

Features



The iVu Series Barcode Reader (BCR) package consists of lighting, sensor, lens, and display. Appropriate cables and mounting brackets can be ordered for each application. Additionally, other lenses, brackets, filters and external lights are available. Installation, setup, and configuration can be done quickly without requiring a PC to configure the sensor.

- No external PC required to configure the sensor
- USB 2.0 compliant host provided for easy updating and diagnostics
- Image processing expertise is not required
- Integrated color touch screen display
- High speed processing



The iVu Series_{TB} Barcode Reader reads the following barcode types:


- DataMatrix (ECC 200) barcodes
- Linear barcodes
 - Code128
 - Code39
 - CODABAR
 - Interleaved 2 of 5
 - EAN13
 - EAN8
 - UPCE
 - Postnet
 - IMB
 - Pharmacode

Models

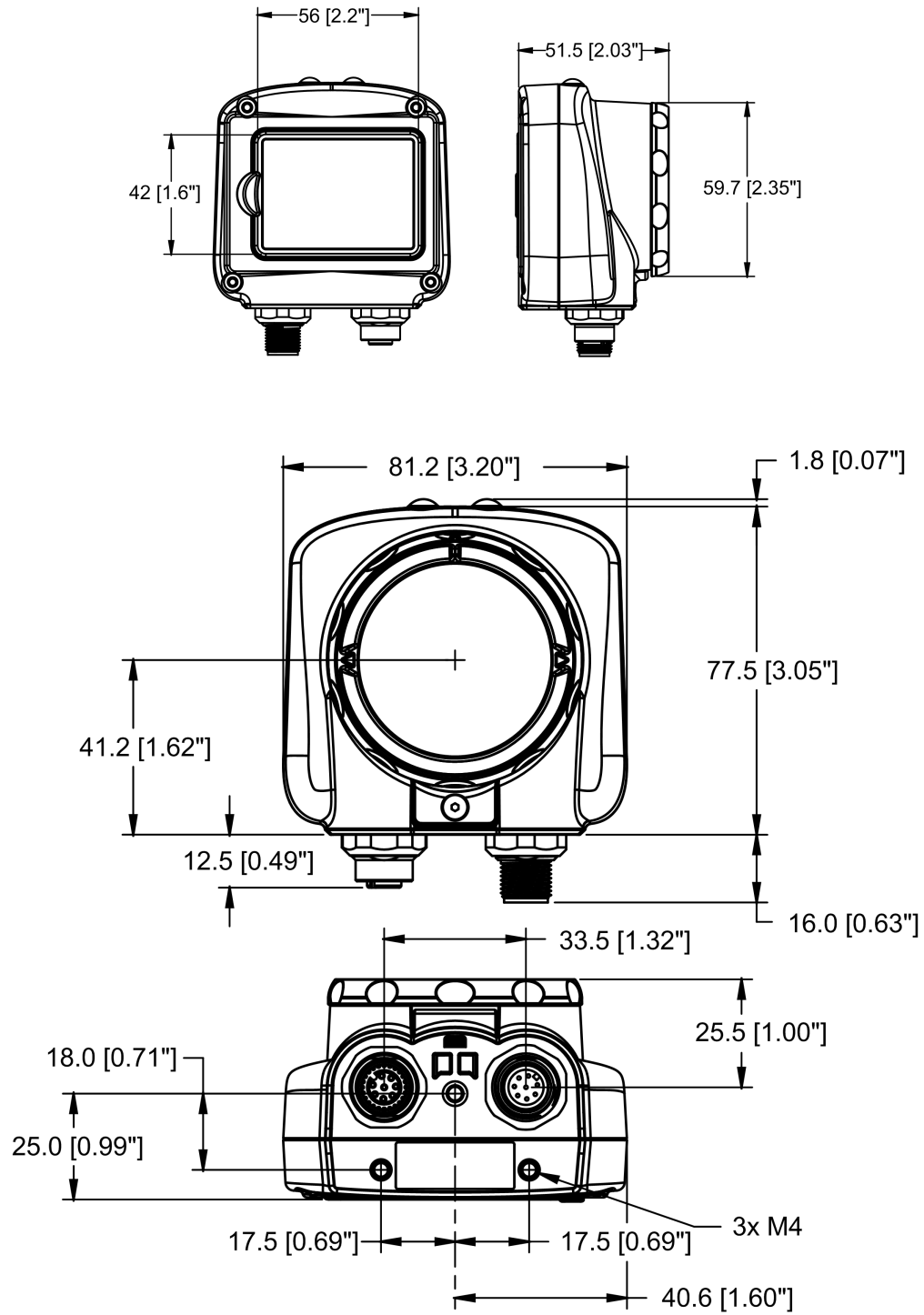
Ring Light Options	Lens Options						Output Type
	4.3 mm	6 mm	8 mm	12 mm	16 mm	25 mm	
None	IVUTBNX04	IVUTBNX06	IVUTBNX08	IVUTBNX12	IVUTBNX16	IVUTBNX25	NPN
	IVUTBPX04	IVUTBPX06	IVUTBPX08	IVUTBPX12	IVUTBPX16	IVUTBPX25	PNP
Red	IVUTBNR04	IVUTBNR06	IVUTBNR08	IVUTBNR12	IVUTBNR16	IVUTBNR25	NPN
	IVUTBPR04	IVUTBPR06	IVUTBPR08	IVUTBPR12	IVUTBPR16	IVUTBPR25	PNP
IR	IVUTBNI04	IVUTBNI06	IVUTBNI08	IVUTBNI12	IVUTBNI16	IVUTBNI25	NPN

