

ProPlex®

DATA DISTRIBUTION



CodeCommander™

LTC-MIDI-ETHERNET RACKMOUNT DEVICE

USER MANUAL

TMB authorizes its customers to download and print this electronically published manual for professional use only. TMB prohibits reproduction, modification or distribution of this document for any other purposes, without express written consent.

TMB has confidence in the accuracy of the document information herein but assumes no responsibility or liability for any loss occurring as a direct or indirect result of errors or exclusions whether by accident or any other cause.

MANUAL EDITION NOTICE, COPYRIGHT, DISCLAIMER

ProPlex CodeCommander User Manual

ProPlex-CodeCommander-Manual-v1.0

Effective 6 January 2026

© Copyright 2026, TMB

All rights reserved

TMB authorizes its customers to download and print this electronically published manual for professional use only. TMB prohibits reproduction, modification or distribution of this document for any other purposes, without express written consent.

Specifications are subject to change without notice. The information in this document supersedes all previously supplied information before the effective date listed above. TMB has confidence in the accuracy of the document information herein but assumes no responsibility or liability for any loss occurring as a direct or indirect result of errors or exclusions whether by accident or any other cause.

TABLE OF CONTENTS

Title page	1
Product Model.....	1
Product photos.....	1
Manual Edition notice, copyright, disclaimer	2
Table of contents.....	3
Overview	6
Model Description.....	6
Main Features	6
Model Overview.....	7
Full dimensional wireframe drawings	8
Setup.....	9
Safety Precautions	9
Unpacking.....	9
What's included.....	10
Power requirements.....	10
Hookup diagrams.....	10
Operation	12
Navigating the Screen	13
Areas of the Screen.....	13
(1) Source Status Tab.....	13
(2) Main Menu.....	14
(3) Input Source List.....	14
(4) Source Rate	14
(5) LTC Level Bar.....	14
(6) LTC Input Level.....	14
(7) LTC Waveform.....	14
Source Detail	15
Main Menu.....	16
Unit Menu.....	17
Unit Name	17
Screen/LED Brightness	17

Screen Lock Type	17
Screen Auto Lock (30s)	18
Lock Screen Shortcut.....	18
LED Display Color.....	18
Unit Info	19
Network Menu.....	19
IP Address.....	19
Network Mask.....	19
Easy IP.....	19
MAC Address.....	20
TC Menu.....	20
How Timecode is Routed.....	20
Config Preset Buttons.....	20
Auto Mode.....	20
Priority Mode.....	21
Rules of Priority.....	21
Art-Net In Config	22
Generator Mode.....	23
Post-Roll	24
LTC Pre-Roll.....	24
LTC Output Settings	24
LTC is not Audio	25
Art-Net Timecode Target IP (ID)	26
Configuration Menu	26
Saving a User Configuration.....	26
Loading a User Configuration.....	27
Locking a User Configuration	27
Deleting a User Configuration	28
Startup Copy	28
Factory Defaults.....	28
Menu Map.....	29
Web Browser	30
Firmware Updates	30
Cleaning and Maintenance.....	31

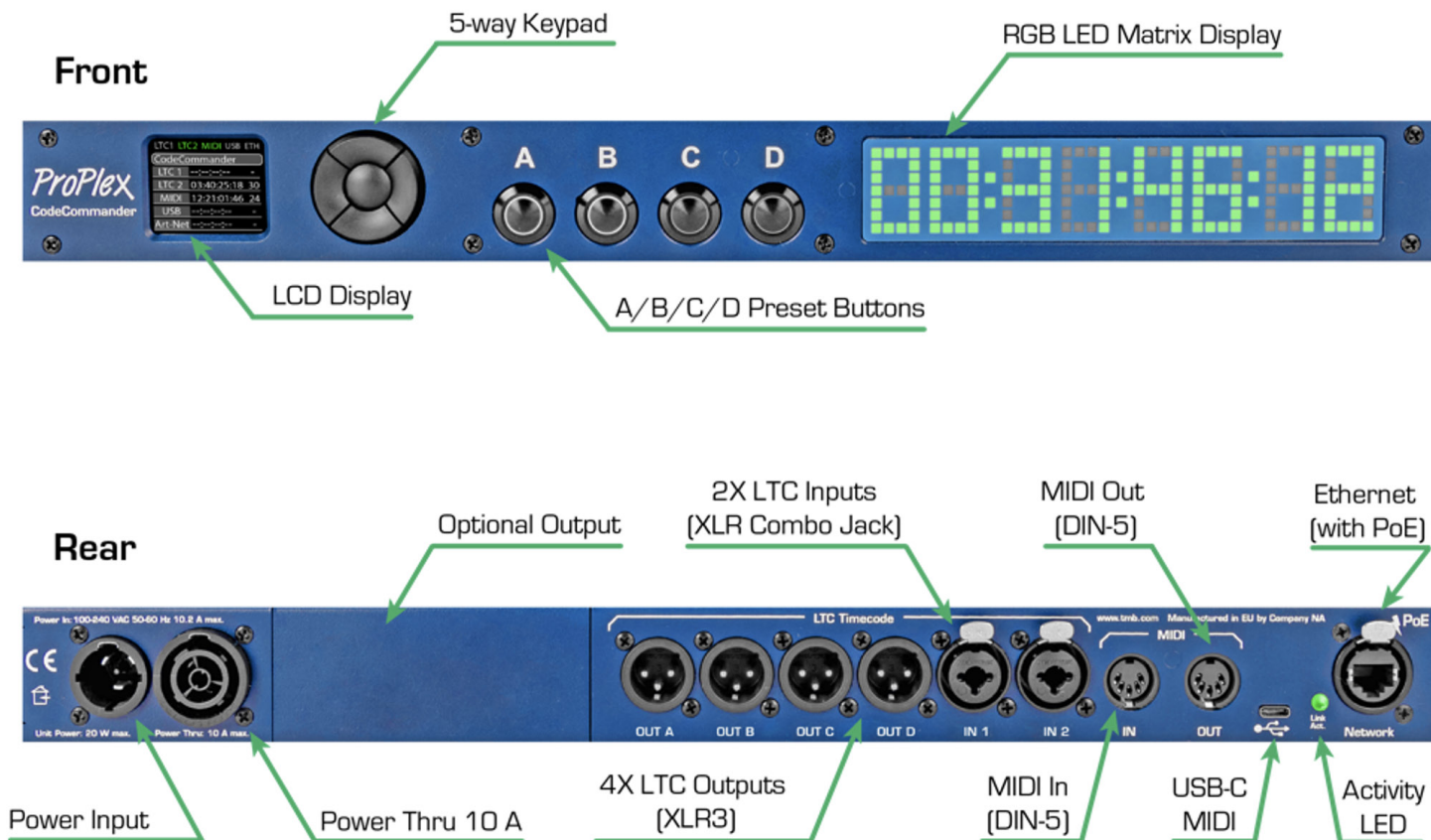
Technical Specifications	32
Ordering Codes	32
CPC PINOUT	33
DB-25 “TASCAM” PINOUT	33
Limited Warranty Information	34
Return Procedure.....	35
Contact information.....	36

The ProPlex CodeCommander is a member of our LTC Device system which is designed to generate, distribute and monitor timecode. Our rugged, RackMount enclosure design has flexible button assignments and operating modes to expand timecode control. With custom color selection on a clean dot-matrix display, the CodeCommander is the ultimate tool to synchronize and monitor timecode streams.

MAIN FEATURES

Multi-Protocol Compatibility	CodeCommander can receive the following protocols: <ul style="list-style-type: none">• LTC (SMPTE) via combo XLR - 1/4" TRS• Art-Net timecode via Ethernet• MTC via USB-C• MIDI timecode via DIN-5
User Assignable Buttons	Each of the 4 buttons can be set to trigger a predetermined behavior: <ul style="list-style-type: none">• Automatic – first timecode source received is primary• Priority – manually set ordered priority• Generator – button playback start/stop
Timecode Conversion	"Primary Source" is forwarded to outputs for LTC, MTC and Art-Net
OLED Screen with Navigation Buttons	Navigate the menu with dedicated tactile buttons
Ethernet Remote Management	IP based browser interface with real-time screen mirroring of the unit
Built-in Timecode Generator	With playback settings and control programmed on assignable buttons
LTC Waveform Analysis	Oscilloscope and level measurements for LTC input sources, accessible from both the LCD screen on the unit and remotely via the browser interface
Expandable Outputs	Add 8 additional LTC outputs by installing an optional output panel: <ul style="list-style-type: none">• 2x CPC• 8x Balanced 1/4" TRS jacks• 1x DB-25• 1x GENLOCK + 1xDB-25
Signal Shape Regen and Jitter Reduction	All LTC outputs are regenerated by syncing input with an internal generator Each output can be assigned a signal level and rise/fall time settings
Output Boost	Level adjustment up to +9 dBu per output
Color Management for Dot-Matrix Display	Default clock color scheme shows LTC status, or set custom colors using RGB commands
Redundant power via Mains + PoE	Powers from both PoE and Mains power *Please note: USB is data only – no USB power

