Partner: Integra
Model: DTR-80.3
Device Type: Receiver

GENERAL INFORMATION

SIMPLWINDOWS NAME:	Integra DTR-80.3 v1.0
CATEGORY:	Receiver/Processor
VERSION:	1.0
SUMMARY:	This module provides RS232 control and feedback for the Integra DTR-80.3.
GENERAL NOTES:	This module provides RS232 control of the Integra DTR-80.3. It also provides true feedback. Onkyo uses the same protocol for most of their receivers. This module should also provide control for the DHC-80.3, DTR-70.3, DTR-50.3, DTR-40.3, DTR-30.3 and the DTR-20.3. Not all functions and inputs are available for all receivers. NOTE This module will only work via RS232. To control the receiver via TCP/IP please use the IP module. NOTE: There is only one tuner in the receiver. All zones use that same tuner. If two zones have the tuner selected they will both be listening to the same station. There is also only one set tuner presets. Recalling preset 1 from zone 2 will recall the same station as recalling preset 1 from the main zone or zone 3. To store a tuner preset: 1) Tune to the desired station. 2) Pulse the *_Tuner_Store_Preset input. 3) While the *_Tuner_Store_Preset_Is_Active, pulse one of the *_Tuner_Preset_* inputs. The store preset mode will only be active for 5 seconds. If two zones enter store preset mode at the same time, both store preset modes will reset when one of those zones selects a preset to store the station to. NOTE: There is only one set of 40 network presets. All zones use the same network presets. Recalling preset 23 from zone 3 will recall the same station as recalling preset 23 from the main zone. To store a network radio preset: 1) Go to stations url. 2) Pulse the *_Network_Store_Preset input. This will cause the current station to be stored in the next available network preset.
CRESTRON HARDWARE REQUIRED:	C2I-COM, ST-COM, C2-COM-*
SETUP OF CRESTRON HARDWARE:	RS232 Baud:9600 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	1021-0499-0110-4101
VENDOR SETUP:	None

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Partner: Integra
Model: DTR-80.3
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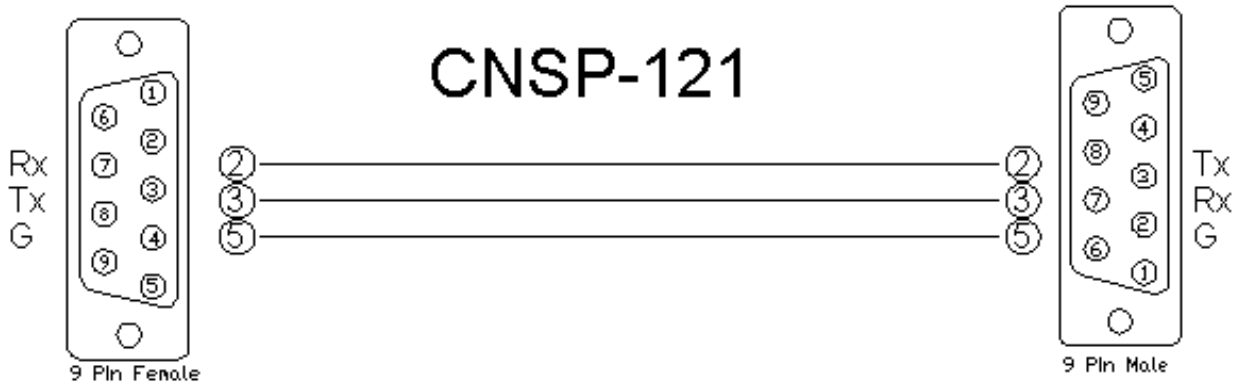
CABLE DIAGRAM:	CNSP-121



CONTROL:

