

MSP 12



12-INCH MASTER SERIES PROMPTER ASSEMBLY AND INSTALLATION GUIDE

Autocue and QTV have been serving the broadcast industry since the mid-1950s when QTV in New York and Autocue in London supplied the very first prompters via their rental divisions.

Creating broadcast history. The two companies merged in 1984 under Autocue Group and, with the introduction of the QSeries family of software, became the only company to offer the television industry a single solution for all transmission, newsroom, scripting and prompting requirements. QTV forms the Americas division of Autocue Group's prompting sales and rental services.

Prompter of choice around the globe. Autocue Group is known worldwide for its service and dependability, serving such prestigious clients as the BBC, Bloomberg, NBC and CNN. The Group's prompting solutions are compatible with all newsroom systems on the market and are in use worldwide by broadcasters, production professionals, government facilities and corporate producers requiring excellence in prompting and newsroom automation solutions.

For further information, please visit either web site shown at the bottom of this page.

Contents

	Contents	iii
1	Introduction	1
	1.1: MSP12.....	1
	1.2: About this guide.....	2
	1.3: Copyright information	2
	1.4: Disclaimer.....	2
2	MSP12 Components	3
	2.1: Supplied equipment.....	3
	2.2: Optional equipment	4
	2.3: Other equipment as required.....	5
3	MSP12 Technical Specifications	6
4	Assembly Procedures	7
	4.1: Tripod head preparation	7
	4.2: Autocue Wide Angle Bracket.....	7
	4.2.1: Wide Angle Bracket options	8
	4.2.2: Bracket assembly	8
	4.2.3: Adjust spacing and location of the mounting bars	10
	4.3: Gold Plate preparation	12
	4.3.1: Attach Gold Plate to a tripod.....	13
	4.3.2: Attach mounting bracket to a Gold Plate	15
5	MSP12 Connections	16
	5.1: Physical characteristics	16
	5.1.1: Video and power inputs	17
	5.1.2: Autocue cue light	17
6	MSP12 Operation	19
	6.1: Connections	19
	6.2: OSD controls	19
	6.2.1: Accessing the OSD controls.....	20
	6.3: Menu options.....	21
	6.3.1: Input Select.....	21
	6.3.2: VGA Adjustments	21
	6.3.3: Color Adjustment	21
	6.3.4: Video Settings	22
	6.3.5: Scaling Adjustment.....	22
	6.3.6: System Settings.....	22

7	Troubleshooting and Maintenance	23
	7.1: Common problems	23
	7.2: Maintenance	24
	7.2.1: Cleaning the monitor	24
	7.2.2: Care and handling advice	25
8	Sales and Support Information	26
	Sales information	26
	Technical support	27

SECTION 1: Introduction

For the broadcaster, production facility or event organiser requiring greater viewing distances and larger display areas, Autocue prompter display and on-camera units satisfy all your needs.

Autocue on-camera units comprise prompter display, hood, mounting bracket, tripod plate and accessories.

Designed for the most demanding of broadcast environments, Autocue prompter display and on-camera units have crisp, ultra-bright picture quality, precision controls, and rugged construction.

Autocue prompter display and on-camera units are available in a range of configurations to match most camera, lens and mounting combinations.

1.1: MSP12



Designed for use with light-weight tripods and jib arms, the MSP12 combines portability and light weight design with excellent readability. This makes it suitable for non-traditional broadcast sectors, such as production companies, educational institutions, religious broadcasters, and corporate production facilities.

The MSP12 consists of the following features:

- Medium wide-angle hood designed specifically for the MSP12.
- Super-lightweight construction.

Multiple mounting options including:

- Gold Plate, Pro Plate and Roller Plate for tripods.
- Matte Box bar kit for mounting on jib-arm cameras.

A variety of counterbalances and adjustable weights are available to ensure safe and stable operation and movement of mounted equipment.

Where appropriate, Autocue can also provide a range of accessories, such as cue lights and remote controls, to complement your chosen system.

1.2: About this guide

This document describes how to assemble and mount your chosen Autocue prompter display or on-camera unit. It is suitable for any broadcaster or news production crew. This guide is suitable for novices as well as expert users of the product line from Autocue.