Ring Light Options	Lens Options						
	4.3 mm	6 mm	8 mm	12 mm	16 mm	25 mm	Output Type
	IVUTBPI04	IVUTBPI06	IVUTBPI08	IVUTBPI12	IVUTBPI16	IVUTBPI25	PNP
White	IVUTBNW04	IVUTBNW06	IVUTBNW08	IVUTBNW12	IVUTBNW16	IVUTBNW25	NPN
	IVUTBPW04	IVUTBPW06	IVUTBPW08	IVUTBPW12	IVUTBPW16	IVUTBPW25	PNP

Sensor Specifications


Feature	Description
Power Connection	12-pin Euro-style (M12) male connector; accessory cable required for operation (see Power Cables on page 6).
USB 2.0 Host	8-pin Euro-style (M12) female connector; optional USB cable required for operation of USB Thumb Drive(see USB Cables on page 6).
Power Requirements	Voltage: 10-30V dc; Current: 500 mA maximum (exclusive of I/O load)
Output Configuration	NPN or PNP determined by model
Demo Mode	Full tool functionality on canned images
Sensor Lock	Optional password protection
External Strobe Output	+ 5V dc
Integrated Ring Light	Red, IR, White
Output Rating	150 mA
Display	68.5 mm (2.7") LCD Color Integrated Display 320 X 240 pixels
Acquisition	100 fps (frames per second) max.
Exposure Time	0.1 ms to 1.049 s
Imager	1/3 inch CMOS 752 X 480 pixels; adjustable Field of View (FOV)
Lens Mount	M12 X 1 mm thread; micro video lens 4.3, 6, 8, 12, 16, 25 mm
Construction	Black Valox™ sensor housing; acrylic window Weight: Approximately .295 kg (10.4 oz.)
Environmental Rating	IP67
Operating Conditions	Stable Ambient Temperature: 0° to + 50° C (+32° to + 122° F) Relative Humidity: 95%, max. relative, non-condensing
Certifications	

Dimensions



Cable Connections

The power and I/O cable for the iVu Series sensor is available in 2, 5, 9, and 15 m (6, 15, 30, 50') lengths. The 12-pin connector on the sensor is shown below (**B**). See the table below for details.

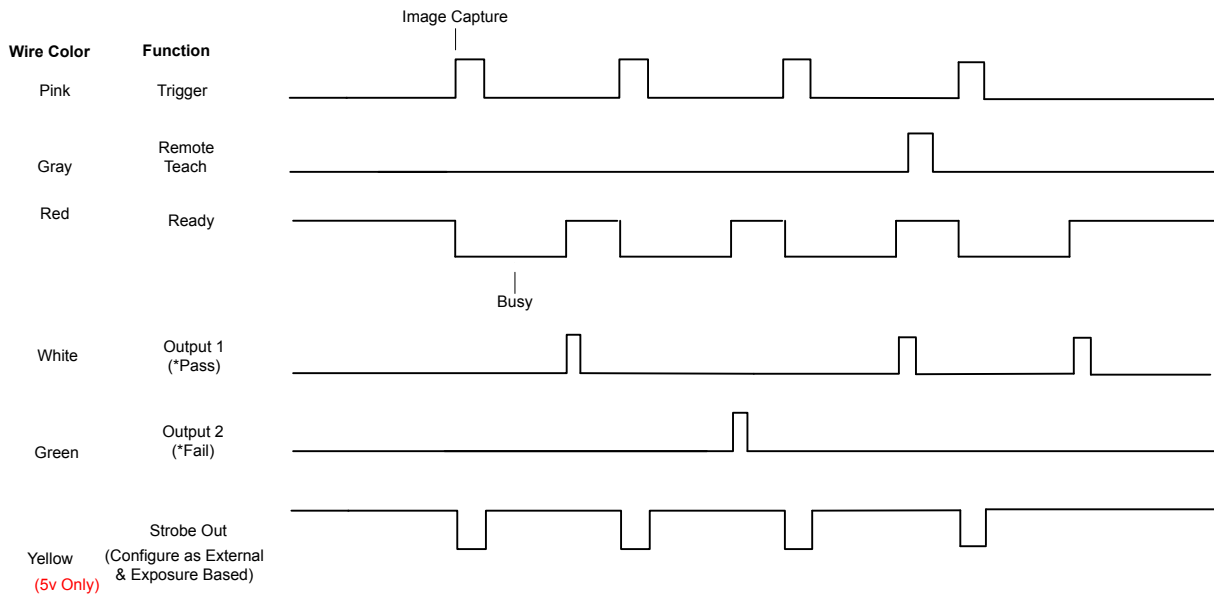
	Pin #	Wire Color	Description	Direction
	2	Brown	10-30V dc	Input
	7	Blue	Common (Signal Ground)	Input
	6	Pink	External Trigger	Input
	5	Gray	Remote Teach	Input
	1	White	Output 1	Output
	8	Red	Ready	Output
	4	Yellow	Strobe Out (5V dc only)	Output
	3	Green	Output 2	Output
	9	Orange	Not used	N/A
	10	Light Blue	RS-232 TX	Output
	11	Black	RS-232 Signal Ground	Output
	12	Violet	RS-232 Rx	Input