Main_Power_<On/Off/Toggle>	D	Pulse to turn the main zone on or off.
Main_Input_*	D	Pulse to select the desired input for the main zone.
Main_Volume_<Up/Down>	D	Press and hold to adjust the main zone volume.
Main_Volume_Mute_<On/Off/Toggle>	D	Pulse to turn the main volume mute on and off.
Main_Tuner_Key_<0..9/Backspace/Clear>	D	Pulse to enter a station to tune to.
Main_Tuner_Key_Enter	D	Pulse to tune to the entered station.
Main_Tuner_Key_<Up/Down>	D	Pulse to start seeking the next station.
Main_Tuner_Preset_<1…40>	D	While the Main_Tuner_Store_Preset_Is_Active is high, pulsing one of these inputs will store the current band and station to the selected preset. While the Main_Tuner_Store_Preset_Is_Active is low, pulsing one of these inputs will recall the stored band and station.
Main_Tuner_Preset_<Up/Down>	D	Pulse to cycle through the tuner presets.
Main_Tuner_Store_Preset	D	Pulse to activate the tuner preset store mode. Tuner store preset mode will remain active for 5 seconds, until a *_Preset_* input is pulsed or until this input is pulsed again.
Zone_<2/3/4>_Power_<On/Off/Toggle>	D	Pulse to turn the desired zone on or off.
Zone_<2/3/4>_Input_*	D	Pulse to select the desired input for the desired zone.

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Partner: Integra
Model: DTR-80.3
Device Type: Receiver

Zone_<2/3/4>_Volume_<Up/Down>	D	Press and hold to adjust the volume for the desired zone.
Zone_<2/3/4>_Volume_Mute_<On/Off/Toggle>	D	Pulse to turn the volume mute on and off for the desired zone.
Zone_<2/3/4>_Tuner_Key_<0..9/Backspace/Clear>	D	Pulse to enter a station to tune to.
Zone_<2/3/4>_Tuner_Key_Enter	D	Pulse to tune to the entered station.
Zone_<2/3/4>_Tuner_Key_<Up/Down>	D	Pulse to start seeking the next station.
Zone_<2/3/4>_Tuner_Preset_<1…40>	D	While the Zone_<2/3/4>_Tuner_Store_Preset_Is_Active is high, pulsing one of these inputs will store the current band and station to the selected preset. While the Zone_<2/3/4>_Tuner_Store_Preset_Is_Active is low, pulsing one of these inputs will recall the stored band and station.
Zone_<2/3/4>_Tuner_Preset_<Up/Down>	D	Pulse to cycle through the tuner presets.
Zone_<2/3/4>_Tuner_Store_Preset	D	Pulse to activate the tuner preset store mode. Tuner store preset mode will remain active for 5 seconds, until a *_Preset_* input is pulsed or until this input is pulsed again.
Sleep_<90/10>_Minutes	D	Pulse to set the time for the sleep timer and start the sleep timer clock.
Sleep_Off	D	Pulse to turn the sleep timer off.
Sleep_Cycle	D	Pulse to cycle through the sleep timer settings.
Front_Panel_Display_*	D	Pulse to set the receiver's front panel display brightness.
Menu	D	Pulse to turn the setup menu on and off.
Up/Down/Left/Right	D	Pulse to move through the menus.
Enter	D	Pulse to select the highlighted item in the menu.
Exit	D	Pulse to step back to the previous menu level.
Audio_Out_*	D	Pulse to set the audio output.
Monitor_Out_Resolution_*	D	Pulse to select the desired monitor output resolution.
Late_Night_<High/Low/Off/Cycle>	D	Pulse to select the desired late night mode.
Display_Cycle	D	Pulse to cycle through the display settings.
Surround_Mode_*	D	Pulse to select the desired surround mode. NOTE: Not all surround modes are available for all inputs.

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Partner: Integra
Model: DTR-80.3
Device Type: Receiver

Main_Net-Tune/Network/USB_*	D	Pulse to control the network inputs.
Main_Network_Preset_<1…40>	D	Pulse to select the desired network preset.
Main_Network_Store_Preset	D	Pulse to store the current station in the next available preset.
Zone_<2/3/4>_Net-Tune/Network/USB_*	D	Pulse to control the network inputs.
Zone_<2/3/4>_Network_Preset_<1…40>	D	Pulse to select the desired network preset.
Zone_<2/3/4>_Network_Store_Preset	D	Pulse to store the current station in the next available preset.
Initialize	D	Pulse to get the initial status.
From_Device	S	Serial data signal to be routed from a 2-way serial com port.