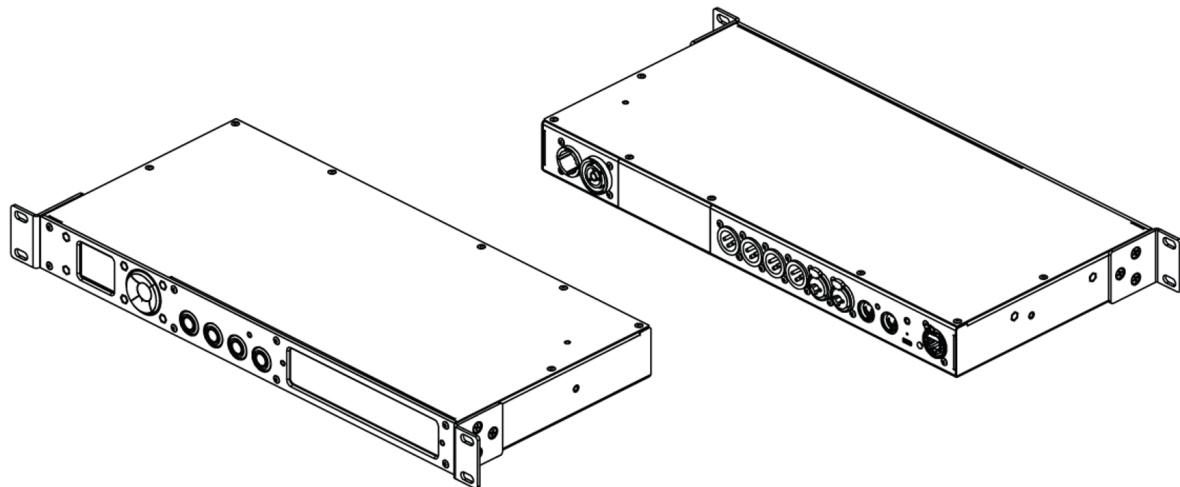
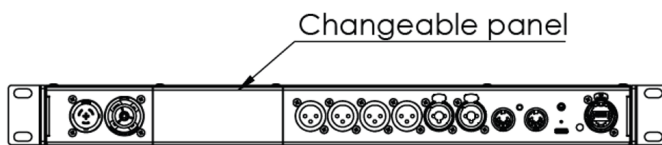
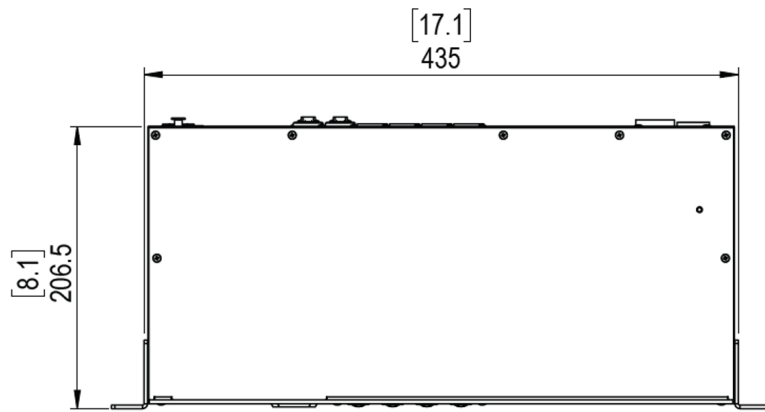
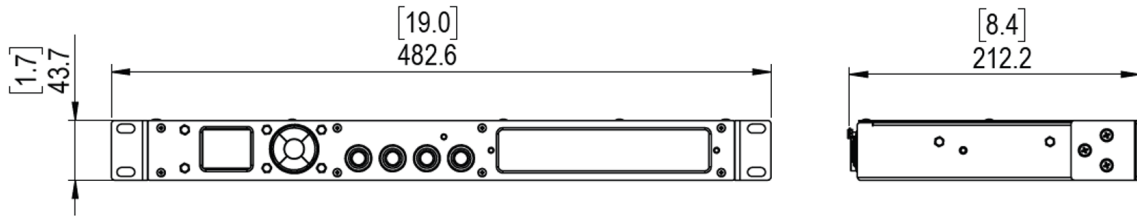
MODEL OVERVIEW



Rear Panel Output Options



FULL DIMENSIONAL WIREFRAME DRAWINGS



SETUP

Safety Precautions



Please read these instructions carefully. This user guide contains important information about the installation, usage, and maintenance of this product

- Ensure the device is connected to proper voltage, and that line voltage is not higher than that stated in the device specifications
- Make sure there are no flammable materials close to the unit while operating
- Always use a safety cable when hanging fixture overhead
- Always disconnect from the power source before servicing or fuse replacement (if applicable)
- Maximum ambient temperature (Ta) is 40°C (104°F). Do not operate unit at temperatures above this rating
- In the event of a serious operating problem, stop using the unit immediately. Repairs must be carried out by trained, authorized personnel. Contact the nearest authorized technical assistance center. Only OEM spare parts should be used
- Do not connect the device to a dimmer pack
- Make sure power cord is never crimped or damaged
- Never disconnect power cord by pulling or tugging on the cord



CAUTION! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please see the limited warranty information at the end of this document

UNPACKING

Upon receipt of the unit, carefully unpack the carton and check the contents to ensure that all parts are present and in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear to be damaged from shipping or if the carton itself shows signs of mishandling. Save the carton and all packing materials. If a unit must be returned to the factory, it is important that it be returned in the original factory box and packing.

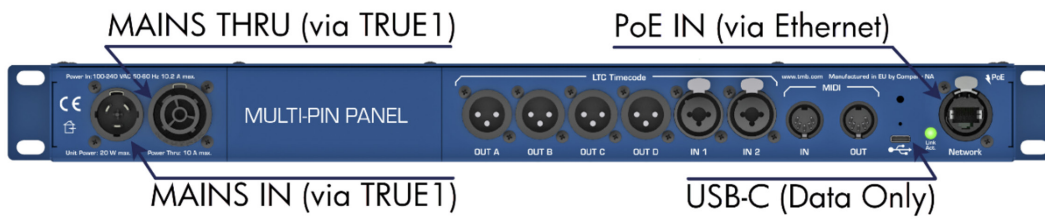
WHAT'S INCLUDED

- PROPLEX CODECOMMANDER
- POWERCON TRUE1POWER CABLE
- QR CODE DOWNLOADS CARD

POWER REQUIREMENTS

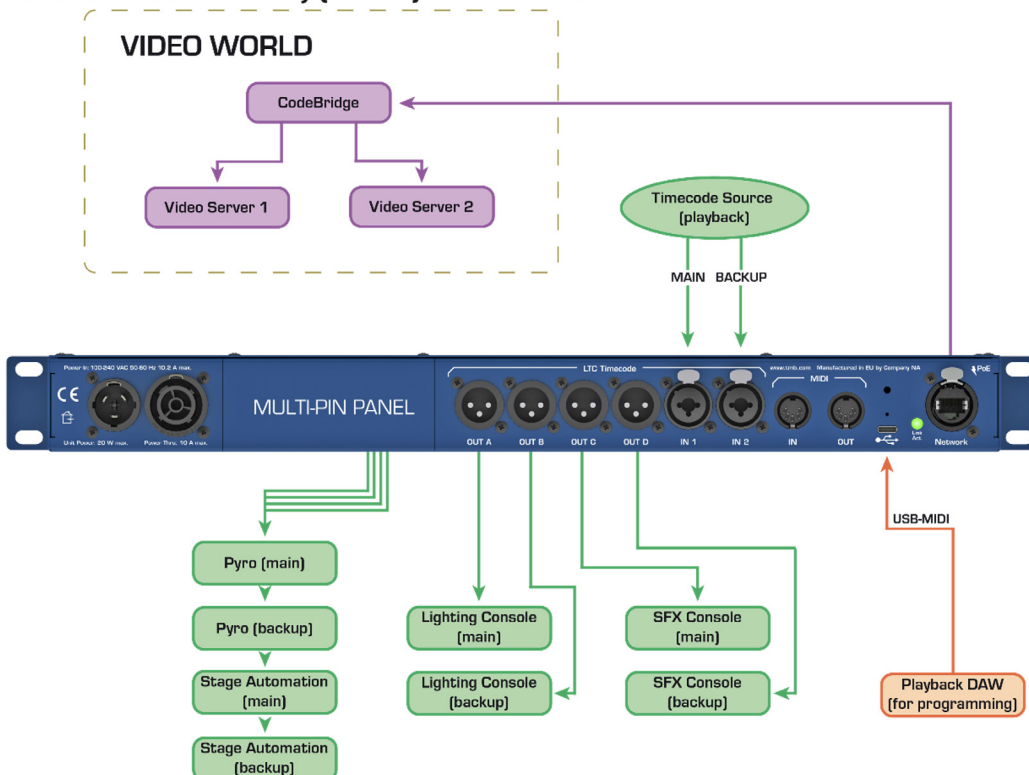
The ProPlex CodeCommander has redundant power connections. In some cases, you may want to utilize both connections. Units powered via PoE allow access to the web browser via any computer connected to the same network.

- Power the device via a powerCON TRUE1 cable connected to any standard source
- Supply Power over Ethernet (PoE) by connecting the CodeCommander Ethernet port to any PoE enabled switch or injector prevent accidental disconnection