Reference material is also provided that explains how to adjust the various settings and troubleshoot the prompters to ensure optimum performance.

1.3: Copyright information

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All third-party software or hardware, including logos, referenced within this guide is copyright of the respective owners.

1.4: Disclaimer

Autocue Group Ltd reserves the right to revise this publication and to make changes in its content without obligation of Autocue Group Ltd to notify any person or persons of such revision.





SECTION 2: MSP12 Components


The following tables list the supplied and recommended components for your MSP12 on-camera unit.

2.1: Supplied equipment

Item Name	Illustration
MSP12	
Power and video cable	
Mounting Bracket	

2.2: Optional equipment

Item Name	
Small Wide Angle Hood	 A small, trapezoidal light hood with a black frame and a white diffuser panel, shown from a three-quarter perspective.
Medium Wide Angle Hood	 A medium-sized, trapezoidal light hood with a black frame and a white diffuser panel, shown from a three-quarter perspective.
Fixed Plate	 A black metal plate with a grid of circular holes, a central adjustment knob with a horizontal bar, and two mounting brackets on the right side.
Roller Plate	 A black metal plate with a central slot and two handles, shown from a three-quarter perspective.

Item Name	
Swing-arm Plate	 A black, L-shaped metal plate with a curved arm on the left side. The arm has a pivot point and a locking mechanism. The main body of the plate has several circular holes of varying sizes.
Quadrant and Pan Bar	 Two components: a small metal quadrant with two spherical ends and a long, thin, curved metal bar with a threaded end.
Telescopic Rods	 Five black telescopic rods of varying lengths, each with a threaded end and a locking mechanism.

2.3: Other equipment as required

Item Name	
Tripod	 A grey and black surveying instrument mounted on a black tripod. The instrument has a lens and various adjustment knobs.

SECTION 3: MSP12 Technical Specifications

ATTRIBUTE	VALUE
Display size	12.1" (305mm)
Brightness	1600Nits
Resolution	1024 x 768
Contrast Ratio	500 : 1
Reading range	4.5m (15ft)
Input signal	Composite 1Vp-p 75Ohm (looping 2 x BNC connectors) VGA (1 x 15-pin high density-D connector)
Composite standard	NTSC, PAL, SECAM
Power input	110-260V AC, 50-60Hz (1 x IEC connector) 12V DC (1 x 4-pin XLR connector)
Power consumption	35W 150mA @ 230V AC; 2.9A @ 12V DC
Display controls	Menu based push button controls. Direct brightness adjustment.
Assembly weight	Top mount: 8.1kg (17.9lb)
Monitor options	<i>Specify on purchase</i>
- Cue light	Integrated, driven by light sensor that attaches to the camera tally light. Supplied with 3-pin DIN sensor connector
- Removable PSU	Reduces weight by 250g (8.8oz)
- Remote control	None
- Cooling fan	Not required
Hood options	Top-mounted: Special top-mount hood (standard size) Bottom-mounted: Medium wide-angle hood.
- Glass	70:30 transmission Internal anti-reflective coated
Mounting options	Top mounted: Roller Plate Bottom mounted: Roller Plate; Fixed Plate; Swing-arm Plate

SECTION 4: Assembly Procedures

An Autocue On Camera Unit can be used with almost any industry-standard camera and tripod combination. On camera units comprise a tripod head attachment, prompter monitor and hood with integral two-way mirror.

Assembling and mounting your on camera unit involves:

- preparing the mounting plates and brackets
- attaching the prompter monitor
- attaching the hood and glass components
- connecting required cables
- ensuring all connections and fixings are secure.

4.1: Tripod head preparation

Autocue on camera units are designed to work with most standard tripods. The first step is to remove the camera mounting plate from the tripod head.



4.2: Autocue Wide Angle Bracket

The Wide Angle bracket consists of a square grooved length of aluminium extrusion, horizontal prompter display unit mounting bars, vertical hood mounting bars and one or two keyhole plates.



NOTE: The vertical hood mounting bars are longer than the horizontal prompter display unit mounting bars.

