

## LOCKIT TECHNOLOGY

PORTABLE TIMECODE, SYNC &amp; METADATA



For about 20 years, the Ambient Lockit is the market leading portable, timecode and sync generator worldwide. The technology is based around a highly accurate, tunable, temperature compensated crystal for reliable synchronization of multiple devices without cables or fragile wireless transmission. The new ACN network generation adds even more accuracy and comfort to the system, while maintaining the renowned reliability.

Ambient has developed Lockit OEM modules with full ACN capabilities available for effortless 3rd party integration. This provides other equipment manufacturers the ability to incorporate Ambient's highly accurate timecode and metadata network.



## MASTER LOCKIT ACN-ML

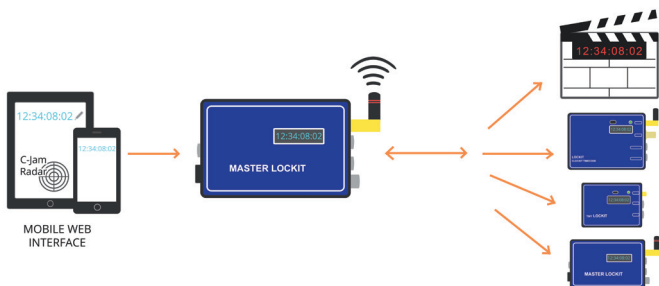
### The new control center for all Lockits in your arsenal

The MasterLockit adds control, flexibility and comfort to your existing Lockit setup.

Being designed to perform as central hub in your system, the unit is able to display and control all other ACN devices on set.

Access the ACN control system using the browser of any device via Wi-Fi for elegant wireless functionality.

This enables you to name your Lockits and assign them to the camera or audio recorder to which they are connected.



What's more, you can remotely jam sync and name all units on set, view battery status, frame rate, set the time, use time of day, see the last clap time of the ACN-LS...

**TC: 12:18:33:13**

Hub Mode ☒

mi-ad004

Help System

Timecode

Metadata Network

Metadata Live

Metadata Export

**Timecode**

HH

MM

SS

FF

Set Timecode

Set Timecode to Time of Day

**Frame Rate (FPS)**

24F

**ACN Channel**

11

**C-JAM**

On

**ACN Radar**

**Ton**

Tiny Lockit (v3.54.0091)

MAC: 00:04:A3:FF:FE:6E:26:19

80 % (Alkaline)

FPS: 25F

**RED 1**

ACL 204 (v3.53.0089)

MAC: 00:1E:C0:FF:FE:F8:E0:B6

70 % (Lithium)

FPS: 25F

**Slate A**

Lockit Slate (v3.55.0099)

MAC: 00:04:A3:FF:FE:D2:86:59

100 % (Lithium)

FPS: 24F

**RED 2 (offline)**

n/a

MAC: 00:1E:C0:FF:FE:D2:86:59

n/a

FPS: n/a

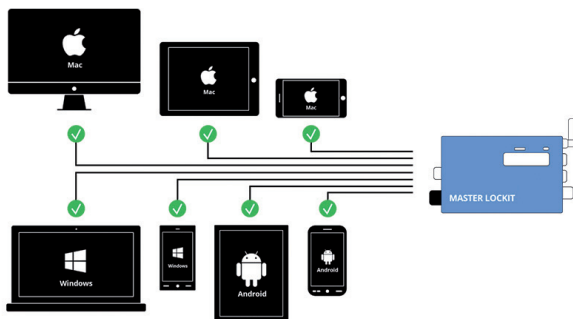
Master Lockit v1.5.2 Ambient Recording

## Cross-Platform Elegance

The MasterLockit control surface is self-contained and accessible from any device with a browser and WiFi – so it is not bound to a specific platform like iOS or Android.

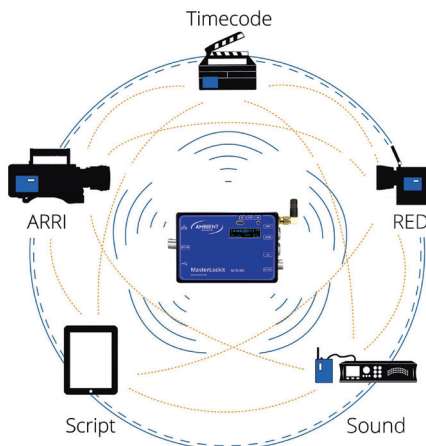
Thanks to its responsive design, the control interface will always automatically adjust to your screen size.

In other words, any device with integrated WiFi and browser can connect to the ACN-ML web interface without limitation.



