



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;

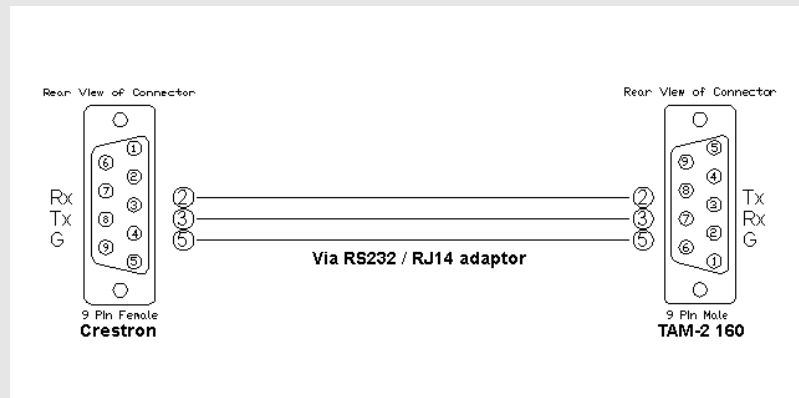
The characters in red will indicate the address of the first and second RQ60 motor controllers. Enter these values in the *controller 1 address* and *controller 2 address* parameter fields on the module.

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



customcodecrafters

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



customcodecrafters

[select.controller.memory+/-]	D	Select the mask memory for the selected controller
-------------------------------	----------	--

[select.controller.memory]	A	Directly select the mask memory for the selected controller
----------------------------	----------	---

OUTPUT DEFINITIONS

tx\$	S	Commands to device
------	----------	--------------------

[current.controller.fb]	A	Indicates the current controller as determined by feedback from the RQbridge
-------------------------	----------	--

[direct.select.controller.x.fb]	A	Indicates the currently selected controller
---------------------------------	----------	---

[real.time.move.fb]	D	Indicates that real time move is enabled
---------------------	----------	--

[position.fb]	A	Indicates the position of the selected controller. Range 0-99d
---------------	----------	--

[position.level.fb]	A	Bar graph indication of the position of the selected controller. Range 0-65535d
---------------------	----------	---

[move.value.fb]	A	Shows the current set move value for the selected controller. Range 0-99d
-----------------	----------	---

[move.level.fb]	A	Bar graph indication of the move level for the selected controller. Range 0-65535d
-----------------	----------	--

[info.fb]	S	Status indication for the user
-----------	----------	--------------------------------

[select.controller.memory.fb]	A	Indicates the current mask memory slot for the selected controller
-------------------------------	----------	--

PARAMETERS

controller 1 address	(s)	Set controller 1 address (default:001)
----------------------	------------	--

controller 2 address	(s)	Set controller 2 address (default:002)
----------------------	------------	--

hold time	(s)	Hold time for select functions
-----------	------------	--------------------------------

repeat time	(s)	Repeat time for select functions
-------------	------------	----------------------------------

REVISION NOTES

1.0.0	GO	Initial release
-------	-----------	-----------------

1.0.1	GO	Re-ordering of signal names on argument definition for clarity
-------	-----------	--

COMMENTS:		
------------------	--	--



customcodecrafters

© 2011 Custom Code Crafters (Europe) Ltd.

Please note:

If this module has not been supplied to you by Custom Code Crafters (Europe) or (North America) then you are using it illegally. Please read the following terms and conditions.

License terms & conditions:

This software & related Source Code is the intellectual property of Custom Code Crafters (Europe) Ltd. Custom Code Crafters (Europe) Ltd grants authorized Dealers, Partners and end-users the non-exclusive right to use and/or compile and/or compress the Software and upload such compiled and/or compressed Software files to control systems within the bounds of the Software agreement.

No right is granted to otherwise copy, reproduce, modify, upload, download, transmit or distribute the Software & Source code or derivative works in any way.

The Software and Source Code and derivative works are protected by copyright trade secret and other intellectual property laws and by international treaties which provide rights and obligations in addition to the rights and obligations set forth here.

This module may contain manufactures communication protocols. These are the intellectual property of the manufacturer in question and remain their intellectual property. No right is granted to otherwise copy, reproduce, modify, upload, download, transmit, distribute or reverse engineer the protocol information or derivative works in any way.

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>