

6 DECEMBER 2012

# C40

# IMB GUIDER UPGRADE

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IMACS Block Diagram Sch

Title:  
C40 IMB UPGRADE

Size: C

Scale:

Drawn By: alash

Checked By: A. BAGISHI

Date: 12/2/2013 10:15:20 AM

Sheet 1 of 8

Revisions:

File: D:\nash\CCIW\work\Scat 32\2012\C40\_upgrade\C40 IMB Cover Sheet Sch

**Carnegie Institution of Washington**

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Pasadena, California 91101  
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**OCIW**

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Power Requirements 12-16V at 25 deg C  
 Galil local rep: John Montgomery 805 591-3996  
 Full hardware handshaking required for Galil controller

Part # DMC-4080(SCNTL)-C012(P422+1200/SSI,STEP)+1200/SSI,STEP-D4040-D4040

### GALIL DMC 4080

#### X-AXIS GUIDER 1

#### MOTOR A

P1 "X"  
 ENCODER INPUT A  
 US DIGITAL ENCODER

P1 X-LIMITS

4, 5, 6 DRIVER POWER

#### Y-AXIS GUIDER 1

#### MOTOR B

P1 "Y"  
 ENCODER INPUT B  
 US DIGITAL ENCODER

P1 Y-LIMITS

ETHERNET

RS-422

RTS- 1

TXD- 2

CTD- 3

STRT- 4

