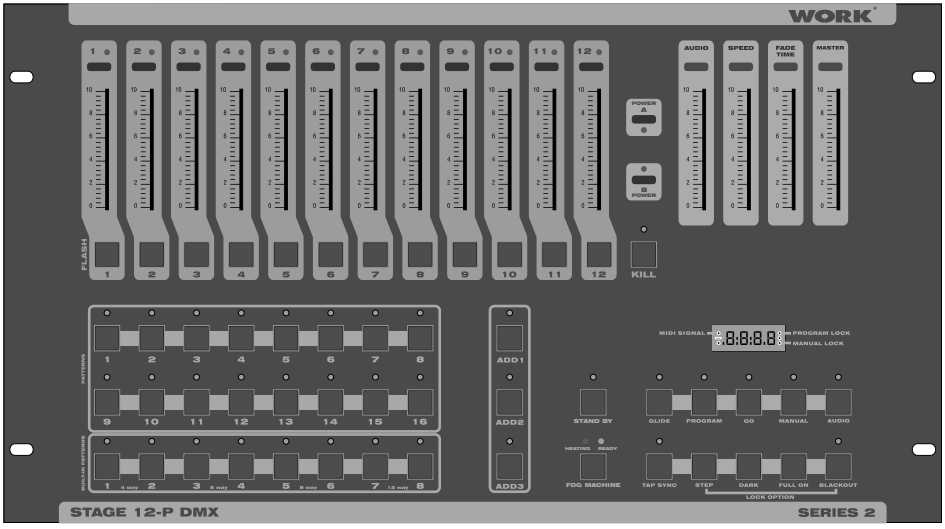
WORK®

STAGE 12-P DMX

12CH Dimmer Console

USER'S MANUAL



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General Introduction

Thank you for purchasing this WORK product STAGE 12-P DMX. This unit provides 24 patterns and 12 channels to control various lighting devices. The main features are that simple free programming, 12 Dimmer Packs and the embedded functions, e.g. Stand By, Audio, Tap Sync, Dark, Full on, Blackout.

Main Features

- 12 Channel DMX Dimming Console
- 16 programable patterns and 8 built-in patterns
- Audio, Speed, Fade Time and Master Control
- 12 free adjustable Faders
- Sound active
- Quick programming and Fader programming
- Catch and hold the present scene temporarily
- Fog Machine trigger
- Remote control in connection with foot switch
- USITT DMX-512 protocol with 3 pin XLR

Safety Instructions

Read the instruction in this manual carefully and throughly, as they give important information regarding safety during use and maintenance. Please keep this manual with the unit for reference in the future.

