DMX512 Products

DTK932M DyNet to DMX512 converter. Useful for controlling DMX512 only devices such as "wiggly mirror" lights and colour Scrolers with Dynalite control panels and timeclocks.
DTK932Z DMX512 to DyNet converter. Useful for temporary override of house lighting system by a DMX512 stage lighting desk.

DMX History

The USITT (U.S.Institute of Theatre Technology) first developed the DMX512 protocol in 1986 as a standard interface between dimmers and consoles.
This standard was modified to introduce some improvements in 1990, and is known as the USITT DMX512/1990 standard.
In 1998 USITT and ESTA commenced work on a new draft standard called DMX512-A so it could become an American National Standard. ESTA has registered this project with ANSI. You can view the draft standard (Rev 3 25 Oct 2000) here.
In 1999 an application was made to IEC (International Electrotechnical Commission) for the proposed DMX512-A ANSI standard to become an international standard.

DMX Connection Info

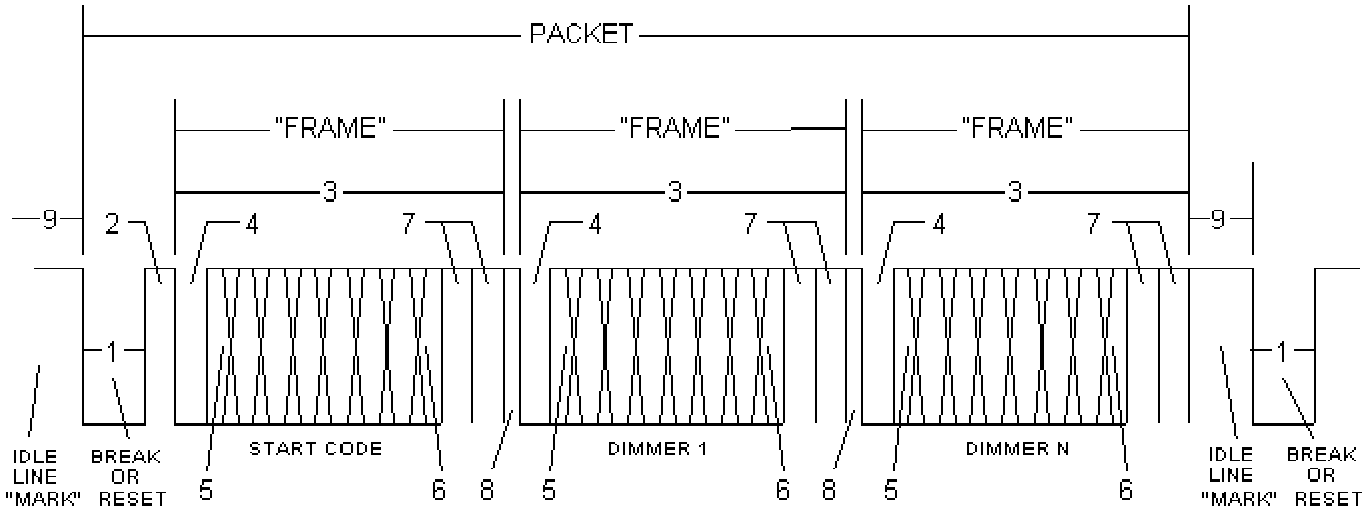
DMX Connector Type: 5 pin XLR
DMX Output Socket Gender (eg. console output): Female
DMX Input Socket Gender (eg. dimmer input): Male
DMX Connector Pinouts:
Pin 1 - Shield (do NOT connect to body of connector)
Pin 2 - D-- for 1st DMX universe (channels 1 to 512)
Pin 3 - D+ for 1st DMX universe (channels 1 to 512)
Pin 4 - Spare, sometimes used as D-- for 2nd DMX universe (channels 513 to 1024)
Pin 5 - Spare, sometimes used as D+ for 2nd DMX universe (channels 513 to 1024)

