



# **Crestron Driver Module Guide**

## **For**

**MuxLab ProDigital Network Controller 500510/811**

HDMI Over IP

500752/500753/500754/500755/500756/500757/500758/500759/  
500480

**Multimedia Matrix Switch**

500470/500416/500418/500419/500468/500469/500210

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## 1. MuxLab ProDigital 500811

SUMMARY: Connects to Muxlab ProDigital 500811 modules to send and receive IP commands to and from the Network Controller.

SETUP OF CRESTRON HARDWARE: Tested with MC3 Control Processor

SIMPL Windows: 4.06.01

SIMPL+: 4.04.01

Device Database: 82.00.002.00

Crestron Database: 61.05.007.00

Crestron Toolbox: 2.42.558.01

SIMPL+ Cross Compiler: 1.3

VENDOR FIRMWARE: v2.1.0

### 1.1. MuxLab ProDigital 500811 IP driver

FIRMWARE: v1.4.8

NAME	TYPE	DESCRIPTION
PARAMETERS:		
IPaddr	P	Switcher IP address
INPUTS:		
Connect	D	High/1 (rising edge) = Connect the TCP socket with the device. Low/0 = Disconnect the TCP socket *Maintain high for optimal performance.
ModulesTx\$	S	Connects to the [Tx\$] of all ProDigital 500811 modules of a same network.
OUTPUTS		
Status	A	Reports the status of the TCP/IP connection as follows: 0d = Not connected 1d = Waiting for connection 2d = Connected 3d = Connection failed

		4d = Connection broken remotely 5d = Connection broken locally 6d = Performing DNS lookup 7d = DNS lookup failed 8d = DNS lookup resolved
ModulesRx\$	S	Connects to the [Rx\$] of all ProDigital 500811 modules of a same network.

## 1.2. MuxLab ProDigital 500811 Device driver

Devices included(RS232): 500753, 500754, 500755, 500756, 500758, 500759

Devices included(IR): 500752, 500753, 500754, 500755, 500756.

KNOWN ISSUE: The PortID should be a unique number for Rx and Tx devices or otherwise it can cause problems with the ComRx\$ response.

NAME	TYPE	DESCRIPTION
PARAMETERS:		
TargetId	P	System ID Use the system ID displayed in the "Product" web page, this is not a constant value, it depends on the system
MNC_userName	P	MNC User Name Default: "admin"
MNC_password	P	MNC password Default: "admin"
PortID	P	Device input or output port ID To be defined in web server
DeviceType	P	<RX> or <TX>
ACK	P	Set to 1 to wait for a command acknowledge
Feedback	P	Set to 1 to wait for a feedback data to be returned from the RS-232 port

INPUTS:		
Reboot	D	The system will reboot the devices
ComTx\$	S	Send data (in hexadecimal) to RS232 port of a device Ex: To send "P01", user should enter "503031"
IrTx\$	S	Send data (in hexadecimal) to IR port of a device
Rx\$	S	Connects to the [ModulesRx\$] of ProDigital 500811 IP Driver
OUTPUTS		
ComRx\$	S	Receive data (in hexadecimal) from RS232 port of a device
Tx\$	S	Connects to the [ModulesTx\$] of ProDigital 500811 Ip Driver

### 1.3. MuxLab ProDigital 500811 Preset driver

Devices included: 500752, 500753, 500754, 500755, 500756, 500757, 500758, 500759

**KNOWN ISSUE:** The corresponding switcher module will not update its feedback value after a preset is sent.

NAME	TYPE	DESCRIPTION
PARAMETERS:		
targetId	P	System ID Use the system ID displayed in the "Product" web page, this is not a constant value, it depends on the system
MNC_userName	P	MNC User Name Default: "admin"
MNC_password	P	MNC password

		Default: "admin"
<b>INPUTS:</b>		
Select_preset [1-255]	D	Apply an existent preset
Rx\$	S	Connects to the [ModulesRx\$] of ProDigital 500811 Ip Driver
<b>OUTPUTS</b>		
Tx\$	S	Connects to the [ModulesTx\$] of ProDigital 500811 Ip Driver

#### 1.4. MuxLab ProDigital 500811 Switcher driver

Devices included: 500752, 500753, 500754, 500755, 500756, 500757, 500758, 500759 & 500480.

NAME	TYPE	DESCRIPTION
<b>PARAMETERS:</b>		
TargetId	P	System ID Use the system ID displayed in the "Product" web page, this is not a constant value, it depends on the system
MNC_userName	P	MNC User Name Default: "admin"
MNC_password	P	MNC password Default: "admin"
<b>INPUTS:</b>		
Rx\$	S	Connects to the [ModulesRx\$] of ProDigital 500811 Ip Driver
PortOut [1-255]	A	Connects a portIn to the selected portOut# Use the port ID (to be defined in web server)
<b>OUTPUTS</b>		

Tx\$	S	Connects to the [ModulesTx\$] of ProDigital 500811 Ip Driver
PortOut_fb [1-255]	A	Reports the Tx device port ID connected to each port output (Rx Device).

