

Atik Horizon Features:

The gain and offset for the horizon camera is more complicated than for other cameras and since it is unique to the horizon, I added some new functions for this:

```
bool __stdcall ArtemisHasCameraSpecificOption(ArtemisHandle handle,
    ushort id);
```

```
int __stdcall ArtemisCameraSpecificOptionGetData(ArtemisHandle
    handle, ushort id, unsigned char * data, int dataLength, int
    &actualLength);
```

```
int __stdcall ArtemisCameraSpecificOptionSetData(ArtemisHandle
    handle, ushort id, unsigned char * data, int dataLength);
```

You will need to call these functions with the following IDs:

```
const ushort ID_AtikHorizonGOPresetMode      = 1;
const ushort ID_AtikHorizonGOPresetLow       = 2;
const ushort ID_AtikHorizonGOPresetMed       = 3;
const ushort ID_AtikHorizonGOPresetHigh      = 4;
const ushort ID_AtikHorizonGOCustomGain      = 5;
const ushort ID_AtikHorizonGOCustomOffset    = 6;
```

The camera has three preset gain/offset values: Low, Medium and High. You can also set the camera to your own custom values (which will get saved on the camera and thus remembered after a power cycle).

To find out if the camera has this gain/offset settings, you can call 'ArtemisHasCameraSpecificOption' with any of the ideas. It'll return true if it has them (i.e. it is a horizon) and false otherwise (any other camera)

To find out the current mode, call ArtemisCameraSpecificOptionGetData with

```
id= AtikHorizonGOPresetMode .
```

The data needs to be an array that already exists (it can't be null). In this case it'll be populated by an unsigned short (2 bytes) which tells you the mode. 0=Custom, Low=1, Med=2, High=3.

To set the mode, call 'ArtemisCameraSpecificOptionSetData' with the first two bytes set to the mode. In both cases, the data is little endian.

To set the custom gain and offset, call 'ArtemisCameraSpecificOptionSetData' with

```
id= AtikHorizonGOCustomGain
    or
id= AtikHorizonGOCustomOffset.
```

The data should be set to an unsigned short as above. Valid values are

Gain: 0 to 60 (0 to 30 is the useful range).
Offset: 0 to 511

You can get the current custom gain and offset values by calling
"ArtemisCameraSpecificOptionGetData", the data will again be an unsigned short, as above.