| CAM TV | | | | | | CAM TV |
| CAM TV | 60" HDTV FOM | 60" HDTV FOM | 80" HDTV Spectra | 60" HDTV FOM | 60" HDTV FOM | CAM TV |

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CAM TV
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8' From Ceiling

60" HDTV - 54 19/64" W x 33 1/2" H
80" HD TV - 71 39/64" W x 43 5/8" H

32' - Width of LIGO Control Room

Corners: 3x46" HDTV
FOMs: Two 4x60" HDTV
Spectra: 2x80" HDTV

Decision was to purchase 80" displays for now. However, we left space to upgrade to 90" displays in the future

LIGO Control Room - Wall Display

D1400412-v2

LLO Control Room Wall Display Bill of Materials

Location	Component	Model	Vendor	Item Cost	Quantity
right side wall - stripcharts	46" HDTV display	LD-4655VX	Westinghouse	$500	6
right side wall - stripcharts	Single-arm articulated wall mount	3607076	Atlantic	$40	6
right side wall - stripcharts	Display computer	MacMini	Apple	$700	3
right side wall - stripcharts	Computer wall mount	MacMini	h-squared	$50	3
left, right corners - IFO cam	46" HDTV display	LD-4680	Westinghouse	$500	6
left, right corners - IFO cam	Single-arm articulated wall mount	3607076	Atlantic	$40	6
left, right-hand FOMs	60" HDTV	LC60LE650U	Sharp	$1,100	8
left, right-hand FOMs	60" HDTV wall mount	60-614	Ergotron	$70	8
central - spectra	80" HDTV	LC80LE650U	Sharp	$2,850	2
center - spectra	80" HDTV wall mount	ST670	Peerless	$95	2
top of wall	Time-zone clocks	TBD	TBD	TBD	3
top of wall	16-character GPS displays	TBD	TBD	TBD	1

LLO Control Room Wall Displays - MSR BOM

Component	Model	Vendor	Item Cost	Quantity
Display computer	MacMini	Apple	$700	14
Computer rackmount	RackMac Mini	Sonnet	$154	7
6' HDMI-DVI cables	AV22401-06-WHT	Belkin	$11	14
4-port DVI extender	EXT-DVI-CAT5-4X	Gefen	(eLIGO)	5
100' Cat6 Cable		Stock on hand		28
4-port wall plate	03413	CablesToGo	$1	16
wall plate - BNC keystones	03811	CablesToGo	$3	28
wall plate - RJ-45 keystones	03677	CablesToGo	$10	16
MiniDisplayPort-DVI adapter	MDP2DVIW	StarTech	$13	14
DVI cable		Stock on hand		14
USB cable		Stock on hand		14
16-port DVI KVM	KV9516A	BlackBox	$925	1
USB extender	EXT-USB-MINI2	Gefen	(eLIGO)	1
KVM video display		Stock on hand		1

LLO Control Room Wall Display - Install Notes

SiDE WALL
The 46" Westinghouse displays are no longer available - suggest substituting 48" HDTV (Sharp LC48LE551U)

The right side-wall has vertical pairs of displays controlled by a single computer (which is mounted on the wall behind the lower display). We have USB extenders run from each to the back of a control-room desk to connect to mouse, keyboard for control

CORNERS
The corner displays were mounted to the side walls, and then moved to a 45 degree angle in the corner using the articulated mounts.

The corner displays each have a video input (RG-59 from the Knox video switch), but only the top two on each side had an HDMI input from a computer in the MSR (carried on two Cat6 cables).

MAIN WALL
The display wall of 60 and 80" displays needed to be reinforced - see detail on Display Wall Detail document

Each display on the main wall has a video input (RG-59 from the Knox video switch), and an HDMI input from the MSR (carried on two Cat6 cables).

MSR

Rack 5 in the MSR has all the MacMinis, mounted in rack-mount holders. Each MacMini runs
first output (MiniDisplayPort + USB) to the DVI KVM,
second output (HDMI) -> HDMI-DVI -> DVI extender -> two Cat6 cables -> DVI extender - > DVI-HDMI -> TV

Two MacMini outputs are run in mirrored mode at HDMI resolution.

We used existing Gefen 4-port DVI extenders left over from eLIGO workstations at LLO. These are no longer available. Suggest getting HDMI or DVI extenders - Solution is TBD
 - Could only use 3 ports on each extender - using all 4 caused all outputs to stop

Instead of a KVM, one could use a 'remote desktop' to each display computer - have not tested this.