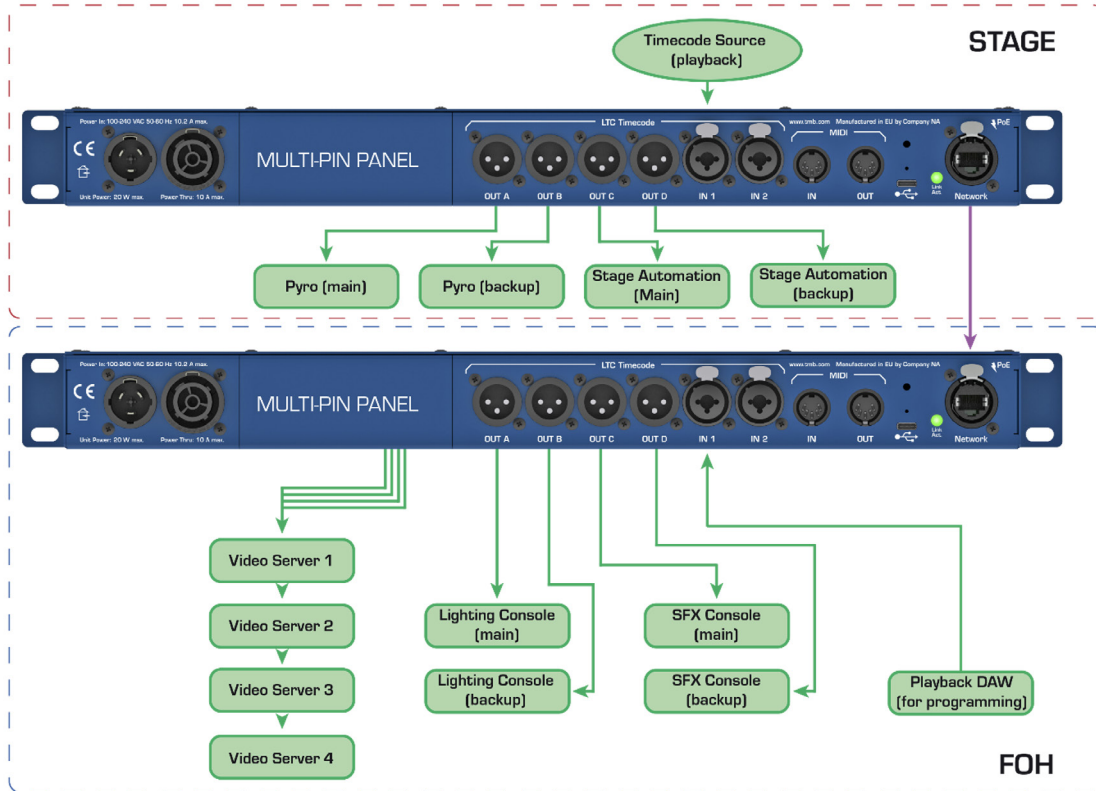


HOOKUP DIAGRAMS

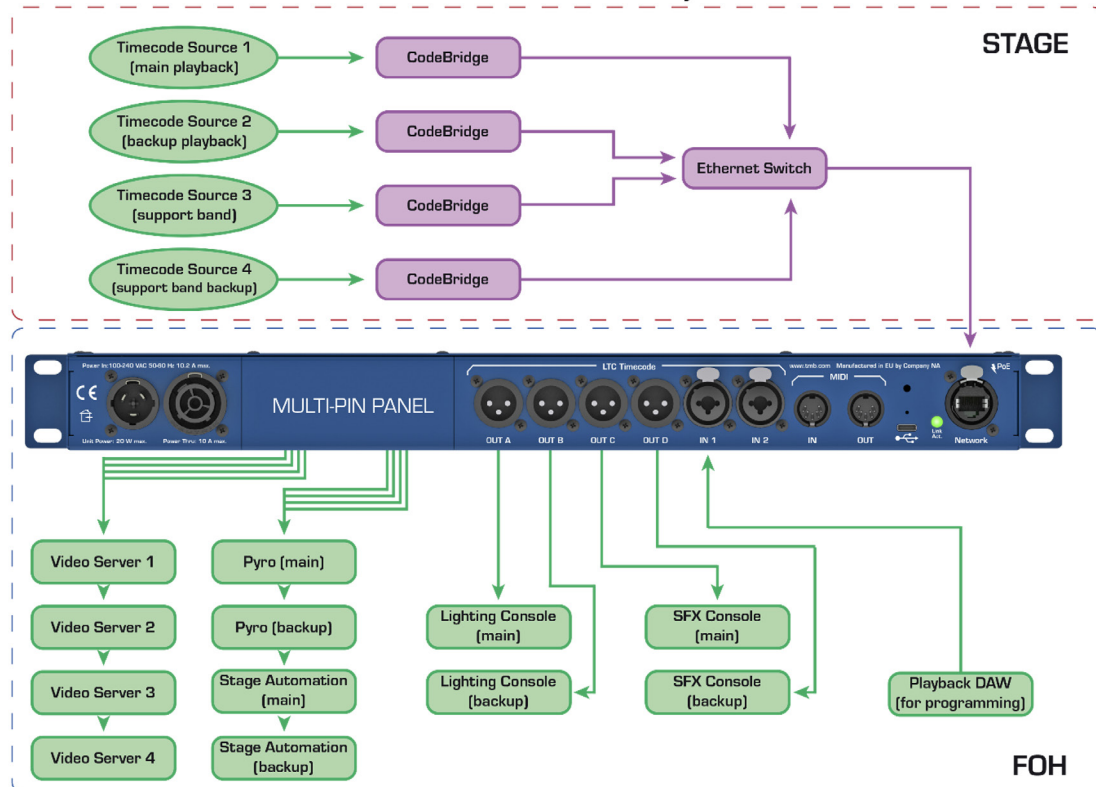
Receive timecode locally (XLR in) and send into network



Receive timecode over XLR on stage and send to FOH

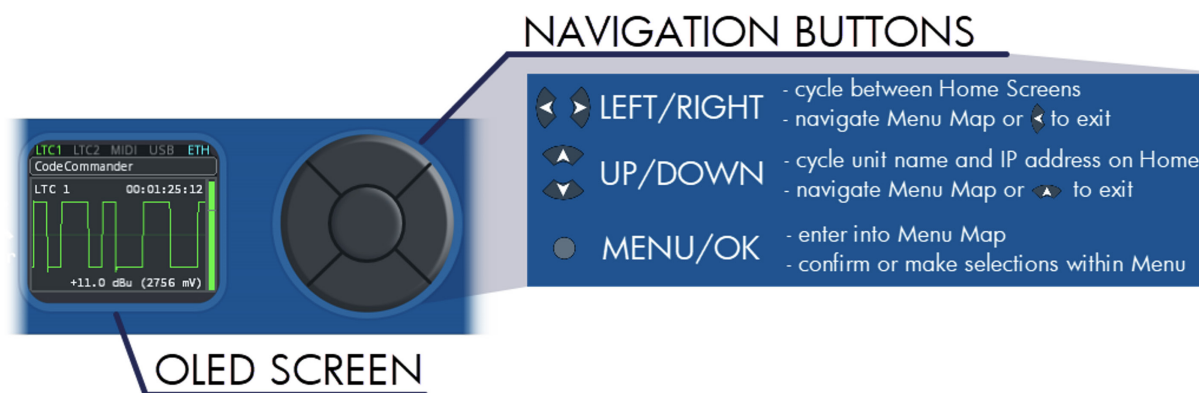


Receive timecode over Ethernet and distribute locally



OPERATION

The ProPlex CodeCommander can be operated at the unit via onboard OLED Display and navigation buttons. The buttons are tactile and click when pressed



An identical method of configuration is available through the Web Browser. Any computer connected to the network can access the virtual interface of the CodeCommander

Additionally, any changes made via the web browser will update simultaneously to the CodeCommander display via screen-mirroring



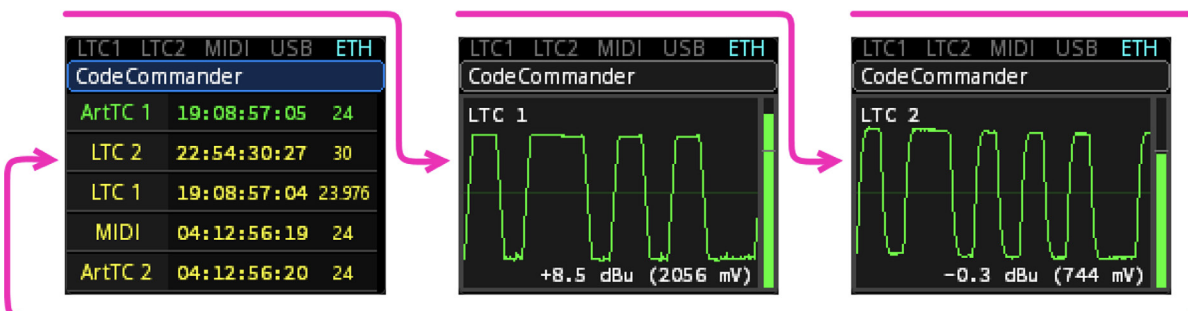
SCREEN MIRROR IS IDENTICAL ON
WEB BROWSER AND OLED DISPLAY

NAVIGATING THE SCREEN

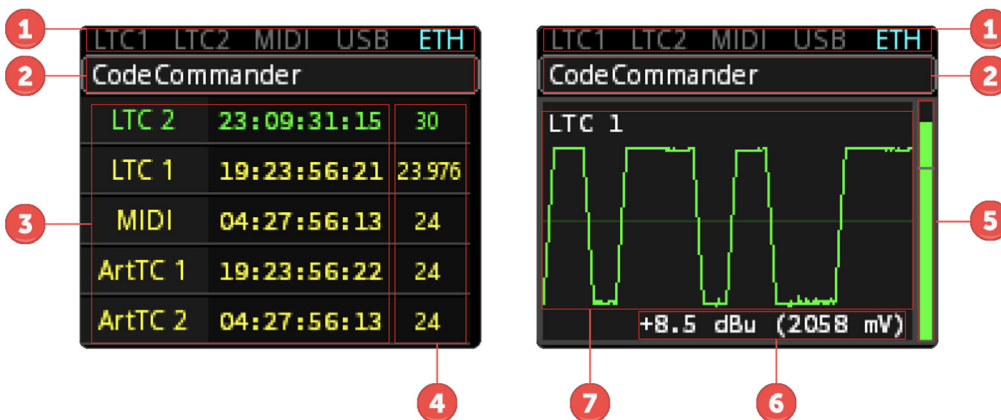
The CodeCommander's starting screen is made up of three separate displays which are set to infinite scroll. Navigate between the displays by pressing ► or ◀

Home Screen: Aggregates incoming stream info and displays name, status and format

LTC1 & 2 Scope: Displays detailed waveform analysis of LTC1 and LTC2 inputs



Areas of the Screen



(1) Source Status Tab

Color-coded source icons tell you the receive status of various streams:

- Receiving TC
- Not receiving TC (since power on)
- Inactive Primary Source (source lost)

The Ethernet icon also has a specified color code: Color-coded source icons tell you the receive status of various streams:

- 100 Mbps link
- 1 Gbps link
- 100 Mbps link with PoE power
- 1 Gbps link with PoE power

(2) Main Menu

The Main Menu button is always accessible on any top-level screen.
Enter the Main Menu by highlighting this field with ▲ or ▼ and pressing ●

(3) Input Source List

The Source List can show up to 5 incoming timecode streams simultaneously, with the option to scroll down to see additional inputs

The source list order can change depending on the operation mode, but the color scheme utilized is the same across modes:

- Primary Source Timecode (shows time on dot-matrix display and forwards to all outputs)
- Secondary Source Timecode (active and available in priority list)
- Blocked Source (active, but blocked from selection in priority list)
- Inactive Source (previously active)
- Last Source Inactive (if final source in priority list is lost)

The Primary Source will always show at the top of the source list in most situations - the only exception is when a preset button is configured as a generator.

As soon as a generator button is activated, all sources become blocked, and the dot-matrix display will display generated timecode in blue (unless custom color overrides this)

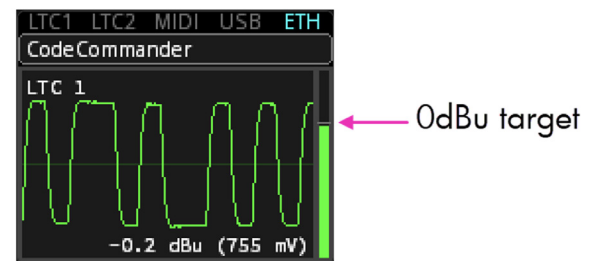
(4) Source Rate

Current frame rate of each input source - CodeCommander can receive inputs with all standard timecode frame rates and formats

(5) LTC Level Bar

LTC level bar is a relative measurement to help monitor signal

At minimum, the LTC input should be received at 0dBu (775mV) which is marked by the grey threshold line on the level bar



(6) LTC Input Level

A precise measurement of the incoming LTC signal level

(7) LTC Waveform

The incoming LTC waveform is analyzed and displayed in real time.
Ideally the LTC IN steam should resemble a square wave with high amplitude.

