Kino Flo's Select 30 and 20 LED DMX systems were launched with great success in June 2016. Lighting crews embraced the remote LED controller and the light-weight fixture that allow for rigging flexibility. In addition, users welcomed the ability to dim without color shift, dial in Kelvin temperatures, and select Green/Magenta settings using on-board controls or DMX lighting consoles. But, there was also a built-in secret.

Kino Flo launched the Select LED system as a white light source with Green/Magenta selection. Kino Flo used an RGB emitter to control the Green/Magenta color, but we knew that the RGB feature could do more. We just needed to sort out a menu system that would be as intuitive when using the controller manually as when using it on DMX.

The Select LED now includes three menu options, one white and two color menus. Those who prefer to work with white light can use the "white menu" that gives the user access to Dimming, Kelvin and Green/Magenta control channels. Kelvin range is from 2700K tungsten to 6500K daylight.

In the first color menu, the Kelvin range travels from 2500K tungsten to 9900K daylight, and Kino Flo has set up a fourth channel called Gel. The Gel channel includes Kino Flo presets such as blue & green screen, sodium vapor, mercury vapor and over 100 well-known lighting gels. In addition, there is also a fifth channel called Hue Angle and sixth channel, Saturation. These two channels behave similar to a traditional color wheel, where you have white light in the center, the Hue angle determines the color along a 360-degree range, and Saturation determines how much color is applied. The second color menu provides individual red, green, blue (RGB) control. This menu is a great way to work with apps with predetermined RGB presets or color wheels.

For those that have already purchased these units, there will be a free firmware update available in April 2017 to gain access to the new color menus.

Kino Flo's new Select LED's also come with standard DMX and wireless DMX (Lumen Radio®), 24VDC input, and universal voltage input 100-240VAC (1.25 Amps at 120VAC). We also recently added new Snapbag Softbox and Snapgrid accessories.
**LED Controller - White Mode**
- Kelvin presets & custom settings, 2700K-6500K
- Universal input 100VAC-240VAC or 24VDC
- Manual & DMX Dimming w/ Auto Terminate
- DMX wireless (Lumen Radio)
- Green/Magenta control
- Flicker-free, quiet operation

**Gels/Hue Color Mode**
In addition to White mode features, Color mode includes access to:
- Extended Kelvin color range 2500K-9900K
- Kino Flo presets and Gels
- Dial in any color through Hue Angle and Saturation control

**RGB Color Mode**
Additional Color mode includes:
- Individual Red, Green, Blue (RGB) contro
- Works with Apps with predetermined RGB presets or color wheels

**Select LED Fixture**
- Built-in Barndoors
- Removable Honeycomb Louver
- Twist-on, locking Center Mount

**Select LED Features**
- Kelvin presets
- Dial-in color temperature control between 2700K-6500K
- Extended color palate from 2500K-9900K
- Green/Magenta Control
- Hue angle and Saturation adjustments
- RGB control
- Works with Apps with predetermined RGB presets or color wheels
- Can use preset buttons to store custom Kelvin settings

**Gel List**
- Alphabetical
- Numerical
- Light levels do not change when selecting Kelvin settings
- Color-correct with high color rendering index (CRI 95)
- Universal input 100VAC-240VAC or 24VDC
- Energy efficient, draws 1.25A, 120VAC and 6.25A, 24VDC (Select 30 LED)
- Flicker-free, quiet operation
- Full range onboard and DMX dimming
- DMX wireless link (Lumen Radio)
- DMX Auto Terminate
- No color shift while dimming
- Remote fixture with built-in barndoors
- Fixture includes removable 90° Honeycomb Louver
- Honeycomb louver also available in 60° as accessory
- Removable Center Mount
- Mounts to stand, light enough to be hand-held

Select 30/20 LED DMX Kits

Select 30 LED DMX Kit w/ Soft Case  Select 30 LED DMX Kit w/ Flight Case  Gaffer 30 LED DMX Kit (2-Unit)

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<td>1 Soft Case</td>
<td>1 Flight Case</td>
<td>1 Ship Case</td>
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Dimensions
42.5 x 7.5 x 16.5" (108 x 19 x 42cm)

Weight
26 lb (12kg)

