



customcodecrafters

Screen Excellence TAM-2 160

GENERAL INFORMATION

SIMPLWINDOWS FILE NAME:	C3 TAM-2 160 v1.x.x.umc
CATEGORY:	Screen control
CURRENT VERSION:	1.0.1
PROGRAMMER:	GO
SUMMARY:	Controls a TAM-2 160 True Aspect Masking system
SYSTEMBUILDER COMPATIBLE	No

GENERAL NOTES:

This module will control all the mask functions of the TAM-2 160 True Aspect Masking system. Functions that can be controlled from this module include:

- Mask movement position
- Mask open / close functions
- Store and recall of up to 36 preset memory positions
- Allows control of individual motor controllers as well as full screen mask

Basic Setup:

If you are unsure of the address settings for the controllers, use Windows Hyper Terminal to establish a connection with the RQbridge. The communication settings are the same as those listed below under **COMMS SETUP**.

Setup Hyper Terminal with the following properties:

File>Properties

[Settings] tab

Emulation: select "Auto detect"

Press [ASCII Setup...]

ASCII Sending section:

Check "Send line ends with line feeds"

Check "Echo typed characters locally"

ASCII Receiving section:

Check "Append line feeds to incoming line ends"

Check "Wrap lines that exceed terminal width"

In the console window press the [Enter] key.

You should get **!BR1U;** (or similar) back.

Send: **!ØØØv?;**

The RQbridge should respond with something like:

!BR1vB1Ø;!ABCV A1Ø;!XYZvA1Ø;

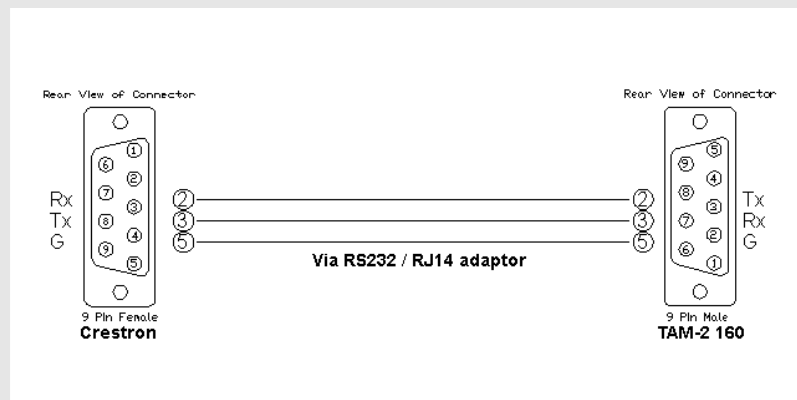
The characters in red will indicate the address of the first and second RQ60 motor controllers. Enter these values in the *controller 1 address* and *controller 2 address* parameter fields on the module.

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



INPUT DEFINITIONS

[rx\$]	S	Data from device
[select.controller+/-]	D	Select the controller (Steps through All,1,2)
[direct.select.controller.x]	A	Directly select a controller (0d: All, 1d: controller 1, 2d: controller 2)
[real.time.move]	D	Enable real time move for the selected controller(s) Note: This function is provided as an aid when setting up the mask positions and is not for general use. When [real.time.move] is enabled the screen mask will move to the requested position when either of the [move.value+/-] buttons are released.
[move.value+/-]	D	Select the move value between 0-99
[move.value]	A	Directly set the move value. Valid range is 0-99
[open.all.controllers]	D	Fully opens the mask on all controllers
[close.all.controllers]	D	Fully closes the mask on all controllers
[move.all.controllers]	D	Move the mask to the value as determined by [move.value.fb]
[recall.all.controllers]	D	Recall the mask memory as determined by [select.controller.memory.fb]
[query]	D	Returns the node address and firmware of the RQbridge and RQ60 controllers
[calibrate]	D	The controller will run the motors and record the travel time from fully open to fully closed and back to open
[open.controller.x]	D	Fully opens the mask on the selected controller
[close.controller.x]	D	Fully closes the mask on the selected controller
[move.controller.x]	D	Move the mask to the value as determined by [move.value.fb]
[recall.controller.x]	D	Recall the mask memory for the selected controller as determined by [select.controller.memory.fb]
[store.controller.x]	D	Store the mask memory for the selected controller as determined by [select.controller.memory.fb]
[identify.controller.x]	D	Asserting this input will cause the LED to flash on the selected controller. Use this as an aid when diagnosing and setting up the controllers



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[select.controller.memory+/-]	D	Select the mask memory for the selected controller
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[select.controller.memory]	A	Directly select the mask memory for the selected controller
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OUTPUT DEFINITIONS

tx\$	S	Commands to device
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[current.controller.fb]	A	Indicates the current controller as determined by feedback from the RQbridge
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[direct.select.controller.x.fb]	A	Indicates the currently selected controller
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[real.time.move.fb]	D	Indicates that real time move is enabled
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[position.fb]	A	Indicates the position of the selected controller. Range 0-99d
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[position.level.fb]	A	Bar graph indication of the position of the selected controller. Range 0-65535d
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[move.value.fb]	A	Shows the current set move value for the selected controller. Range 0-99d
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[move.level.fb]	A	Bar graph indication of the move level for the selected controller. Range 0-65535d
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[info.fb]	S	Status indication for the user
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[select.controller.memory.fb]	A	Indicates the current mask memory slot for the selected controller
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PARAMETERS

controller 1 address	(s)	Set controller 1 address (default:001)
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controller 2 address	(s)	Set controller 2 address (default:002)
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hold time	(s)	Hold time for select functions
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repeat time	(s)	Repeat time for select functions
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REVISION NOTES

1.0.0	GO	Initial release
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1.0.1	GO	Re-ordering of signal names on argument definition for clarity
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COMMENTS:		
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Help file compiled by: GO
Help file checked by: GO
Created: 30/08/11
Modified: 05/09/11 (GO)
Released: 05/09/11

C3 Custom Code Crafters (Europe) Ltd.
One, The Market Place, Station Road, Thorpe-Le-Soken, Essex, CO16 0HQ.

Telephone: +44 (0) 1255 862850 Fax: +44 (0) 1255 863909 Internet: <http://www.C3-eu.com>