

# ANALOG WAY LIVECORE™

## Module: MAIN PL

### Crestron 3-series

Date: **February 06th 2019**  
Driver version: **V4.02**  
Compatible with: **LiveCore™ Firmware v4.00.x or above**

## GENERAL

This module is the core module for controlling LiveCore™ series processors. It must be connected to any optional module used in your program. Even if you use only one optional module, the MAIN PL module must be included in the project. This module mainly provides inter-modules connectivity and synchronization, global TAKE feature, LiveCore™ processor information feedback as well as some remote control functions.

## CONNECTION

You have to implement one Crestron TCP/IP client object in your project and connect it to the MAIN PL module.

IP address: LiveCore™ processor IP address  
Default port: **10500**

## Control

### Main

From_device	String_in	To be connected to TCP-IP client RX\$
Licence_Txt	String_in	License string
To_device	String_out	To be connected to TCP-IP client TX\$
Licence_Txt_FB	String_out	License number (ASCII) for indirect text display
Licence_validity_FB	Digital_in	1 if valid license, 0 if not.
Refresh_General_Statuts_PB	Digital_in	To be pulsed for initialization after each TCP_IP connection
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
Refresh_All_Modules_OS	Digital_out	Pulsed to indicate that a refresh of all modules is needed.

### Inter\_connect\_screen\_Modules

You can connect up to 8 optional SCREEN modules (LiveCore\_Screen).

X is screen index (1=>8)

ScreenX_Available_FB	Digital_in	Screen validity (1 if valid)
From_Module_ScreenX	String_in	LiveCore_ScreenX module commands to LiveCore™ processor
Mess_Txt_From_Module_ScreenX	String_in	LiveCore_ScreenX module text status
To_Module_ScreenX	String_out	From TCP-IP client RX\$ to LiveCore_ScreenX module

### Inter\_connect\_screen\_Preset\_Modules

You can connect up to 8 PRESET optional modules (LiveCore\_Preset).

X is the screen index (1=>8)

From_Module_ScreenX_Presets	String_in	Module_ScreenX_Presets module commands to LiveCore™ processor
Mess_Txt_From_Module_ScreenX_Presets	String_in	Module_ScreenX_Presets module status text
To_Module_ScreenX_Presets	String_out	From TCP-IP client RX\$ to Module_ScreenX_Presets module

## Inter\_connect\_Other\_Modules

Optional modules connections. These connections are to be connected if corresponding optional modules are used.

From_Module_In	String_in	Module_In module commands to LiveCore™ processor
Mess_Txt_From_Module_In	String_in	Module_In module status text
To_Module_In	String_out	From TCP-IP client RX\$ to Module_In module
From_Module_Frame_logo	String_in	Module_Frame_logo module commands to LiveCore™ processor
Mess_Txt_From_Module_Frame_logo	String_in	Module_Frame_logo module status text
To_Module_Frame_logo	String_out	From TCP-IP client RX\$ to Module_Frame_logo module
From_Module_Presets_Filtering	String_in	Module_Presets_Filtering module commands to LiveCore™ processor
Mess_Txt_From_Module_Presets_Filtering	String_in	Module_Presets_Filtering module status text
To_Module_Presets_Filtering	String_out	From TCP-IP client RX\$ to Module_Presets_Filtering module
From_Module_Master_Presets	String_in	Module_Master_Presets module commands to LiveCore™ processor
Mess_Txt_From_Module_Master_Presets	String_in	Module_Master_Presets module status text
To_Module_Master_Presets	String_out	From TCP-IP client RX\$ to Module_Master_Presets module
Mess_Txt_From_Module_Snapshot	String_in	Module_Snapshot module status text
From_Module_Monitoring_Master	String_in	Module_Monitoring module commands to LiveCore™ processor (master device)
Mess_Txt_From_Module_Monitoring_Master	String_in	Module_Monitoring module status text (master device)
To_Module_Monitoring_Master	String_out	From TCP-IP client RX\$ to module LiveCore_Monitoring (master device)
From_Module_Monitoring_Slave	String_in	Module_Monitoring module commands to LiveCore™ processor (slave device)
Mess_Txt_From_Module_Monitoring_Slave	String_in	Module_Monitoring module status text (slave device)
To_Module_Monitoring_Slave	String_out	From TCP-IP client RX\$ to module LiveCore_Monitoring (slave device)
From_Module_GPIO	String_in	Module_GPIO module commands to LiveCore™ processor
Mess_Txt_From_Module_GPIO	String_in	Module_GPIO module status text
To_Module_GPIO	String_out	From TCP-IP client RX\$ to module LiveCore_GPIO
From_Module_Stills_Library	String_in	Stills_Library module commands to LiveCore™ processor
Mess_Txt_From_Module_Stills_Library	String_in	Stills_Library module status text
To_Module_Stills_Library	String_out	From TCP-IP client RX\$ to Stills_Library module

## General

X is the output number (1=>8)

Type_RQ_PB	Digital_in	Pulse for requesting LiveCore™ processor type
Cmd_Set_Ver_RQ_PB	Digital_in	Pulse for requesting LiveCore™ version
Updater_Ver_RQ_PB	Digital_in	Pulse for requesting LiveCore™ Updater version
Controllers_Count_RQ_PB	Digital_in	Pulse for requesting LiveCore™ connected controller count
Shutdown_PB	Digital_in	Pulse to shutdown LiveCore™ processor (manual restart only)
Sleep_PB	Digital_in	Pulse to shutdown LiveCore™ processor and enable Wake on LAN function. See program example as well as the Magic Packet module provided to see how to implement Wake on LAN function
Reboot_PB	Digital_in	Pulse to reboot LiveCore™ processor
User_Messages_TXT	String_out	User text messages (to be displayed)
Device_Type\$	String_out	LiveCore™ processor type
Cmd_Set_Ver\$	String_out	LiveCore™ processor version
Updater_Ver\$	String_out	LiveCore™ processor Updater version
Build_Ver\$	String_out	LiveCore™ processor TPP version
Controllers_Count_FB	Ana_out	Number of controllers connected to the LiveCore™ processor
NB_Screen_Available_FB	Ana_out	Number of valid screens. <b>To be sent to LiveCore_Master_Presets module</b>
OutputX_Name_FB	String_out	Output X label (16 char. Max)
OutputX_HDCP_State_FB	Digital_in	HDCP status for output X
Status_Machine_FB	Ana_out	LiveCore™ processor global state. see table below for values

## Global take

X is the screen number (1=>8)

Auto_Screen_List_Toggle	Digital_in	Enable or disable the automatic filling of the global screen list (when loading a Master Preset from memory)
List_Take_PB	Digital_in	Pulse for launch a global TAKE. This command uses the global screen list to determine which screens will be affected
ScreenX_Into_List_Toggle	Digital_in	Include screen X in the global screen list or exclude screen X from the global screen list
Auto_Screen_List_FB	Digital_out	1 if the automatic filling of the global screen list option is enabled (when loading a Master Preset from memory)
List_Take_FB	Digital_out	Global TAKE status. Remains at 1 until all the individual screen "TAKE" actions have been successfully completed.
ScreenX_Into_List_FB	Digital_out	1 if screen X is included into the global screen list

## LiveCore™ global states

0	Unknown
1	Initializing
2	Recalling configuration
3	Linking to secondary LiveCore™ processor
4	Restoring factory settings
5	Updating firmware
255	Ready

## Parameters

Time_Message	Param	User messages display time
Licence	Param	Module license key