Select 20 LED DMX Kit w/ Soft case  Select 20 LED DMX Kit w/ Flight Case  Interview 20 LED DMX Kit (2-Unit)

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

Weight
46.5 lb (21kg)

Select 20 LED DMX Kit w/ Soft Case  Select 20 LED DMX Kit w/ Flight Case  Interview 20 LED DMX Kit (2-Unit)

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

Weight
69 lb (31kg)
Select LED System

The Select LED System consists of four components: Select LED Fixture (fig. 1), Mounting Plate (fig. 2), Select 150 LED DMX Controller (fig. 3), and Extension Cable (fig. 4). It was designed in this manner to allow the greatest flexibility in lighting solutions for challenging situations.

Select 30/20 LED Fixture

The Select LED fixture includes a removable 90° Louver. The fixture has a twist-on mating plate to accept a removable twist-on Center Mount. The remote Controller can also be attached to the back of the fixture with Velcro.

Fixture Accessories

Besides the plastic louvers, another light control option is a Flozier available in half f-stop. The Flozier attaches to the barndoors and can be adjusted to various configurations.
Honeycomb Louver – The spread of the light is controlled by means of thin wall honeycomb louvers. The advantage of these louvers is the minimal loss of light. The Select LED fixtures include a 90° louver. A 60° louver is also available as an accessory. They are lightweight and are held to the fixture with Velcro fasteners.

The SnapBag accessory (DFS-FS31-S & DFS-FS21-S) is a lightweight fabric tailor-made for the Select 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.

The SnapGrid accessory (LVR-FS340-S & LVR-FS240-S) is constructed of pre-stretched fireproof fabric with a built-in stainless steel frame. It unfolds and snaps into place. It can only be used with the corresponding SnapBag and is attached with Velcro. It cannot be used by itself.

Block/KF21 Battery

The KF21 battery can power 28.8V (20-34VDC) applications. Run time for the Select 20/30 LED is approximately 1 hour and 10 minutes at full brightness. When fixtures are dimmed, the battery will last longer. Charge time is only 1.5 hours versus Lithium batteries that take approximately 4 hours to fully charge. Unlike lithium batteries, the Kino Flo/BlockBattery is also travel friendly with no travel restrictions. BlockBattery Travel Documentation.

The Kino Flo/BlockBattery system includes a Mafer Mount, BAT-MM1, with 28.8V output with 3-Pin xlr, 3ft. The battery slides onto the mount and mounts onto a Mafer clamp.
The 3-pin xlr cable connects to the Select 150 LED DMX Controller.

For more information, see Battery.

Mounting

One of the design features of the Select LED Fixture is the twist-on removable Center Mount. When it’s on, the fixture mounts easily to a light stand; when it’s off, the fixture is flat and can be hand-held, or hidden in a space too small to place a stand-mounting fixture. When the mount is removed, the grommet holes along the edge of the fixture are designed to allow the fixture to be screwed to a wall or ceiling through its eyelets.

Mounted on a Stand

The standard mount comes with a Baby Mount that mounts onto a baby stand. The ball and socket mount allows the fixture to be oriented in a broad range of angles. There is also a short version and mount w/ 3/8” pin (see below) available as accessories. The yellow wire loops are there to provide attachment points for a safety chain.

Mounting options include MTP-KW41 Mount with 3/8” Pin (10mm); MTP-BW41 Mount with Baby Receiver Curve (16mm); MTP-BW41S Mount with Baby Receiver Short (16mm).
Note: The lollipops on all of these mounts are interchangeable.

**MTP-L**  Kino 41 Lollipop w/ 3/8” Pin

**MTP-LBC**  Kino 41 Lollipop w/ Baby Receiver Curve (16mm)

**MTP-LBS**  Kino 41 Lollipop w/ Baby Receiver Short (16mm)

Turn the knob to loosen or tighten the orientation of the mount.

The lollipops on all of these mounts are interchangeable.

**MTP-B41F**

The Kino Offset w/ Baby Receiver, **MTP-B41F** (sold separately) can be used to center the weight and balance of the fixture on a stand. It can also be under slung from a baby stand to use as an up light.