Source Detail

You can dig deeper into source details by highlighting a specific source with ▲ or ▼ and pressing ● to enter the detail screen

Source details are updated live and show in three separate windows - Info, Counters and Stats

LTC1	LTC2	MIDI	USB	ETH
CodeCommander				
ArtTC 1	01:21:42:01	30		
LTC 2	02:00:28:05	23.976		
MIDI	02:04:29:08	24		
LTC 1	03:24:19:11	30		
ArtTC 2	02:04:29:08	24		

LTC 2		
02:00:28:05		
Info	Counters	Stats
Format	23.976	
Framerate	23.9760	
User Bits	0x00000000	
Level	+11.1 dBu	
Info	Counters	Stats
Good	386328	
Incomplete	0	
Pause	11	
Info	Counters	Stats
Start TC	02:39:24:16	
Short Jitter	-10.1586%	
Long Jitter	+12.4182%	

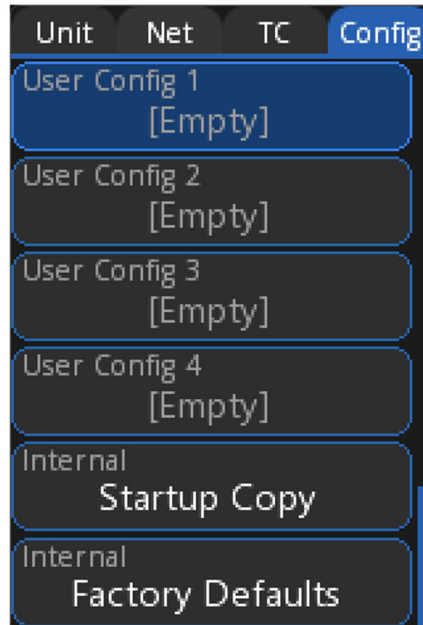
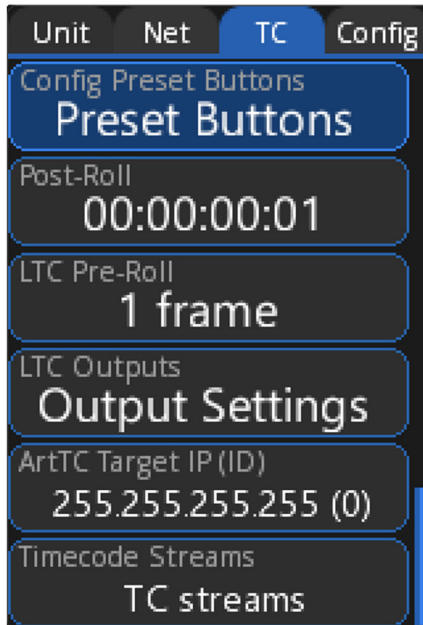
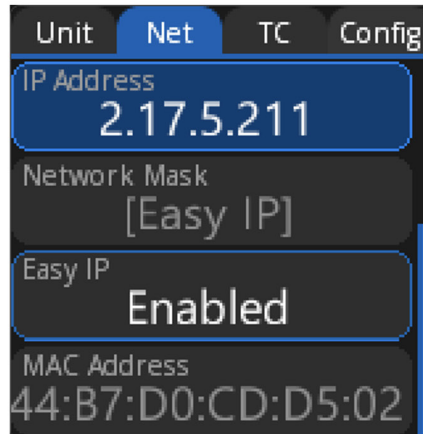
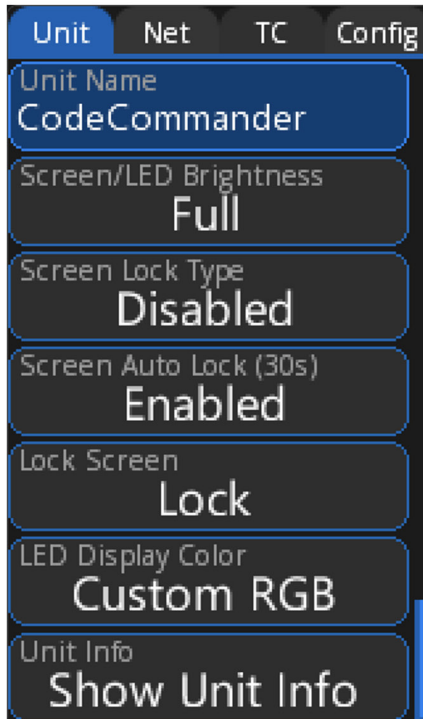
LTC1	LTC2	MIDI	USB	ETH
CodeCommander				
ArtTC 2	09:04:20:14	24		
ArtTC 1	00:11:37:28	30		
LTC 2	02:15:46:13	23.976		
MIDI	09:04:20:14	24		
LTC 1	03:39:38:15	30		

ArtTC 2		
09:04:20:14		
Info	Counters	Stats
Format	24	
Framerate	0.0000	
Source	2.18.235.102	
StreamID	0	
Info	Counters	Stats
Frame	56876	
Pause	0	
Info	Counters	Stats
Start TC	01:40:20:21	

Main Menu

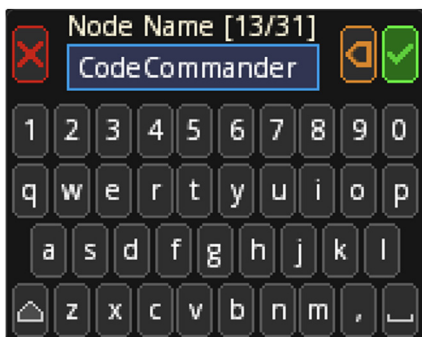
Enter the Main Menu from any home screen by highlighting the unit name with ▲ or ▼ and pressing ●

The menu is divided into 4 sub-menus (Unit, Net, TC and Config) indicated by the tab at the top of the screen. Navigate between the displays by pressing ► or ◀



Unit Menu




Unit Name



Use ► ◀ ▲ or ▼ to highlight alphanumeric characters and press ● to enter them at the end of the name field

31 characters are available for naming the unit

There are also 3 buttons at the top of the screen:

-  Delete a character
-  Save and exit
-  Exit without saving

Screen/LED Brightness

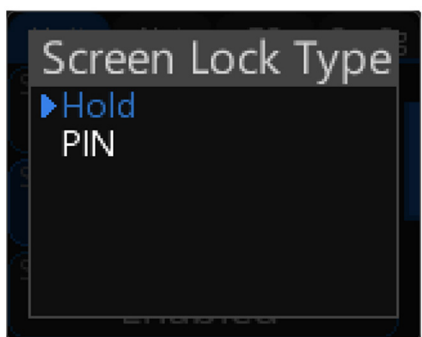


Brightness settings affect the following:

- OLED screen
- Illuminated **A B C D** buttons
- dot-matrix LED clock display

Use ▲ or ▼ to highlight a brightness level and press ● to save

Screen Lock Type





Two styles of screen lock are available :

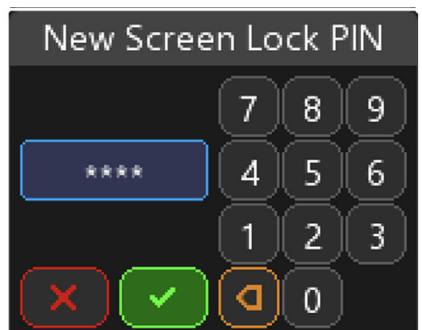
- HOLD - press and hold ● for 3 seconds to unlock
- PIN - set a 4-digit code used for unlocking the screen

When PIN is selected, the user will be prompted to enter a PIN

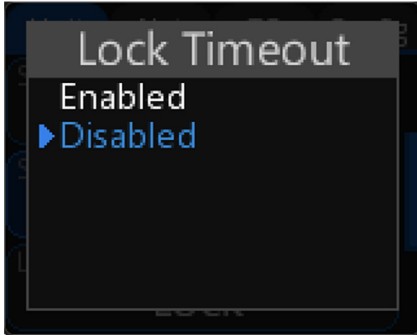
To enter a new PIN, use ► ◀ ▲ or ▼ to highlight numbers and press ● to enter digits in the field.

Press  when complete, then re-enter the PIN to verify.

Digits will be obscured when entering - if you cannot remember the PIN and need to start over at this point, press 



Screen Auto Lock (30s)

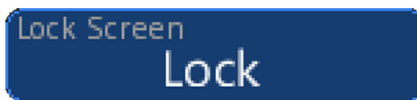


If a screen lock is active, the CodeCommander will automatically lock after 30 seconds of Idle activity by default

If the lock timeout is disabled, then the unit will always be unlocked regardless of idle time

Use ▲ or ▼ to highlight the timeout option and press ● to save

Lock Screen Shortcut

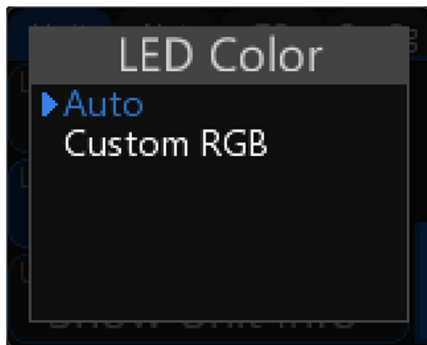


Highlight this menu option and press ● to bypass the Auto Lock timer and lock the unit immediately

Unit will also return to the Home Screen

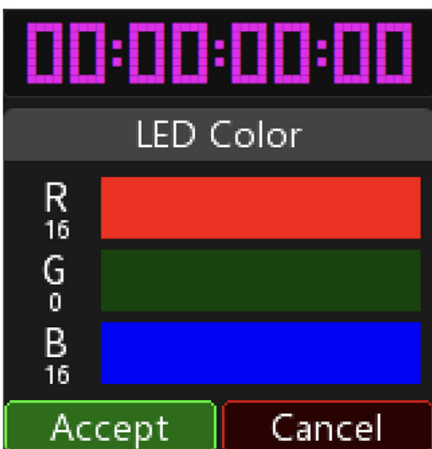
LED Display Color

The dot-matrix LED clock display has two color schemes to choose from:



AUTO uses a predefined color scheme which changes depending on the time state:

- "Locked" timecode running
- Timecode running, not locked yet (after start or jump)
- Post-roll frames are running (after a source has stopped)
- Timecode not running (shows last received value)
- Timecode Generator running
- Timecode Generator stopped



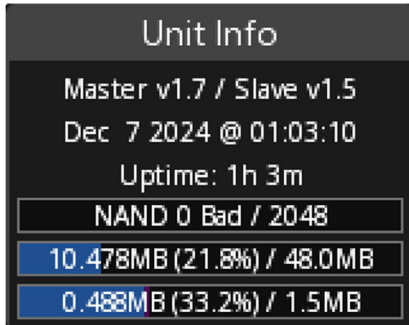
Custom RGB allows the user to set a predefined clock color that is universal and static regardless of the timecode state

To adjust color, use ▲ or ▼ to select between Red, Green and Blue intensity. Once highlighted, use ► and ◀ to change levels. Up to 16 increments of color intensity are available to mix

Note: you should see color mix changes happening both live on the dot-matrix display and via screen mirroring

When finished, highlight the Accept button and press ● to save

Unit Info



The info screen is a non-editable memory usage monitor

It also displays the current operating firmware and uptime specs


Network Menu

IP Address



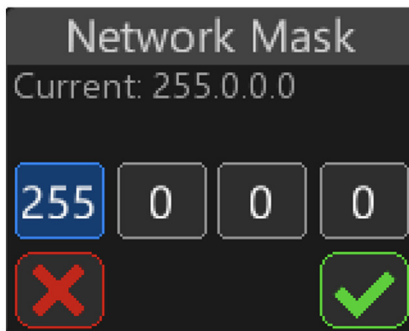
To change the IP Address, press ► or ◀ to highlight the octet you wish to edit

Once highlighted, use ▲ or ▼ to select a value 0-255. Alternatively, you can type the IP address in a X . X . X . X format when using the web browser

Highlight the  icon and press ● to save and exit

Note: the current IP address shows at the top of the screen

Network Mask



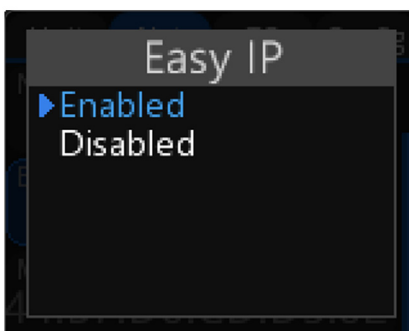
To change the Network Mask, press ► or ◀ to highlight the octet you wish to edit

Once highlighted, use ▲ or ▼ to select a value 0-255. Alternatively, you can type the IP address in a X . X . X . X format when using the web browser

Highlight the  icon and press ● to save and exit

Note: the current mask shows at the top of the screen

Easy IP



Easy IP is useful in situations where subnet filtering is not required. It allows the CodeCommander to automatically search for all masks instead of just the one specified

Note: When Easy IP is enabled, the Network Mask setting becomes unavailable

To enable or disable, Use ▲ or ▼ to highlight the option and press ● to save

MAC Address



This field is non-editable

MAC Address should be unique to each different unit

TC Menu

How Timecode is Routed

The CodeCommander can handle inputs from multiple simultaneously running timecode streams, but only one stream is forwarded to the dot-matrix display and various outputs

We refer to the current “master” timecode as the Primary Source - all other inputs, whether active or inactive, are considered secondary

When the CodeCommander is powered on, one of the four user-defined preset buttons will illuminate. This button is responsible for the operating mode - Auto, Priority or Generator.