4.2.1: Wide Angle Bracket options

Autocue produces three wide angle bracket sets depending on the size of hood and prompter display unit that you have ordered.

- Small Wide Angle Bracket is used with the Small Wide Angle Hood and compact prompter display units
- Medium Wide Angle Bracket is used with the Medium Wide Angle Hood and mid-sized prompter display units
- Large Wide Angle Bracket is used with the Large Wide Angle Hood and the largest prompter display units

Autocue Wide Angle Brackets.



4.2.2: Bracket assembly

The assembly of the brackets is the same for all three sizes.

NOTE: The illustrations below depict various sized brackets.

1. Unscrew the keyhole plates in the bracket and rotate them to the upright position.



2. Screw in the horizontal prompter display unit mounting bars.



3. Screw in the vertical hood mounting bars.



4.2.3: Adjust spacing and location of the mounting bars

NOTE: It is recommended that you check the spacing between the mounting bars before attaching the mounting bracket to the plate you have ordered.

1. Loosen all the mounting bars slightly so that they can freely move to the left and right.
2. Place your prompter display unit face down on a flat, padded surface.
3. Align the horizontal mounting bars with the holes on the rear, side or bottom of the unit, depending on the prompter display unit you have ordered.
4. Slide the mounting bars in to the holes to confirm correct positioning. (The picture below is for illustrative purposes only.)



NOTE: It is recommended that you mount the prompter display unit so that it is centred along the mounting bracket.

5. Tighten the horizontal mounting bars to secure them in position and remove them from the rear of the prompter display unit.
6. Carefully place your wide angle hood face down on a flat, padded surface.

7. Align the vertical mounting bars with the screw clamps on the rear of the hood and slide the bars in.



NOTE: It is recommended that you mount the hood so that it is centred along the mounting bracket.

8. Tighten the vertical mounting bars to secure them in position and remove them from the screw clamps.
9. The mounting bracket is now ready to be attached to the plate you ordered.



4.3: Gold Plate preparation

The Autocue Gold Plate is provided disassembled as illustrated below.

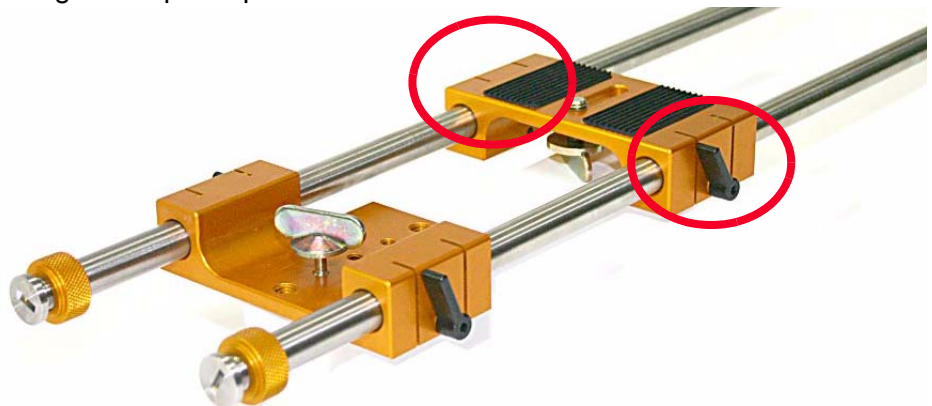


The body of the Gold Plate consists of the mounting slide and the camera carriage. Once the Gold Plate is assembled, it can be attached to a tripod or to a hand-held shoulder grip.

1. Screw the Gold Plate extension bars into the ends of the threaded rods protruding from the camera carriage of the Gold Plate.



