

February 4, 2011

TEAM UPDATE #8

GENERAL NOTICES

Mandatory Software Update Released

Mandatory software updates for LabVIEW, C/C++, and Java are available at <http://usfirst.org/roboticsprograms/frc/content.aspx?id=18758>. Each of these updates requires a reimage of the cRIO, which is included in the updates. New software version numbers are as follows:

- Java is now 4.12
- C++ is now 20110203rev2259
- LabVIEW is now 3.1
- cRIO image is now FRC_2011_v27

Section 1 – Introduction & Section 2 – The Arena

Section 2, The Arena, Rev C has been updated to include the edits below. The **2011 Game Field Elements** drawing package and **2011 Arena Layout and Marking** drawings have been revised to reflect the addition.

2.2.1 Dimensions and Tolerances

2011 FRC DRAWINGS			
TITLE	CATEGORY	DWG NO.	SHEET/S
<i>2011 Arena Assembly*</i>	<i>Overall Arena Assembly</i>	<i>FE-00034*</i>	<i>5 Sheets</i>
<i>Outer Pole Assembly*</i>	2011 Game Specific	GE-11000	1 Sheet
<i>Middle Pole Assembly*</i>	2011 Game Specific	GE-11003	1 Sheet
Base	2011 Game Specific	GE-11020	3 Sheets
Mounting Angle, Left	2011 Game Specific	GE-11021	2 Sheets
Mounting Angle, Right	2011 Game Specific	GE-11022	2 Sheets
<i>Lane Divider Assembly*</i>	2011 Game Specific	GE-11025	1 Sheet
Corner Glass Right	2011 Game Specific	GE-11027	1 Sheet
Corner Glass Left	2011 Game Specific	GE-11028	1 Sheet
Modified End Panel, Corner	2011 Game Specific	GE-11041	8 Sheets
Tower Assembly*	2011 Game Specific	GE-11049	2 Sheets
Net Support	2011 Game Specific	GE-11051	1 Sheet
Net	2011 Game Specific	GE-11055	1 Sheet
Guard	2011 Game Specific	GE-11060	1 Sheet
Fueling Port Rear Plastic	2009 Game Specific	GE-09023	1 Sheet
Top Rail	2009 Game Specific	GE-09031	1 Sheet
Drivers Station Support	Generic Field Drawing	FE-00001	2 Sheets
Corner Supports, Left and Right	Generic Field Drawing	FE-00002	2 Sheets
Rail Pin Assembly	Generic Field Drawing	FE-00003	1 Sheet
End Panel	Generic Field Drawing	FE-00004	3 Sheets
Field Top Rail	Generic Field Drawing	FE-00007	1 Sheet
Field Plastic "A"	Generic Field Drawing	FE-00008	1 Sheet
Field Plastic "B"	Generic Field Drawing	FE-00009	1 Sheet

Field Plastic "C"	Generic Field Drawing	FE-00010	1 Sheet
Field Plastic "G"	Generic Field Drawing	FE-00011	1 Sheet
Drivers Station Acrylic	Generic Field Drawing	FE-00012	1 Sheet
Field Outrigger	Generic Field Drawing	FE-00013	1 Sheet
Field Entry Ramp	Generic Field Drawing	FE-00014	2 Sheets
Field Trip Guard	Generic Field Drawing	FE-00015	1 Sheet
Hanger, Plastic "G"	Generic Field Drawing	FE-00016	1 Sheet
<i>Field Rail Assembly - Middle*</i>	<i>Generic Field Drawing</i>	<i>FE-00022*</i>	<i>1 Sheet</i>
<i>Field Rail Assembly - End*</i>	<i>Generic Field Drawing</i>	<i>FE-00023*</i>	<i>1 Sheet</i>
<i>Field Rail Assembly – Gate*</i>	<i>Generic Field Drawing</i>	<i>FE-00029*</i>	<i>1 Sheet</i>

2.2.7 FEEDER STATIONS

A FEEDER STATION is located on either side of the ALLIANCE STATION. A FEEDER from the opposing ALLIANCE stands in the FEEDER STATION during the MATCH. The FEEDER STATION extends back eight feet from the ALLIANCE WALL, and from the line at the edge of the ALLIANCE STATION to the edge of the FIELD width.