Config Preset Buttons

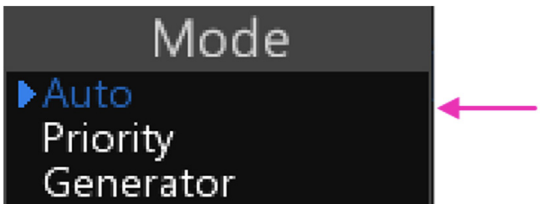
Each button A, B, C and D has an independent page indicated by the tab at the top of the screen. Navigate between each button page by pressing ► or ◀



When you have selected a button page, press ▼ to highlight the Mode field and ● to change the mode



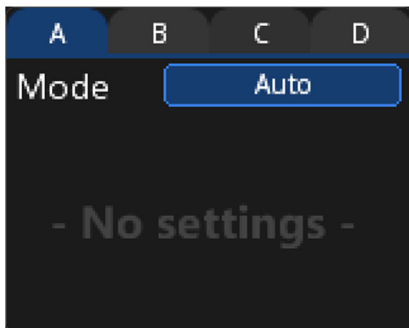
In mode selection, the blue carrot indicates the current mode - Auto is selected by default



To change the mode, highlight the desired setting with ▲ or ▼ - once selected, press ● to save

Auto Mode

In Auto mode, the primary source is determined automatically in order of physical connection



For example: if you connect both LTC inputs, the first TC stream detected is automatically considered the primary source

If the primary source is lost or becomes inactive, the next secondary source in the auto source list will be promoted to primary

If no source is available, then all output will stop until a new or recovered TC stream is detected, or a generator is engaged

Priority Mode

In some cases, you may have multiple incoming streams of timecode data, but you need to choose one of these inputs to become the primary source

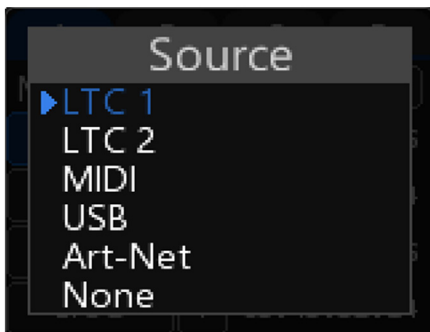
Priority Mode is used to prioritize timecode streams, effectively allowing control over which clock data is routed to the output

	A	B	C	D
	Mode	Priority		
SLOT 1 →	LTC 1	i	00:04:26:08	
SLOT 2 →	MIDI	i	00:06:17:12	
SLOT 3 →	USB MIDI	i	00:05:33:16	
SLOT 4 →	LTC 2	i	03:24:40:12	

Each button (A B C D) has a unique list of four slot positions

In the left example, LTC1 is assigned to the highest priority (SLOT 1)

That means when Preset A is pressed, the LTC1 input is promoted to primary source and is therefore forwarded to all outputs and the dot-matrix clock display



To change the priority slot assignment, highlight the slot position with ▲ or ▼, then press ● to edit

The blue carrot ► indicates the current assignment. Use ▲ or ▼ to select a new source and press ● to save

If the source is actively running, the live timecode will show on the right side of the screen. Press ► on any slot position to highlight the info icon ⓘ, then press ● to view source detail


Rules of Priority

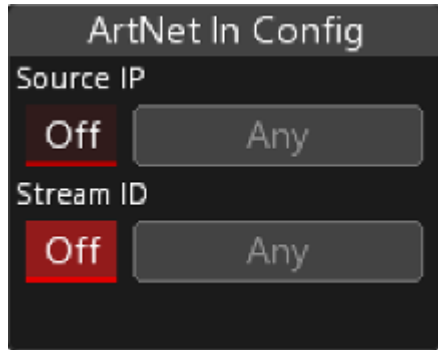
- Engaging a preset button in priority mode will promote the highest priority slot available to primary source status
- If a source assigned to the highest priority slot is lost or not available, then the next available slot in the priority list is promoted to primary
- If no priority source is available at all, then all output will stop until a prioritized stream is recovered or another button is engaged
- Only those streams assigned to the priority list are available for selection. You may have other valid streams received by the CodeCommander, but those streams cannot be promoted to primary unless assigned to a slot
- If a higher priority stream is recovered while a lower priority stream is primary, then the higher priority will automatically assume primary status

Art-Net In Config

Incoming Art-Net Timecode streams have additional settings which filter Source IP and Stream ID



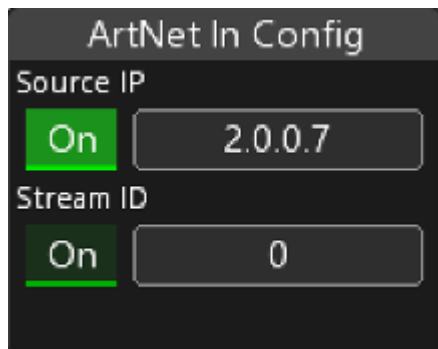
Press ► on any slot position to highlight the gear icon  then press ● to enter the configuration screen



Source IP and Stream ID filter should be Off by default

When these filters are not enabled, any Art-Net Timecode stream from any source is available for placement in the priority list

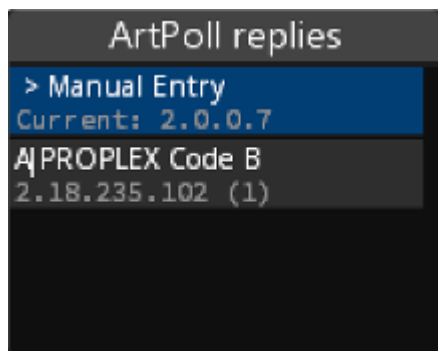
These configuration settings can remain Off in setups which have only one Art-Net stream on the network



Enabling Source IP or Stream ID filters may be useful if the network has multiple Art-Net Timecode streams, and you need to distinguish between them

Use ▲ ▼ ► or ◀ to highlight the On/Off button and press ● to turn On the filter

To edit the filter details, press ► to highlight the IP or ID field and press ● to edit



The first IP filter option is always Manual Entry. To enter the IP address, highlight this field with ▲ or ▼, then press ● to edit (similar to Unit IP Address editor described above)

Other source IP are selectable if they available on the network

In this example, a computer with IP 2.0.0.7 sends Art-Net Timecode over the network with 3rd party software. IP 2.18.235.102 is a stream originating from a CodeBridge generating Art-Net timecode on the network



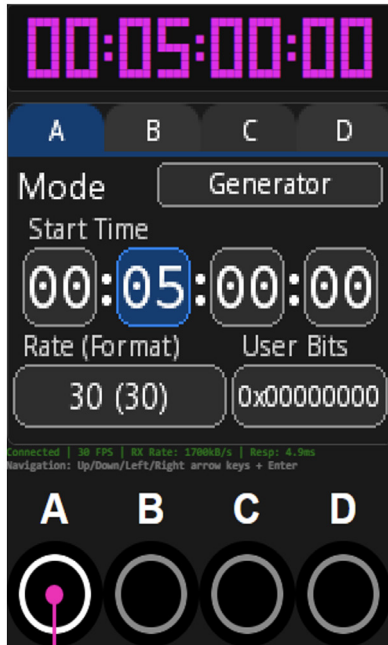
ArtTimeCode packets can also be distinguished from one another by using StreamID

Any Art-Net source capable of utilizing StreamID can be filtered out and assigned as a priority slot

When editing StreamID filter, use ▲ or ▼ to select a value, or type the desired ID number. Highlight the  icon and press ● to save and exit

Generator Mode

In Generator Mode, the Preset button becomes the Start/Stop button for timecode playback. Various settings are available



Start/Stop

Start time - this value in HH:MM:SS:FF format is the starting point for generated timecode. Time always resets to this point each time the preset button is pressed

To edit Start Time, highlight a time field with ► or ◀ and press •. Now you can use ▲ or ▼ to change the time value, and then press • a final time to save

Rate (Format) - The generator can output in any standard combination of rate and format. While these terms are often used interchangeably, they are two distinct parameters

Rate is the speed at which the frames increment


There are 5 standard rates:

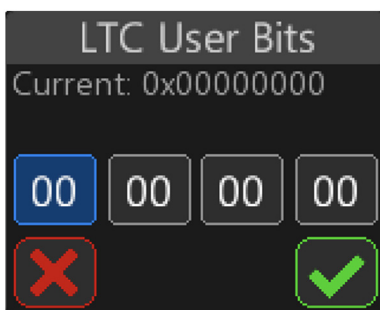
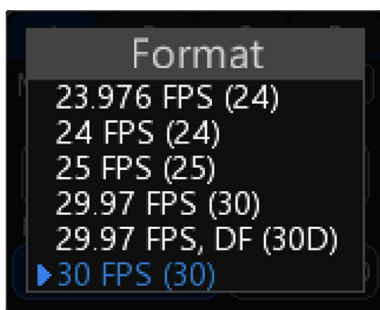
- 23.976 FPS - film adjusted for NTSC
- 24.00 FPS - film
- 25.00 FPS - PAL standard,
- 29.97 FPS - NTSC broadcast standard, used in US and Americas; almost everyone refers to this as “30”
- 30.00 FPS - original B/W television and some digital cameras (like iPhone)

Format defines the expected frame numbering sequence. There are 4 standard formats:

- 24 / film - uses sequential frame numbers 0-23
- 25 / PAL / EBU - uses sequential frame numbers 0-24
- 30 / 30ND / NDF / Non-Drop - uses sequential frame numbers 0-29
- 30D / 30DF / DF / DropFrame - uses 0-29 as a base, but skips frames 28 and 29 from the last second of every minute, except every 10th minute.

