

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

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 integer Gain Word value, (see examples below).

Byte # 9 = $(\text{gainWord} / 128)$ = upper bits of Gain Word

-Or- for Crestron users Byte # 9 = $\text{chr}(\text{gainWord} / 128)$

Byte # 10 = $(\text{gainWord} \& 127)$ = the seven least significant bits of Gain Word

-Or- for Crestron users Byte # 10 = $\text{chr}(\text{gainWord} \& 127)$

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

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

Byte # 11 is the stop byte and is fixed.