iVu Trigger, Remote Teach, and I/O Waveforms

The iVu has two input signals—Trigger and Remote Teach. The default setting for PNP sensors is to detect the Trigger or Remote Teach input on the low to high transition. For NPN sensors the default setting is to detect the Trigger or Remote Teach input on the high to low transition. This setting can be changed in the Input Polarity screen on the sensor.

iVu BCR Sensor

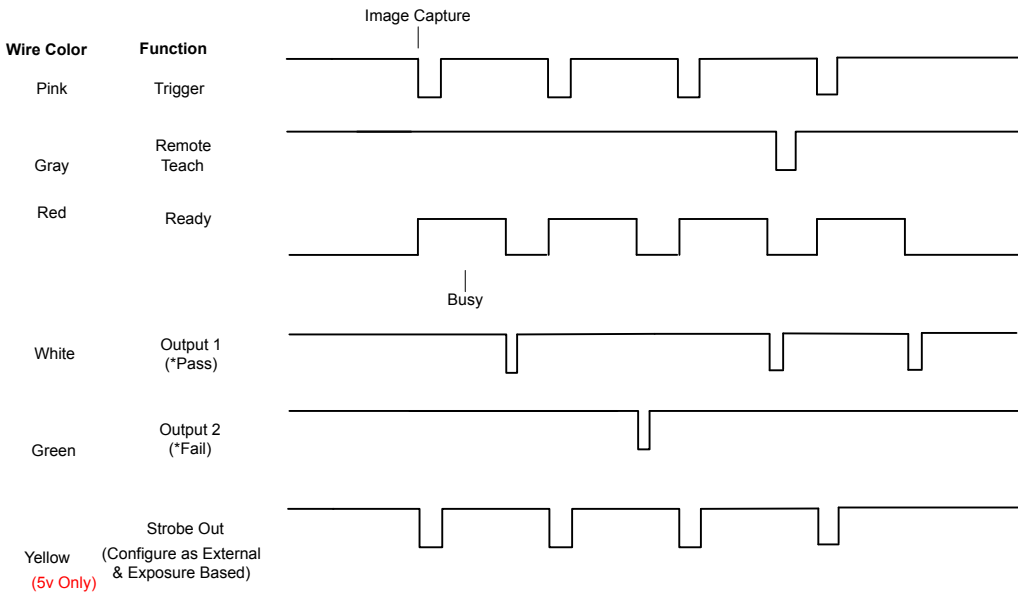
Below are the iVu BCR PNP sensor waveforms. The PNP sensor triggers from low to high, and Remote Teach behaves electrically like trigger.



* Programmable

iVu BCR NPN Sensor

Below are the iVu BCR NPN sensor waveforms. By default, the NPN version of the sensor triggers from high to low, and Remote Teach behaves electrically like trigger.