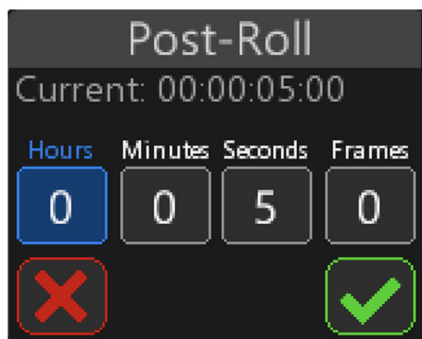
User Bits - this function adds an 8-digit hexadecimal info tag to the timecode stream. This might be useful for recording date information, camera ID, reel number or any other short metadata

To edit User Bits, press ► or ◀ to highlight the field you wish to edit. Once highlighted, use ▲ or ▼ to change the value. You can also type hex digits with keyboard via the web browser. Highlight the  icon and press • to save and exit



Post-Roll


Post-roll frames help correct erroneous or dropped frames in a suboptimal timecode source



When a primary source is lost for any reason, the transmission will continue until a count equivalent to the post-roll frames setting is reached

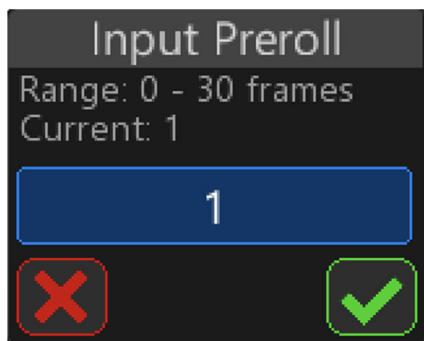
If an erratic source issue is resolved within the post-roll window, the device will continue streaming timecode without interruption

If post-roll ends and the CodeCommander is in Priority Mode, the next priority slot will be promoted to primary source automatically

To edit post-roll, press ► or ◀ to highlight the field you wish to edit. Once highlighted, use ▲ or ▼ to change the value. Alternatively, you can type numbers with a keyboard via the web browser. Highlight the  icon and press • to save and exit

LTC Pre-Roll

Pre-roll is the number of valid frames needed to consider a timecode source valid and begin forwarding it to the outputs



Use ▲ or ▼ to change the pre-roll value between 0 and 30 frames. Alternatively, you can type the number with a keyboard via the web browser

Highlight the  icon and press • to save and exit

Note: The Input Source list will always show timecode value starting from the first received frame regardless of the pre-roll setting

LTC Output Settings

The CodeCommander has several outputs which distribute LTC

LTC Output Settings		
Port	Level	Rise Time
A	+9 dBu	Normal
B	+9 dBu	Normal
C	+9 dBu	Normal
D	+9 dBu	Normal
EXT1	+9 dBu	Normal
EXT2	+9 dBu	Normal

(4x) - XLR3 outputs

(8x) - Optional output plate (2x CPC, DB25 or 8x ¼" TRS)

Each of the XLR outputs have independent level and rise time settings
(OUT A, OUT B, OUT C and OUT D)

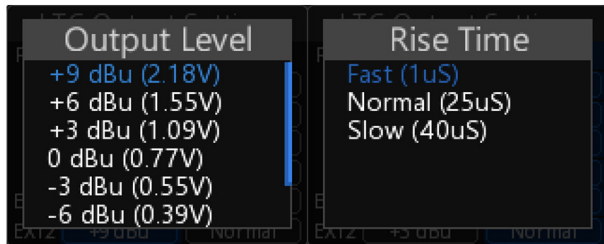
Optional panel outputs are grouped together in 2 groups of 4 outputs
(1-4 labeled **EXT1** and 5-8 labeled **EXT2**)

LTC Output Settings			LTC Output Settings		
Port	Level	Rise Time	Port	Level	Rise Time
A	+9 dBu	Normal	A	+9 dBu	Normal
B	+9 dBu	Normal	B	+9 dBu	Normal
C	+9 dBu	Normal	C	+9 dBu	Normal
D	+9 dBu	Normal	D	+9 dBu	Normal
EXT1	+9 dBu	Normal	EXT1	+9 dBu	Normal
EXT2	+9 dBu	Normal	EXT2	+9 dBu	Normal

Edit All
Edit Individual

When entering the Output Settings menu, all levels will be selected by default

To edit settings for individual outputs only, press ▼ and ► or ◀ to select a level or rise time field to edit for a particular port - then press ● to edit



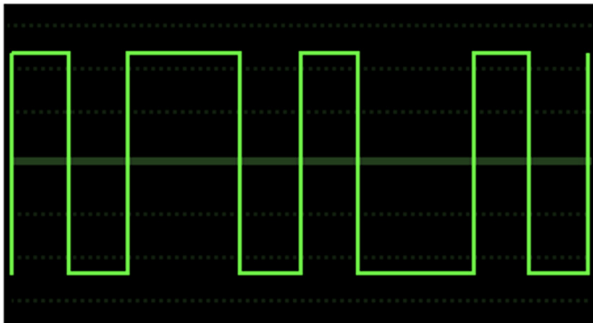
Output level settings can range from -18 to +9 dBu (0dBu (775mV) is recommended default)

Rise Time settings have 3 speed options to choose from, with most applications using the fastest time

Use ▲ or ▼ to highlight a selected level, then press ● to save and exit back to the previous menu

LTC is not Audio

LTC is not audio - rather it is an encoded digital signal.



If you were to scope the LTC signal, the graph should look like a repeating square wave with steep rise times with high amplitude

The sharp transitions from a high to low signal within a period correspond with the logical bit values of zero or one (AKA binary code)

A single timecode frame is a collection of these signal transitions - enough to communicate 80 bits of binary data up to 30 times a second

Ideal LTC signal

Some confusion lies with how similar LTC distribution is to audio. Often, LTC is part of an audio track transmitted over audio cables and patch equipment. Well intentioned audio operators may attempt turn monitor LTC signal by following a “common sense” approach. However, it is a mistake to work with LTC in the same way as a standard analog audio signal.

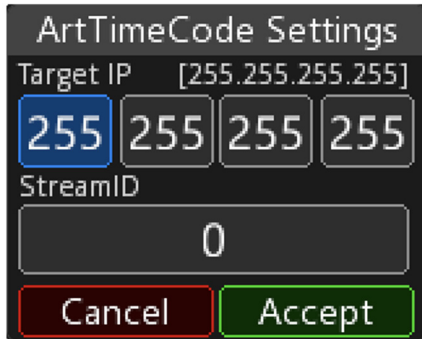
Here are some tips:

- LTC should never be passed through console amps or processing tools as this can “round out” and distort the square waveform
- It may seem counterintuitive to boost the LTC level to a clipping level, but this is good practice - LTC operational level should be at least 0dBu to +2dBu

Note: LTC signal is within the audible frequency range for humans. If you like terrible dial-up modem sounds, give it a listen - but we don't recommend headphones

Art-Net Timecode Target IP (ID)

ArtTimeCode settings control how Art-Net timecode output is distributed on the network



Art-Net Timecode output has similar settings like you see on the input side:

Target IP – timecode can be unicast to a specific receiver’s IP or broadcast on the network. The default setting 255.255.255.255 is the broadcast IP, which allows all receivers on the network to see this traffic

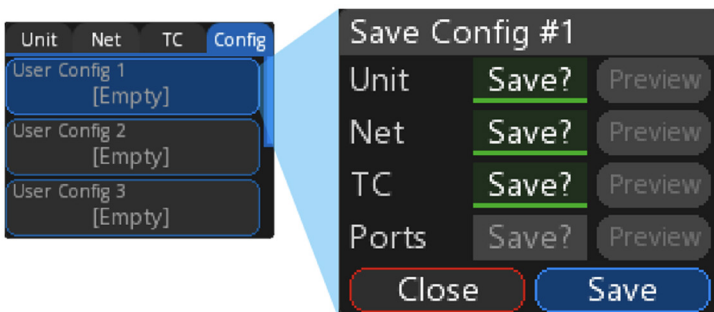
StreamID – tag your stream with an ID number so that it can be differentiated from multiple streams on the network

To edit Target IP or StreamID, use ▲ ▼ ► or ◀ to highlight the field you wish to change. Once highlighted, press ● to edit. Use ▲ or ▼ to change the value and press ● again to save. To finish, highlight the **Accept** icon and press ● to save and exit

CONFIGURATION MENU

Saving a User Configuration

User Configurations save unit settings to recall for future use. This can be useful if, for example, someone accidentally changes a setting and you need to reset the machine to a prior state

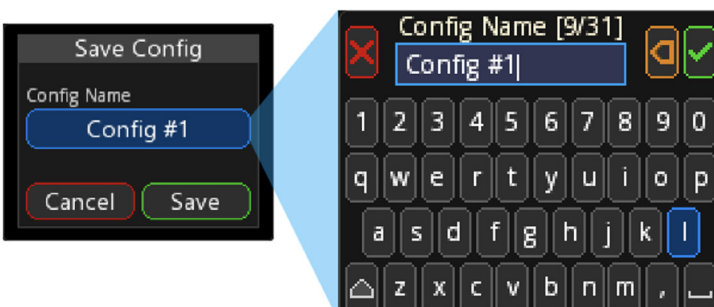


There are 4 User Config save slots each with independent settings

To save a new configuration, highlight one of the save slots using ▲ or ▼, press ● to enter the save menu

Here you can select what type of data is important to save

A green **Save?** button means this data will be saved to the user config. Use ▲ or ▼, to highlight a button, then press ● once. The button is now a red **Save?** indicating that the data will be excluded from the user config. To finish, highlight the **Save** button, then press ●



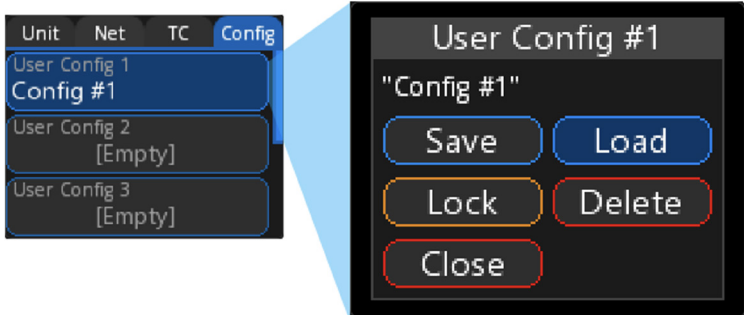
Highlight the config name and press ● to open the on-screen keyboard

Use ► ◀ ▲ or ▼ to highlight alphanumeric characters and press ● to enter them in the name field

To finish, select **Save** to save, then highlight and press ● **Save**

Loading a User Configuration

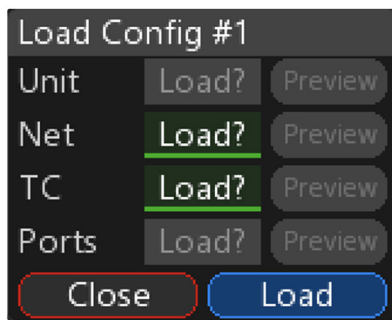
Once a configuration is saved, the slot is no longer [Empty] - instead it will show the configuration name in the slot list



When the slot is selected with ●, a new config menu will appear

By default the cursor should automatically highlight the **Load** button

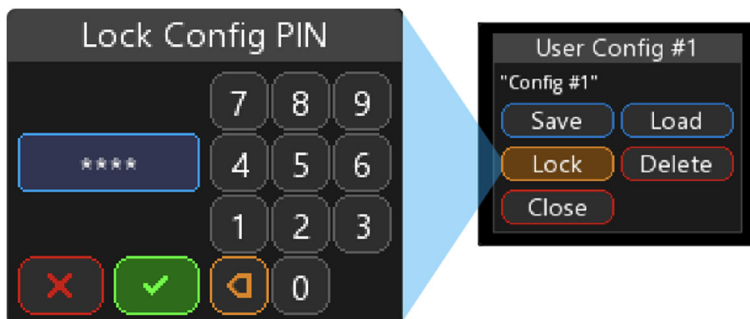
Press ● to load the config



Another selection menu will appear where you can decide which type of data is important to load

A green **Load?** button means this data type will be loaded from the config. Use ▲ or ▼, to highlight a button, then press ● once. The button is now a red **Load?** indicating that the data will be excluded when loading the user config.