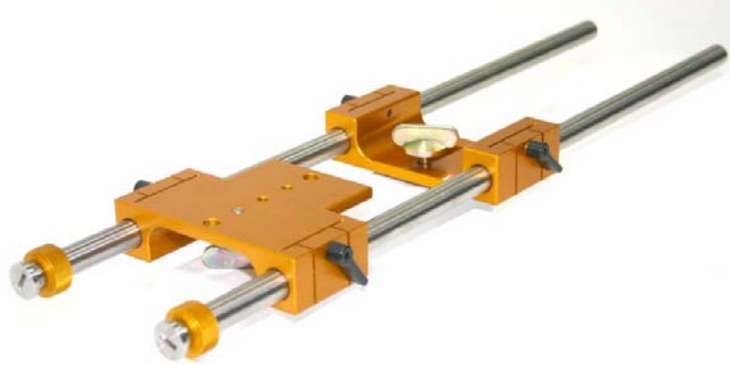
2. Adjust the distance between the camera carriage and the mounting slide. The distance depends on whether the Gold Plate will be attached to a tripod or shoulder mount.
3. Loosen the locking levers on the camera carriage and move the camera carriage to required position.



4. Loosen the locking levers on the mounting slide and move it to the required position.

4.3.1: Attach Gold Plate to a tripod

1. Place the Gold Plate on a flat surface with the mounting slide uppermost.



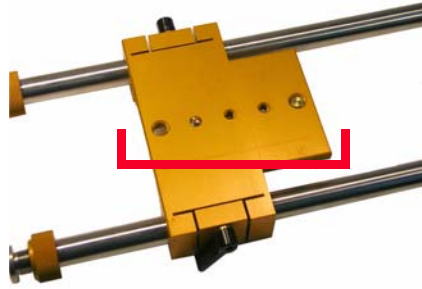
2. Place the tripod camera mounting plate on to the Gold Plate mounting slide.



3. Fix the camera mounting plate in place by screwing it to the Gold Plate mounting slide.



NOTE:



Camera mounts vary, but must be only attached using the large or small threaded holes in the Gold Plate mounting slide.

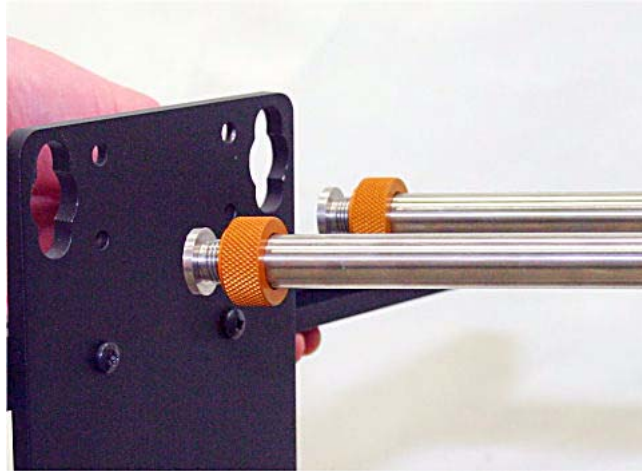
4. Fix the combined Gold Plate and camera mounting plate to your tripod.



4.3.2: Attach mounting bracket to a Gold Plate

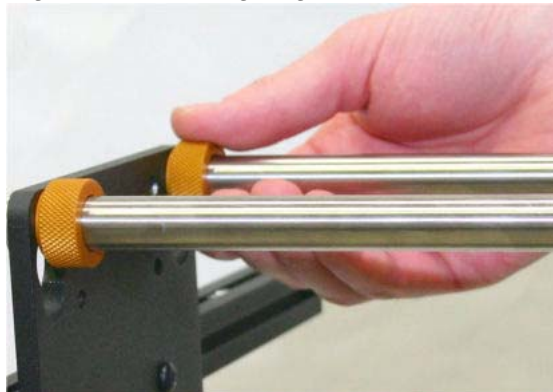
Ensure that the Gold Plate is securely attached to a tripod or shoulder mount.

1. Loosen the knurled locking rings on the adaptor rods at the front of the Gold Plate.
2. Place the openings in the keyhole plates over the ends of the adaptor rods.



NOTE: Ensure the keyhole plates remain in front of the locking rings.