## It is a timecode master and „On Set“ metadata server

With its dual processor architecture the MasterLockit truly is the most powerful timecode device we have ever built. Using the acclaimed Lockit timecode generator with its rock-solid, high-accuracy, temperature-compensated oscillator, along with the sophisticated ACN, the MasterLockit offers features like a generator buffered timecode transceive mode, 0.0ppm drift between linked units through the unique continuous jam with control, and monitoring through the integrated web GUI.

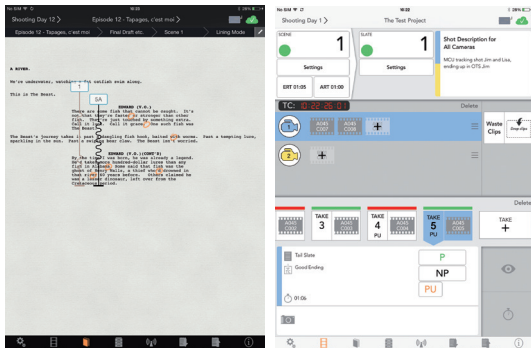


## Metadata Network

As productions already use Lockits and connect them to cameras, 3D-rigs, Sound recorders..., ACN-equipped Lockit units can also read out device-specific metadata for transmission to the MasterLockit server. While the internal memory centrally stores and hosts all metadata collected through ACN connected units, iPads running LockitSCRIPT automatically sync their data through the MasterLockit's router functionality.

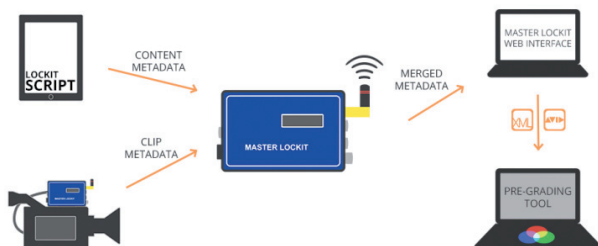
## Included LockitScript App

The LockitScript app elegantly accommodates all the daily needs within the demanding role of a Script Supervisor. This comprehensive and time-saving tool helps fighting paperwork, duplicate listing and overtime after wrap. Once used together with the MasterLockit, you can experience the beauty of two worlds working smoothly together.



## DIT Features

With the LockitScript app, and the ACN metadata working, the MasterLockit Web Interface enables DITs to access the merged data in real-time, and to download important clip-based content information as e.g an ALE-File for direct import into your pregrading software.



## Remote control your Sound Devices recorder

With Firmware 4.1, we integrate remote functionality for the renowned Sound Devices 633, 664, 688, and 788T into the MasterLockit's capabilities. The new Remote Control Tab in the MasterLockit's web interface provides wireless access to the most important recorder functions like Record Start / Stop, Track Naming, Track Arming, Metadata entry for the current and upcoming clip, Circle & Waste Clip, Track Metering (with the 788T), Access to the metadata of the last clips.



MasterLockit controls 688

## KEY FEATURES

### Integrated Lockit:

Highly accurate Lockit timecode generator  
 Generator buffered timecode transceiver  
 Drift of less than 1 frame a day (~0,1ppm)  
 No drift at all within the ACN  
 Supports all SMPTE frame rates  
 Sunlight readable OLED Display  
 Adjustable timecode output for recording TC on audio track

### Built-In Hub:

Integrated 16GB server  
 Collects and stores all ACN and LockitScript metadata  
 Enables ACN - iOS LockitScript app communication  
 Reads and stores ARRI ALEXA metadata  
 Reads and stores RED camera metadata (all DSMC cams)  
 Reads and stores Sound Devices 788T & 6-series metadata  
 Creates Shot Log, Sound Report, ALE, CSV, JSON reports with collected metadata

### Web Interface:

Remote Control of MasterLockit  
 Remote control of ACN ready Lockit devices  
 Remote control of Sound Devices 788T & 6-series recorders  
 Metadata Live view

### Physical Details:

Material: anodized, pearl blasted aluminum  
 Dimensions: 91 x 64.5 x 33 mm (overall length with WiFi and SMA antenna detached: 102.5mm)  
 Mounting Options: 3/8" Thread, ACM-TL quick lock mount (not included)  
 Weight: approx. 275 g

### Power:

Requires external DC Supply with 6-24V, 1.5A DC  
 Power consumption when charged / charging @ ext. DC Supply:  
 ~ 500mA/850mA @ 6V  
 ~ 250mA/ 400mA @ 12V DC  
 ~ 150mA/ 200mA @ 24V DC  
 Internal backup battery: Li-Ion backup battery, ~up to 3 hours when fully charged

### Connectors:

2x USB  
 TC-Lemo 5-pin: tc I/O, adjustable tc level  
 ACN-Lemo 5-pin: 2nd tc I/O, Serial Interface  
 Ethernet  
 2x Hirose I/O to loop through DC

ACN-ML panels



## LOCKIT

### ACL 204

As all Ambient Lockit devices, the ACL 204 provides a rock solid, highly accurate, temperature compensated timecode and sync generator.

