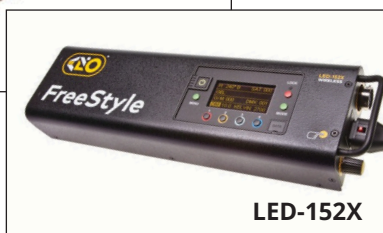
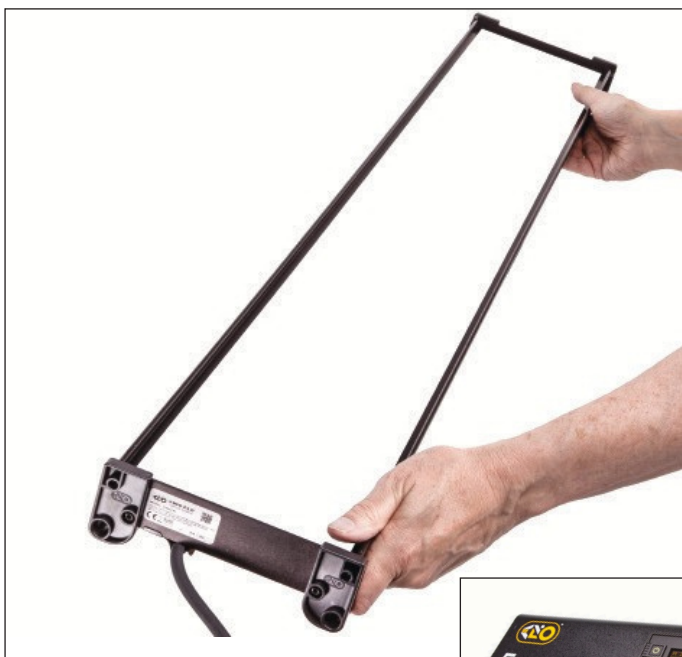

Operation Manual

FreeStyle & GT 41, 31, 21

(True Match Firmware 6.0)
(RDM)



KINO FLO
Lighting Systems

FreeStyle Systems



SYS-F41U FreeStyle 41 LED DMX System, Univ

SYS-F41TU FreeStyle/GT 41 LED DMX System, Univ



SYS-F31U FreeStyle 31 LED DMX System, Univ

SYS-F31TU FreeStyle/GT 31 LED DMX System, Univ



SYS-F21U FreeStyle 21 LED DMX System, Univ

SYS-F21TU FreeStyle/GT 21 LED DMX System, Univ

Each FreeStyle LED System consists of:

- 1 FreeStyle LED Fixture or 1 x FreeStyle/GT LED Fixture
- 1 Mounting Plate
- 1 Extension Cable
- 1 LED Controller

FreeStyle System Components



CFX-F41 FreeStyle 41 LED Fixture
CFX-F31 FreeStyle 31 LED Fixture
CFX-F21 FreeStyle 21 LED Fixture



CFX-F41T FreeStyle/GT 41 LED Fixture
CFX-F31T FreeStyle/GT 31 LED Fixture
CFX-F21T FreeStyle/GT 21 LED Fixture



MTP-BG41 KinoGrip 41K Mount w/
Baby Receiver (16mm)

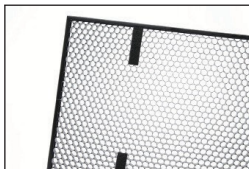


X12-F425 FreeStyle/4 Extension, 25ft



LED-152X-120U FreeStyle 152 LED DMX Controller,
Univ 120U
LED-152X-230U FreeStyle 152 LED DMX Controller,
Univ 230U

Included w/ all FreeStyle & GT Fixtures



LVR-SL290-P FreeStyle 21 Louver/HP, 90°
LVR-SL390-P FreeStyle 31 Louver/HP, 90°
LVR-SL490-P FreeStyle 41 Louver/HP, 90°

FreeStyle 41 LED DMX Kits



**FreeStyle 41 LED DMX Kit
w/ Travel Case**

KIT-F41U

FreeStyle 41 LED DMX Kit w/ Travel Case, Univ

Kit Contents:

- 1 FreeStyle 41 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Extension, 25ft
- 1 Travel Case

Dimensions:

54.5 x 9 x 21"
(138.5 x 23 x 53.5cm)

Weight:

49 lb
(22.5kg)



