

Countdown Timer v2.0.10.0

Remote Control Protocol

Web: <http://www.irisdown.co.uk> Email: support@irisdown.co.uk

Description

Remote control is available via TCP on port 61002

Syntax

Commands are sent in ASCII and require an EOL (either \r, \n or \r\n). Responses have an EOL of \r\n and a response of 'OK' indicates success. A response of 'ERROR' indicates the command could not be parsed and a response of 'INVALID' indicates the command was out of context e.g. trying to pause a stopped timer. While UPDATES mode is enabled, all other responses are disabled.

Supported Commands (new commands marked +)

Command	Description
GO	Start timer with current duration or resume
PAUSE	Pause timer
TOGGLEPAUSE	If playing, pause or if paused, resume
RESET	Reset timer to last set duration
RESET <time>	Reset timer with new duration
REMAINING	Get remaining seconds
+ JOG <minutes>	Adjust timer up/down while running
STATE	Report current state
DISPLAY <mode>	Change display mode
UPDATES <on off>	Sends time remaining hh:mm:ss and playstate when either change
+ UPDATEMODE <1 2>	Change UPDATES syntax
VERSION	Reports application version
+ MESSAGE "text"	Display text as message
+ MESSAGE CLEAR	Clear message from display

GO

Description: If timer is stopped, starts timer with last set duration. If paused, resumes timer

Syntax: GO

PAUSE

Description: Pauses running timer

Syntax: PAUSE

TOGGLEPAUSE

Description: If running, timer is paused. If paused, timer resumes

Syntax: TOGGLEPAUSE

RESET

Description: Stops timer and loads last set duration

Syntax: RESET

RESET <time>

Description: Stops timer and loads a new duration in minutes or hours & minutes (hh:mm) or hours, minutes & seconds (hh:mm:ss)

Syntax: RESET <time> where <time> is:

minutes (integer e.g. RESET 25) **or**

hh:mm:ss (also with seconds e.g. RESET 00:05:30)

Use leading zeroes and no spaces when using hh:mm or hh:mm:ss

+ JOG <minutes>

Description: Adjusts timer up or down, even while running

Syntax: JOG <minutes>

For example:

JOG 5

JOG -5

REMAINING

Description: Queries number of seconds remaining on timer

Syntax: REMAINING

STATE

Description: Queries timer state

Syntax: STATE

Response: PLAYING, PAUSED, STOPPED

DISPLAY <mode>

Description: Sets display mode to Timer, Clock only, Black, Test Pattern

Syntax: DISPLAY <mode> where <mode> is TIMER, CLOCK, BLACK, TEST

UPDATES <ON|OFF>

Description: When enabled, a change in time remaining, play state, display mode or message state will send a single line string about the state of the timer. The string is terminated with CRLF. The default is mode 1 (for legacy connections) which is now feature-locked.

Mode 2 has some additional parameters and scope to add more. Mode 2 parameters are separated by &.

When enabled, all other command responses are disabled.

Syntax: UPDATES <ON|OFF>

Parameter details:

± = positive or negative sign where negative indicates overtime

hh:mm:ss = time remaining

<PlayingState> = PLAYING | PAUSED | STOPPED

<DisplayMode> = TIMER | CLOCK | BLACK | TEST

<MessageState> = TRUE | FALSE

Mode 1 Response:

hh:mm:ss <PlayingState> <DisplayMode>

For example: 00:10:00 STOPPED TIMER

Mode 2 Response:

TIME=±hh:mm:ss&STATE=<PlayingState>&DISPLAY=<DisplayMode>&MESSAGE=<MessageState>

For example: TIME=+00:10:00&STATE=STOPPED&DISPLAY=TIMER&MESSAGE=TRUE

+ UPDATEMODE <1|2>

Description: Changes between different update feedback modes. The default is 1 for legacy connections. Mode 2 was added to expand the feature while maintaining backwards compatibility.

Mode 1: hh:mm:ss <Playing State> <Display Mode>

Mode 2: TIME=±hh:mm:ss&STATE=<Playing State>&DISPLAY=<DisplayMode>&MESSAGE=<Message State>

VERSION

Description: Reports application version.

Syntax: VERSION

Response: VERSION a.b.c.d

For example:

VERSION 2.0.10.0

+ MESSAGE CLEAR

Description: Remove currently displayed message (if any). Equivalent to MESSAGE "".

Syntax: MESSAGE CLEAR

Response: OK

+ MESSAGE "<text>"

Description: Display <text> on screen. String length of over 90 characters will be truncated.

Syntax: MESSAGE "<text>"

For example:

MESSAGE "Lunch has been brought forward 15 minutes"

Response: OK

Version History

Version	Commands	Notes
2.0.10.0	UPDATEMODE JOG MESSAGE RESET hh:mm	New (added alternative feedback string) New New Option removed (support for seconds made this option ambiguous)

2.0.9.1	UPDATES VERSION	New (added feedback string) New
2.0.6.0	GO RESET PAUSE TOGGLEPAUSE REMAINING STATE	

UDP Broadcast

The time remaining and other information is UDP broadcast every 0.1 second on port 61003. The broadcast has a target IP of 255.255.255.255 which means it will reach every device in the local network. The packet contains a 20 character string which breaks down as follows (since v.2.0.10.0):

Character index	Value	Description
0-4	"IDCT:"	Identifying header
5	"-" or "+"	Sign of time remaining, where "-" indicates overtime
6-11	"000000" to "344619"	Time remaining in seconds (max is 99x59x59 seconds)
12	"0" to "F"	Id of Timer instance as hexadecimal
13	"G" or "A" or "R"	Text colour (green, amber, red) (currently not supported)
14	"0" or "1"	Text blink (0=no, 1= yes)(currently not supported)
15-19	unused	For future expansion