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| Command | Code | Additional parameters | Returns | Description |
| Blink power LED | 0x00 | None | 0x00 | Blinks the power LED 10 times |
| Visor | 0x01 | None | 0x01 | Plays a visor pattern across the front panel LEDs |
| Blink power for counts | 0x02 | Number of blinks (0-255) | 0x02 | Blinks the power LED for the specified number of times |
| Set radius | 0x10 | Waveform amplitudes (0-65535) | 0x10 | Updates the waveform output amplitude DACs with the specified values. The new values is saved in memory as the circle scan amplitude. The command is sent as:  0x10 HB\_X LB\_X HB\_Y LB\_Y  Where HB and LB are the high byte and low bytes for the respective axis |
| Set center | 0x11 | Waveform offsets (0-65535) | 0x11 | Updates the DC offset to the waveform outputs. Applies only when scanning (waveform) mode is active. Sent as:  0x11 HB\_X LB\_X HB\_Y LB\_Y |
| Set TIRF | 0x12 | Waveform amplitudes (0-65535) | 0x12 | Updates the stored TIRF amplitude values. Switches output to TIRF scan. Same message structure as “Set radius”. |
| Circle scan | 0x13 | None | 0x13 | Switches to circle scan value for the waveform amplitude. |
| TIRF scan | 0x14 | None | 0x14 | Switched to TIRF scan value for the waveform amplitude. |
| Location park | 0x15 | DC amplitudes (0-65535) | 0x15 | Stops scanning (waveform) output and sets a constant output voltage. Same message structure as “Set center”. |
| Discrete scan | 0x16 | Amplitude and scan rate | 0x16 | Stops waveform output and approximates sine wave outputs with a discretized, 32-point sine wave. Sent as:  0x16 HB\_amp LB\_amp HB\_reset LB\_reset  The point dwell time is calculated as 0.25\*(0xFFFF-reset) μs where reset is an integer between 0 and 65535.  Must be canceled by sending 0x1E before resuming waveform operation. |
| Discrete scan off | 0x1E | None | 0x1E | Cancels the discrete scan output |
| Center Park | 0x1F | None | 0x1F | Stops waveform and sets output to the scan center value in memory. Sets the illumination blank and shutter outputs to 0. |
| Set Frequency | 0x20 | Waveform frequency (0-65535) | 0x20 | Updates the waveform output frequency of both axis.  0x20 HB\_freq LB\_freq |
| Default Frequency | 0x21 | None | 0x21 | Updates the waveform output frequency of both axis to 1 kHz |
| Set Phase | 0x22 | Waveform phase offset (0-4095) | 0x22 | Sets the phase offset of the two waveform outputs to a new value. The phase offset in degrees can be calculated as *f* \* 360 \* 2-12.  0x22 HB\_freq LB\_freq |
| Default Phase | 0x23 | None | 0x23 | Updates the waveform output phase offset to 90 deg |
| Toggle waveform clock | 0x24 | None | 0x24 | Toggles the waveform generation master clock on/off. When the clock is switched off the output remains constant at the last value. |
| Waveform disable | 0x25 | None | 0x25 | Puts the waveform generators into reset state. Output is set to midscale (0 V). Updates to frequency and phase are stored and will be reflected in the outputs once reenabled. |
| Waveform enable | 0x26 | None | 0x26 | Returns the waveform generators from reset. |
| Waveform sine | 0x27 | None | 0x27 | Sets the output waveform type to sine |
| Waveform triangle | 0x28 | None | 0x28 | Sets the output waveform type to triangle |
| Waveform square | 0x29 | None | 0x29 | Sets the output waveform type to square |
| Set axis frequency | 0x2A | Per-axis frequencies (0-4095) | 0x2A | Update the frequency of each waveform generator independently.  0x2A HB\_Xfreq LB\_Xfreq HB\_Yfreq LB\_Yfreq |
| Set DC value | 0x30 | Output (0, 1), value (0-1023) | 0x30 | Set the DC level of the specified output  0x2A Output HB\_value LB value |
| Set DC midscale | 0x31 | None | 0x31 | Sets the DC level of both outputs to midscale (0 V) |
| Set DC minimum | 0x32 | None | 0x32 | Sets the DC level of both outputs to the minimum value (-0.1 to -10 V depending on the hardware configuration) |
| Enable excitation | 0x40 | None | 0x40 | Sets the global blanking output high |
| Disable excitation | 0x41 | None | 0x41 | Sets the global blanking output low |
| Set excitation channel | 0x42 | Channel (0-7), value (0-1023) | 0x42 | Updates the output value of the specified channel  0x42 Channel HB\_value LB\_value |
| Load excitation profile | 0x43 | Profile number | 0x43 | Sets the current excitation output to the values stored in the profile |
| Open shutter | 0x44 | None | 0x44 | Sets the digital shutter output high |
| Close shutter | 0x45 | None | 0x45 | Sets the digital shutter output low |
| Toggle shutter | 0x46 | None | 0x46 | Toggles the output state of the digital shutter output |
| Add excitation profile | 0x4C | Profile number, values (0-1023) | 0x00 on success | Adds an excitation profile to memory. Any data in the existing profile will be overwritten. Values are listed in channel order from 0 to 7. Values are byte-pairs, high byte first.  0x47 Profile HB\_Ch0 LB\_Ch0 HB\_Ch1 LB\_Ch1 … LB\_Ch7 |
| Excitation reset | 0x4F | None | 0x4F | Resets the excitation outputs to 0 V and sets the global blank low. |
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