It not only covers all timecode rates and sync formats but also allows to apply an offset to the TC output to compensate for the processing delay typical for most HD cameras.

3D camera rigs can be made lighter and neater by utilizing the 2nd TC output and the sync output that can be switched to drive a dual load.

The integrated ACN transceiver enables the ACL 204 to work as a fully functional, generator buffered wireless timecode transceiver. Even more powerful, the ACN continuous jam feature reduces the drift within the network from 0.1ppm to none at all.

Plugged in into a computer, the Lockit transforms into a highly accurate midi timecode interface with LTC / midi timecode conversion. This way the ACL 204 opens up the possibility to timecode and word clock sync for example multiple cameras with a Pro Tools workstation.

New as of fall 2015 the ACL 204 allows native integration with RED DSMC bodies for hassle-free cooperation with these highly acclaimed cameras. When additionally attached via optional RCP-I/O cable, the Lockit will adjust to the project framerate, conveniently applying the correct timecode. Even more, when used along within an ACN ecosystem, camera generated clipped based metadata are sent to the metadata hub. This overcomes the requirement of an additional MasterLockit on the camera bringing enhanced value to existing users.



Sync ARRI ALEXA with Ambient Lockit  
On Location of „Famous Five 2“

## KEY FEATURES

- Highly accurate timecode generator
- Generator buffered timecode transceiver
- Drift of less than 1 frame a day (~0,1ppm, 0ppm within the ACN)
- Supports all SMPTE frame rates
- Supports all standard video sync and word clock formats
- Sunlight readable OLED Display
- Adjustable timecode offset
- Dual Sync Mode, 2 TC-OUT for 3D use
- MIDI timecode interface with LTC/MTC conversion
- Built in ACN transceiver with internal antenna
- RS232, USB port
- RCP compatible, adjusts to RED project frame rate, reads and transmits clip based metadata within ACN (optional cable required)
- Works 30 hours on 2 AA batteries
- Robust machined and anodized aluminum body
- Dimensions: 100 mm x 74 mm x 36 mm
- Weight (without batteries): 250 g

## LOCKIT MOUNT

The ACM-204 Mount is a quick release mount with a fixable 3/8" male thread (ACM-MS) and with screw on back plate for aluminum body ACL 204.



ACM-MS

## TINY LOCKIT

### ACN-TL

Like its bigger brother, the TinyLockit provides a rock solid, highly accurate, temperature compensated timecode generator.

Except for the sync signal output, it comprises the full functionality of the Lockit, including Ambient LockitNetwork support, auto tuning, wireless jam syncing as well as metadata transfer and logging.

Thus the ACN-TL also can be used as fully functional, generator buffered timecode transceiver. This provides the stability of an Ambient Lockit generator with the flexibility of a wireless TC system but without the fear of dropouts. In addition, it also offers a variable timecode output level for recording TC on audio track.

Connected to a computer, the TinyLockit transforms into a highly accurate midi timecode interface with LTC / midi timecode conversion. This way the ACN-TL opens up the possibility to TC sync for example multiple cameras with an e.g. ProTools workstation.

The second Lemo connector is used for TC or communication and can be configured as USB, RS232, or GP I/O.

With firmware 4.1, also the ACN-TL is able to read out and distribute metadata from RED cameras that is then stored on a MasterLockit. With ACN-RCP cable connected the TinyLockit will automatically sense RED camera type, and timecode frame rate – and match those settings.

As known from the ACL 204, the user interface is easy and intuitive to use. Due to its smaller form factor the ACN-TL is especially suitable for applications on small cameras and in setups where a sync signal is not required.

Thanks to the machined, pearl blasted and anodized aluminum body the TinyLockit can easily withstand the roughest production conditions.

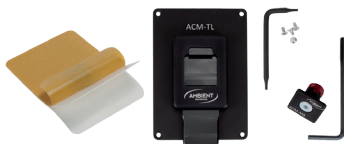


## KEY FEATURES

- Highly accurate timecode generator
- Generator buffered timecode transceiver
- Drift of less than 1 frame a day (~0,1ppm, 0.0ppm within the ACN)
- Supports all SMPTE frame rates
- Sunlight readable OLED Display
- Adjustable timecode offset
- Adjustable timecode level for recording TC on audio track
- MIDI timecode interface with LTC/MTC conversion
- RCP compatible, adjusts to RED project frame rate, reads and transmits clip based metadata within ACN (optional cable required)
- Built in ACN transceiver with internal antenna
- RS232, USB and GP I/O port
- Works 12 hours on 2 AAA batteries
- Robust machined and anodized aluminum body
- Dimension: 77 mm x 56.5 mm x 21 mm
- Weight: 118 g

## TINY LOCKIT MOUNT

Quick release mount with a fixable 3/8" male thread (ACM-MS)



ACM-TL kit

## LOCKIT SLATE

### ACN-LS

The Ambient LockitSlate provides a rock solid, highly accurate, temperature compensated timecode generator.

