Partner: Datasat
Model: AP20
Device Type: Surround Processor

GENERAL INFORMATION

SIMPLWINDOWS NAME:	Datasat AP20 TCP-IP
CATEGORY:	Surround Sound Processor
VERSION:	1.0
SUMMARY:	This module provides ethernet control and feedback of the Datasat AP20 Processor.
GENERAL NOTES:	All format names and macro names must be entered into the parameter fields in this module exactly as they appear in the Datasat AP20 menus. They are case sensitive.

If an exact match is not found for the format names, the device will not respond and the feedbacks for current format will not function. If the macro names do not match exactly the digital feedback signal "Macro Name Not Recognized" will pulse high for 5 seconds to indicate that the name needs adjustment.

Note that when the power to the AP20 is off, the device will only be polled for its power status. Once the power of the AP20 is on it will be polled every 5 seconds for power, master volume, master mute, monitor volume, monitor mute, and current format status. This is to reduce traffic on the network or RS-232 port. The AP20 does not itself report status changes for things like power, volume, and mute when changes are made on the front panel, so polling must be enabled in order to keep feedback accurate. |
| **CRESTRON HARDWARE REQUIRED:** | C2ENET-1, C2ENET-2 |
| **SETUP OF CRESTRON HARDWARE:** | TCP/IP:

Install a TCP/IP Client
Use port 14500D. |
VENDOR FIRMWARE:	V 1.02.02
VENDOR SETUP:	All format and macro configuration is done from the menu system on the AP20 front panel. These format and macro names can then be copied into the module and selected via the digital inputs on this module. Also note that firmware prior to V 1.02.02 does not support the discrete power commands used in this module.
CABLE DIAGRAM:	None.

CONTROL:

Power_On/Off/Toggle	D	Pulse to turn the power on and off.

Partner: Datasat
Model: AP20
Device Type: Surround Processor

Master_Fader_Up/Down	D	Pulse to adjust the master fader output volume.
Master_Fader_Mute_On/Off/Toggle	D	Pulse to turn mute for master volume level on and off.
Monitor_Up/Down	D	Pulse to adjust the monitor output volume.
Monitor_Mute_On/Off/Toggle	D	Pulse to turn mute for monitor volume level on and off.
Request_Format_*	D	Pulse to request the name of the format entered into the corresponding "format name *" parameter fields in this module. Note that the names MUST match the spelling in the menus of the AP20 exactly.
Request_Macro_*	D	Pulse to execute the name of the macro entered into the corresponding "macro name *" parameter fields in this module. Note that the names MUST match the spelling in the menus of the AP20 exactly.
Poll	D	Hold high to continue to poll for power, volume, mute and current format status.
Password_Encrypted	D	Hold high to enable sending a NetCmd password if required. Password can be disabled in the AP20's setup menu by entering a "-" If used, the password must be entered into the parameter field exactly as it appears in the AP20 setup menu.
From_Device	S	Serial signal to be routed from a 2-way serial com port.

FEEDBACK:

Power_Is_On/Off	D	High to indicate current power status.
Master_Fader_Volume_Gauge	A	Decimal value from 0-65535 to indicate current master volume level. Typically sent to a gauge on a touchpanel. Note that the value will not drop to "0" when the device is muted. This is to replicate the behavior on the AP20 front panel.
Master_Fader_Muted/Unmuted	D	High to indicate current mute status of the master volume output.
Monitor_Volume_Gauge	A	Decimal value from 0-65535 to indicate current monitor output volume level. Typically sent to a gauge on a touchpanel. Note that the value will not drop to "0" when muted. This is to replicate the behavior on the AP20 front panel.
Monitor_Muted/Unmuted	D	High to indicate current mute status of the monitor volume output.
Format_*_Is_Selected	D	High to indicate a currently selected "format" on the AP20. Note that this feedback will not work if the name in the "Format_*_Name" parameter fields in this module does not match EXACTLY what is entered into the menu system of the AP20. These names are case sensitive.
Format_*_Name	S	Serial outputs indicating the names of the formats as they are entered into the "Format_*_Name" parameter fields in this module.
Current_Format_Name	S	Serial output indicating the name of the format that was last selected.

Macro_*_Name	S	Serial outputs indicating the names of the macros as they are entered into the "Macro_*_ Name" parameter fields in this module.
Macro_Command_Accepted	D	High for 5 seconds to indicate that a macro name matched what is entered into the AP20 menu system correctly and that that macro has been successfully executed.
Macro_Name_Not_Recognized	D	High for 5 seconds to indicate that the requested macro name did not match any macros entered into the Macro_*_Name" parameter fields of this module. If this signal goes high, please check the spelling of the macro name against what is entered into the AP20's setup menu.
To_Device	S	Serial Signal to be routed to a 2-way serial com port.

PARAMETERS:

Format * Name	Names of the user formats that are set up in the menu system of the AP20. These must be set up in the front panel menu system of the AP20 first before formats can be executed.
Macro * Name	Names of the macro commands that are set up in the menu system of the AP20. These must be set up in the front panel menu system of the AP20 first before any macros can be executed.
Master Fader Ramp Time	Amount of time in seconds for the master output level to ramp up from 0 to 100%.
Monitor Fader Ramp Time.	Amount of time in seconds for the monitor output level to ramp up from 0 to 100%.
Password	NetCmd password if entered into the AP20's setup menu.
Port Number	TCP/IP port used to communicate with the Datasat. Set to 14500 by default.

TESTING:

OPS USED FOR TESTING:	4.003.0015
SIMPL WINDOWS USED FOR TESTING:	3.01.24
CRES DB USED FOR TESTING:	24.05.003.00
DEVICE DATABASE:	32.05.002.00
SYMBOL LIBRARY USED FOR TESTING:	712
SAMPLE PROGRAM:	Datasat AP20 TCP-IP v1.0 Demo PRO2.smw
REVISION HISTORY:	V 1.0 – Original Release