To finish, highlight **Load** then press ● twice to confirm



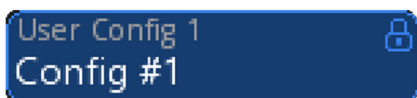
The CodeCommander features a PIN lock feature to protect user configurations from being deleted

When the slot is selected with ●, the config menu will appear

Use ► ◀ ▲ or ▼ to highlight the **Lock** button and press ●. You will be prompted to enter a PIN

To enter a new PIN, use ► ◀ ▲ or ▼ to highlight numbers and press ● to enter digits in the field

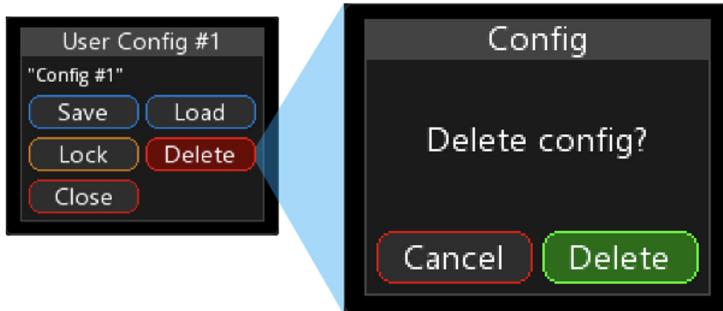
Press **✓** when complete, then re-enter the PIN to verify. Digits will be obscured when entering - if you cannot remember the PIN and need to start over at this point, press **X**



Locked user configurations will show a small icon in the top right corner of the slot and will require you to enter the PIN to unlock

Deleting a User Configuration

User configurations can only be deleted within the specific slot menu

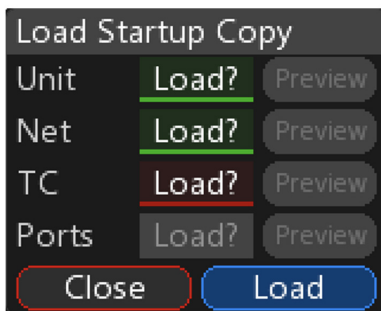


Highlight a saved slot and select it with **●**. The config menu will appear

Highlight **Delete** and press **●** - the unit will ask again to double-check you are sure

Highlight the **Delete** button again to confirm and press **●**

Startup Copy

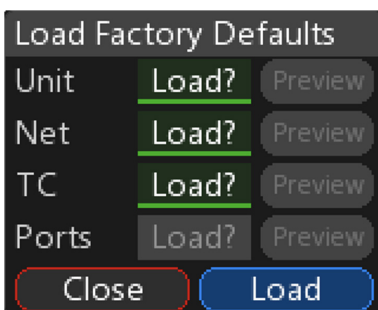


The startup copy is used to restore the node configuration to the state it was in when the node was most recently powered on. The startup copy is automatically saved on startup

A green **Load?** button means this data type will be loaded from the config. Use **▲** or **▼**, to highlight a button, then press **●** once. The button is now a red **Load?** indicating that the data will be excluded when loading the startup copy

To finish, highlight **Load**, then press **●** twice to confirm

Factory Defaults

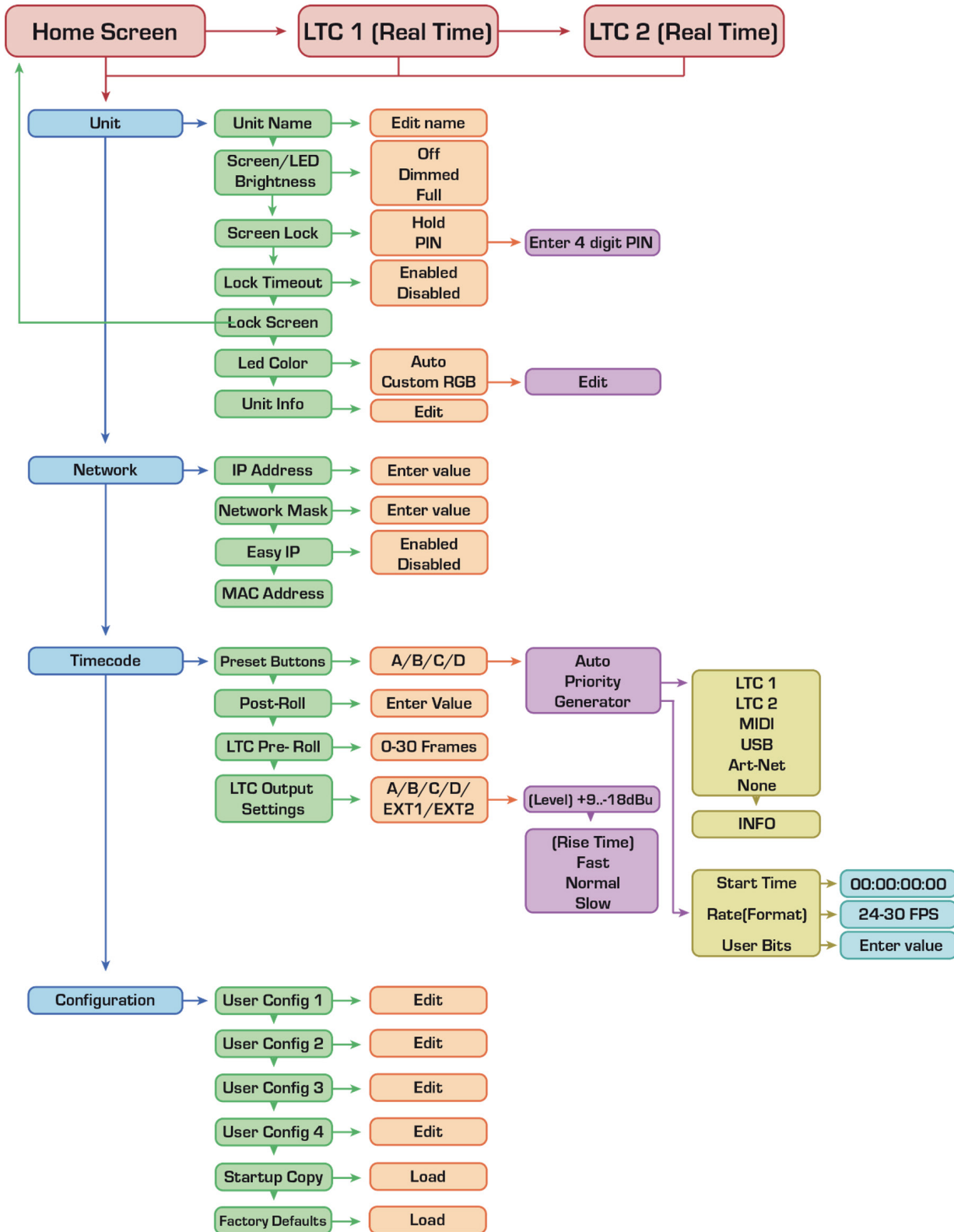


Factory defaults return all settings to factory conditions, useful when resetting a unit after use

A green **Load?** button means this data type will be loaded from the config. Use **▲** or **▼**, to highlight a button, then press **●** once. The button is now a red **Load?** indicating that the data will be excluded when loading factory defaults

To finish, highlight **Load**, then press **●** twice to confirm

MENU MAP



WEB BROWSER

User configurations can only be deleted within the specific slot menu



Every CodeCommander has a built-in network interface allowing remote configuration through the web browser

The browser behaves like a website - simply type the unit IP address into a browser to open the GUI

The browser displays a clock and screen mirror which should be updated in real time

Navigate the screen remotely with the virtual buttons representing

▶ ◀ ▲ ▼ • and **A B C D**

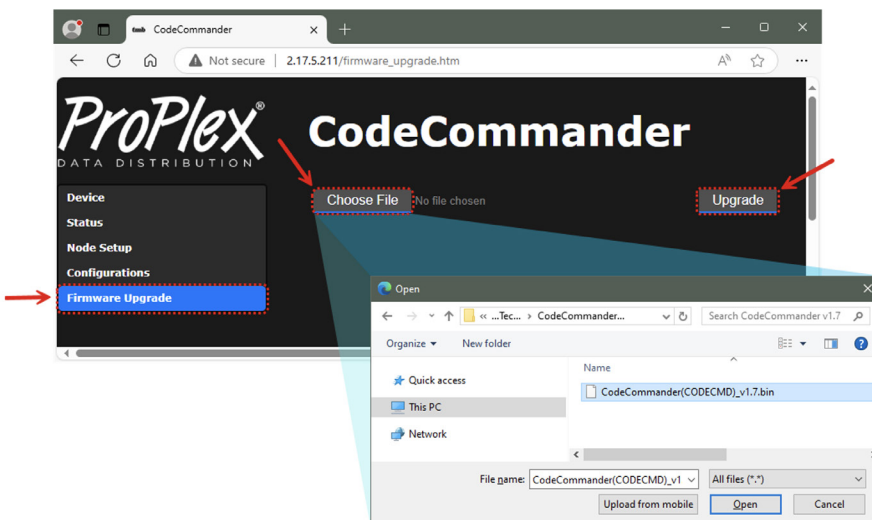
FIRMWARE UPDATES

Occasionally we will release firmware updates that contain new features or bug fixes. Firmware for all ProPlex units is available via the TMB Cloud

A link to TMB Cloud is under the Resources menu on our main website <https://tmb.com/>

To update the CodeCommander:

- Download the latest “.bin” firmware file
- Select the **Firmware Upgrade** page from the browser menu and select **Choose File** to locate the “firmware.bin” file on your computer
- Press the **Upgrade** button and wait a few moments until complete
- Once finished, the unit should automatically reboot into the new firmware version



