

## DMX-IT 12 SETUP and OPERATION

**DMX-IT** models are **really** simple to use - for many applications, just set it to "1" and go to work!

The **DMX-IT 12** lighting console provides dimming control over any 12 consecutive channels of standard DMX512 receivers.

The **MASTER** fader controls the maximum output level for fader channels **1-12**.

The **CHANNEL** section has sliders **1 - 12** that set the level of an individual DMX channel.

The starting address of the **DMX-IT 12** can be any channel in the DMX512 address space. If the starting address is set to 25 then DMX receivers set to 25 through 36 will respond to the channel sliders **1-12**.

### DMX CHANNEL SELECTION for FADER CHANNELS 1-12

Operation of the **DMX-IT 12** is very straightforward.

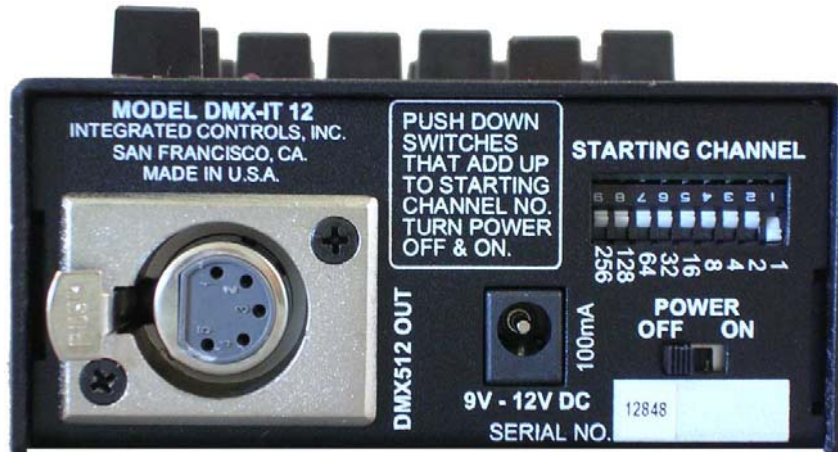
To change the starting address of the sliders **1-12**:  
Set the DIP switches on the rear to ON so that the numbers

**1 2 4 8 16 32 64 128 256**

add up to the starting channel you want.

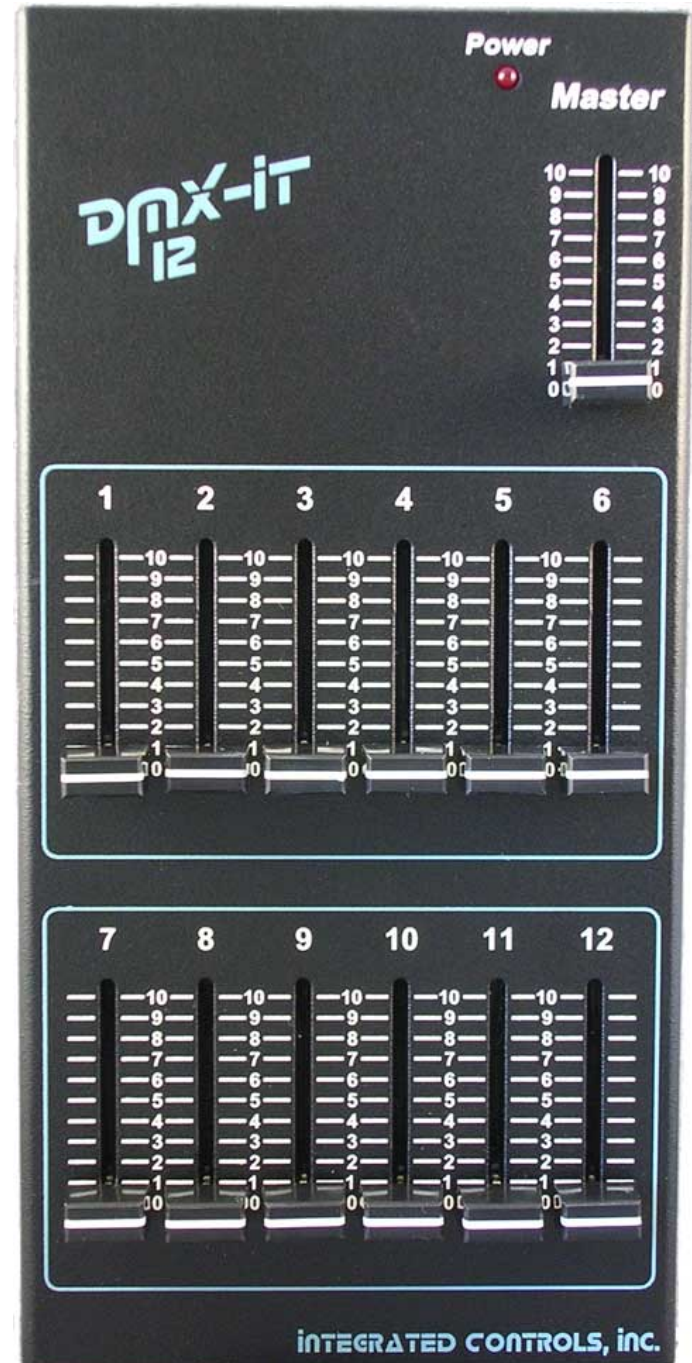
Push down (toward the numbers) to turn them ON.  
DO NOT USE A PENCIL, THE 'LEAD' IS CONDUCTIVE.

