

## ASHLY ne24.24M / 24.24M : RS-232 Gain Message Details

### Sample Gain Message

To set Input 7 to -50dB on a 24.24M whose Device ID is set to 1 (default), transmit the following:

Byte Number:	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
Hexadecimal:	<b>F0</b>	<b>00</b>	<b>01</b>	<b>2A</b>	<b>06</b>	<b>00</b>	<b>0C</b>	<b>06</b>	<b>3C</b>	<b>0C</b>	<b>F7</b>
or Decimal:	<b>240</b>	<b>0</b>	<b>1</b>	<b>42</b>	<b>6</b>	<b>0</b>	<b>12</b>	<b>6</b>	<b>60</b>	<b>12</b>	<b>247</b>
or Crestron:	<b>\xF0</b>	<b>\x00</b>	<b>\x01</b>	<b>\x2A</b>	<b>\x06</b>	<b>\x00</b>	<b>\x0C</b>	<b>\x06</b>	<b>\x3C</b>	<b>\x0C</b>	<b>\xF7</b>

**Byte # 1-5** are fixed header bytes.

**Byte # 6** is the 24.24M's Device ID Index, which is defined as (Device ID – 1).

Therefore Byte # 6 = 0 for Device ID 1, 1 for Device ID 2, ... 15 (or hex 0F) for Device ID 16.

Note: Device ID is shown on the unit's front panel dual 7-segment display when the preset LED is not lit.

\*\*\* For ne24.24M Byte #6 is always 0 \*\*\*

**Byte # 7** is the message type and is fixed.

**Byte # 8** is the channel index for the input/output channel to receive the new gain setting.

Byte # 8 value is 0-19 (or hex 00-13) for Inputs 1-20 respectively.

Byte # 8 value is 64-83 (or hex 40-53) for Outputs 1-20 respectively.

**Byte # 9** and **Byte # 10** each contain part of the new Gain Word value.

Byte # 9 = the integer portion of  $((\text{Gain Word})/128)$

**Byte # 10** =  $((\text{Gain Word}) \& (\$7F))$  = the seven least significant bits of Gain Word

-Or- for Crestron users **Byte # 10** =  $\text{ITOH}(\text{gainword}) \& (127)$

Gain Word has a valid decimal range of 7692 to 8312 which represents -50dB to +12dB in 0.1dB steps.

### Examples

Gain Word value 7692 = <b>-50dB</b>	:	Byte # 9 = <b>\$3C</b> ,	Byte # 10 = <b>\$0C</b>
Gain Word value 7792 = <b>-40dB</b>	:	Byte # 9 = <b>\$3C</b> ,	Byte # 10 = <b>\$70</b>
Gain Word value 7892 = <b>-30dB</b>	:	Byte # 9 = <b>\$3D</b> ,	Byte # 10 = <b>\$54</b>
Gain Word value 7992 = <b>-20dB</b>	:	Byte # 9 = <b>\$3E</b> ,	Byte # 10 = <b>\$38</b>
Gain Word value 8092 = <b>-10dB</b>	:	Byte # 9 = <b>\$3F</b> ,	Byte # 10 = <b>\$1C</b>
Gain Word value 8192 = <b>0dB</b>	:	Byte # 9 = <b>\$40</b> ,	Byte # 10 = <b>\$00</b>
Gain Word value 8292 = <b>+10dB</b>	:	Byte # 9 = <b>\$40</b> ,	Byte # 10 = <b>\$64</b>
Gain Word value 8312 = <b>+12dB</b>	:	Byte # 9 = <b>\$40</b> ,	Byte # 10 = <b>\$78</b>

**Byte # 11** is the stop byte and is fixed.