**FreeStyle/GT 41 LED DMX Kit
w/ Travel Case**

KIT-F41TU

FreeStyle/GT 41 LED DMX Kit w/ Travel Case, Univ

Kit Contents:

- 1 FreeStyle/GT 41 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Extension, 25ft
- 1 Travel Case

Dimensions:

54.5 x 9 x 21"
(138.5 x 23 x 53.5cm)

Weight:

46 lb
(21kg)

FreeStyle 31 LED DMX Kits



**FreeStyle 31 LED DMX Kit
w/ Soft Case**

KIT-F31BU

FreeStyle 31 LED DMX Kit w/ Soft Case, Univ

Kit Contents:

- 1 FreeStyle 31 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Extension, 25ft
- 1 Soft Case

Dimensions:

42.5 x 7.5 x 16.5"
(108 x 19 x 42cm)

Weight:

29 lb
(13kg)



**FreeStyle 31 LED DMX Kit
w/ Flight Case**

KIT-F31U

FreeStyle 31 LED DMX Kit w/ Flight Case, Univ

Kit Contents:

- 1 FreeStyle 31 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Extension, 25ft
- 1 Flight Case

Dimensions:

46 x 11 x 16.5"
(117 x 28 x 42cm)

Weight:

49.5 lb
(22kg)



**Gaffer/FS 31 LED DMX Kit
(2-Unit)**

KIT-F32U

Gaffer/FS 31 LED DMX Kit, Univ (2-Unit)

Kit Contents:

- 2 FreeStyle 31 LED Fixture
- 2 FreeStyle 152 LED DMX Controller
- 2 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 2 Extension, 25ft
- 1 Ship Case

Dimensions:

43.5 x 13 x 18.5"
(110.5 x 33 x 47cm)

Weight:

75 lb
(34kg)



**FreeStyle/GT 31 LED DMX Kit
w/ Travel Case**

KIT-F31TU

FreeStyle/GT 31 LED DMX Kit w/ Travel Case, Univ

Kit Contents:

- 1 FreeStyle/GT 31 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Travel Case

Dimensions:

45.5 x 9 x 16.5"
(116 x 23 x 42cm)

Weight:

39 lb
(18kg)

FreeStyle 21 LED DMX Kits



**FreeStyle 21 LED DMX Kit
w/ Soft Case**

KIT-F21BU

FreeStyle 21 LED DMX Kit w/ Soft Case, Univ

Kit Contents:

- 1 FreeStyle 21 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Extension, 25ft
- 1 Soft Case

Dimensions:

31 x 7.5 x 18"
(79 x 19 x 46cm)

Weight:

24.5 lb
(11kg)



**FreeStyle 21 LED DMX Kit
w/ Travel Case**

KIT-F21U

FreeStyle 21 LED DMX Kit w/ Travel Case, Univ

Kit Contents:

- 1 FreeStyle 21 LED Fixture
- 1 FreeStyle 152 LED DMX Controller
- 1 MTP-BG41 Mount w/ Baby Receiver (16mm)
- 1 Extension, 25ft
- 1 Travel Case

Dimensions:

32 x 11 x 18.5"
(81 x 28 x 47cm)

Weight:

36 lb
(16kg)



**Interview/FS 21 LED DMX Kit
(2-Unit)**

KIT-F22U

Interview/FS 21 LED DMX Kit, Univ (2-Unit)

Kit Contents:

2 FreeStyle 21 LED Fixture
2 FreeStyle 152 LED DMX Controller
2 MTP-BG41 Mount w/ Baby Receiver (16mm)
2 Extension, 25ft
1 Ship Case

Dimensions:

36 x 13 x 20.5"
(91.5 x 33 x 52cm)

Weight:

66.5 lb
(30kg)



**FreeStyle/GT 21 LED DMX Kit
w/ Travel Case**

KIT-F21TU

FreeStyle/GT 21 LED DMX Kit w/ Travel Case, Univ

Kit Contents:

1 FreeStyle/GT 21 LED Fixture
1 FreeStyle 152 LED DMX Controller
1 MTP-BG41 Mount w/ Baby Receiver (16mm)
1 Extension, 25ft
1 Travel Case

Dimensions:

28.5 x 8.5 x 16"
(72.5 x 22 x 41cm)

Weight:

27.5 lb
(12.5kg)

Power



AC Input

The FreeStyle 152 LED DMX Controller is powered AC and includes an IEC connection. It also includes a 12ft power cord with a locking IEC connector.