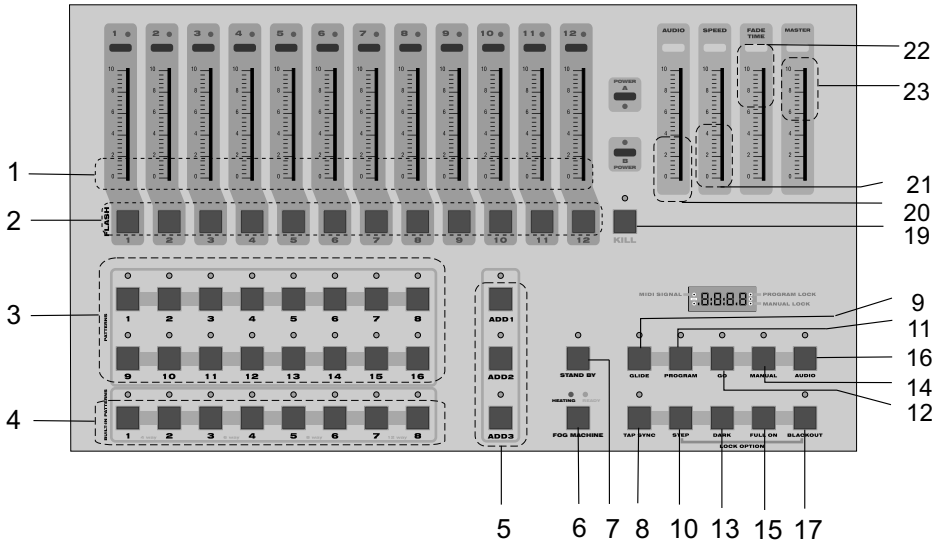
⚠ Warnings

- Be careful of high voltage connected with this unit.
- DO NOT make any inflammable liquids, water or metal objects contact the unit.
- STOP using the unit immediately in the event of serious operation problem and contact your local dealer without hesitation.
- DO NOT open the unit --there is no user serviceable parts inside. NEVER try to repair the unit yourself.

⚠ Cautions

- This unit must be earthed.
- Be sure that your product is not damaged and all accessories are not missing.
- This unit must only be operated by adults. DO NOT allow children to tamper or play with it.
- DO NOT dismantle or modify the unit when charging it.
- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture.

Front Panel



1. Channel Faders — These 12 Faders can adjust the levels of each channel to control the intensity of external lights/ fixtures indicated by 12 LEDs related to the specific channels.

2. Flash Keys — These 12 keys are used to give an individual channel a full intensity and also used for quick programming.

3. Pattern Keys — The 16 Pattern Keys are used for activating any of the 16 static scenes or chase patterns which have been programmed before.

4. Built-in Pattern Keys — The 8 keys can activate built-in patterns stored in the unit.

5. Add Keys — The 3 Add keys are used to set modes of the patterns in rows between Single/Mix mode and Kill mode.

Front Panel

6.	Fog Machine Key	This key can trigger the external connected Fog Machine, indicated the states heating and ready by two separate LEDs.
7.	Stand By Key	This key can enable/ disable the Stand By function, which can shutter all the outputs.
8.	Tap Sync Key	Repeatedly tap the key establishes the chase rate.
9.	Glide key	Enable the Fade Time between the two steps in the Glide Mode.
10.	Step key	Press this key to go a step of a chase. Set Lock Function when combined with Blackout key.
11.	Program key	Press to enter Program Mode.
12.	Go key	Press this key to hold the set channel intensity.
13.	Dark key	Press to turn off all output.
14.	Manual key	When this key is pressed down, real time operation of the channel Fader level will be provided.
15.	Full on key	Press to output all at full intensity.
16.	Audio key	Activate audio sync of chase rate or set a scene at audio effect.
17.	Blackout key	This key is used to clear Program, Go, Pattern, Manual Mode. When used with the Step key, Lock function is enabled to be set.
18.	LED Window	It shows current programming or function state including Program Lock State, Manual Lock State, MIDI Receive State , and also reads some relative values like dimmer, chase rate, steps of a programming chase etc.

Front Panel

19. Kill Key — It can enable/disable the Kill mode.

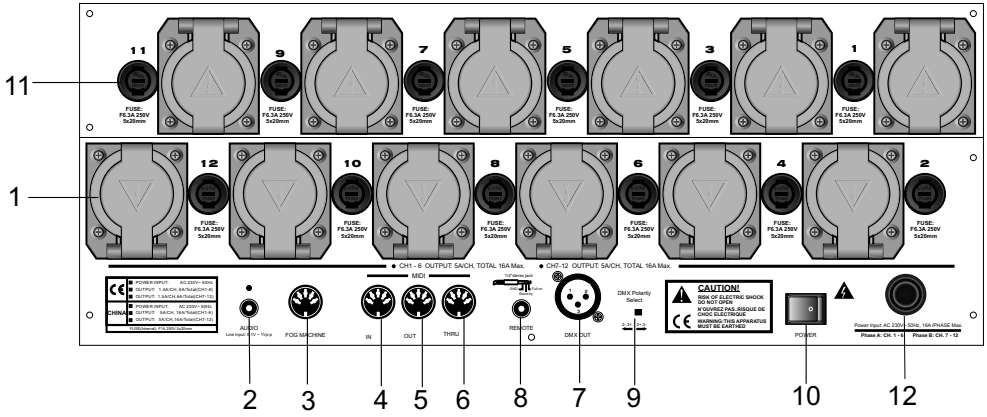
20. Audio Fader — It can control the sensitivity of the audio automatic gain control circuit. Adjust it for best effects with external audio device.