YOU MUST TURN THE POWER OFF FOR SEVERAL SECONDS, THEN BACK ON BEFORE THE NEW SETTINGS TAKE EFFECT.



Unit is shown as shipped with starting channel set to 1

## DMX-IT 12 User Guide



## POWER

The **DMX-IT** operates on 4AA batteries or the supplied AC adapter.

The **POWER** LED indicates power is present when the power switch is turned on. If using batteries, the LED will flash when the battery voltage is low. If the batteries are too low to operate, the LED will turn off and the **DMX-IT** will stop transmitting.

To conserve battery power the **DMX-IT** stops transmitting when the Master slider is at 0.

NiCad or NiMH batteries are not recommended as operating life will not be acceptable due to their lower initial cell voltage.

Expected battery life for alkaline batteries is 20-30 hours of operation.

Replace the 4 AA batteries (not included) in the slide out tray by loosening the screw at the bottom front of the enclosure and sliding out the battery tray. It is not necessary to remove the screw completely, just loosen it enough to release the battery tray.

## CHANNEL SETTING RANGE

Available starting addresses for the DMX-IT 12 are from 001 to 511. With no value set on the address switches (all switches off/up), the unit will assume starting channel of 1. Setting the starting address to a channel number from 502 to 511 will result in the sliders controlling the channels from the starting address up to channel 512. The remaining sliders will be ignored. For example, with the starting address set to 511, channel sliders 1 & 2 will control channels 511 & 512. Sliders 3-12 will be ignored.

The starting channel assign switches are read during the power up cycle of the **DMX-IT 12**. Changing the switch settings with power on will have no effect until the power is cycled off, then on again.

## DMX-512 CONNECTIONS

Use a standard 5 pin XLR, DMX data cable to connect the **DMX-IT** to your DMX receivers. (Pins 1-3 are used. Pins 4 & 5 are not connected to the **DMX-IT**)

Note: **DMX-IT** products comply with the DMX512 standard as defined by the USITT specification and use a 5 pin XLR for interface connection and data transmission to DMX receivers. The wire for DMX512 cable must be data cable designed for EIA485. This cable is low capacitance, twisted pair, shielded, and designed for high speed data. There are many brands and types that will work reliably. Standard pre-built cables can be purchased from any theatrical lighting supplier. Conversion to 3 pin XLR and use of microphone cable is known to be problematic and not recommended.

## SPECIFICATIONS

Size: 7.6" L, 1.3" H(front), 1.75" H(rear), 3.75" W  
(19.3cm L, 3.3cm H(front), 4.4cm H(rear), 9.5cm W)  
Net Weight: 1.5 lbs. (0.68kg)

Power requirements: 4 AA alkaline batteries (not included) and/or a9-12V 100mA  
AC adapter (included), with a standard 2.1mm x 5.5mm barrel connector.  
Adapter polarity may be either center positive or center negative.

**DMX-IT** data control timing accuracy meets or exceeds USITT standards and provides highly stable outputs with no jitter or bobble headed values.