* Programmable

Power Cables

Model	Length	Description
MQDC2S-1206	2 m (6')	12-pin cable, straight
MQDC2S-1215	5 m (15')	
MQDC2S-1230	9 m (30')	
MQDC2S-1250	15 m (50')	

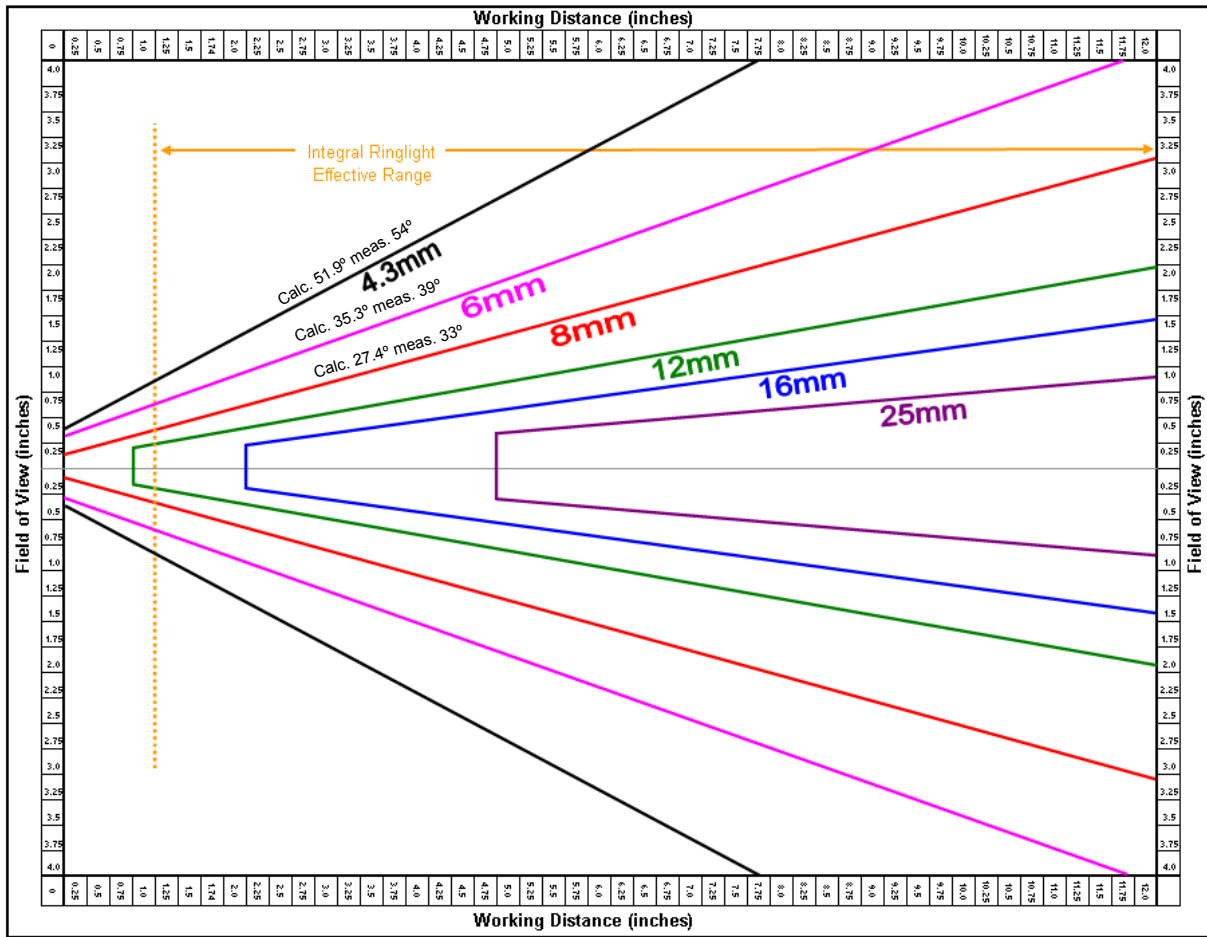
USB Cables

Model	Length	Description
MQDEC-8005-USB	.15 m (6")	USB cable, straight
MQDEC-801-USB	.30 m (1')	
MQDEC-803-USB	.90 m (3')	
MQDEC-810-USB	3 m (10')	
MQDEC-8005RA-USB	.15 m (6")	USB cable, right angle
MQDEC-801RA-USB	.30 m (1')	
MQDEC-803RA-USB	.90 m (3')	
MQDEC-810RA-USB	3 m (10')	

Lenses

Model	Lens Description
LMF04	4.3 mm lens
LMF06	6 mm lens
LMF08	8 mm lens
LMF12	12 mm lens
LMF16	16 mm lens
LMF25	25 mm lens





iVu Lens Chart



Filters

Model	Description
FLTMR	Red filter kit
FLTMB	Blue filter kit
FLTMG	Green filter kit
FLTMI	IR Filter kit

Brackets

Model	Description	Mounting Bracket
SMBIVURAL	Right angle, left mounting bracket	
SMBIVURAR	Right angle, right mounting bracket	
SMBIVUB	Bottom mounting bracket kit	
SMBIVUU	U-shape mounting bracket kit (includes SMBIVUB) <p> Note: Banner recommends that cables with right-angle connectors be used with this bracket kit.</p>	