21. Speed Fader — This fader controls the speed of the patterns (chases) or sets the Fade Time in the Glide Mode.

22. Fade Time Fader — It can set the initial fade in and out of a chase, Go function, Manual state etc.

23. Master Fader — Pushing the Master fader can control the output values of all the 12 channels.

Rear Panel



1. Channel Output — This unit provides 12 Dimmer packs for easy and convenience operation.
2. Audio input — Audio input line for music signals or built-in microphone signals, with amplitude ranging from 100mV to 1v.
3. Fog Machine Connector — Connects with a fog machine.
4. MIDI In — MIDI data input
5. MIDI Out — MIDI data output
6. MIDI Thru — MIDI data transmitting
7. DMX Out — Standard DMX signal output
8. Remote Control — Connects a remote controller to enable Stand By and Full On function
9. DMX Polarity Select — Used to select DMX polarity
10. Power switch — Switch on/ off this unit.
11. Channel Fuse — F6.3A/CH, 250V, 5 x 20mm
12. Power Input: AC 230V~ 50Hz, 16A /PHASE Max.
    (Phase A: CH. 1 - 6 Phase B: CH. 7 - 12)

Main Function

Patterns (16 + 8)

There are total 24 patterns in charge of pattern keys in which 16 are edited programs and the other 8 are built-in programs (chases).
For the built-in patterns, they can be selected for application , complying with the real controlled channels of external lighting devices.

Pattern Number	Way Number	Channels of lighting device
Pattern 1,2	4 way	4 channels
Pattern 3,4	6 way	6 channels
Pattern 5,6	8 way	8 channels
Pattern 7,8	12 way	12 channels

A tap of any of the patterns keys will light the pattern LEDs and causes the scene or chase stored in memory to fade at the set fade rate.
A second tap will cause Pattern LED to go off and the current channel LEDs will fade out at the set fade rate.

24 Pattern keys are arranged with 3 rows and each row has an Add key , which determine Kill Mode or Add Mode.

Pattern key works normally in the Kill Mode, whereas pressing one key will disable other patterns that are active and cause them fade out while the selected pattern fades in.

Pressing the Add key will put the patterns in the Add Mode and all patterns will operate independently of each other.

Main Function

ADDs (3)

The Add mode is activated by pressing the Add key. When the Add mode is turned on, multiple patterns of the row will be selected every time.

Add mode consists of Single and Mix modes.

Single mode:

Press the appropriate Add key, indicated by the ADD LED flashing. The Single mode is active. Tap the desired Pattern keys in the row, the patterns will chase in sequence from left to right.

Mix mode:

Press the appropriate Add keys until the ADD LED lights, the Mix mode is active. Tap the desired Pattern keys in the row, the patterns will chase in unison.

To change between Single and Mix mode, press the appropriate Add key until its LED lights/flashes from flashes/lights.

Kill

Press Kill key until its LED lights. In Kill Mode, pressing any Flash keys will disable any other channel outputs. A second tap of Kill key will return normal Add Mode in which tap of any Flash keys will not affect other outputs.

Main Function

Glide

The Glide key is used to turn on and off the Glide Mode. When the Glide is activated, any pattern selected will fade in afer the previous pattern. The rate of the change is determined by the Speed fader between steps (chase rate) .

Press the Glide key again to exit the Glide mode. And turning on or off the Glide Mode will not affect patterns that are already running.

Go

The Go key causes all channels to fade to the present level represented by the setting of the Channel Fader. The lighting level will be added to the present scene. Compared to the present level of each channel, the higher level of each corresponding channel of any other active scenes or functions will have precedence to control the intensity.
Pressing the Go key additional times will cause the old scenes to fade out and the new scenes to fade in.