### 1.5. MuxLab ProDigital 500811 VideoWall driver

KNOWN ISSUE: When applying a Video Wall configuration without a PortIn value (0d), the default config is sent, but the portOut\_FB values are not updated.

NAME	TYPE	DESCRIPTION
PARAMETERS:		
TargetId	P	System ID Use the system ID displayed in the "Product" web page, this is not a constant value, it depends on the system
MNC_userName	P	MNC User Name Default: "admin"
MNC_password	P	MNC password Default: "admin"
INPUTS:		
vwApplyConfig	D	Apply a (existent) video wall configuration specified by vwConfigId.
Rx\$	S	Connects to the [ModulesRx\$] of ProDigital 500811 Ip Driver
vwConfigId	A	Video wall config id that will be send when <b>vwApplyConfig</b> is pulsed.
vwConfigPortIn	A	Select a source (TX) to be send to the video wall configuration specified by <b>vwConfigId</b> (original configuration parameters are not changed)

		Note that the source will be send only when <b><i>vwApplyConfig</i></b> is pulsed.
OUTPUTS		
Tx\$	S	Connects to the [ModulesTx\$] of ProDigital 500811 Ip Driver
portOut_fb [1-50]	A	Reports the Tx device port ID connected to each port output (Rx Device)



## 2. MuxLab ProDigital Multimedia Switcher

**SUMMARY:** Provides IP control of switching functions on MuxLab ProDigital series Switcher.

**SETUP OF CRESTRON HARDWARE:** Tested with MC3 Control Processor

SIMPL Windows: 4.06.01

SIMPL+: 4.04.01

Device Database: 82.00.002.00

Crestron Database: 61.05.007.00

Crestron Toolbox: 2.42.558.01

SIMPL+ Cross Compiler: 1.3

**VENDOR FIRMWARE:** v2.0.1

### 2.1. MuxLab ProDigital 8-Output Driver IP

**GENERAL NOTES:** The number of input and output varies depending on the unit:

DEVICE	Input	HDMIOut	HDbTOut	Serial port
500418	4	0	8	8
500419	4	4	4	4
500468	8	0	8	8
500469	8	4	4	4

NAME	TYPE	DESCRIPTION
<b>PARAMETERS:</b>		
IPaddr	P	Switcher IP address
Admin_Password	P	Switcher admin password (default = "admin")
BaudRate [1-8]	P	Baudrate for each RS232 port of each HdBaseT Outputs
<b>INPUTS:</b>		

Connect	D	High/1 (rising edge) = Connect the TCP socket with the device. Low/0 = Disconnect the TCP socket *Maintain high for optimal performance.
ResetDevice	D	Reset the unit to factory settings
Select_Preset [1-8]	D	Apply all connections defined in the selected preset#
Output [1-8]	A	Connects an input [0d to 8d] to the selected output#
PortTx [1-8]	S	Send pass through data to the specified output port# Must be an HEX String (max 80 characters). Ex: To send "P01", user should enter "503031"
OUTPUTS		
Authenticated	D	High/1 = Device is authenticated with a valid session ID. *Sessions will automatically close after 5 minutes of inactivity. A new session ID request will be sent automatically if the "Connect" input is high/1.
Status	A	Reports the status of the TCP/IP connection as follows: 0d = Not connected 1d = Waiting for connection 2d = Connected 3d = Connection failed 4d = Connection broken remotely 5d = Connection broken locally 6d = Performing DNS lookup

		7d = DNS lookup failed 8d = DNS lookup resolved
Output_FB [1-8]	A	Reports the input number [0d to 8d] connected to each output#
PortRx [1-8]	S	Response, if any, coming back from the specified output port#

## 2.2. MuxLab ProDigital 16-Output Driver IP

NAME	TYPE	DESCRIPTION
PARAMETERS:		
IPAddr	P	Switcher IP address
Admin_Password	P	Switcher admin password (default = "admin")
INPUTS:		
Connect	D	High/1 (rising edge) = Connect the TCP socket with the device. Low/0 = Disconnect the TCP socket *Maintain high for optimal performance.
ResetDevice	D	Reset the unit to factory settings
Select_Preset [1-8]	D	Apply all connections defined in the selected preset#
Output [1-16]	A	Connects an input [0d to 16d] to the selected output#
OUTPUTS		
Authenticated	D	High/1 = Device is authenticated with a valid session ID. *Sessions will automatically close after 5 minutes of inactivity. A new session ID request will be sent automatically if the "Connect" input is high/1.