3. Tighten the locking rings to secure the mounting bracket in position.



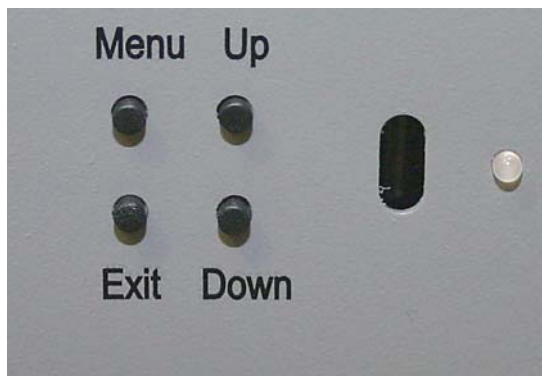
SECTION 5: MSP12 Connections

5.1: Physical characteristics

The prompter display unit of the Autocue MSP12 is illustrated below.



The MSP12 has four control buttons on the side of the unit.



Buttons	Control
Menu	Opens the OSD menus or Opens a particular sub-menu
Exit	Exits from the a sub-menu or Closes the OSD
Up	Move OSD cursor to highlight a sub-menu or Increase the value of a parameter
Down	Move OSD cursor to highlight a sub-menu or Decrease the value of a parameter

The actions of the on-screen menus are described in Section 6: Prompter Operation.

5.1.1: Video and power inputs

Connect video cables and power leads to the sockets on the side of the .prompter display unit.



Power. Use either a standard mains electrical supply cable to the Mains Input socket or use the supplied 12 V DC XLR connector to the DC Input socket.

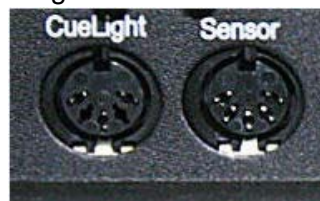
Video. You can connect a video signal via the Video In BNC or use the prompter display unit directly from your computer using a standard VGA cable.

5.1.2: Autocue cue light

When an on-camera unit is used, the hood can sometimes obscure the cue light on the camera. To overcome this, Autocue has developed an extension light that is attached to the hood.



1. Attach the sensor to the light on the camera.
2. Plug the sensor into the Sensor socket on the prompter display unit.



3. Attach the cue light to the top of the hood.
4. Insert the plug from the light in to the CueLight socket.
5. The Autocue cue will illuminate whenever your camera is "live".

NOTE:



The cue light sensitivity can be adjusted using the preset marked Trim on the control panel.

SECTION 6: MSP12 Operation

OSD (On Screen Display) menus are used to configure the prompter display unit and prepare it for displaying scripts.

NOTE: While operating prompter display units, troubleshooting or maintenance tasks may need to be performed on the prompter display unit. For guidance, refer to section 1.

6.1: Connections

Once your MSP12 and camera combination are securely mounted on a tripod or shoulder grip, attach the MSP12 cabling.

1. Ensure you have a power supply and video signal available

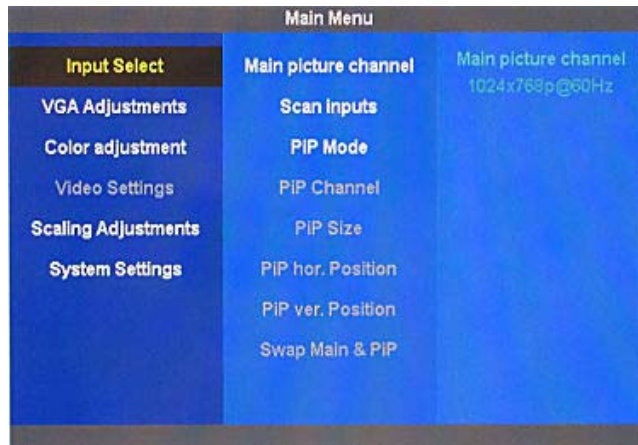
6.2: OSD controls

The OSD controls are used to make changes to parameters, perform scaling adjustments and amend other operational settings of your MSP12.

NOTE: Your MSP12 comes with an infrared remote control handset. To activate this, you need to enter the following code:
31341
where requested to do so.

6.2.1: Accessing the OSD controls

The Menu button on the side of the MSP12 opens the OSD controls. An example OSD menu screen is shown below.



NOTE: If no adjustment is made to a control, the OSD will switch off after approximately ten seconds

There are six main OSD menus that are used to set up a MSP12 prompter display unit:

- Input Select
- VGA Adjustments
- Color adjustments
- Video settings
- Scaling adjustments
- System Settings

The tables in the following sections list the various sub-menu selections and the options that can be set for them.