The FreeStyle 152 LED DMX has a built-in power supply with universal input from 100-240VAC.



Ambient Operating Temperature

The FreeStyle 152 LED DMX is designed to operate at temperatures from 14°F to 104°F (-10°C to 40°C).

DC Input

The FreeStyle 152 LED DMX can also be operated on 24VDC (input range 18-36VDC) through a 3-Pin XLR.

The pin polarity is:

Pin # 1 – Ground

Pin # 2 + 18-36VDC

Pin # 3 not used



Note:

A low voltage warning will display if input DC voltage is under 18VDC. Photo example: **LOW VDC: 16**

FreeStyle Fixture Assembly



The FreeStyle LED Fixture is comprised of a removable Fixture Shell, LED panel and Louver. The Louver is held in place with Velcro fasteners.



The FreeStyle/GT includes Gaffer Tray in place of Plastic Shell.



To remove the LED panel from the fixture housing, press the locking pin and turn thumbscrew to release LED panel.



Lift LED panel from metal tray.



Slide LED panel from fixed pins.

To replace, reverse the procedure.

Removable Mount



Align the center pin of the mounting plate to the center hole on the mating plate.

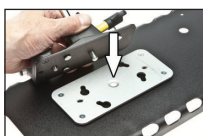


Rotate plate clockwise until the four shoulder rivets drop into the receptacle. A locking pin will snap into place when the plate is properly seated.

The **yellow wire loop** provides an attachment point for a safety chain.



To remove the plate, pull up on the locking pin and reverse the mounting procedure.



The FreeStyle/GT Gaffer Tray & LED panel also have a mating plate to accept the twist-on mount plate.

Mounting the Controller



The controller can operate the fixture remotely with an extension cable or can be attached to the back of the FreeStyle 21/31 fixture. It can also be mounted to the FreeStyle 21/31/41 Gaffer Tray.

Insert the 4 rubber feet of the controller into the 4 holes in the fixture/Gaffer Tray.

Secure the controller to the fixture/Gaffer Tray with the Velcro fastening strap.

Connect the harness to the controller. Align the key ways on the harness connector with the circular receptacle on the ballast. Rotate the silver locking ring until it clicks into the lock position.

Extension Cable



The FreeStyle LED fixture can operate remotely from the controller with extension cable up to 50ft (2 x 25ft). Remote operation of the controller provides more rigging options.

Mount Options



MTP-BAL1



The Controller can be mounted to a stand with a ballast mount accessory, **MTP-BAL1** and mafer clamp.

Baby Offset Arm

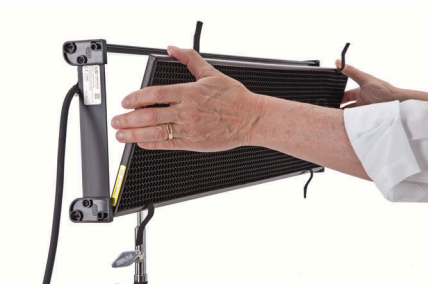


MTP-B41F
Kino Offset w/ Baby
Receiver (16mm)



The Baby Offset Arm (**MTP-B41F**) allows fixtures to mount on the center of a stand or it can also be under slung from a baby stand to use as an up light.

Applying Louver



The Louver is fastened to the fixture with 4 Velcro straps.

SnapBag & SnapGrid



The SnapBag accessory is a lightweight fabric tailor-made for the FreeStyle LED. It slips over the fixture and is attached with straps. The reflective material intensifies the soft light. The removable grid cloth attaches to the inside with Velcro.

DFS-FS41-S FreeStyle 41 SnapBag w/ 2 x Diffusion

DFS-FS31-S FreeStyle 31 SnapBag w/ 2 x Diffusion

DFS-FS21-S FreeStyle 21 SnapBag w/ 2 x Diffusion



The SnapGrid accessory is constructed of pre-stretched fireproof fabric with a built-in stainless steel frame. It unfolds and snaps into place. This model requires the use with the corresponding SnapBag; it is not designed to be used by itself.

LVR-FS440-S FreeStyle 41 SnapGrid 40°

LVR-FS340-S FreeStyle 31 SnapGrid 40°

LVR-FS240-S FreeStyle 21 SnapGrid 40°

Control Panel - White Mode



A) On /Off: **On** = Green light displayed. **Off** = Red light displayed. The display and all menu settings can be operated while the power button is in the Off position, as long as power is applied to the controller. The On /Off button only controls the light source.

