good results with two-channel sources not specifically encoded for Dolby Surround, including two-channel Dolby Digital sources adding THX Cinema processing
Discrete	13d	Similar to Cinema, except that it uses the Music speaker layout and sets the LFE level to -10dB
Cinema	14d	Recommended for listening to multichannel movie soundtracks when no further processing is required
Pro logic IIx music6	15d	Creates four surround signals; it is intended for multichannel music playback from sources such as DVD-A or SACD
Pro logic IIx movie6	16d	Creates four surround signals from traditional multichannel source material like Dolby Digital 5.1
THX	17d	Re-equalises the signals to suit domestic listening conditions, and applies frequency-response correction and decorrelation to the surround channels
THX EX	18d	As THX but with surround processing
THX ultraII cinema	19d	Recommended for movie soundtracks that are not Dolby Surround EX encoded
THX music	20d	Recommended for listening to multichannel music
User preset 1	21d	
User preset 2	22d	
User preset 3	23d	
User preset 4	24d	
User preset 5	25d	
User preset 6	26d	
User preset 7	27d	
User preset 8	28d	
User preset 9	29d	
User preset 10	30d	

COMMS SETUP:	(Default) 9600, 8, 1, N. Handshaking: None. RTS/CTS are not used.

CABLE DIAGRAM:

INPUT DEFINITIONS

[rx$]	S	Data from device
[standby]	D	Switch off the device
[main.vol+]	D	Increase main zone volume
[main.vol-]	D	Decrease main zone volume
[mute.toggle]	D	Toggle main zone mute on / off
[mute.on]	D	Mute main zone
[mute.off]	D	Un-mute main zone
[main.source]	A	Assign source to main & turn on power. Range 1-12d
[main.dsp]	A	Assign dsp function to main zone. Range 1-30d

[zone.vol+]	**D**	Increase copy zone volume
[zone.vol-]	**D**	Decrease copy zone volume
[zone.mute.toggle]	**D**	Toggle copy zone mute on /off
[zone.mute.on]	**D**	Mute copy zone
[zone.mute.off]	**D**	Un-mute copy zone
[zone.source]	**A**	Assign source to copy zone. Range 1-13d
zone.source.change.unmute	**D**	Change how the copy zone mute functions: Low: changing the [zone.source] input between a value of 1-13d WILL NOT un-mute the zone circuit. High: changing the [zone.source] input between a value of 1-13d WILL un-mute the zone circuit.
[setup]	**D**	Operate the unit setup menu
[osd]	**D**	Toggle the OSD on / off
[navigation keys]	**D**	Use navigation keys when a menu is on-screen
[enter]	**D**	Used when in menu's or osd functions
[return]	**D**	Used when in menu's or osd functions
[mono]	**D**	Toggle the main zone mono mode on / off
[band]	**D**	Toggle am / fm functions

OUTPUT DEFINITIONS

tx$	**S**	Commands to device
[power.on.fb]	**D**	Indicates power on
[power.off.fb]	**D**	Unit is in standby
[mute.on.fb]	**D**	Indicates that the main zone is muted
[mute.off.fb]	**D**	Indicates that the main zone is un-muted
[main.vol.fb]	**A**	Main zone volume level. Use to drive a gauge. Range 1-99d
[main.vol.bar.fb]	**A**	Main zone volume level. Use to drive a bar graph. Range 0-65535d
[main.vol.sp]	**D**	This output will be driven high as the volume level changes. It will remain high for a value determined by the 'volume subpage hold time' parameter after the volume has stabilised. Use this output to drive a subpage showing volume level
[main.source.fb]	**A**	Indicates the current selected main zone source
[main.source.fb$]	**S**	Name of the current main zone source
[main.dsp.fb]	**A**	Indicates the current selected main zone dsp function
[main.dsp.name.fb$]	**S**	Name of the current main zone psp function
[zone.vol.fb]	**A**	Copy zone volume level. Use to drive a gauge. Range 1-99d
[zone.vol.bar.fb]	**A**	Copy zone volume level. Use to drive a bar graph. Range 0-65535d

[zone.vol.sp]	**D**	This output will be driven high as the volume level changes. It will remain high for a value determined by the 'volume subpage hold time' parameter after the volume has stabilised. Use this output to drive a subpage showing volume level
[zone.mute.on.fb]	**D**	Indicates that the copy zone is muted
[zone.mute.off.fb]	**D**	Indicates that the copy zone is un-muted
[zone.source.fb]	**A**	Indicates the current selected copy zone source
[zone.source.fb$]	**S**	Name of the current copy zone source
[navigation keys.fb]	**D**	Pass through of input to output when power is on
[enter.fb]	**D**	Pass through of input to output when power is on
[return.fb]	**D**	Pass through of input to output when power is on
[mono.fb]	**D**	Indicates unit is in mono mode
[band.fb]	**D**	Pass through of input to output when power is on. Indicates band type
[radio.sp]	**D**	This output will go high when a valid radio source is selected
[display.mimic.fb$]	**S**	20 byte mimic of the G68 front panel. This duplicates the info shown on the front of the unit
[source_n_.label.fb$]	**S**	Indirect text outputs to touchpanel. Determined by 'source name' parameters

PARAMETERS

power off value	**(d)**	Set the value that will trigger the unit to switch off. Default 65535d
volume subpage hold time	**(s)**	Set the duration of the volume subpage. Default 3 secs
hold time	**(s)**	Hold time for volume functions
repeat time	**(s)**	Repeat time for volume functions
default volume	**(d)**	Volume to be set after power on

REVISION NOTES

1.02	**GO**	• Added copy zone volume controls
1.01	**GO**	• Reworked command extraction routine • Added indirect text outputs
1.00	**GO**	Initial release
COMMENTS:		

Help file compiled by:	GO
Help file checked by:	GO
Created:	05/08/10
Modified:	05/08/10 (GO)
Released:	05/08/10