Press the Up and Down arrows to highlight a heading and press the Menu button to select it. The sub-menus within the six main categories are selected with the Up & Down buttons.

Press Menu again to select a sub-menu from a category and then the Up and Down arrows to adjust or change the parameters. Press Menu once more to save the setting.

6.3: Menu options

6.3.1: Input Select

The first option allows you to select a video signal source for your prompter display unit.

Sub-menu	Options
Main Picture channel	VGA
	Component Video
Scan inputs	Off
	On
PIP Mode	Off
	Picture in Picture
	Side by Side

6.3.2: VGA Adjustments

The following are only usable if the VGA Channel is active.

Sub-menu	Options
Auto Adjust	Use for automatic image adjustment
Clock	Set clocks manually
Phase	Adjust the focus and clarity of the display
Sharpness	Increase image sharpness
Hor.-Position	Move the image position horizontally
Ver.-Position	Move the image position vertically

6.3.3: Color Adjustment

The various colour settings for the image can be adjusted using this option.

Sub-menu	Options
Brightness	use UP DOWN keys for setting brightness.
Contrast	use UP DOWN keys for setting contrast.
Saturation	use UP DOWN keys for setting saturation.
Hue	use UP DOWN keys for setting hue.
Fleshtone	use UP DOWN keys for setting flesh tone
Backlight	use UP DOWN keys for setting backlight brightness.
Auto Color adjustment	Auto adjustment of colour
Advanced	Setting of Gamma, colour temperature and RGB colour value.

6.3.4: Video Settings

These settings are only selectable if a signal is present on an active video channel.

Sub-menu	Options
Motion Processing	Use for optimum motion sharpness
Sharpness	Emphasize borders
Film Mode	Only use with DVD Input
Noise Reduction	Filter for noise reduction
Mpeg Processing	Filter for MPEG (This setting cannot be used as add on board does not exist)
Decoder Settings	Settings for video decoder

6.3.5: Scaling Adjustment

Scaling Adjustments for the image are set in this menu.

Sub-menu	Options
Scaling Mode	Use UP and DOWN keys to select the scaling modes.
	Expand: Image is expanded to the full monitor screen.
	Aspect: Image is shown in its aspect ratio according to the input signal.
	1:1 : Image is shown in its original resolution.
Picture Flip	Horizontal or vertical flip of image
Zoom	Enlarge image
Hor. Pan	Horizontal pan of enlarged Image
Vert. Pan	Vertical pan of enlarged Image

6.3.6: System Settings

Sub-menu	Options
OSD Timeout	Setting of OSD timeout
OSD Hor. Position	Setting of OSD horizontal position
OSD Vert. Position	Setting of OSD vertical position
OSD Blend	Setting of OSD blend
OSD Orientation	OSD Horizontal. OSD Vertical. Flip, OSD Rotate
OSD Language	OSD Language (Engl. Deutsch)
Reset to Default	Reset to default; all saved settings will be lost!!

SECTION 7: Troubleshooting and Maintenance

7.1: Common problems

The table below lists common problems that may occur during prompter operation. Suggested things to look for are.

Problem	Check...
The power LED of the LCD flat-panel display is not illuminated	if the power switch for the unit is in the ON position
	if the power cord is connected to a working power outlet.
	if the power cord is plugged in to the unit
There is no picture visible	if the power supply receives power and is correctly connected to the display
	if the signal cable is correctly connected to the graphics board or to the video source and display
	if the device is it turned on and set to the correct mode (VGA or video)
	if the display supports the graphics mode of the graphics board (see Technical Specifications)
	if the connectors have any bent pins
	if the brightness and contrast settings in the OSD menu are appropriate
	if the screen saver settings of your system are causing problems
The power LED is red	See previous item #2.
The image is blurred or unstable	if the signal cable is correctly connected
	if the selected graphics mode is correct.
	if the display supports the graphics mode of the graphics board.
	if the resolution of the unit is set to less than 1280 x 1024 at a refresh rate of 60 Hz. (For resolutions lower than this the image is expanded via interpolation which may cause errors. As a result the image may look blurred.)
<i>Alternative suggested remedies:</i>	
	Select "Auto adjust" from the Position menu.