#### The timecode slate with full ACN integration

The completely revised LED timecode display doubles the brightness at less than half of the power consumption of its predecessor. This allowed us to reduce the batteries to only 4 AA cells while still achieving prolonged battery life.

Additionally, we equipped the new slate with light and motion sensors. Thus, the brightness can adjust automatically to the local light conditions, and the timecode display flips when the slate is turned upside down.

#### Transmit the clapped time directly to the script app

Furthermore, this new slate comprises clap time broadcast in addition to the same full functionality of the TinyLockit including ACN support. These network capabilities also allow the LockitSlate to be a fully-functional, generator-buffered timecode transceiver. This provides the same stability of an Ambient Lockit generator that has the flexibility of a wireless TC system but without the fear of dropouts.

#### Use the display stand-alone as fully functional timecode interface

The LockitSlate offers a variable timecode offset to compensate for processing delays of digital cameras. Plugged in into a computer, the LockitSlate transforms into a highly accurate midi timecode interface with LTC / midi timecode conversion and of course big TC LED display.

This way the ACN-LS opens up the possibility to sync multiple cameras with a Pro Tools workstation. As known from the Lockit and TinyLockit, the user interface is easy and intuitive to use.

#### Never lose the timecode when changing batteries...

Thanks to the built-in Supercap, the ACN-LS is able to hold the highly accurate timecode for more than 10 minutes after loss of power.

Changing batteries, no longer automatically means re-jamming the slate.

The included slip-on handle with built-in fold-out stand allows for easy one-handed operation. Additionally, it provides a 3/8" thread on the bottom. This way, the handle can be attached to any boom pole and brought up to any camera position – even on cranes or edge arms.

#### Wooden clap sticks available

The LockitSlate can be ordered or retro fitted with clap sticks made of maple wood.

Customized slate boards are available on request.



ACN-LD



ACN-LSW



## LOCKIT SLATE BAG

ACN-LSB



The ACN-LSB bag protects the slate against shocks, rain and dirt. With a rigid, sewn-in framework, this bag can withstand even roughest production conditions. The robust, waterproof fabric with long, overlapping cover forms a reliable shield against any weather conditions and keeps your slate dry and clean.

Due to magnetic buttons, the bag can be closed and locked even in low-light situations without a second look. Additionally, the magnets release when pulling the slate handle for lightning-fast slate removal.

Quivers for board markers and other utilities are placed on both the bag front and under the lid, providing easy access for left and right handed people. With several loops on the bag and the comfy carrying strap, the slate can be put on a belt, sound cart, or a magliner.

Providing excellent protection and flexibility, the ACN-LSB can be conveniently placed or hung near the AC or sound mixer for quick access to the LockitSlate.



## CLOCKIT CONTROLLER

### ACC 501

A whole set of features as timecode, word clock, MIDI TC and GPS capability makes the ACC501 rather a timecode Swiss Army knife than just a master clock.

An extensive keypad and a graphical LCD with command and menu bars ensure an intuitive but comprehensive user interface.

Using a reprogrammable MPU the controller features a future-proof design with growing capabilities.

Firmware revisions are obtainable through the download section and can easily be performed by the user.



### KEY FEATURES

- Timecode master clock with LTC and ASCII timecode, send, receive TC and check diversion, tune other Lockit units and Lockit featured products (ARRI ALEXA, Sound Devices Recorders, SI 2K, Aeta 4Minx, Weiss Cam, P+S Technik...).
- USB interface for data download, programming, MIDI timecode and serial Sony-P2 transmission.
- Low jitter word clock generator with all clocks up to 192 KHz incl. pull up/down.
- Interface for accessories such as GPS receiver
- Powering options: internal battery, USB, external 6 – 17 Volts
- 4x AA cells for over 24 hours of operation
- Standby mode for keeping accurate timecode.
- Firmware updates by user, available through download.

## GPS-MODULE

### ACCSI-GPS

Ambient's GPS module has been kept small enough to be stored in the Controller pouch. It comes with a 2 meter cable attached and can be used to derive position data and universal time (UTC) to jam the internal timecode generator.

The GPS reference signal of one pulse per second can also be used to calibrate the internal reference oscillator.

Thus, it is possible to synchronize cameras anywhere worldwide to well under 0.5 frames offset.



PROD.NR.	DESCRIPTION
ACC501	Controller for Lockit System
ACCSI-GPS	Ambient Serial Interface with GPS Module for ACC501