B) Menu: Provides access to menu options such as General settings, Reset, DMX, DMX Wireless, Camera LUT and Color Space.
Shortcut: While on control screen, press and hold for 3 seconds to switch through menus **White, Gels & Hue, RGB, CIE xy**.

C) Preset Buttons: Factory defaults left to right are: 2700K, 3200K, 5000K and 6500K. G/M default value is 000. User can also use these preset buttons to store custom Kelvin and G/M settings.

D) Display: Provides access to Dim, Kelvin, G/M, and DMX channel.
Factory reset will show: Dim = 10%, Kelvin = 2700K, G/M = 000, DMX = 001.

E) Lock: Press the **Lock** button to disable all buttons and Control knob.
Press for 3 seconds to restore displayed presets to default factory settings.

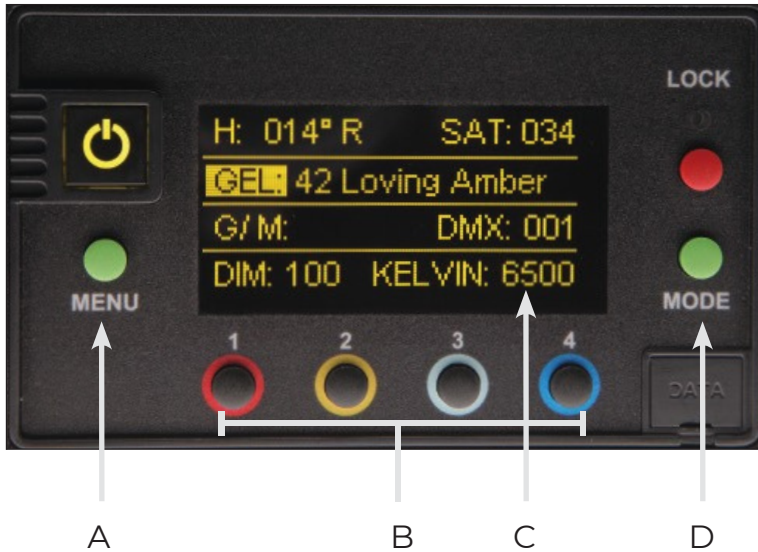
F) Mode: Press to navigate from Dim to Kelvin and G/M settings.
When in sub-menus, pressing Mode always returns you to main display.
When DMX is applied, use Mode to access DMX channel on main display.
Shortcut: Long press will bring you back one step.

G) Data Port: Mini B USB for firmware updates.

H) Control Knob: Manually adjusts Dim, Kelvin, G/M levels and DMX address.
Press the Control knob to toggle between **Fine** and **Coarse** increments or when selecting options within menus.

DMX Note: Each LED Fixture has an **"AUTO TERMINATE"** feature. The last fixture that does not have an XLR cable attached to the DMX "Out" port will automatically terminate.

Control Panel - Gels/Hue Mode



Gels/Hue Mode

A) Menu:

Provides access to menu options such as General settings (**Gels/Hue** mode), Reset, DMX, DMX Wireless, Camera LUT and Color Space.
Shortcut: While on control screen, press and hold for 3 seconds to switch through menus **White, Gels & Hue, RGB, CIE xy**.

B) Preset Buttons:

Factory defaults left to right are: 2700K, 3200K, 5000K and 6500K.
G/M default value is 000. User can also use these preset buttons to store custom Kelvin between 2500K and 9900K and custom G/M, Gel, Hue and Saturation settings.

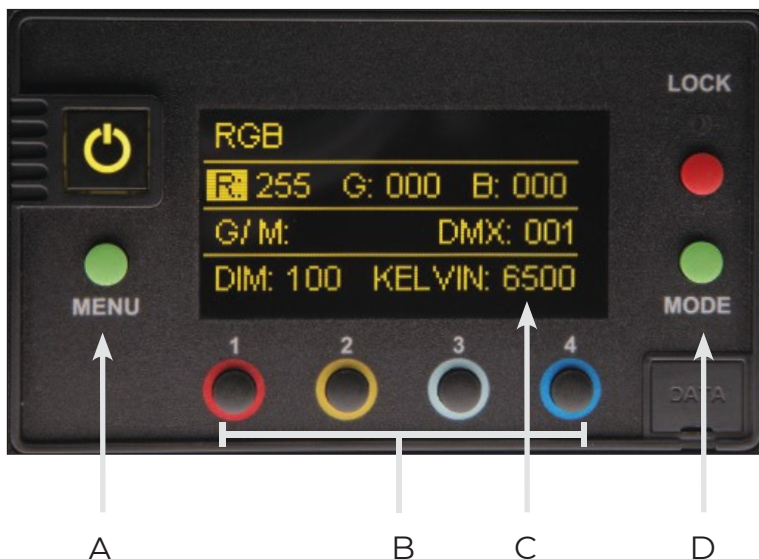
C) Display:

