

CP-100

Owners And Installation Manual



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Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Install in accordance with the manufacturers instructions.
- 8) Do not install near any heat sources such as radiators or other apparatus that produce heat.
- 9) Equipment must be earthed using an appropriate mains cord.
- 10) Protect the mains cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by manufacturer.
- 12) Unplug the apparatus during lightning storms or when unused for long periods of time.
- 13) Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way such as liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture. Dangerously high voltages are present inside the unit. Do not open the unit.

Refer Servicing to qualified personnel only.

NOTICE

This notice is applicable for USA/Canada only.

If shipped to USA/Canada, install only UL LISTED/CSA LABELLED power supply cord meeting the following specifications:

SPECIFICATIONS:

Plug Type: Nema-Plug 5-15p

Cord: Type SVT or SJT, minimum 3 x 18 AWG

Length: Maximum 15 feet

Rating: Minimum 7 A, 125 V

Instructions De Sécurité Importantes

- 1) Lire les instructions suivantes.
- 2) Conserver ces instructions.
- 3) Tout avertissement doit être pris compte.
- 4) Respecter les instructions à la lettre.
- 5) Ne pas utiliser cet appareil près de sources d'eau.
- 6) Nettoyer uniquement avec un torchon sec.
- 7) Installer selon le mode d'emploi fournit par la chaîne de production.
- 8) Ne pas installer près de sources de chaleur; c'est-à-dire radiateurs ou appareils produisant de la chaleur.
- 9) L'équipement doit être mis à terre en utilisant un câble approprié.
- 10) Protéger les câbles principaux de tout danger d'être écrasé ou trop serré; en particulier au niveau des fiches, des douilles murales et de la prise de courant par laquelle ils sortent de l'appareil.
- 11) N'utiliser que les accessoires spécifiés par la chaîne de production.
- 12) Débrancher l'appareil en cas d'orage ou pendant de longues périodes où il n'est pas utilisé.
- 13) Se référer à un personnel qualifié pour toute révision de l'appareil. Une révision de l'appareil est nécessaire si celui-ci a été endommagé: liquide répandu ou objets tombés à l'intérieur de l'appareil, si l'appareil a été mis au contact de la pluie ou exposé à l'humidité, ou s'il ne fonctionne pas normalement ou a été renversé.

Attention

Pour éviter tout risque de feu ou de décharger électrique, ne pas exposer l'appareil à la pluie ou à l'humidité.

Hautes tensions dangereuses présentes à l'intérieur de l'appareil. Ne pas ouvrir l'appareil.

En cas de réparation, uniquement se référer à un personnel qualifié.

NOTICE

Cette notice s'applique aux Etats-Unis et au Canada uniquement.

Si cet appareil est exporté aux Etats-Unis ou au Canada, utiliser le cordon d'alimentation portant la mention UL LISTED/CAS LABELLED et remplissant les conditions suivantes:

SPECIFICATIONS:

Type de fiche: Fiche Nema 5-15 broches

Cordon: Type SVT ou SJT, minimum 3 x 18 AWG

Longueur: Maximum 15 pieds

Tension: Minimum 7 A, 125 V

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Introduction

The CP-100 is a generic control panel that is designed primarily to be used with professional film and video processing, sourcing and recording equipment. It is designed to be used with a host platform running software that will be provided by the software vendor that supplied the CP-100. The CP-100 will not perform any functions when switched on if it is not connected to a host platform running the appropriate software. It relies on the host platform to download software to it which will then configure the CP-100 to perform the function that the software vendor intends it to. For further information, please refer to the software vendors operation manual.

Installation

The CP-100 is designed to be mounted in one of two ways:

- Free standing on a flat desk surface.
- Mounted sunk into a desk on the 10mm integral mounting lip that runs around the top surface of the control panel.

If mounting the CP-100 sunk into a desk, then make sure that you allow room for the cables to exit from the rear of the unit. The hole in the desk should be cut out to the following dimensions: 400mm x 835mm (see **Dimensions** for more details).

Before connecting any cables or external equipment to the CP-100, refer to the software vendors operation manual.

The connectors that will be used and the cables that should be used in conjunction with these will depend upon the equipment that is to be connected to the CP-100 and the software provided by the software vendor. The specifications of all the connectors can be found in the Specifications section of this manual.

Operation

Switching On

The power switch is located on the rear of the CP-100. When switched on the two LED's labeled "PWR" to the right of the inlet should light up. If these do not light up, refer to the Trouble Shooting section of this manual.

Panel Displays

The top left display on the front of the CP-100 will display a message similar to the following when first switched on:

Panel ID: 5
Version: 0.006

The number after the **Panel ID** is unique to each CP-100 and is the serial number of the unit.

The number after the **Version** is the boot code version number of the unit.

Panel Controls

The various knobs, tracker balls and buttons on the front of the CP-100 will not perform any function unless connected to a host platform which has down loaded software to it. They will however show test information on the displays when operated when not connected to a host platform. See the section on Test Mode Operation below.

Test Mode

When the panel is switched on and not connected to a host platform, moving/pressing a control will cause test information for that control to be displayed on all the displays on the panel. The test information that will be displayed will be similar to that shown below:

Encoder 12: +12 for tracker ball and knob movements.
Button 2: UP for button presses.