RTN- 5

TXD+ 6

TXD- 7

CTD+ 8

CTD- 9

RTS+ 10

RTS- 11

TXD+ 12

TXD- 13

CTD+ 14

CTD- 15

RTS+ 16

RTS- 17

TXD+ 18

TXD- 19

CTD+ 20

CTD- 21

RTS+ 22

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TXD+ 246

TXD- 247

CTD+ 248

CTD- 249

RTS+ 250

RTS- 251

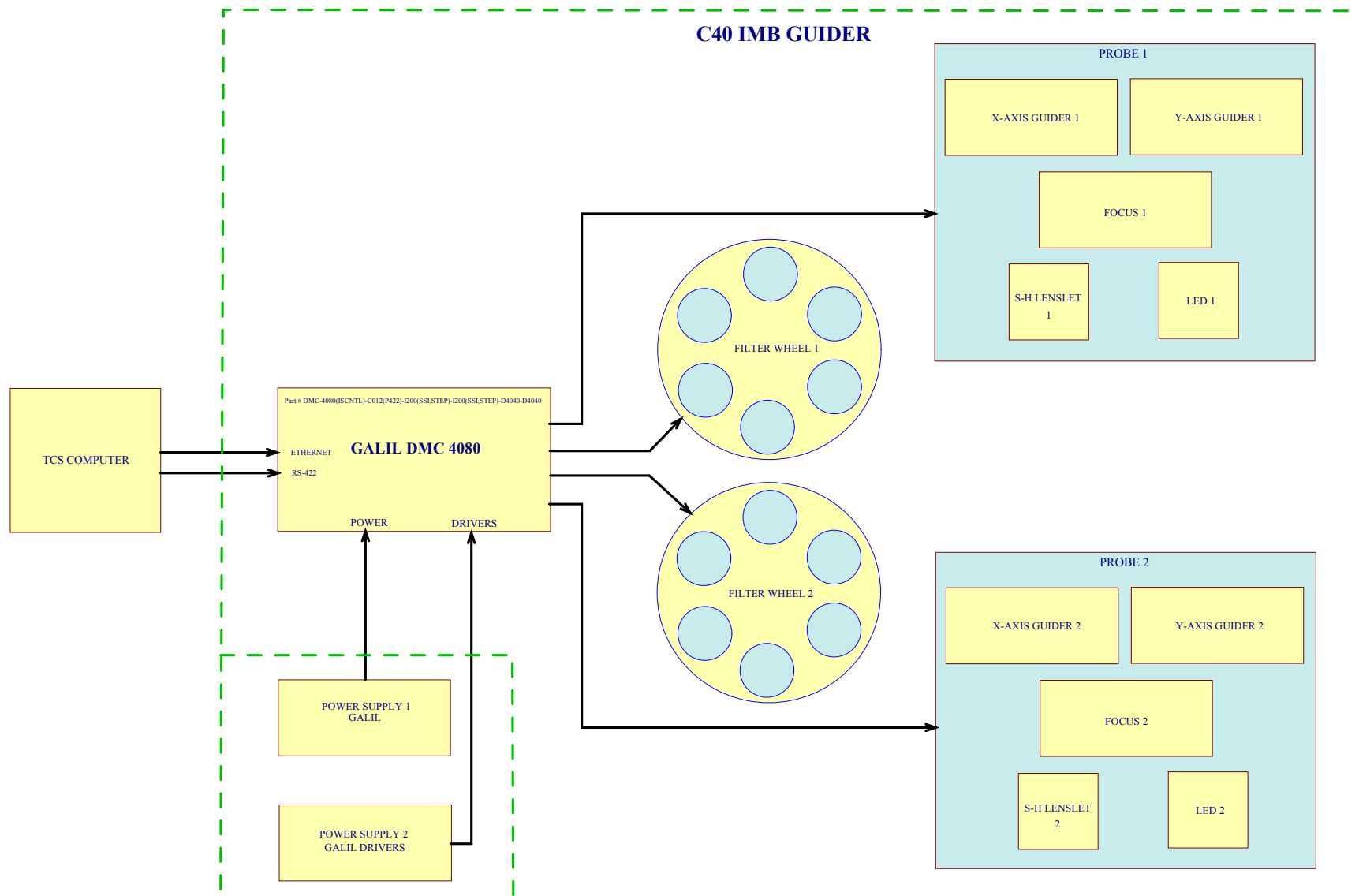
TXD+ 252

TXD- 253

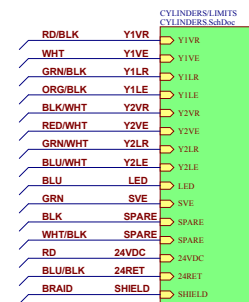
CTD+ 254

CTD- 255

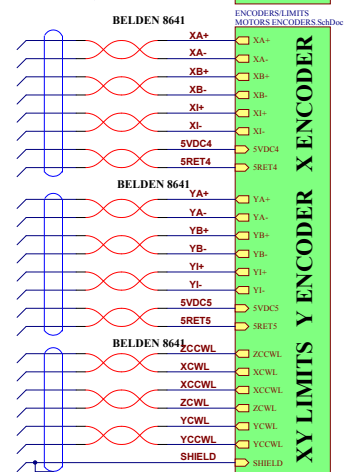
RTS+ 256



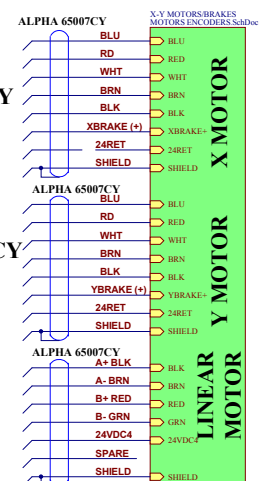
BELDEN 9541 14 + SHIELD



CYLINDERS/LIMITS

BELDEN 1424A 12-PAIR + 1  
22 + SHIELD

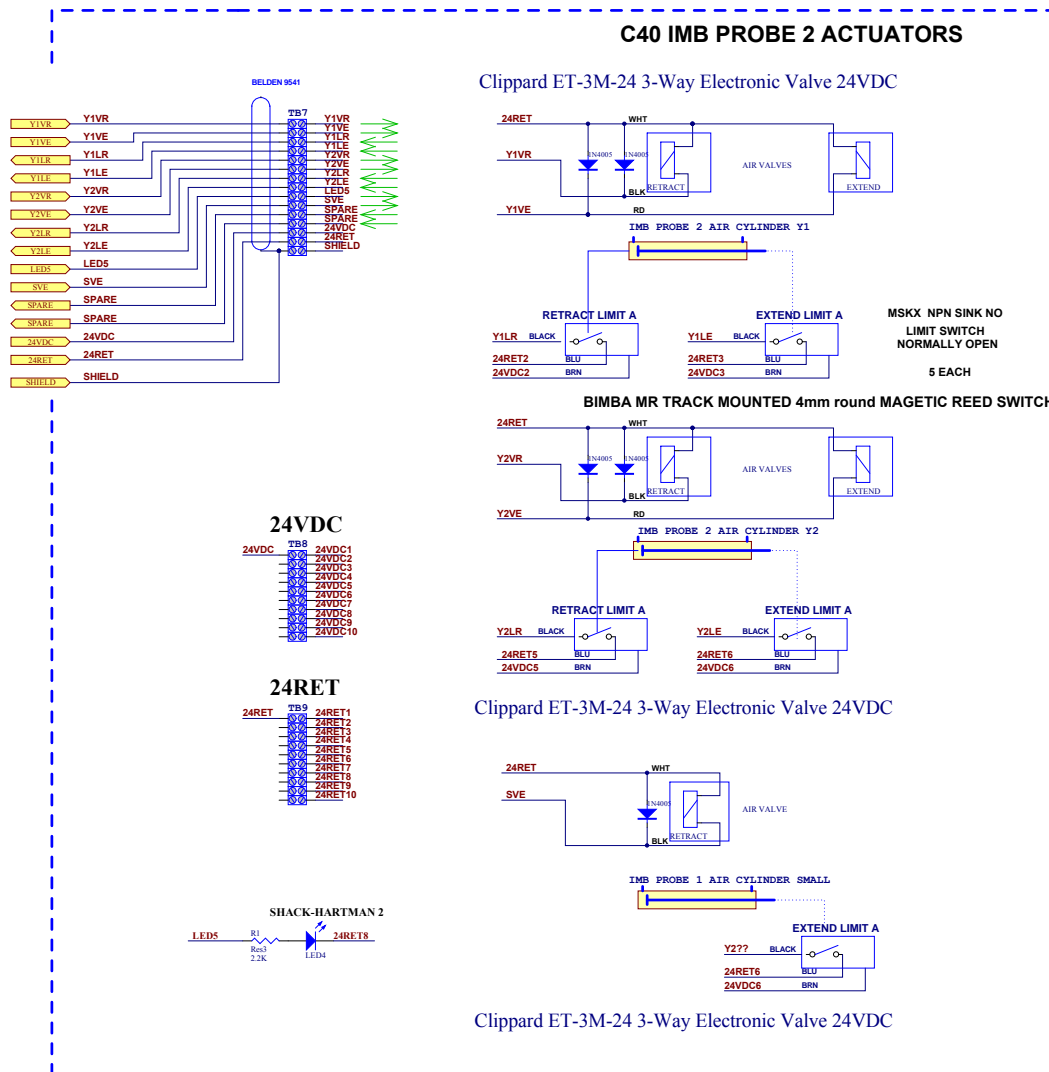
ENCODERS/LIMITS

7 + SHIELD  
ALPHA 65007CY

X-Y MOTORS/BRAKES

PORT X  
X-Y MOTORS/BRAKES

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The Observatories 813 Santa Barbara Street Pasadena, California 91101 PHONE (626) 577-1122 FAX (626) 795-8136			
<b>OCIW</b>			
Title: HARNESS			
Size: C	Scale:	Drawn By: alsh	Revision:
Date: 12/2/2013 10:15:50 AM	Checked By: A. BAGISH	Sheet 4 of 8	
File: D:\alph OCIW work Sept 30 2013\CCIW-40-amarade\HARNES.SchDoc			