DMX Cable type

EIA485 / RS485 rated cable with twisted pairs

DMX Data Info

Timing diagram of a DMX512/1990 signal:

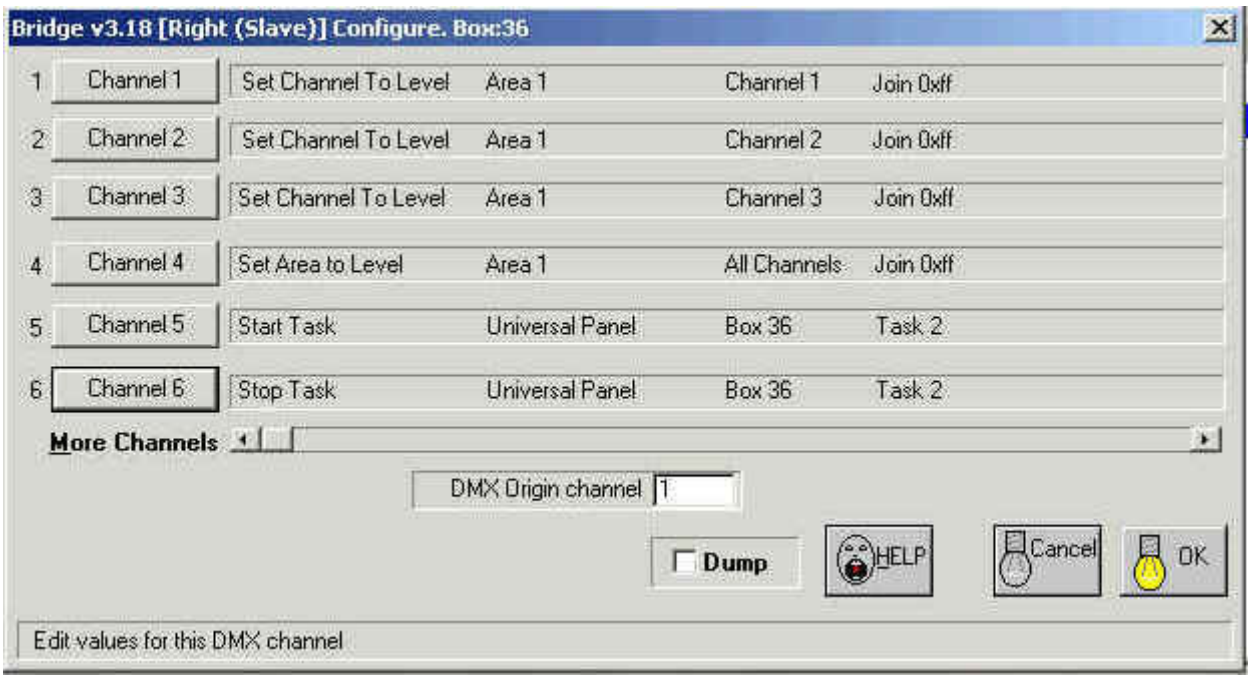


DMX512/1990 timing specification					
REF.	**DESCRIPTION**	**MIN**	**TYP**	**MAX**	**UNIT**
1	"SPACE" FOR BREAK	88	88	90	mS
2	"MARK" BETWEEN BREAK & START	8.00	-	10	mS
3	FRAME TIME	43.12	44.0	44.48	mS
4	START BIT	3.92	4.0	4.08	mS
5	LEAST SIGNIFICANT DATA BIT	3.92	4.0	4.08	mS
6	MOST SIGNIFICANT DATA BIT	3.92	4.0	4.08	mS
7	STOP BIT	3.92	4.0	4.08	mS
8	"MARK" TIME BETWEEN FRAMES	0	0	2	mS
	PACKET TIME	-	22.67	-	mS
	PACKET REPETITION	49	50	51	mS