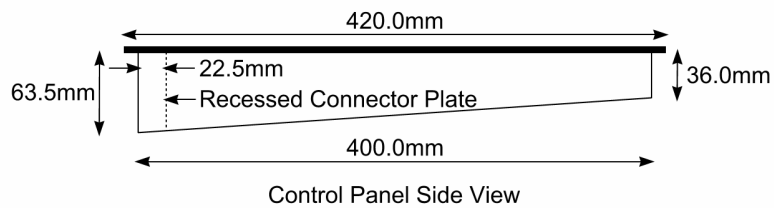
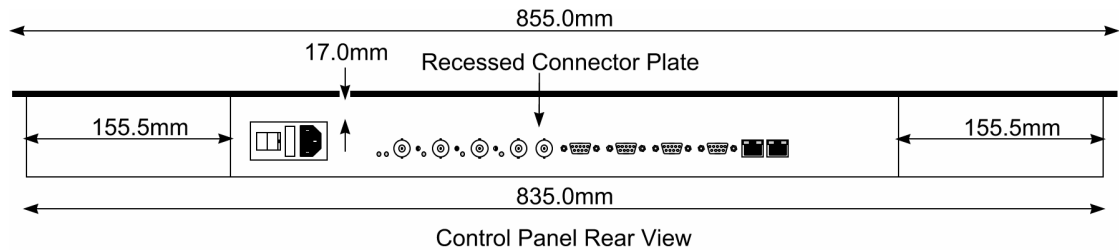
The numbers after **Encoder** are the encoder number and the amount it has just moved by (+ or -).

The number after **Button** is the button number followed by the current state it is in (UP or DOWN).

Specifications

Dimensions

Weight: 15.0Kg



Note: 10mm lip all round panel.

Power Requirements

Voltage: 100-230 V ac, 50-60Hz

Power: Maximum 36W

Connectors

Power Inlet

Fused IEC
Use only 1A fuse.

Pulse 1

BNC
-12V to +12V dc, input only.
The trigger threshold level for this input can be set by adjusting the trimmer to the right of this connector. When triggered, the LED to the right of the connector will be on.

Pulse 2

BNC
-12V to +12V dc, input only.

The trigger threshold level for this input can be set by adjusting the trimmer to the right of this connector. When triggered, the LED to the right of the connector will be on.

Pulse 3

BNC

-12V to +12V dc, input only.

The trigger threshold level for this input can be set by adjusting the trimmer to the right of this connector. When triggered, the LED to the right of the connector will be on.

Bi-Sync

BNC

Bi-level, High Definition sync input.

Internal 75 Ohm termination.

Tri-Sync

BNC

Tri-level, Standard Definition sync input.

Internal 75 Ohm termination.

Tacho

9 way D-type female.

Input only.

This connector is designed to take a bi-phase differential input at TTL levels.

Pin	Description
1	+5V Do not use – for Tangent Devices use only
2	Phase A+
3	Phase B-
4	GND
5	GND
6	GND
7	Phase A-
8	Phase B+
9	GND

GPI/O

9 way D-type female.

General purpose input and output.

This connector is designed to provide a general purpose trigger output and input.

Pin	Description
1	Output A See notes below
2	Output B See notes below
3	Not connected
4	Input A signal See notes below
5	Input B signal See notes below
6	Output A See notes below
7	Output B See notes below
8	GND
9	GND

Output A and B

These outputs are from two internal relays that can be used to switch an external device.

These outputs should not be used to switch more than 5V dc at 500mA. DO NOT EXCEED THESE RATINGS!

Input A and B

These inputs are designed to receive a trigger from an external device. The inputs are pulled high by an internal 2K2 Ohm resistor. The DP-100 can be triggered by pulling either of these down to GND (pins 8 and 9) through an external switch.

Serial Main

9 way D-type female
RS232 or RS422 serial interface.

RS232 mode

Pin	Description
1	Not connected
2	RX
3	TX
4	GND
5	GND
6	GND

7	Do not use
8	Do not use
9	Not connected

RS422 mode

Pin	Description
1	Not connected
2	RX A
3	TX B
4	GND
5	GND
6	GND
7	RX B
8	TX A
9	Not connected

Serial Aux

9 way D-type female.
RS232 or RS422 serial interface.

RS232 mode

Pin	Description
1	Not connected
2	RX
3	TX
4	GND
5	GND
6	GND
7	Do not use
8	Do not use
9	Not connected

RS422 mode

Pin	Description
1	Not connected
2	RX A
3	TX B
4	GND
5	GND
6	GND
7	RX B
8	TX A
9	Not connected

Ethernet

RJ45
10 Base T Ethernet

TDLAN

RJ45
10 Base T Ethernet

Trouble Shooting

If the displays on the front of the CP-100 panel fail to come on, or if either of the two LED's to the right of the IEC inlet labeled "PWR" fail to light up, then check the supply cord to the IEC inlet or check the fuse in the IEC inlet. Replace the fuse in the IEC inlet only with the type specified.

If any of the controls fail to function, then power off the CP-100 and disconnect it from the host platform. Turn the power back on. This will bring the CP-100 up in test mode, see the Operation - Test Mode section of this manual. If the control fails to display its test information when operated, then return the unit to Tangent Devices or the software vendor for further servicing.

Refer to the software vendors operations manual for further information.

Do not remove the cover. Refer servicing to qualified personnel only.