A 50.5" x 29" polycarbonate sheet is mounted vertically, with its lowest edge resting on the carpet, between the rearmost vertical supports of the uprights to the left and right of the FEEDING SLOT in each FEEDER STATION. This polycarbonate spans the width of the FEEDING STATION, forming a narrow protective box with the ALLIANCE WALL. This helps prevent contact between FEEDERS and field electronics located near the ALLIANCE WALL.

Section 3 – The Game

A note about recent revisions of Section 3 – The Game:

Section 3, The Game, Rev G, released on 2/1/11, accidentally omitted Rule <G30>. Rev G+ was soon released with Rule <G30> reinstated. Rev H incorporates edits to Rev G+. Please accept our apologies for any confusion. The edits for Rev H are as follows:

- <G10>** Each FEEDER STATION must contain 3 sets of LOGO PIECES. LOGO PIECES are considered "contained" if they overlap the FEEDER STATION in any way. LOGO PIECES may not contact the opponent's ALLIANCE STATION.
- <G20>** ROBOTS/HOTBOTS may not contact their own TOWERS above the DEPLOYMENT LINE.
Violation: PENALTY for contact. TOWER is disabled if MINIBOT is DEPLOYED above the DEPLOYMENT LINE.
- <G21>** HOSTBOTS may DEPLOY MINIBOTS only onto their ALLIANCE'S TOWERS and entirely below the DEPLOYMENT LINE.
Violation: RED CARD. TOWER is disabled if MINIBOT is DEPLOYED above the DEPLOYMENT LINE.
- <G33>** Neither ROBOTS, HOSTBOTS, nor MINIBOTS may break the planes of the vertically projected borders of the opponent's LANES, including a GAME PIECE in their POSSESSION. Momentary incursions by a POSSESSED GAME PIECE will not be penalized if they do not make contact with anything in the LANE.
Violation: PENALTY. G61 does not apply to this rule, however strategies aimed at taking advantage of this exception will result in a YELLOW CARD. If a ROBOT enters the opponent's LANE and does not make immediate effort to leave OR if it contacts another ROBOT (or GAME PIECE in its POSSESSION) also in the LANE, then the intruding TEAM will receive a RED CARD.

Section 4 – The Robot

Section 4, The Robot, Rev H has been updated to include the following edits:

<R42> Each power-regulating device (speed controller or relay module) shall control one and only one electrical load (motor, actuator, light or compressor).

Exception: Multiple low-load, pneumatic solenoid valves or lights may be connected to a single relay module. This would allow one relay module to drive multiple pneumatic actions or multiple lights. No other electrical load can be connected to a relay module used in this manner.

Section 5 – The Tournament

Section 5, The Tournament, Rev B has been updated to include the following edits:

<T25> The only equipment that may be brought on to the ARENA is the OPERATOR CONSOLE, non-powered ANALYST-to-FEEDER signaling devices, reasonable decorative items, and special clothing and/or equipment required due to a disability. Other items, particularly those intended to provide a competitive advantage for the TEAM, are prohibited.

The Kit of Parts

If you received a bad D-Link radio:

If your D-Link product is defective, please contact D-Link Technical Support at 877-453-5465. Technical Support will troubleshoot the problem you are having with your product. If the unit is deemed defective by Technical Support, you will be given a case number from the technician. With the case number, you will be able to apply for an RMA online at <http://rma.dlink.com>.

D-Link will likely require proof of purchase for the radio. An invoice (with pricing redacted) has been posted on the [Kit of Parts website](#) in the *Support* section.