

# ANALOG WAY Midra

## Module: MAIN

### Crestron 2-series & 3-series

Date: **December 10, 2013**  
Driver version: **V1.00**  
Tested with: **Midra Firmware V01.00.12**

## GENERAL

This module is the core module for controlling Midra series swithers. It must be implemented once in the main program.

## IP CONNECTION

You have to implement one TCP-Client Crestron object in your project and connect it to the main module.

IP address: Midra machine IP address  
Default port: **10500**

## Control

From_device	String_in	To be connected to TCP-IP client RX\$
To_device	String_out	To be connected to TCP-IP client TX\$
Refresh_General_Statuts_PB	Digital_in	Pulse for initialization after each TPC-IP connection
Wake_Up_PB	Digital_in	Pulse to wake-up the Midra device
Shutdown_PB	Digital_in	Pulse to shutdown the Midra device
Refresh_General_Statuts_In_Progress_FB	Digital_out	Module status refresh in progress
Refresh_Next_Module_OS	Digital_out	To be connected to next module for daisy chain initialization
Device_Standby_FB	Digital_out	Standby status
Device_Standby_Progression	Analog_out	Standby operation progress status
Device_Ready_FB	Digital_out	Device 'ready' status, after power up

### Inter\_connect\_screen\_modules

You can connect up to 2 Midra\_Screen optional modules. To prevent processor overloading, do not add any unnecessary Midra\_Screen modules in your program (for ex, when the corresponding screen is not used or not available).

X is screen number (1=>2)

ScreenX_Available_FB	Digital_in	Screen X validity (1 if valid, 0 if unused)
From_Module_ScreenX	String_in	Midra_Screen X module commands to Midra device
Mess_Txt_From_Module_ScreenX	String_in	Midra_Screen X module text status
To_Module_ScreenX	String_out	From TCP-IP client RX\$ to Midra_Screen X module

### Inter\_connect\_screen\_preset\_modules

You can connect up to 2 Midra\_Preset optional modules. To prevent processor overloading, do not add any unnecessary Midra\_Preset modules in your program (for ex, when the corresponding screen is not used or not available).

X is the screen number (1=>2)

From_Module_ScreenX_Presets	String_in	Commands from Midra_Screen_Presets module to Midra device (screen X)
Mess_Txt_From_Module_ScreenX_Presets	String_in	Midra_Screen_Presets module status text (screen X)
To_Module_ScreenX_Presets	String_out	From TCP-IP client RX\$ to Midra_Screen_Presets module (screen X)

## Inter\_connect\_other\_modules

Optional modules connections (to be connected if the corresponding optional modules are used in your program).

From_Module_In_Video	String_in	Commands from Midra_In_Video module to Midra device
Mess_Txt_From_Module_In_Video	String_in	Module_In_Video module status text
To_Module_In_Video	String_out	From TCP-IP client RX\$ to Midra_In_Video module
From_Module_In_Audio	String_in	Commands from Midra_Audio module to Midra device
Mess_Txt_From_Module_In_Audio	String_in	Midra_Audio module status text
To_Module_In_Audio	String_out	From TCP-IP client RX\$ to Midra_Audio module
From_Module_Frame_logo	String_in	Commands from Midra_Frame_logo module to Midra device
Mess_Txt_From_Module_Frame_logo	String_in	Midra_Frame_logo module status text
To_Module_Frame_logo	String_out	From TCP-IP client RX\$ to Midra_Frame_logo module

## General

User_Messages_TXT	String_out	User text messages
Device_Type\$	String_out	Device type
Cmd_Set_Ver\$	String_out	Device version
Updater_Ver\$	String_out	Device updater version
Device_Serial_Num\$	String_out	Device serial number

## Flags

Device capabilities flags (could be enabled or disabled depending on the type of device and options).