Provides access to Dim, Kelvin, G/M, Gel, Hue/Saturation and DMX channel.
Factory reset will show: Dim = 10%, Kelvin = 2700K, G/M = 000, DMX = 001.

D) Mode:

Press to navigate from Dim to Kelvin, G/M, Gel, Hue and Saturation settings. When on the Gel function, pushing the Control knob in/out will apply the gel or remove the gel. When in sub-menus, pressing Mode always returns you to main display. When DMX is applied, use Mode to access DMX channel on main display. Shortcut Tip: Long press will bring you back one step.

Control Panel - RGB Mode



RGB Mode

A) Menu:

Provides access to menu options such as General settings (**RGB** mode), Reset, DMX, DMX Wireless, Camera LUT and Color Space. Shortcut: While on control screen, press and hold for 3 seconds to switch through menus **White, Gels & Hue, RGB, CIE xy**.

B) Preset Buttons:

Factory defaults left to right are: 2700K, 3200K, 5000K and 6500K. G/M default value is 000. User can also use these preset buttons to store custom Kelvin between 2500K and 9900K and custom G/M, and RGB settings.

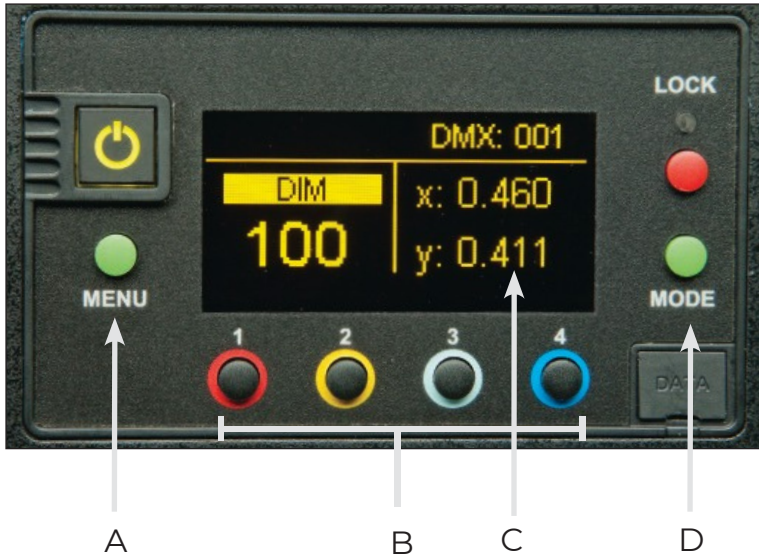
C) Display:

Provides access to Dim, Kelvin, G/M, RGB and DMX channel. Factory reset will show: Dim = 10%, Kelvin = 2700K, G/M = 000, DMX = 001.

D) Mode:

Press to navigate from Dim to Kelvin, G/M, RGB settings. When in sub-menus, pressing Mode always returns you to main display. When DMX is applied, use Mode to access DMX channel on main display. Shortcut: Long press will bring you back one step.

Control Panel - CIE xy



CIE xy Mode

A) Menu:

Provides access to menu options such as General settings (**CIE xy** mode), Reset, DMX, DMX Wireless, Camera LUT and Color Space.

Shortcut: While on control screen, press and hold or 3 seconds to switch through menus **White, Gels & Hue, RGB, CIE xy**.

B) Preset Buttons:

Factory defaults left to right are: 2700K, 3200K, 5000K and 6500K.

User can also use these preset buttons to store custom xy settings.

C) Display:

Provides access to Dim, CIE xy coordinates and DMX Channel.

Factory reset will show: Dim = 10%, $x = 0.460$, $y = 0.411$, G/M = 000, DMX = 001.