A tap of Blackout key will cancel Go State.

Manual

Press Manual key until its LED light up. In the Manual State, each channel controls its channel intensity.

A second tap of Manual key or Blackout key can turn off Manual State.

Note: In manual Lock State a second tap of Blackout key can not turn off Manual State.

Main Function

Audio key/ Fader

Audio chase sync may be activated by tapping the Audio key, indicated by Audio LED lighting up. Then adjusting the sensitivity control for desired effects. The patterns will sequence on the audio beat. In this case the Tap Sync key and Speed fader can not affect these patterns.

Audio intensity effects may be programmed into any channel by Program key. This can enable the desired channels to flash following the audio signal whenever the Audio mode is on.

Tap Sync

The Tap Sync key is used to set and synchronize the chase rate (the rate at which all patterns will sequence) by pressing the key several times. The chase rate will synchronize to the interval time of last two taps. The LED above the Tap Sync key will flash.

Tap Sync key will override any previous setting of the chase rate control Fader until the Fader move again.

Blackout

Each tap of Blackout key will clear or deactivate functions in the following order: Program mode, Go Function, Patterns and Manual Mode.

The Blackout LED will light up when all the above function completely deactivated. Lights affected by each function will fade out at the set fade rate.

Main Function

Master Fader

Pushing this fader can control the maximum output of 12 channels. The output of each channel can't be beyond the set max. value. However pressing the Flash key or Full key may change the output temporarily.

Fade Time Fader

This Fader is used to adjust Fade Time. The time changing of 12 channels intensity can be determined by this function. But when the Flash key or MIDI key is enabled, the present Fade Time setting can not be used at all.

If the LED shows 1.1, it represents 1.1second and if it shows 1:10, the fade time is 1 minute and 10 seconds. Fade time ranges from 0 to 10 minutes.

Speed Fader

Pushing this fader up/ down to the desired position can adjust the rate of chase. The rate must range from 0.05 second to 10 minutes. If the LED shows 1.10, it indicates that the rate can be 1.10 seconds. And when the LED shows 1:10, it means that the rate can be one minute and ten seconds.

Power A/B

Power A indicates the work state of phase A . When its LED lights up, phase A can be powered on. On the contrary, there is no electricity passing in phase A.
Power B indicates the work state of phase B . When its LED lights up, phase B can be powered on. On the contrary, there is no electricity passing in phase B.

Main Function

Remote Control

Connecting a foot switch will give a remote control of Full on and Stand by states.

Full on: makes all channel output full on.

Stand by: shuts down output but do not affect the intensity of LEDs.
Stand by fails in Full on state.
Its LED will flash when stand by state is activated.

Manual (Program) Lock

Press and hold Step key and Blackout key , their LEDs will flash at the same time. Do not release and press the Manual (Program) key. The LED shows On/Off, which indicates Manual (Program) Lock or Unlock states.

In Manual Lock State, Black out key can not control and only pressing the Manual key can turn off Manual State.

While in Program Lock State, any entry key for programming will be disabled. And only setting the unlock state can allow to use Program function.

Erase all recorded chases

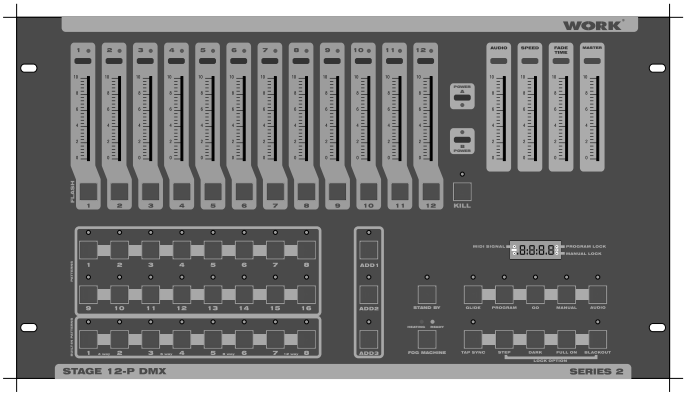
Press Pattern key 3, 6, 10 and 15. Do not release and turn off the unit. Turn on the console again after several seconds and all recorded chases will be deleted.

