

OptoFidelity™ BUDDY-3

Performance tester with 3 degrees of freedom for any head mounted display

2SWR) LGHOLW\ %8''< LV D FRPSUHKHQVLYH VROXWLRQ
IRU 9LUWXDO \$XJPHQWHG DQG 0L[HG 5HDOLW\ 95 \$5 05
+HDG 0RXQWHG 'LVSOD\ +0' SHUIRUPDQFH WSDWLDO MLWWHU
FDOLEUDWLRQ LQ ERWK 5 ' DQG LQ PDQXIDFWXULW\ LQ LQHV
3UHGLFWLRQ RYHUVKRRW XQGHUVKR
:LWK LWV LQWHJUDWHG YLVLRQ PRGXOH DQG GHJUHHV
RI IUHHGRP \RX DUH DEOH WR HQVXUH WKH EHVW +0
SHUIRUPDQFH LQFOXGLQJ 0RWLRQ WR 3KRWRQ 3003 DWHQF\ Z R PRWLRQ SUHGLFWLR
MHUNLQHV VSDWLDO MLWWHU DQG SRVH GULVWLFHQW HAZH0R WLRQ SUHGLFWLRQ
UHDO ZRUOG DQG YLUWXDO ZRUOG
SUHGLFWWDEOH PRYHPHQWV
0 3 ODWHQF\ Z PRWLRQ SUHGLFWLRQ
7KH V\WHP LV EDVHG RQ QRQ LQWUXVLYH PHOSUHGLFWWDEOH PRYHPHQWV
FRPSDULQJ WKH FKDQJHV LQ WKH YLUWXDO ZRUOG SRVH
WR WKH URERWLFV SRVH 0HDVXUHPHQW SHUIRUPDQFH
FRPHV IURP 2SWR) LGHOLW\ V SURSULHWDU\ YLVLRQURPRGXFH
DQG URERWLFV SODWIRUP ZKLFK HQDEOHV XQDEHWDLOH
UHSHDWDELOLW\ WLPV\QFKURQL]DWLRQ DQG SRVLWLRQ
EDVHG WULJJHULQJ
6/50 VLPXOWDQHRXV ORFDOL]DWLRQ DQG PDSSLDJ
YHULILFDWLRQ

Test Cases

DISPLAY TEMPORAL CHARACTERISTICS

'LVSOD\ SL[HO SHUVLVWHQFH
'LVSOD\ UHIUHVK UDWH

MOTION TRACKING ACCURACY

3UHGLFWLRQ RYHUVKRRW XQGHUVKR
:LWK LWV LQWHJUDWHG YLVLRQ PRGXOH DQG GHJUHHV

MOTION TO PHOTON (M2P) LATENCIES

0 3 ODWHQF\ Z PRWLRQ SUHGLFWLRQ
SUHGLFWWDEOH PRYHPHQWV

0 3 ODWHQF\ Z PRWLRQ SUHGLFWLRQ
SUHGLFWWDEOH PRYHPHQWV

0 3 ODWHQF\ Z PRWLRQ SUHGLFWLRQ
SUHGLFWWDEOH PRYHPHQWV

6/50 VLPXOWDQHRXV ORFDOL]DWLRQ DQG PDSSLDJ
YHULILFDWLRQ

OPTION1: ADDITIONAL STAND-ALONE EQUIPMENT OR INTEGRATED INTO BUDDY-3

)36 -HUNLQHVV GXULQJ PRYHPHQW
DYHUDJH IUDPH UDWH GURSSHG IUD
)36 -LWWHU GXULQJ PRYHPHQW
VWG GHYLDWLRQ RI IUDPH UDWH
6HH WKURXJK ODWHQF\ &DPHUD YLH

OPTION2: MECHANICAL BUDDY-3 ADAPTATION TO TEST A HANDHELD CONTROLLER

&RQWUROOHU 0RWLRQ WR 3KRWRQ 0

VISION MODULE (THE EYE)

2SWLFV |)LHOG RI 9LHZ ZLWK DX
-PDJLQJ VHQRU [SL[HOV
0RWLRQ WR SKRWRQ DQDO\VLV XS V
7ULWLPXOXV VHQRU 3RLQW W\SH
6HOHFWDEOH FRORU FKDQQHO WUL
-PDJH SURFHVVVLQJ DQG DFTXLVLWL
670) PLFURFRQWUROOHU

ROBOTICS SPECIFICATION

*LPEDO UHDFK PD[VSHHG DQG DFFH
5ROO | | V | Vt
3LWFK | | V | Vt
<DZ XQOLPLWHG | V | Vt
-QFUHDVHG <DZ UHDFK RQ UHTXHV
5HSHDWDELOLW\ SHU D[LV DUF VH
\$FFXUDF\ DEVROXWH SRVLWLRQ FDO

ROBOT CELL

)RUP IDFWRU 7DEOH WRS IL[WXU
7HVW &HOO GLPHQVLRQV : + /
HLJKW NJ
2SWLRQ VDIHW\ HQFORVXUH

3\$7(176

86 3DWHQWV
86
86
86
86

&1 3DWHQW
=/

1

4

0

3

- 0DLQ FRPSRQHWW
1 +0' PRXQWLQJ
2 9LVLRQ PRGXOH
3 5ROO D[LV
4 3LWFK D[LV
5 <DZ D[LV
6 &RQWUROOHU

5

6