Status	A	Reports the status of the TCP/IP connection as follows: 0d = Not connected 1d = Waiting for connection 2d = Connected 3d = Connection failed 4d = Connection broken remotely 5d = Connection broken locally 6d = Performing DNS lookup 7d = DNS lookup failed 8d = DNS lookup resolved
Output_FB [1-16]	A	Reports the input number [0d to 16d] connected to each output#

### 2.3. MuxLab ProDigital Audio Switcher Driver IP

NAME	TYPE	DESCRIPTION
PARAMETERS:		
IPaddr	P	Switcher IP address
Admin_Password	P	Switcher admin password (default = "admin")
INPUTS:		
Connect	D	High/1 (rising edge) = Connect the TCP socket with the device. Low/0 = Disconnect the TCP socket *Maintain high for optimal performance.
ResetDevice	D	Reset the unit to factory settings
Select_Preset [1-8]	D	Apply all connections defined in the selected preset#
Output [1-8]	A	Connects an input [0d to 8d] to the selected output#
Volume [1-8]	A	Set output volume value (0d to 127d) for selected output#

OUTPUTS		
Authenticated	D	High/1 = Device is authenticated with a valid session ID. *Sessions will automatically close after 5 minutes of inactivity. A new session ID request will be sent automatically if the "Connect" input is high/1.
Status	A	Reports the status of the TCP/IP connection as follows: 0d = Not connected 1d = Waiting for connection 2d = Connected 3d = Connection failed 4d = Connection broken remotely 5d = Connection broken locally 6d = Performing DNS lookup 7d = DNS lookup failed 8d = DNS lookup resolved
Output_FB [1-8]	A	Reports the input number [0d to 8d] connected to each output#
Volume_FB [1-8]	A	Reports output volume value (0d to 127d) for each output#

## 2.4. MuxLab ProDigital 8-Output Driver RS232

BAUD RATE - 9600

PARITY - NONE

DATA BITS - 8

STOP BITS - 1

GENERAL NOTES: The number of input and output varies depending on the unit:

DEVICE	Input	HDMIOut	HDbTOut	Serial port
500418	4	0	8	8
500419	4	4	4	4
500468	8	0	8	8
500469	8	4	4	4

NAME	TYPE	DESCRIPTION
PARAMETERS:		
BaudRate [1-8]	P	Baudrate for each RS232 port of each HdBaseT Outputs
INPUTS:		
Poll	D	Retrieve current output routing
ResetDevice	D	Reset the unit to factory settings
Select_Preset [1-8]	D	Apply all connections defined in the selected preset#
RX\$	S	Serial data string to be routed from a COM port RX\$
Output [1-8]	A	Connects an input [0d to 8d] to the selected output#
PortTx [1-8]	S	Send pass through data to the specified output port# Must be an HEX String (max 80 characters).

		Ex: To send "P01", user should enter "503031"
<b>OUTPUTS</b>		
Output_FB [1-8]	A	Reports the input number [0d to 8d] connected to each output#
TX\$	S	Serial data string to be routed to a COM port TX\$
PortRx [1-8]	S	Response, if any, coming back from the specified output port#

## 2.5. MuxLab ProDigital 16-Output Driver RS232

BAUD RATE - 9600

PARITY - NONE

DATA BITS - 8

STOP BITS – 1

NAME	TYPE	DESCRIPTION
<b>PARAMETERS:</b>		
<b>INPUTS:</b>		
Poll	D	Retrieve current output routing
ResetDevice	D	Reset the unit to factory settings
Select_Preset [1-8]	D	Apply all connections defined in the selected preset#
RX\$	S	Serial data string to be routed from a COM port RX\$
Output [1-16]	A	Connects an input [0d to 16d] to the selected output#
<b>OUTPUTS</b>		
TX\$	S	Serial data string to be routed to a COM port TX\$
Output_FB [1-16]	A	Reports the input number [0d to 16d] connected to each output#

**2.6. MuxLab ProDigital Audio Switcher Driver RS232**

BAUD RATE - 9600

PARITY – NONE

DATA BITS – 8

STOP BITS – 1

NAME	TYPE	DESCRIPTION
PARAMETERS:		
INPUTS:		
Poll	D	Retrieve current output routing and volume values
ResetDevice	D	Reset the unit to factory settings
Select_Preset [1-8]	D	Apply all connections defined in the selected preset#
RX\$	S	Serial data string to be routed from a COM port RX\$
Output [1-8]	A	Connects an input [0d to 8d] to the selected output#
Volume [1-8]		
OUTPUTS		
TX\$	S	Serial data string to be routed to a COM port TX\$
Output_FB [1-8]	A	Reports the input number [0d to 8d] connected to each output#
Volume_FB [1-8]	A	Reports output volume value (0d to 127d) for each output#