Note: Deleted chases can not be recovered. Please be cautious when performing this function.

Operation

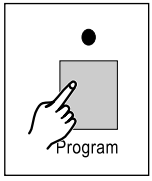
Programming

Quick Programming

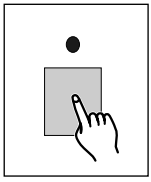


1 Press Program Key to enable Program function, indicated by its LED lit up.

Note: If the LED can't be on, Program Key may be set in Lock State (see Lock Function)

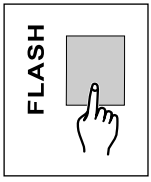


2 Select a desired Pattern for program and press it. Its LED will flash, indicating that Program Mode can be active.



3 Press and hold the desired Flash key(keys) as a scene.

4 Releasing these Flash key(keys) will automatically record the present scene as one step of the chase. All LEDs of 24 patterns will have a flash, indicating the successful storing. And the LED will show the present step number for quick programming.



Operation

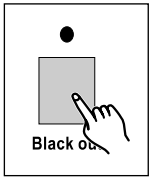
Programming

Note: If there can be Flash key(keys) in the holding state, this unit will wait for you to release it (them) for storing the scene.

5 Repeat step 3 and 4 until all desired steps are include in the chase.

Note*:* Every Pattern can record no more than 100 steps.

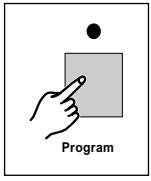
6 Tap the Blackout key to exit Program Mode.



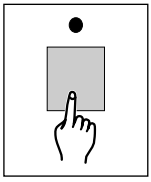
Fader Programming

Static Scenes or Chase Sequences with adjustments of levels may be programmed into any of Patterns using Channel Faders.

1 Press Program key until its LED lights up.
If its LED is off, indicating that the program may be locked.

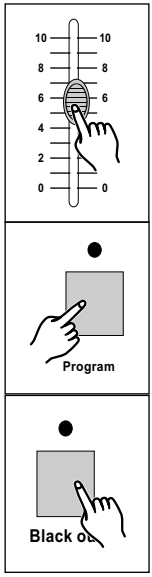


2 Select the pattern to program by tapping one of the 16 Pattern keys and its LED will start to flash.



Operation

Programming



3 Move the channel level Fader to the desired level for this step.

Note: Channel LED does not light up except in Manual Mode.

4 Press Program key and this step will be automatically programmed into memory.

5 Repeat step 3 and step 4 until all your desired steps are completely programmed.

Note*:* Every Pattern can record no more than 100 steps.

6 Press Blackout key to exit.

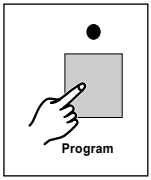
Note: Quick programming and Fader programming can be used together according to your requirements.

Operation

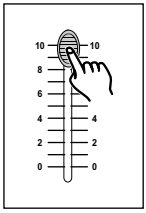
Audio Effect Programming

The Audio Mode could be programmed to flash desired channels to the intensity of the Audio signal whenever the Audio Mode is on by following these steps:

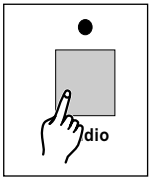
1 Tap the Program key until its LED lights. If the LED does not light, the memory lock is on.



2 Select channels to be affected by audio by moving the corresponding channel Faders to the maximum, and move other channel Fader to minimum.



3 Tap the Audio key to program the audio intensity into memory.

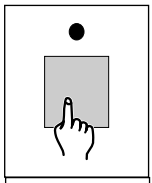


Operation

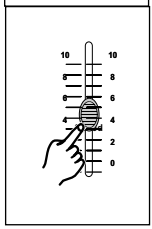
Run a Pattern

Run a pattern with Speed Fader

Tap the Pattern key stored your desired program to run and its LED lights.