CLEANING AND MAINTENANCE

Dust build-up in connector ports can cause performance issues and can potentially lead to further damage during normal wear and tear

CodeCommander devices need occasional cleaning to maintain best performance, especially units used in harsher environmental conditions

THE FOLLOWING ARE GENERAL CLEANING GUIDELINES:

- Always disconnect from power before attempting any cleaning
- Wait until unit has cooled and discharged completely before cleaning
- Use vacuum or dry compressed air to remove dust/debris in and around connectors
- Use a soft towel or brush to wipe and buff the chassis body
- To clean the navigation screen, apply isopropyl alcohol with a soft lens cleaning tissue or lint free cotton
- Alcohol pads and q-tips may help remove any grime and residue from navigation buttons



IMPORTANT:
Be sure all surfaces are dry before attempting to power on again

TECHNICAL SPECIFICATIONS

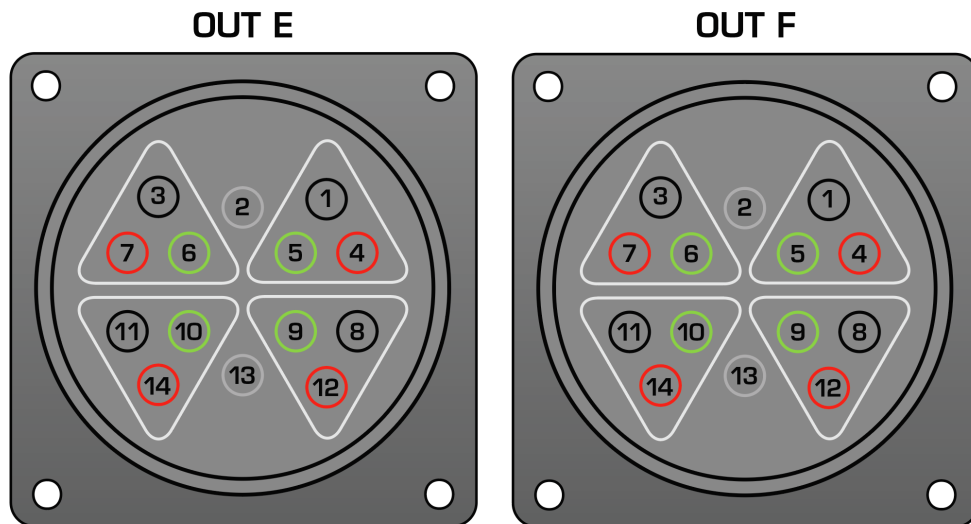
Part Number	PPCODECOMLMER
Operating Voltage	100-240 VAC 50-60 Hz or PoE
Power Consumption	15 W
Power Connector	Neutrik [™] PowerCON TRUE1 [™] with THRU
Ethernet Connector	Neutrik [™] EtherCON [™] RJ45
MIDI Input Connector	DIN 5-Pin Female
MIDI Output Connector	DIN 5-Pin Female
USB MIDI Input Connector	USB-C
LTC Input Connector	2x Neutrik [™] Combination 3-Pin XLR and 1/4" TRS female
LTC Output Connectors	4x Neutrik [™] 3-Pin XLR Male Plus optional panel can be selected at time of order with: <ul style="list-style-type: none"> • 8x Outputs over DB-25 with Tascam Pinout • 8x Outputs over 2x CPC connector • 8x 1/4" TRS connectors
Optimized Input Signal Level	0dBu (775 mV)
Operating Temperature	-20° to +40° C
Unit Dimensions (HxWxD)	19 in (482.6 mm) × 1.7 in (43.7 mm) × 8.4 in (212.2 mm)
Shipping Dimensions (HxWxD)	20.5 in (522 mm) x 3.5 in (90 mm) x 10.5 in (268 mm)
Unit Weight	6.39 lb (2.9 kg)
Shipping Weight	6.83 lb (3.1 kg)

ORDERING CODES

PPCODECOMLMER	PROPLEX CODE COMMANDER LTC MIDI ETHERNET RACKMOUNT
PPCODECOMLMECR	PROPLEX CODE COMMANDER LTC MIDI ETHERNET CPC4 OUT RACKMOUNT
PPCODECOMLMEDR	PROPLEX CODE COMMANDER LTC MIDI ETHERNET DB25 OUT RACKMOUNT
PPCODECOMLMEJR	PROPLEX CODE COMMANDER LTC MIDI ETHERNET JACK OUT RACKMOUNT

The CodeCommander optional 8-channel Output Plates are “Factory (TMB) Install Only”

CPC PINOUT



NEGATIVE	1
POSITIVE	4
GROUND/SHIELD	5

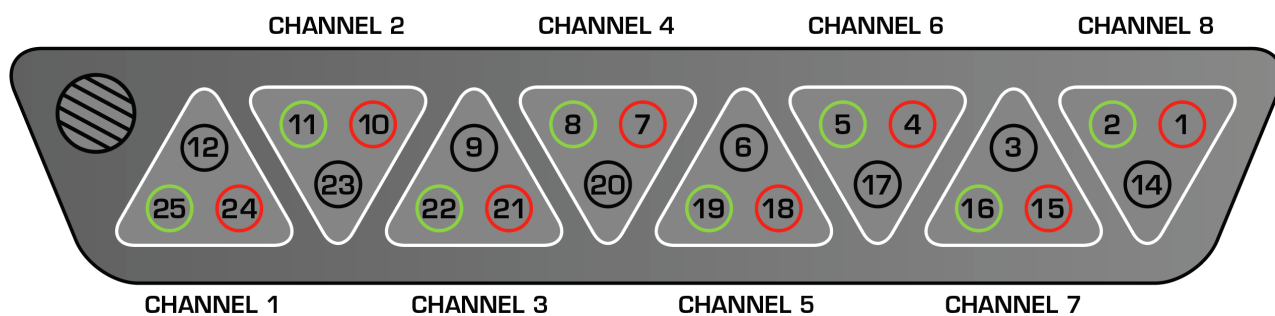
NEGATIVE	8
POSITIVE	12
GROUND/SHIELD	9

NEGATIVE	11
POSITIVE	14
GROUND/SHIELD	10

NEGATIVE	3
POSITIVE	7
GROUND/SHIELD	6

NOT CONNECTED	2
NOT CONNECTED	13

DB-25 "TASCAM" PINOUT



CHANNEL 1	
NEGATIVE	12
POSITIVE	24
GROUND/SHIELD	25

CHANNEL 2	
NEGATIVE	23
POSITIVE	10
GROUND/SHIELD	11

CHANNEL 3	
NEGATIVE	9
POSITIVE	21
GROUND/SHIELD	22

CHANNEL 4	
NEGATIVE	20
POSITIVE	7
GROUND/SHIELD	8

CHANNEL 5	
NEGATIVE	6
POSITIVE	18
GROUND/SHIELD	19

CHANNEL 6	
NEGATIVE	17
POSITIVE	4
GROUND/SHIELD	5

CHANNEL 7	
NEGATIVE	3
POSITIVE	15
GROUND/SHIELD	16

CHANNEL 8	
NEGATIVE	14
POSITIVE	1
GROUND/SHIELD	2

LIMITED WARRANTY INFORMATION

ProPlex Data Distribution Devices are warranted by TMB against defective materials or workmanship for a period of two (2) years from the date of original sale by TMB.

TMB's warranty shall be restricted to the repair or replacement of any part that proves to be defective and for which a claim is submitted to TMB before the expiration of the applicable warranty periods.

This Limited Warranty is void if the defects of the Product are the result of:

- Opening the casing, repair, or adjustment by anyone other than TMB or persons specifically authorized by TMB
- Accident, physical abuse, mishandling, or misapplication of the product.
- Damage due to lightning, earthquake, flood, terrorism, war, or act of God.

TMB will not assume responsibility for any labor expended, or materials used, to replace and/or repair the Product without TMB's prior written authorization. Any repair of the Product in the field, and any associated labor charges, must be authorized in advance by TMB. Freight costs on warranty repairs are split 50/50: Customer pays to ship defective product to TMB; TMB pays to ship repaired product, ground freight, back to Customer.

This warranty does not cover consequential damages or costs of any kind.

A Return Merchandise Authorization (RMA) Number must be obtained from TMB prior to return of any defective merchandise for warranty or non-warranty repair. For repair enquiries, please contact TMB via email at TechSupport@tmb.com or phone at either of our locations below:

TMB US

527 Park Ave.
San Fernando, CA 91340
United States
Tel: +1 818.899.8818

TMB NY

65 Commerce Road
Carlstadt, NJ 07072
United States
Tel: +1 201.896.8600

TMB UK

21 Armstrong Way
Southall, UB2 4SD
England
Tel: +44 (0)20.8574.9700

TMB RIGA

Lambertu iela 9,
Marupe, Marupes novads, LV-2167
Latvia
Tel: +371 6389.8886

You may also contact TMB directly via email at TechSupport@tmb.com

RETURN PROCEDURE

Please contact TMB and request a repair ticket and Return Merchandise Authorization Number prior to shipping items for repair. Be prepared to provide the model number, serial number, and a brief description of the cause for the return as well as the return shipping address and contact information. Once a repair ticket has been processed, the RMA # and return instructions will be sent via email to the contact on file.

Clearly label any shipping package(s) with **ATTN: RMA#**. Please return equipment prepaid and in the original packaging whenever possible. **DO NOT** include cables or accessories (unless advised otherwise). If original packaging is not available, be sure to properly pack and protect any equipment. TMB is not liable for any shipping damage resulting from inadequate packaging by the sender.

Freight call tags will not be issued for shipping repairs to TMB, but TMB will pay the freight for return to the customer if the repair qualifies for warranty service. Non-warranty repairs will undergo a quotation process by the technician assigned to the repair. All associated costs for parts, labor and return shipping must be authorized in writing before any work can be completed.

TMB reserves the right to use its own discretion to repair or replace product(s) and determine the warranty status of any equipment.

CONTACT INFORMATION

LOS ANGELES HEADQUARTERS

527 Park Avenue | San Fernando, CA 91340, USA

Tel: +1 818.899.8818 | Fax: +1 818.899.8813

sales@tmb.com

TMB 24/7 TECH SUPPORT

US/Canada: +1.818.794.1286

Toll Free: 1.877.862.3833 (1.877.TMB.DUDE)

UK: +44 (0)20.8574.9739

Toll Free: 0800.652.5418

techsupport@tmb.com

LOS ANGELES +1 818.899.8818

LONDON +44 (0)20.8574.9700

NEW YORK +1 201.896.8600

BEIJING +86 10.8492.1587

CANADA +1 519.538.0888

RIGA +371 6389 8886



www.proplex.com

A full service company providing technical support, customer service, and follow-up.

Providing products and services for the industrial, entertainment, architectural, installation, defense, broadcast, research, telecommunications, and signage industries.

Servicing the global market from offices in Los Angeles, London, New York, Toronto, Riga and Beijing.