FEEDBACK:

Main_Power_Is_<On/Off>	D	High to indicate current power status for the main zone.
Main_Input_Is_*	D	High to indicate the currently selected input for the main zone.
Main_Volume_Gauge	A	Analog output indicating the volume level for the main zone.
Main_Volume_Mute_Is_<On/Off>	D	High to indicate the current volume mute status for the main zone.
Main_Tuner_Frequency_Text	S	Serial signal indicating the currently tuned station frequency.
Main_Tuner_Preset_Is_<1…40>	D	High to indicate the currently selected tuner input.
Main_Tuner_Store_Preset_Is_Active	D	High to indicate that the store preset mode is active for the main zone. This will remain high for 5.0 seconds after the Main_Tuner_Store_Preset is pulsed.
Zone_<2/3/4>_Power_Is_<On/Off>	D	High to indicate current power status for each zone.
Zone_<2/3/4>_Input_Is_*	D	High to indicate the currently selected input for each zone.
Zone_<2/3/4>_Volume_Gauge	A	Analog output indicating the volume level for each zone.
Zone_<2/3/4>_Volume_Mute_Is_<On/Off>	D	High to indicate the current volume mute status for each zone.
Zone_<2/3/4>_Tuner_Frequency_Text	S	Serial signal indicating the currently tuned station frequency.
Zone_<2/3/4>_Tuner_Preset_Is_<1…40>	D	High to indicate the currently selected tuner input.

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Zone_<2/3/4>_Tuner_Store_Preset_Is_Active	D	High to indicate that the store preset mode is active for each zone. This will remain high for 5.0 seconds after the Zone_<2/3/4>_Tuner_Store_Preset is pulsed.
Sleep_Time_Digital_Gauge	A	Analog value indicating the current number of minutes remaining in the sleep timer. To be displayed using a digital gauge on a touch panel.
Front_Panel_Display_Is_*	D	High to indicate the current front panel display brightness setting.
Audio_Out_*	D	High to indicate the current audio out setting.
Monitor_Out_Resolution_*	D	High to indicate the current monitor out resolution setting.
Surround_Mode_Is_*	D	High to indicate the currently selected surround mode.
Main_Net-Tune/Network/USB_Is_*	D	High to indicate the current Net-Tune/Network/USB transport status.
Main_Net_Tune/Network/USB_Line_*_Text	S	Serial signals displaying the Net-Tune/Network/USB menus.
Main_Net_Tune/Network/USB_Cursor_Position _Is_Line_*	D	High to indicate which Net-Tune/Network/USB menu line is currently highlighted.
Main_Net_Tune/Network/USB_*_Text	S	Serial signals indicating the artist, album, title, time and track for the currently playing on the Net-Tune/Network/USB.
Main_Net_Tune/Network/USB_Repeat_Is_*	D	High to indicate the current repeat status for the Net-Tune/Network/USB.
Main_Net_Tune/Network/USB_Shuffle_Is_*	D	High to indicate the current shuffle status for the Net-Tune/Network/USB.
Main_Network_Preset_Is_*	D	High to indicate the currently selected network preset.
Zone_<2/3/4>_Net-Tune/Network/USB_Is_*	D	High to indicate the current Net-Tune/Network/USB transport status.
Zone_<2/3/4>_Net_Tune/Network/USB_Line_*_ Text	S	Serial signals displaying the Net-Tune/Network/USB menus.
Zone_<2/3/4>_Net_Tune/Network/USB_Cursor_ Position_Is_Line_*	D	High to indicate which Net-Tune/Network/USB menu line is currently highlighted.
Zone_<2/3/4>_Net_Tune/Network/USB_*_Text	S	Serial signals indicating the artist, album, title, time and track for the currently playing on the Net-Tune/Network/USB.
Zone_<2/3/4>_Net_Tune/Network/ USB_Repeat_Is_*	D	High to indicate the current repeat status for the Net-Tune/Network/USB.
Zone_<2/3/4>_Net_Tune/Network/ USB_Shuffle_Is_*	D	High to indicate the current shuffle status for the Net-Tune/Network/USB.
Zone_<2/3/4>_Network_Preset_Is_*	D	High to indicate the currently selected network preset.
Initialize_Busy	D	High to indicate that the module is getting the initial status from the receiver.

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To_Device	S	Serial data signal to be routed to a 2 way com port.

TESTING:

OPS USED FOR TESTING:	PRO2: v4.003.0015 MC3: 1.002.0000
SIMPL WINDOWS USED FOR TESTING:	3.10.20
DEVICE DB USED FOR TESTING:	39.00.005.00
CRES DB USED FOR TESTING:	29.01.004.00
SYMBOL LIBRARY USED FOR TESTING:	772
SAMPLE PROGRAM:	Integra DTR-80.3 v1.0 Demo
REVISION HISTORY:	v1.0 – Initial Release

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