**MTP-BAL**

A Ballast Baby Mount (**MTP-BAL**) is available as an accessory.

The **MTP-BAL** can be used with a Mafer clamp to mount the Controller onto a stand, for example.

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**The Select 150 LED DMX Controller**

The Select 150 LED DMX Controller includes includes state of the art features; dial-in variable color temperature control; full-range dimming; programmable presets; three menu options, one white and two color menus. The “white menu” gives the user access to Dimming, Kelvin, and Green/Magenta control channels. Kelvin range is from 2700K to 5500K.

In the first color menu, the Kelvin range travels from 2500K tungsten to 9900K daylight, and Kino Flo has set up a fourth channel called **Gel**. The Gel channel includes Kino Flo presets such as blue & green screen, sodium vapor, mercury vapor and over 100 well-known...
lighting gels. In addition, there is also a fifth channel called **Hue Angle** and sixth channel, **Saturation**. These two channels behave similar to a traditional color wheel, where you have white light in the center, the Hue angle determines the color along a 360-degree range, and Saturation determines how much color is applied. The second color menu provides individual red, green, blue (**RGB**) control. This menu is a great way to work with Apps with predetermined RGB presets or color wheels.

It operates flicker-free and does not shift color temperature when dimmed. Light levels are consistent throughout the Kelvin range. The controller can be used remotely with a 25ft extension cable or can easily be attached to the back of the Select LED fixture with Velcro.

With built-in DMX and Lumen Radio® receivers, the Select LED’s can be controlled by DMX or DMX wireless with DMX auto terminate. The energy efficient Select 150 LED DMX Controller runs on universal input voltage from 100-240VAC at only 1.25A (120VAC) (Select 30 LED) or can also operate 24VDC using only 6.25A.

For **Select LED DMX Mapping**, [click here](#).

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### Select 150 LED DMX Controller - 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 and DMX Wireless settings. Tip: While on control screen, press and hold for 3 seconds to switch to **Color** mode.

C) **Kelvin & G/M (Green/Magenta) 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 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. Tip: Long press will bring you back one step.

G) **Data Port:** Mini B USB for software updates.

H) **Dimmer Knob:** Manually adjusts Dim, Kelvin, G/M levels and DMX address. Press the knob to toggle between fine and coarse adjustments or when selecting options within menus.

DMX Note: Each Select 150 LED DMX Controller has an **“AUTO TERMINATE”** feature. The last fixture that does not have an XLR cable attached to the DMX “Out” port will automatically terminate.

### Select 150 LED DMX Controller - Gels/Hue Color Mode
In addition to White mode features, Color Mode provides access to Kino Flo presets and Gels, Hue angle and Saturation adjustments.

Select 150 LED DMX Controller - RGB Color Mode

RGB color mode includes access to individual Red, Green, Blue (RGB) control. Works with Apps with predetermined RGB presets or color wheels.

Power

AC Input
The Select 150 LED DMX Controller is powered AC and includes an IEC connection. The controller includes universal input from 100-240VAC.

DC Input
The Select 150 LED DMX Controller 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

DMX Operation
The Select LED DMX operates on three DMX channels (in White mode) using DMX512 (six DMX channels in Color mode). The first channel operates dimming; the 2nd channel operates Kelvin color temperature control; the 3rd channel operates the Hue.

In Gels/Hue Color mode: 4th channel operates the Gel; 5th channel operates the Hue angle and the 6th channel operates the Saturation.
In **RGB Color** mode, 4th channel operates Red; 5th channel operates Green and the 6th channel operates Blue.

**Wireless Operation**

The Select 150 LED DMX Controller includes a built-in Lumen Radio receiver and can be operated wirelessly with a Lumen Radio transmitter (sold separately). Wireless is an option to using DMX cables. For more information on Lumen Radio Receiver/Transmitter, see [www.LumenRadio.com](http://www.LumenRadio.com).

**The Select 150 Extension cable**

Up to 50 feet (2 x 25ft) of extension cable can be used between the fixture and the Controller.

**Cases**

The flight case (**KAS-DL30 or KAS-DL20**) is well suited for long distance transport by sea or air. The rugged construction ensures that the system is well protected. The flight case holds one Select LED system, an additional louver and a medium duty stand.