Designed and manufactured by:

### **INTEGRATED CONTROLS, inc.**

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### Some examples of switch settings and resulting starting channel numbers: (switch down = ON)

Slider number 1 = channel 1

1	2	4	8	16	32	64	128	256												
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF												
1	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	+	0	=	1

Slider number 1 = channel 13

1	2	4	8	16	32	64	128	256												
ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF												
1	+	0	+	4	+	8	+	0	+	0	+	0	+	0	+	0	+	0	=	13

Slider number 1 = channel 93

1	2	4	8	16	32	64	128	256										
ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF										
1	+	0	+	4	+	8	+	16	+	0	+	64	+	0	+	0	=	93

The following table shows all available DMX channel starting values and correlating switch settings. The switches are set UP for a '0' value and DOWN for a '1' value. The first (left) digit in switch settings is the switch value 256, the last (right) digit is value 1, as marked on the DMX-IT 12 rear panel. DMX-IT 12 units come shipped set to the most commonly used starting value of channel 1—switch setting 00000001

CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH	CH SWITCH
2 00000010	53 000110101	104 001101000	155 010011011	206 011001110	257 100000001	308 100110100	359 101100111	410 110011010	461 111001101
3 00000011	54 000110110	105 001101001	156 010011100	207 011001111	258 100000010	309 100110101	360 101101000	411 110011011	462 111001110
4 000000100	55 000110111	106 001101010	157 010011101	208 011010000	259 100000011	310 100110110	361 101101001	412 110011100	463 111001111
5 000000101	56 000111000	107 001101011	158 010011110	209 011010001	260 100000100	311 100110111	362 101101010	413 110011101	464 111010000
6 000000110	57 000111001	108 001101100	159 010011111	210 011010010	261 100000101	312 100111000	363 101101011	414 110011110	465 111010001
7 000000111	58 000111010	109 001101101	160 010100000	211 011010011	262 100000110	313 100111001	364 101101100	415 110011111	466 111010010
8 000001000	59 000111011	110 001101110	161 010100001	212 011010100	263 100000111	314 100111010	365 101101101	416 110100000	467 111010011
9 000001001	60 000111100	111 001101111	162 010100010	213 011010101	264 100001000	315 100111011	366 101101110	417 110100001	468 111010100
10 000001010	61 000111101	112 001110000	163 010100011	214 011010110	265 100001001	316 100111100	367 101101111	418 110100010	469 111010101
11 000001011	62 000111110	113 001110001	164 010100100	215 011010111	266 100001010	317 100111101	368 101110000	419 110100011	470 111010110
12 000001100	63 000111111	114 001110010	165 010100101	216 011011000	267 100001011	318 100111110	369 101110001	420 110100100	471 111010111
13 000001101	64 001000000	115 001110011	166 010100110	217 011011001	268 100001100	319 100111111	370 101110010	421 110100101	472 111011000
14 000001110	65 001000001	116 001110100	167 010100111	218 011011010	269 100001101	320 101000000	371 101110011	422 110100110	473 111011001
15 000001111	66 001000010	117 001110101	168 010101000	219 011011011	270 100001110	321 101000001	372 101110100	423 110100111	474 111011010
16 000010000	67 001000011	118 001110110	169 010101001	220 011011100	271 100001111	322 101000010	373 101110101	424 110101000	475 111011011
17 000010001	68 001000100	119 001110111	170 010101010	221 011011101	272 100010000	323 101000011	374 101110110	425 110101001	476 111011100
18 000010010	69 001000101	120 001111000	171 010101011	222 011011110	273 100010001	324 101000100	375 101110111	426 110101010	477 111011101
19 000010011	70 001000110	121 001111001	172 010101100	223 011011111	274 100010010	325 101000101	376 101111000	427 110101011	478 111011110
20 000010100	71 001000111	122 001111010	173 010101101	224 011100000	275 100010011	326 101000110	377 101111001	428 110101100	479 111011111
21 000010101	72 001001000	123 001111011	174 010101110	225 011100001	276 100010100	327 101000111	378 101111010	429 110101101	480 111100000
22 000010110	73 001001001	124 001111100	175 010101111	226 011100010	277 100010101	328 101001000	379 101111011	430 110101110	481 111100001