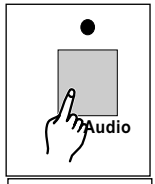


Move Speed Fader to adjust to your wanted value.

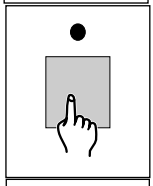


Run a Pattern at audio effect

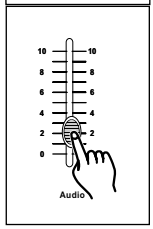
1 Tap the Audio key to enter Audio Mode.



2



3 Move the Audio Fader slowly up until the desired effect is reached.



Operation

MIDI In & Out

1. After turning off the power, press and hold Built-in keys 5, 6, 7, 8 at the same time. Continues to hold these keys and then switch on the power. You will be allowed to set the states of MIDI and value display mode, indicated by Pattern LED 1, 2, 3 and 4 flashing.

2. Press Pattern key 1 to access the setting state of MIDI Receiving. The LED will show " IN : XX" and XX refers to the relative receiving channel(1 ~ 12). Press the Pattern 7 (Pattern 8) to increment (decrement) the channel number to the desired receiving channel of MIDI. Press Blackout key to confirm the new setting and automatically return the previous setting state.

3. Press Pattern key 2 to access the setting state of MIDI transmitting. The LED Display will show " OU : XX" and XX refers to the relative transmitting channel(1 ~ 12). Press the Pattern 7 (Pattern 8) to increment (decrement) the channel number to the desired transmitting channel of MIDI. Press Blackout key to confirm the new setting and automatically return the previous setting state.

4. Value display settings (decimal and percent mode)

   Pressing pattern 3 will allow to set the decimal display mode.
   Then the LED displays " 255". Press Blackout key to confirm the new setting and automatically return the previous setting state.
   And pressing pattern 4 will enable the percent display mode, indicated by the LED displaying "100".

   Also press Blackout key to confirm the new setting and automatically return the previous setting state.

5. Press the Blackout again to exit from this setting state.

Operation

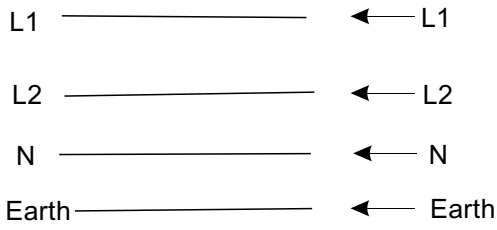
MIDI Transmitting & Receiving

This unit can transmit and receive Note On/ Off data to enable some preset functions.

NOTE NUMBER	VELOCITY	FUNCTION
22 - 45		Turn on or off patterns 1-24
46 - 57	channel intensity	Turn on or off channels 1-12
62 - 64		Turn on or off Add State (1-3)
65		DARK
66		FULL -ON
67		Manual Function
68		Activate Glide function
69		Turn on or off AUDIO
70		Step
71		BLACK OUT
72		Standby

Power Input Wiring

Two phases input Wiring :



Power input
AC 230V ~ 50HZ

Technical Specifications

Power input

Power Input: AC 230V~ 50Hz, 16A /PHASE Max.
(Phase A: CH. 1 - 6 Phase B: CH. 7 - 12)

Channel output

CE: 1.5 A/CH, 6A total (CH 1-6)
1.5 A/CH, 6A total (CH 7-12)

CHINA: 5A/CH, 16A total (CH1-6)
5A/CH,16A total (CH7-12)

Audio input	Line input 0.1v ~ 1Vp-p
MIDI in/out/thru	5-pin Multi connector
DMX output	3 pin XLR female socket
Remote control	1/4" stereo jack
Cooling	Powerful fan thermo-controlled
Circuit fuse	F1A 250V 5x20mm
Channel fuse	F6.3A 250V 5x20mm
Dimension	482x266x182mm
Weight	8.6 kg

CE

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REV 1.1 Apr, 2003

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