Flags_Mixer_Mode_Available	Digital_out	1 if the Mixer mode is available
Flags_Matrix_Mode_Available	Digital_out	1 if the Matrix mode is available
Flags_Matrix_Mode_Type_Basic	Digital_out	1 if the Matrix mode type 'basic' is available
Flags_Matrix_Mode_Type_Medium	Digital_out	1 if the Matrix mode type 'medium' is available
Flags_Matrix_Mode_Type_Complex	Digital_out	1 if the Matrix mode type 'complex' is available
Flags_Quad_Mode_Available	Digital_out	1 if the Quadra-vision mode is available
Flags_Mosaic_Display_Available	Digital_out	1 if the Mosaic display is available on the output 2
Flags_OSD_Available	Digital_out	1 if the On Screen Display (OSD) is available
Video_Out_Available_FB	Digital_out	1 if the Video output is available
Layer_Flip_Available_FB	Digital_out	1 if the Live Layer content flip option is available
Background_Resize_Available_FB	Digital_out	1 if the background layer is resizable
Frame_Only_Available_FB	Digital_out	1 if only frames are available for Quick Frame (no logo)

Flags_Mixer_Mode_Layer_Frame_Available	Digital_out	1 if layer Frame is available with Mixer mode
Flags_Mixer_Mode_Layer_Pip1_Available	Digital_out	1 if layer PiP1 is available with Mixer mode
Flags_Mixer_Mode_Layer_Pip2_Available	Digital_out	1 if layer PiP2 is available with Mixer mode
Flags_Mixer_Mode_Layer_Pip3_Available	Digital_out	1 if layer PiP3 is available with Mixer mode
Flags_Mixer_Mode_Layer_Pip4_Available	Digital_out	1 if layer PiP4 is available with Mixer mode
Flags_Mixer_Mode_Layer_Logo1_Available	Digital_out	1 if layer Logo 1 is available with Mixer mode
Flags_Mixer_Mode_Layer_Logo2_Available	Digital_out	1 if layer Logo 2 is available with Mixer mode
Flags_Mixer_Mode_Layer_Audio_Available	Digital_out	1 if layer Audio is available with Mixer mode
Flags_Matrix_Mode_Layer_Frame_Available	Digital_out	1 if layer Frame is available with Matrix mode
Flags_Matrix_Mode_Layer_Pip1_Available	Digital_out	1 if layer PiP1 is available with Matrix mode
Flags_Matrix_Mode_Layer_Pip2_Available	Digital_out	1 if layer PiP2 is available with Matrix mode
Flags_Matrix_Mode_Layer_Pip3_Available	Digital_out	1 if layer PiP3 is available with Matrix mode
Flags_Matrix_Mode_Layer_Pip4_Available	Digital_out	1 if layer PiP4 is available with Matrix mode
Flags_Matrix_Mode_Layer_Logo1_Available	Digital_out	1 if layer Logo 1 is available with Matrix mode
Flags_Matrix_Mode_Layer_Logo2_Available	Digital_out	1 if layer Logo 2 is available with Matrix mode
Flags_Matrix_Mode_Layer_Audio_Available	Digital_out	1 if layer Audio is available with Matrix mode
Flags_Quad_Mode_Layer_Frame_Available	Digital_out	1 if layer Frame is available with Quadravision mode
Flags_Quad_Mode_Layer_Pip1_Available	Digital_out	1 if layer PiP1 is available with Quadravision mode
Flags_Quad_Mode_Layer_Pip2_Available	Digital_out	1 if layer PiP2 is available with Quadravision mode
Flags_Quad_Mode_Layer_Pip3_Available	Digital_out	1 if layer PiP3 is available with Quadravision mode
Flags_Quad_Mode_Layer_Pip4_Available	Digital_out	1 if layer PiP4 is available with Quadravision mode
Flags_Quad_Mode_Layer_Logo1_Available	Digital_out	1 if layer Logo 1 is available with Quadravision mode
Flags_Quad_Mode_Layer_Logo2_Available	Digital_out	1 if layer Logo 2 is available with Quadravision mode
Flags_Quad_Mode_Layer_Audio_Available	Digital_out	1 if layer Audio is available with Quadravision mode
Flags_Border_Style_None_Available	Digital_out	1 if Border style 'None' is available
Flags_Border_Style_Edge_Available	Digital_out	1 if Border style 'Edge' is available
Flags_Border_Style_Smooth_Available	Digital_out	1 if Border style 'Smooth' is available
Flags_Border_Style_Smooth_Edge_Available	Digital_out	1 if Border style 'Smooth Edge' is available
Flags_Border_Style_Shadow_Available	Digital_out	1 if Border style 'Shadow' is available
Flags_Frame_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for the background layer
Flags_Frame_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for the background layer
Flags_Frame_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for the background layer
Flags_Frame_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for the background