The metal valence ship case (**KAS-SL32 or KAS-SL22**) is recommended for transport by sea or air. The ship case holds two Select LED systems, two medium duty stands and space for two additional louvers.

The telescoping cases are recommended for location transport in small vehicles or local production trucks. The cases hold three Select 30 LED Fixtures (**KAS-SL33**) or three Select 20 LED Fixtures (**KAS-SL23**).

The soft case (**BAG-SL30 or BAG-SL20**) is made out of lightweight fabric material. It has room for one Select LED System, medium duty stand and an additional louver.
Select LED Advantages

Energy Efficiency
The Select LED DMX operates on universal AC power or battery power and needs only 1.25A at 120VAC or 6.25A at 24VDC (Select 30 LED). The Select LED's cost savings from low energy and long LED life continues Kino Flo's reputation as an environmentally friendly lighting company.

Modular Design
As with our award winning 4Bank system, the Select LED fixture's lightweight modular design includes built-in barndoors and a removable louver. The Louver can give direction to the light or be removed to give broad coverage over an area. The twist-on removable center mount can mount the fixture easily to a stand. When the mount is removed, the fixture is flat and can be hand-held or screwed to the wall or ceiling through its eyelets. The Select 150 LED DMX Controller can also be strapped to the back of the fixture with Velcro or used remotely.

High Output Select LED Controller
The Select 150 LED DMX Controller features state of the art electronics with presets and custom settings with three menu options, one white menu and two color menus. In white mode, users have access to Dimming, Kelvin and Green/Magenta control channels. Kelvin range is from 2700K tungsten to 6500K daylight. Light levels do not change when selecting Kelvin settings. In the first color menu, the Kelvin range travels from 2500K tungsten to 9900K daylight, and Kino Flo has set up a fourth channel called Gel. The Gel channel includes Kino Flo presets such as blue & green screen, sodium vapor, mercury vapor and over 100 well-known lighting gels. In addition, there is also a fifth channel called Hue Angle and sixth channel, Saturation. The second color menu provides individual red, green, blue (RGB) control. This menu is a great way to work with apps with predetermined RGB presets or color wheels. With built-in DMX and Lumen Radio® receivers, the Select LED’s can be controlled by DMX or DMX wireless. With universal input at 100-240VAC, the Select 30 LED uses only 1.25A at 120VAC or 6.25A at 24VDC. The unique features and portable design make the Select LED a versatile tool in the studio or on location.

Long LED Life
LED's are well known as being energy efficient, lasting for thousands of hours. While Kino Flo's Select LED also has a long LED life, the Select LED's unique design will maintain its color-correct color temperature.

True Match® Color-Correct
As with all Kino Flo products, the Select LED has been specially formulated to match the spectral distribution curves of today's HD film and video equipment. The Select LED has a high color rendering index of CRI 95. Even while dimming, the fixture is flicker-free and without color shift.

Heat Management Design
For Kino Flo, heat management is a critical design element of fixture design. The physical heat or buildup heat within the LED fixture will directly influence the color temperature, lumen performance and life of an LED.

The Select LED’s unique design operates coolly, consumes very low energy (1.25A, 120VAC) and is properly ventilated to maintain a stable color temperature.
A well maintained temperature extends the lumen maintenance, color temperature and life of an LED.

Cost Savings
Cost savings cover a broad range of concerns:
- Lower energy costs
- Less heat so lower air conditioning expenses

Energy Savings Calculations
With the push for reducing fossil fuel consumption, TV studios are looking at cooler more efficient lighting systems to reduce the costs and save energy. Part of this process involves generating energy values to determine savings. One of the most important values is Btu/kWh.

British Thermal Units per Kilowatt Hour
Any light generates a percentage of usable light and the rest in heat. For example, a standard incandescent light bulb converts only 11 percent of its electrical input into visible light, while the rest is dissipated directly as heat. There are energy costs involved in cooling the studio environment. The measure of Btu/kWh is a means of calculating the thermal loads related to operating lighting.

Use the following information to calculate Btu/kWh Watts to Btu:

1 kWh = 3413 Btu/Hr
1 Watt = 3.413 Btu/Hr

3.413 Btu per Watt-hour