D) Mode:

Press to navigate from Dim to xy settings. When in sub-menus, pressing Mode always returns you to main display. When DMX is applied, use Mode to access DMX channel on main display. Shortcut: Long press will bring you back one step.

Camera LUT



The **Camera LUT** (Look-up Tables) feature harmonizes the Kino Flo light sources to the camera. Depending on the camera and the Kelvin setting, some differences are very subtle, while others can be more dramatic.

The corrections are applied as a **CIE xy** correction at each CCT (Kelvin) setting. The default setting is targeting the CIE xyz response (human eye).

Press the green menu button to the left of the display screen and scroll down to **Camera LUT**, then press the control knob. Menu with camera selection will be displayed. Turn the control knob and press to select camera setting:

- C1 Arri Alexa**
- C2 Sony Venice**
- C3 Panavision DXL**
- C4 Panasonic Varicam**

The camera code (C1 for Arri Alexa), for example, will appear on the main menu between **DIM** and **CCT** to designate that a camera setting is active. Note: When the controller is reset, the camera settings will go to Kino Flo Default mode.

Color Space



Color Space defines the RGB color space used and only affects color – not Kelvin. It is used in **RGB** mode and **Hue Angle** and **Saturation**. The RGB color space defines the value of Red, Green, and Blue primaries (in CIE xy) and the white point is fixed at 6500 Kelvin.

Press the green menu button to the left of the display screen and scroll down to **Color Space**, then press the control knob. Menu with color selection will be displayed. Turn the control knob and press to select Color Space options:

rec 709 / sRGB
P3 D65
rec 2020

The color space **rec 709 / sRGB** is commonly used on computer monitors, SDTV and HDTV television. There are slight gamma variations between rec 709 / sRGB, but not enough to separate into 2 color spaces.

The color space **P3 D65** is a common color space for digital movie projection.

The color space **rec 2020** is used in ultra high definition television (UHDTV).

The color space is used when the controller is set to the RGB mode and when set to the Hue Angle/ Saturation mode.

In **RGB** mode – the color space designation will be displayed at the top of the menu.

When changing the Red, Blue or Green values, the Kelvin will be locked in at 6500 for all color spaces. When the Kelvin is locked in, CCT will be displayed as CCT*.

When using Green/Magenta the CCT value is unlocked and color space selection has no impact.

In **Hue Angle/Saturation** mode – the color space designation will be displayed on the Gel line and GEL will be displayed as GEL* and CCT will be displayed as CCT*.

The Color space will be displayed only when Hue Angle and Saturation are being used. When using Green/Magenta or Gel, the CCT will be unlocked and color space selection has no impact.

Accessories



SYS-BK12 Block/KF21 Single Battery System, 140Whr, 28.8V (2 x Battery)



DFS-SL20-H FreeStyle 21 Flozier, Half

DFS-SL30-H FreeStyle 31 Flozier, Half

DFS-FS40-H FreeStyle 41 Flozier, Half



FIX-F21 FreeStyle 21 Fixture Shell Only

FIX-F31 FreeStyle 31 Fixture Shell Only

FIX-F41 FreeStyle 41 Fixture Shell Only



FIX-F21T FreeStyle/GT 21 Gaffer Tray

FIX-F31T FreeStyle/GT 31 Gaffer Tray

FIX-F41T FreeStyle/GT 41 Gaffer Tray



PAN-F21 FreeStyle 21 LED Panel Only

PAN-F31 FreeStyle 31 LED Panel Only

PAN-F41 FreeStyle 41 LED Panel Only



LVR-SL260-P FreeStyle 21 Louver/HP, 60°

LVR-SL360-P FreeStyle 31 Louver/HP, 60°

LVR-SL460-P FreeStyle 41 Louver/HP, 60°



DFS-FS21-S FreeStyle 21 SnapBag w/ 2 x Diffusion

DFS-FS31-S FreeStyle 31 SnapBag w/ 2 x Diffusion

DFS-FS41-S FreeStyle 41 SnapBag w/ 2 x Diffusion



LVR-FS240-S FreeStyle 21 Louver/HP, 40°

LVR-FS340-S FreeStyle 31 Louver/HP, 40°

LVR-FS440-S FreeStyle 41 Louver/HP, 40°

Cases



BAG-SL20

FreeStyle 21 Soft Case

BAG-SL30

FreeStyle 31 Soft Case



KAS-DL30

FreeStyle 31 Flight Case



KAS-DL21-C

FreeStyle/GT 21 Travel Case

KAS-DL31-C

FreeStyle/GT 31 Travel Case

KAS-FS41-C

FreeStyle/GT 41 Travel Case



KAS-FT24C

FreeStyle 21 Travel Case



KAS-FS22

Interview/FS 21 Ship Case (2-Unit)