23 000010111	74 001001010	125 001111101	176 010110000	227 011100011	278 100010110	329 101001001	380 101111100	431 110101111	482 111100010
24 000011000	75 001001011	126 001111110	177 010110001	228 011100100	279 100010111	330 101001010	381 101111101	432 110110000	483 111100011
25 000011001	76 001001100	127 001111111	178 010110010	229 011100101	280 100011000	331 101001011	382 101111110	433 110110001	484 111100100
26 000011010	77 001001101	128 010000000	179 010110011	230 011100110	281 100011001	332 101001100	383 101111111	434 110110010	485 111100101
27 000011011	78 001001110	129 010000001	180 010110100	231 011100111	282 100011010	333 101001101	384 110000000	435 110110011	486 111100110
28 000011100	79 001001111	130 010000010	181 010110101	232 011101000	283 100011011	334 101001110	385 110000001	436 110110100	487 111100111
29 000011101	80 001010000	131 010000011	182 010110110	233 011101001	284 100011100	335 101001111	386 110000010	437 110110101	488 111101000
30 000011110	81 001010001	132 010000100	183 010110111	234 011101010	285 100011101	336 101010000	387 110000011	438 110110110	489 111101001
31 000011111	82 001010010	133 010000101	184 010111000	235 011101011	286 100011110	337 101010001	388 110000100	439 110110111	490 111101010
32 000100000	83 001010011	134 010000110	185 010111001	236 011101100	287 100011111	338 101010010	389 110000101	440 110111000	491 111101011
33 000100001	84 001010100	135 010000111	186 010111010	237 011101101	288 100100000	339 101010011	390 110000110	441 110111001	492 111101100
34 000100010	85 001010101	136 010001000	187 010111011	238 011101110	289 100100001	340 101010100	391 110000111	442 110111010	493 111101101
35 000100011	86 001010110	137 010001001	188 010111100	239 011101111	290 100100010	341 101010101	392 110001000	443 110111011	494 111101110
36 000100100	87 001010111	138 010001010	189 010111101	240 011110000	291 100100011	342 101010110	393 110001001	444 110111100	495 111101111
37 000100101	88 001011000	139 010001011	190 010111110	241 011110001	292 100100100	343 101010111	394 110001010	445 110111101	496 111110000
38 000100110	89 001011001	140 010001100	191 010111111	242 011110010	293 100100101	344 101011000	395 110001011	446 110111110	497 111110001
39 000100111	90 001011010	141 010001101	192 011000000	243 011110011	294 100100110	345 101011001	396 110001100	447 110111111	498 111110010
40 000101000	91 001011011	142 010001110	193 011000001	244 011110100	295 100100111	346 101011010	397 110001101	448 111000000	499 111110011
41 000101001	92 001011100	143 010001111	194 011000010	245 011110101	296 100101000	347 101011011	398 110001110	449 111000001	500 111110100
42 000101010	93 001011101	144 010010000	195 011000011	246 011110110	297 100101001	348 101011100	399 110001111	450 111000010	501 111110101
43 000101011	94 001011110	145 010010001	196 011000100	247 011110111	298 100101010	349 101011101	400 110010000	451 111000011	502 111110110
44 000101100	95 001011111	146 010010010	197 011000101	248 011111000	299 100101011	350 101011110	401 110010001	452 111000100	503 111110111
45 000101101	96 001100000	147 010010011	198 011000110	249 011111001	300 100101100	351 101011111	402 110010010	453 111000101	504 111111000
46 000101110	97 001100001	148 010010100	199 011000111	250 011111010	301 100101101	352 101100000	403 110010011	454 111000110	505 111111001
47 000101111	98 001100010	149 010010101	200 011001000	251 011111011	302 100101110	353 101100001	404 110010100	455 111000111	506 111111010
48 000110000	99 001100011	150 010010110	201 011001001	252 011111100	303 100101111	354 101100010	405 110010101	456 111001000	507 111111011
49 000110001	100 001100100	151 010010111	202 011001010	253 011111101	304 100110000	355 101100011	406 110010110	457 111001001	508 111111100
50 000110010	101 001100101	152 010011000	203 011001011	254 011111110	305 100110001	356 101100100	407 110010111	458 111001010	509 111111101
51 000110011	102 001100110	153 010011001	204 011001100	255 011111111	306 100110010	357 101100101	408 110011000	459 111001011	510 111111110
52 000110100	103 001100111	154 010011010	205 011001101	256 100000000	307 100110011	358 101100110	409 110011001	460 111001100	511 111111111