		layer
Flags_Frame_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for the background layer
Flags_Frame_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for the background layer
Flags_Frame_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for the background layer
Flags_PiP1_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for PiP1
Flags_PiP1_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for PiP1
Flags_PiP1_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for PiP1
Flags_PiP1_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for PiP1
Flags_PiP1_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for PiP1
Flags_PiP1_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for PiP1
Flags_PiP1_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for PiP1
Flags_PiP2_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for PiP2
Flags_PiP2_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for PiP2
Flags_PiP2_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for PiP2
Flags_PiP2_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for PiP2
Flags_PiP2_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for PiP2
Flags_PiP2_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for PiP2
Flags_PiP2_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for PiP2
Flags_PiP3_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for PiP3
Flags_PiP3_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for PiP3
Flags_PiP3_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for PiP3
Flags_PiP3_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for PiP3
Flags_PiP3_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for PiP3
Flags_PiP3_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for PiP3
Flags_PiP3_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for PiP3
Flags_PiP4_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for PiP4
Flags_PiP4_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for PiP4
Flags_PiP4_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for PiP4
Flags_PiP4_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for PiP4
Flags_PiP4_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for PiP4
Flags_PiP4_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for PiP4
Flags_PiP4_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for PiP4

Flags_Logo1_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for Logo 1
Flags_Logo1_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for Logo 1
Flags_Logo1_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for Logo 1
Flags_Logo1_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for Logo 1
Flags_Logo1_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for Logo 1
Flags_Logo1_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for Logo 1
Flags_Logo1_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for Logo 1
Flags_Logo2_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for Logo 2
Flags_Logo2_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for Logo 2
Flags_Logo2_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for Logo 2
Flags_Logo2_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for Logo 2
Flags_Logo2_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for Logo 2
Flags_Logo2_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for Logo 2
Flags_Logo2_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for Logo 2
Flags_Audio_Transition_Cut_Available	Digital_out	1 the Cut Transition is available for Audio (Audio layer is considered as a standard layer)
Flags_Audio_Transition_Clean_Cut_Available	Digital_out	1 the Clean Cut Transition is available for Audio (Audio layer is considered as a standard layer)
Flags_Audio_Transition_Fade_Available	Digital_out	1 the Fade Transition is available for Audio (Audio layer is considered as a standard layer)
Flags_Audio_Transition_Slide_Available	Digital_out	1 the Slide Transition is available for Audio (Audio layer is considered as a standard layer)
Flags_Audio_Transition_Wipe_Available	Digital_out	1 the Wipe Transition is available for Audio (Audio layer is considered as a standard layer)
Flags_Audio_Transition_Circle_Available	Digital_out	1 the Circle Transition is available for Audio (Audio layer is considered as a standard layer)
Flags_Audio_Transition_Stretch_Available	Digital_out	1 the Stretch Transition is available for Audio (Audio layer is considered as a standard layer)

## Video\_Mode

Video_Mode_Mixer_PB	Digital_in	Pulse to enable Mixer mode
Video_Mode_Matrix_PB	Digital_in	Pulse to enable Matrix mode
Video_Mode_Quad_PB	Digital_in	Pulse to enable Quad mode
Video_Mode_Mixer_PB	Digital_out	1 if Mixer mode is enabled
Video_Mode_Matrix_PB	Digital_out	1 if Matrix mode is enabled
Video_Mode_Quad_PB	Digital_out	1 if Quad mode is enabled

## Parameters

Time_Message	In seconds	Time duration for displaying user messages
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