KAS-FS32

Gaffer/FS 31 Ship Case (2-Unit)



MTP-KG41

KinoGrip 41K Mount
w/ 3/8" Pin (10mm)



MTP-BG41S

KinoGrip 41K Mount w/
Baby Receiver Short (16mm)



MTP-B41F

Kino Offset w/ Baby Receiver (16mm)



MTP-BAL1

Kino Bal/Led Controller Mount
(16mm)



MTP-BRA

Baby Right Angle Offset (5/8" Pin)



XLR-310

3-Pin Xlr DC Power Cable, 10ft



STD-M30

Medium Duty, 3-Rise 30"

STD-M36

Medium Duty, 3-Rise 36"

LED Fixture Specifications



FreeStyle LED

CFX-F41 FreeStyle 41 LED Fixture

Weight: 16 lb (7kg)

Dimensions: 52.5 x 4 x 9" w/ 6" barndoors
(133 x 10 x 23cm w/ 15cm barndoors)

CFX-F31 FreeStyle 31 LED Fixture

Weight: 15 lb (7kg)

Dimensions: 40.5 x 3.5 x 11" w/ 6.5" barndoors
(103 x 9 x 28cm w/ 16.5cm barndoors)

CFX-F21 FreeStyle 21 LED Fixture

Weight: 11.5 lb (5kg)

Dimensions: 26.5 x 3.5 x 13" w/ 6" barndoors
(67 x 9 x 33cm w/ 15cm barndoors)



FreeStyle/GT LED

CFX-F41T FreeStyle/GT 41 LED Fixture

Weight: 12.5 lb (6kg)

Dimensions: 50 x 2.5 x 8"
(127 x 6.5 x 20cm)

CFX-F31T FreeStyle/GT 31 LED Fixture

Weight: 11.5 lb (5kg)

Dimensions: 37.5 x 2.5 x 9.5"
(95 x 6.5 x 24cm)

CFX-F21T FreeStyle/GT 21 LED Fixture

Weight: 9 lb (4kg)

Dimensions: 23.5 x 2.5 x 11.5"
(60 x 6.5 x 29cm)



**FreeStyle LED
Panel Only**

PAN-F41 FreeStyle 41 Panel Only

Weight: 10 lb (4.5kg)

Dimensions: 49.5 x 2.5 x 7.5"
(126 x 6.5 x

19cm)

PAN-F31 FreeStyle 31 Panel Only

Weight: 9 lb (4kg)

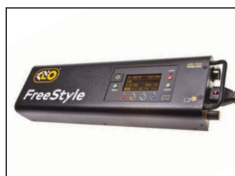
Dimensions: 37.5 x 2.5 x 9.5"
(95 x 6.5 x 24cm)

PAN-F21 FreeStyle 21 Panel Only

Weight: 7 lb (3kg)

Dimensions: 23.5 x 2.5 x 11.5"
(60 x 6.5 x 29cm)

LED Controller Specifications



**FreeStyle 152 LED
DMX Controller**

LED-152X FreeStyle 152 LED DMX Controller

AC Input Voltage: 100~240VAC 50/60Hz, 150W

Amperage VAC: 1.25A at 120VAC, 0.65A at 230VAC

DC Input Voltage: 18~36VDC, 150W

Amperage VDC: 6.25A at 24VDC

Kelvin Range: 2500K~9900K

Dimming Range: 100%~1%

Weight: 4 lb (2kg)

Dimensions: 15 x 4.5 x 3"
(38 x 11 x 8cm)

FCC Part 15 Verification:

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

FCC Part 15 Declaration of Conformity:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



KINO FLO, INC

FreeStyle & GT 41, 31 & 21 LED & LED-152X

ID: XRSCRMXTIMO101

IC: 8879A-CRMXTI01

The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced. The luminaire is intended for professional use only.



For latest Warranty information and Certifications,
see Kino Flo website at www.kinoflo.com.

Environmental: Disposal of Old Electrical & Electronic Equipment.

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. This product is made of recyclable materials and should be disposed of in accordance with governmental regulations.

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