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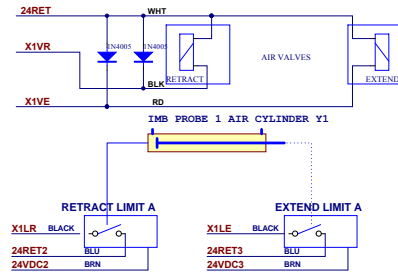
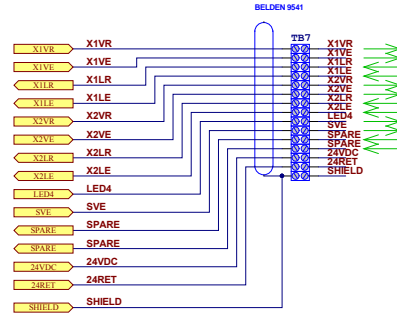
Title: **PROBE 2 CYLINDERS**

Size: C	Scale:	Drawn By: alah	Revision:
Date: 12/2/2013 10:15:50 AM	Checked By: A. BAGISH	Sheet 5 of 8	

File: D:\proj\OCIW\work\Sci 32\2013\CC-40\_unrar\probe2 CYLINDERS.sldDoc

### C40 IMB PROBE 1 ACTUATORS

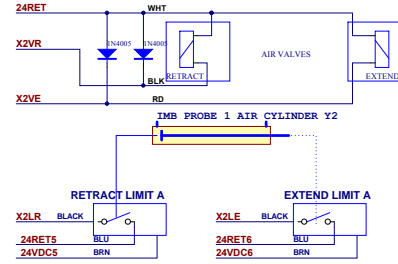
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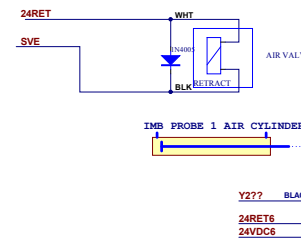
5 EACH

BIMBA MR TRACK MOUNTED 4mm round MAGNETIC REED SWITCH

MSKX NPN SINK NO  
LIMIT SWITCH  
NORMALLY OPEN

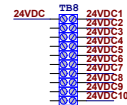


Clippard ET-3M-24 3-Way Electronic Valve 24VDC

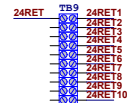


Clippard ET-3M-24 3-Way Electronic Valve 24VDC

24VDC



24RET



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Title: PROBE 1 CYLINDERS			
Size: C	Scale:	Drawn By: alanb	Revision:
Date: 1/23/2013 10:37:50 AM	Checked By: A BAGISH	Sheet 5 of 8	
File: D:\alab\OCIW\work\Sept 26 2012\c40 upgrades\PROBE 1 CYLINDERS\SchDoc			