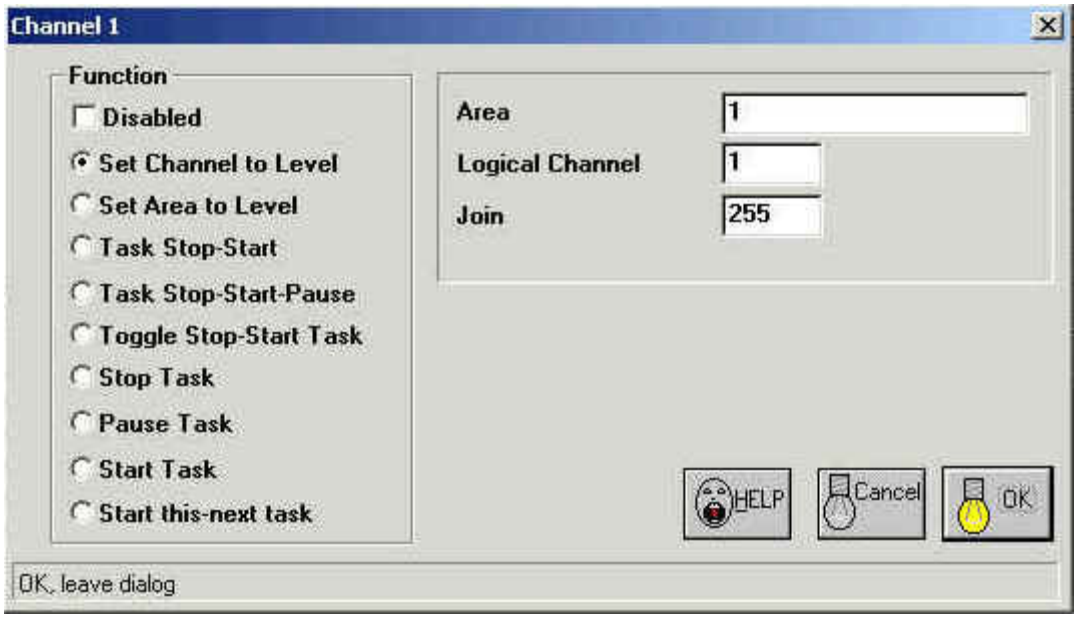
DTK932Z DMX512 to DyNet Converter

- Converts a block of 24 DMX channels to DyNet
- Adjustable DMX start address
- Each DMX channel can be individually configured to a DyNet Channel, or other functions as described below.

DTK932Z settings for first 6 Channels



DTK932Z Channels Options



Set Channel to Level: Maps a DMX channel directly to a DyNet channel. DyNet ChannelLevel messages will be sent whenever there is a change in the DMX channel's level.

Set Area to Level: Maps a DMX channel directly to a whole DyNet Area. DyNet Area Level messages will be sent whenever there is a change in the DMX channel's level.

Task Stop-Start: Used to control Tasks in other devices. Sends a StartTask message when the DMX Channel level rises above 66% and sends a StopTask message when the DMX Channel level falls below 33%.

Task Stop-Start-Pause: Used to control Tasks in other devices. Sends a StartTask message when the DMX Channel level falls in the range of 75% to 100%, sends a StopTask message when the DMX Channel level falls in the range of 0% to 25%, sends a PauseTask message when the DMX Channel level falls in the range of 25% to 75%.

Toggle Stop-Start Task : Used to control Tasks in other devices. Sends a StartTask message on the first DMX Channel 0% to 100% transition, sends a StopTask message on the next DMX Channel 0% to 100% transition, etc.

Stop Task: Used to control Tasks in other devices. Sends a StopTask message on a DMX Channel 0% to 100% transition.

Pause Task : Used to control Tasks in other devices. Sends a PauseTask message on a DMX Channel 0% to 100% transition.

Start Task: Used to control Tasks in other devices. Sends a StartTask message on a DMX Channel 0% to 100% transition.

Start This-Next Task: Sends a StartTask message when the DMX Channel level rises above 66% and sends a StartTask message for the next Task (ie the first Task + 1) when the DMX Channel level falls below 33%.