Problem	Check...
	Select the H-Total and Phase functions from the Position menu and change the settings to achieve a sharp and stable image (these settings may have to be repeated when you have selected another graphics mode).
The image is not sized properly or not centered	if the horizontal and vertical image position in the OSD menu is set correctly
	If the selected graphics mode is appropriate
	if the display unit supports the graphics mode of the graphics board
OSD error message: "Signal overrange"	if the selected graphics mode is correct.
	if the display unit supports the graphics mode of the graphics board

For further troubleshooting assistance, refer to our Frequently Asked Questions (FAQ) database on our website: www.autocue.com.

7.2: Maintenance

7.2.1: Cleaning the monitor

CAUTION: **Electric Shock Hazard!**

Isolate the prompter display unit and any other devices from any power source before cleaning the display unit surface.

Regular cleaning will help keep your prompter display unit in good condition.

- As recommended by the manufacturers, use tepid water with a small amount of detergent to clean the glass on the prompter display unit and then leave it to dry naturally.
- Wipe the equipment surface down with a moist cloth; do not allow liquid to enter the equipment.
- Clean the prompter display unit screen with a lint-free, soft cloth. Do not use (glass) cleaning agents or paper tissues for cleaning. In addition, do not clean the glass with abrasive cleaners or dusters, these will scratch the glass coating.
- Wait until all cleaned parts are completely dry before reconnecting the prompter display unit to the power source.

7.2.2: Care and handling advice

- Avoid dropping the prompter display unit or any of its individual components.
- Clean the monitor periodically.

NOTE: Do not use abrasive cleaners or dusters when cleaning the monitor.

- Do not run the prompter for excessively long periods of time. This will cause the operation of the backlight panel to deteriorate, gradually becoming dimmer.
- Do not use in wet weather without a cover.
- Do not expose to sunlight for long periods of time.
- Adjust the mounting bracket to allow clear space between the glass of the hood and the fully-extended camera lens
 - small vibrations may cause scratches
 - contact by the lens may break the glass
- Ensure that the prompter display unit is correctly aligned both horizontally and vertically with the camera
- Ensure that the whole on camera unit is securely fastened and does not sway from side to side.

SECTION 8: Sales and Support Information

We have been working in live broadcast environments for the past 50 years and understand the importance of efficient and effective hardware and software support.

We provide the latest prompting software builds for free on our website ensuring you continue to benefit from enhancements. Warranties cover all of our hardware products, with an in-house assessment and repair service offered outside of the warranty period.

Sales information

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Technical support

Our hardware and software support is provided by our own in-house teams.

Telephone support

We provide 24/7 support for our QSeries and Rental customers, with support for prompting customers available during UK office hours (9am till 6pm GMT) and US office hours (9am till 5pm EST).

Onsite support

Our Tech Support team also travel to customer sites to install QSeries systems and offer ongoing after-sales support to QSeries customers.

To request technical support please use one or more of the following options.

International

Phone.

1. Call the main Autocue number:
+44 20 8665 2992
2. Select the support option

3. Leave a message including as much detail about the problem as practical.

Email.

1. Send an email to:
support@autocue.co.uk
Remember to include as much detail as possible. A phrase such as "Screen blank" makes it difficult for the support staff to diagnose a problem and will delay providing you with an answer.

Web site.

1. Go to www.autocue.com
2. Select "Support" and then "Problem Form" from the menu bar
3. Complete the form and submit it.

Americas

Phone.

1. Call the main QTV number:
+1 704 377 1496
2. Select the support option
3. Leave a message including as much detail about the problem as practical.

Email.

1. Send an email to:
support@qtv.com
Remember to include as much detail as possible. A phrase such as "Screen blank" makes it difficult for the support staff to diagnose a problem and will delay providing you with an answer.

Web site.

1. Go to www.qtv.com
2. Select "Support" and then "Problem Form" from the menu bar
3. Complete the form and submit it.