EVOLUTION® 6000 Thermal Imaging Cameras
Color Palette Guide and Applications

MSA
The Safety Company

WHEN YOU GO IN, WE GO IN WITH YOU.

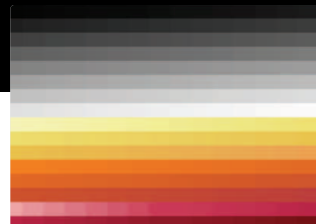## **White Hot (WH)**

- Hottest objects are white, coldest objects are black. All other objects are represented in shades of gray.
- Yellow, orange and red (highest temperature) colorization is added as temperature increases.
- Optimized for the full range of firefighting applications and temperature exposures.
- NFPA Basic Mode color palette as specified as standard by NFPA 1801.
- This operating mode should be familiar to any firefighter familiar with thermal imaging technology.

Application:

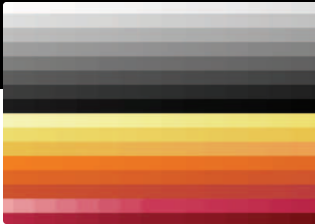- Structural firefighting
  - Initial size-up
- Search and rescue

Colors displayed, cold to hot

Size-up

Hot spots

Colors displayed, cold to hot

Size-up

Hot spots

Black Hot (BH)

- Opposite of White Hot. Hottest objects are black, coldest objects are white. All other objects are represented in shades of gray.
- Yellow, orange and red (highest temperature) colorization is added as temperature increases.
- Optimized for the full range of firefighting applications and temperature environments.
- NFPA Plus Mode color palette

Application:
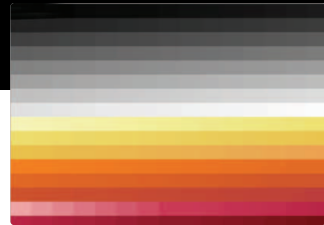
- Water rescue
- HazMat
- Search and rescue

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EVOLUTION® 6000 **TIC**

Fire and Ice (F&I)

- Based upon White Hot palette. Hottest image is automatically colored red, coolest image is automatically colored blue. No other colors are applied to image.
- Optimized for rapid identification of temperature minimums and maximums across the full range of firefighting applications and temperature environments.
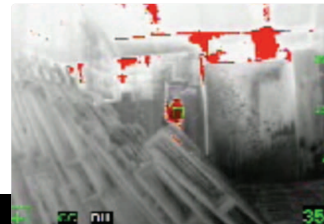- NFPA Plus Mode color palette

Application:

- Structural firefighting:
  - Locating fire source (size-up, overhaul)
  - Locating victims
  - Locating fire extension
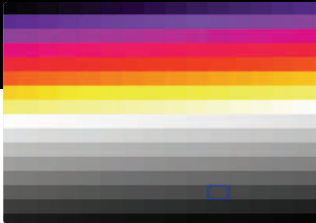- Search and rescue
- HazMat scene size-up
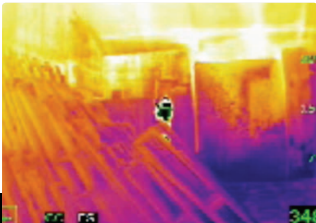

Colors displayed, cold to hot

Size-up

Hot spots

Colors displayed, cold to hot

Size-up

Hot spots

Ironbow (IRON)

- Image is colorized from dark purple, light purple, orange, yellow, white, and black, from coldest to hottest temperature.
- Palette provides high levels of colorization to clearly show temperature differences.
- Palette is commonly used on industrial thermal imaging cameras.
- Optimized for detail enhancement across the full range of firefighting applications and thermal environments.
- NFPA Plus Mode color palette

Application:

- Structural firefighting
  - Size-up
- Scene investigation involving electrical or ventilation issues
- HazMat size-up
- Motor vehicle accident response/investigation
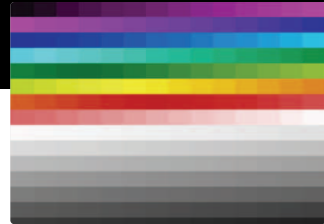- Liquid storage evaluation
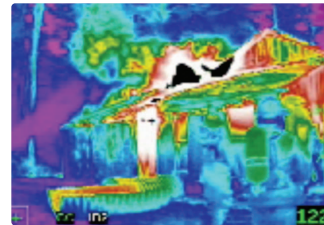
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EVOLUTION® 6000 **TIC**

Rain (RAIN)

- Image is colorized from coldest to hottest, from purple, blue, green, yellow, orange red, white, gray, and black.

- Image stays in multi-color at lower temperatures, providing very high levels of colorization across lower temperature differentials.

- Palette is commonly used on industrial thermal imaging cameras.

- Optimized for high detail within low temperature differential environments.
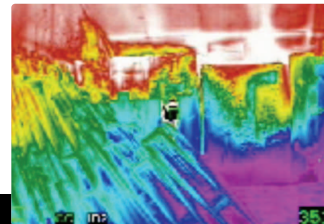
- NFPA Plus Mode color palette

Application:

- Scene investigation involving electrical or ventilation issues
- Initial scene size-up for where heat may be more/most intense
- Hazmat scene size-up
- Motor vehicle accident response/investigation
- Missing person searches
- Egress from environment with little temperature variation
- Fire scene investigation (arson suspicion)
- Liquid storage evaluation

Colors displayed, cold to hot

Size-up

Hot spots

Room Temperature Search and Rescue (S&R)

- Based upon White Hot palette, provides increased level of detail in room temperature environments.
- Optimized for enhanced detail when operating in room temperature environments.
- NFPA Plus Mode color palette

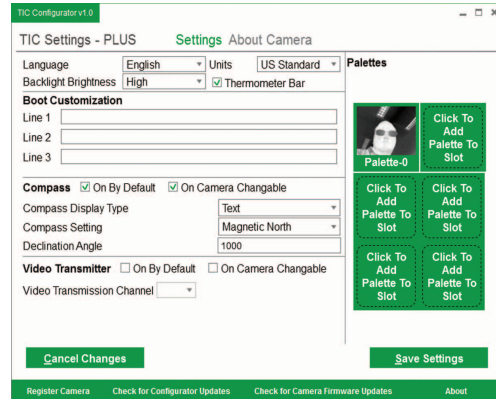### Application:

- Search and rescue

EVOLUTION 6000 TICs offer six color palettes for many applications, including:

- Initial scene size-up & overhaul
- Structural firefighting
- Search & rescue
- Fire extension location
- Water rescue
- HazMat
- Scene investigation
- Liquid storage evaluation

Users can employ the TIC software configuration application to change the order, add or remove color palettes to meet their individual needs. Additional color information is available from MSA's EVOLUTION 6000 TIC instruction manual (P/N 10127438), available for download at www.MSAsafety.com.